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Introduction

The overall aim of this book is to introduce a *complete* system that is sufficiently strong to cater for most bridge partnerships. It is based on the French system **Majeure Cinqième** with a 15-17 1NT open. The book is divided into three parts:

- **Part I: The Basics.** This part lays the foundations of the system, with the emphasis being the bread and butter of bridge bidding: finding the major games. Chapter 1 starts with the suit opening bids, in particular the 1 Major opens, and considers the support responses. Chapter ?? looks at the situation when the response is not a support response, but when opener's rebid supports the response. Chapter ?? looks at the situation when after the first three bids no fit has been found, and discusses opener's actions including reverses and jump-shifts. Chapter 5 looks at the 1NT open bid and subsequent response bidding structure including Stayman and transfers. Chapter 6 considers the semi and game forcing, strong 2 opens. Chapter 7 considers the subtlety of slam bidding, including Blackwood and control bidding. Up till now it has been assumed that there has been no interference from the opposition. Chapter 8 considers the direct overcall and responses thereof, as well as the double overcall and 1NT overcall. Chapter 9 considers the subtle changes that need to be made to the previous chapters to remain competitive when the opposition have entered the auction, including such actions as the sputnik double. Chapter 10 discusses when a double is penalties or take-out within competitive bidding situations. Chapter 11 considers the pre-emptive weak 2 and 3 opens. Finally section 12 looks at protective bidding.
- **Part II: Conventions.** This part builds on the previously established foundations. Strictly speaking many conventions are unnecessary, but with them enables the bidding to be more accurate thus leading more often to the correct contract. The advantages of conventions is that they solve tricky bidding problems but naturally disadvantages exist. The most obvious one being the loss of the natural meaning to the conventional bids. A good convention is one where this loss is less than the gain of the problem solved.

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- **Part III: Signalling.** This part looks into the signalling during defensive card play, so that two defenders can work in unison to defeat declarer. Opportunities to signal occur throughout the play of the hand; from the opening lead, following suit and discarding. The strongest flavour to come out of this part is that of the principle of count.

All bidding systems need a method of hand evaluation, in this book we use the following conventions. We use the 4-3-2-1 scale for counting the Honour points A-K-Q-J. When a fit is known we use the 3-2-1 scale for counting the Distribution points void-singleton-doubleton. Finally for Length points, we count an extra point for every extra trump above a combined 8, and an extra point for every card above 4 in a good side suit.

A bidding system is built around a few folklore facts, some cannot be proven as such, but all are important to know and be aware of:

Fact 1: The more points we have the more tricks we should make.

Fact 2: The more trumps we have the more tricks we should make.

Fact 3: Game bonuses score very well.

Fact 4: Major games are safer than 3NT, which is safer than minor games.

Fact 5: With a combined 26 points and an 8 card Major trump suit, a Major game should be makeable. Minor games require 28 points, whereas 3NT requires 25 points.

Fact 6: 4-4 fits are better than 5-3 fits.

Fact 7: Slam bonuses score better than game bonuses, but occur less frequently.

Fact 8: With a combined total of 32 points, a trump fit and without two top losers, a small suit slam should be feasible. 6NT would require 33 points.

Fact 9: No bidding system is an exact science.

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The consequence of these facts is that any bidding system needs to be rigid enough to find good major game contracts, with a preference to 4-4 fits over 5-3 fits, otherwise 3NT when without a major fit and finally a minor game. On the other hand the system needs to be flexible enough to land in a safe part-score when game is not there; to land in game when a slam is not there; and to be competitive with respect to the opposition's bidding.

From the facts above we can deduce many of the golden numbers of bridge bidding. Since the emphasis is on finding major games and 3NT, Fact 5 gives us the *Magic Numbers* are **26** and **25**. The theory is that an opening bid opposite an opening bid, leads to game. Thus essentially an open promises half the points of game: 13 points. If we include distribution points we see that an opening bid of 13 points with no 5 carded suit is equivalent to a hand with 12 points and a 5 carded suit, and a hand with 11 points and a 6 carded suit. For the further deductions it would be more convenient if we assume an opening bid as 12 points.

Consider the open were a major, say 1♥, and in response there is a fit. If responder holds at least 13+ points then game is there so in theory responder can bid it, 4♥. If responder bids 3♥ then he is limited to 12 points, but further he is only giving opener a binary choice; to bid 4♥ or to pass. Thus responder cannot have too wide a point range. So for a binary choice we assign a binary point range. Thus 3♥ shows 11-12 points. Similarly, a response of 2♥ is limited to 10 points, and further leads to four possibilities; opener passes, bids game, or invites with 3♥, to which responder can pass or bid game. Thus a four way decision is assigned a 4 point range, thus a 2♥ response is 7-10 points. In fact we extend this range to 6-10 points.

Consider that responder could not support the open, then in principle he could respond 1NT, 2NT or 3NT, following the exact same point ranges as the above, 6-10, 11-12 or 13+ points respectively. In fact a response of no-trumps says further that responder cannot make any natural bid between the open and the no-trump bid. These new suit responses will be unlimited, thus all we need do is chop off the upper limit, thus a new suit response at the 1-level is 6+ points whereas a new suit at the 2-level is 11+ points.

Consider that the response is a new suit, say a major, and that opener can support it; for example the bidding were $1\Diamond-1\heartsuit$. Then opener knows that opposite sits at least 6 points, when holding 20+ points game is there and so can bid $4\heartsuit$. In fact, this is weakened by one point, so a game rebid promises 19+ points. Similarly, a rebid of $3\heartsuit$ gives responder a binary choice and so this too is a two point range, thus 17-18 points. Finally a rebid of $2\heartsuit$ is a four-point range, extended by one extra point, thus 12-16 points. Note how these point ranges are exactly the same as 6-10, 11-12, 13+, except they are now adjusted by 6, the points promised by the response. In other words, the bidding sequence $1\heartsuit-2\heartsuit$ promises 12+ and 6-10 points respectively, thus combined there is 18-22; whereas $1\Diamond-1\heartsuit-2\heartsuit$ promises 12-16 and 6+ points, again 18-22 as a combined minimum point range.

With 6 points responder will reply to the open, but with 5 or fewer points the correct response is pass. Thus when holding 21+ points, opener cannot afford to hear such a response, for game may be missed. Thus we need to make a semi-forcing open. Likewise with more strength yet, opener may open with a game-forcing open.

We consider an overcall as a competitive open, thus two points fewer than an opening bid, thus in general an overcall promises 10+ points. If opposite an open responder is obliged to speak with 6+ points, then opposite an overcall, the overcaller's responder is obliged to speak with 8+ points. Similarly responses of $1NT$, $2NT$ and $3NT$ all promise the same point ranges as for an opening bid, but adjusted by two points throughout, thus 8-12, 13-14 and 15+ points. Since there will be a response to an overcall with 8+ points, overcaller must do something stronger when holding 19+ points, for he does not want to hear a pass and miss game. Thus overcaller doubles, and whereby the double is considered at least as a semi-forcing overcall.

Consider that after the open there has been an overcall. Normally the responder is obliged to say something when holding at least 6 points, if not the hand can be passed out. Had there been an intervening overcall, now opener will get a second chance to bid even if responder passes. Thus if responder now bids he is promising more than the required minimum strength; 2 points extra than normal, thus 8+ points. Similarly, after an overcall, the responder of the overcaller is obliged to speak with 8+ points, so again, if the third player speaks, he is no longer obliged to

bid when holding a minimum. So again if he volunteers a bid it is an extra 2 points more than usual, thus 10+ points.

Putting all this together we have the following conclusion. An opening bid is 12+, an overcall 10+, third player speaks shows 8+ and if fourth player too speaks then he has 10+ points. Thus if all four players bid then there is promised $12+10+8+10=40$ points, that is all the points of the pack.

Sometimes counting points is not enough to judge whether a contract is good or not. The **Losing Trick Count** is another method of evaluation. The theory is as follows. Each suit has a maximum of 3 losers, (the ace, king, queen). Thus each hand has a maximum of 12 losers therefore combined there is a maximum of 24 losers; in which case no tricks can be made. The idea is that every non-loser is a winner. Thus if we have 7 losers and partner has 7 losers, we have 14 losers out of 24, hence 10 winners, that is game. An average opening hand has 7 losers, a good opening hand has 6. With 4 losers we could consider a semi-forcing open, whereas with 3 or less losers we would want to open with a game force.

It should be noted that all systems rely on some method to evaluate hands and this too is not a perfect art. The real test is whether the final contract reached has a better than 50% chance of making. One way of finding the percentage of a contract making given two hands is to randomly generate the defenses hands and to allow a bridge computer to play the four hands. From keeping account of how many times the contract makes or breaks a percentage can be assigned. The intention will be to do such computations for all the given hands and contracts used as examples throughout the book. From these results we can see whether the bidding system is good or not.

Throughout the book we will need to refer to the players who make the bids. To avoid confusion we will use the following nomenclature: Dealer is the player who starts the auction, thus he is entitled to pass; Opener is the player who makes the opening bid, i.e. the first non-pass bid; Responder is the partner of opener; Overcaller is the first player of the side that did not open to make a non-pass bid; Advancer is the partner of overcaller; Questioner is the player who uses a bid to ask

a question; Answerer is the partner of questioner.

As a further help we will use numerical codes to help distinguish ambiguous bidding situations. Opener is given code 1, overcaller code 2, responder code 3 and advancer code 4. Given a bidding situation we only give the number when a non-pass bid has been made. Thus a bid with code 1 means that we are dealing with the opening bids; 12 means we are dealing with the direct overcall; 13 means we are dealing with responses when there has been no overcall; 123 means we are dealing with the response to opener after there has been an overcall; 1341 would mean we are dealing with rebids by opener after there has been a sandwich overcall in the fourth seat. Thus all bidding situations can be assigned an unambiguous code.

Part I

The Basics

1 The Opening Bid

Since the main emphasis on bidding is to find game, we can consider an open to be half a game; game needs 26 points hence an open equates to at least 13 points. The worst hand shape is the 4333, since it offers no long suit and no ruffing potential. Hence with a little bit of distribution we could say that a 13 pointed 4333 hand is equivalent in strength to a 12 pointed 4432 hand, which is equivalent in strength to a 12 pointed 5332 hand. Going an extra step we see that when holding a good six carded suit then even with as few as 11 points, we can open with such a hand.

Some opening bids are well defined, others are ambiguous. When holding a balanced hand without a 5 carded major, and 15-17 points then the open is 1NT, see chapter 5. When holding any balanced hand and 20-21 points then the open is 2NT, see section 6.3. When holding a hand that has at least 22 points, then the open is either 2♣ or 2♦; but note that sometimes we should open 2♣ or 2♦ when holding fewer points but more distribution, see chapter 6 for the full details. When holding a long single suited distribution but fewer points than opening, 6-10, then we may be able to make a pre-emptive open, see chapter 11 for full details. If we are too weak to open, and cannot make a pre-emptive open then naturally the open is pass. So far all opening bids are relatively well-defined, that is why we are able to discuss them in specific chapters and sections. What remains therefore are the simple 1-level suit opens, 1♣, 1♦, 1♥ and 1♠. An open of any of such is ambiguous, since then hand could be anything in strength from 11-21 points. Hence we will dedicate the first ?? chapters to the 1-level opens and the further developments. Note that our main consideration is when the opening bid is made in either first or second position, although they are still valid for third and fourth seat opens, there are slight modifications: see section 11.3 for the third seat opens; see section section 12.1 for the fourth seat opens.

1.1 The 1-level Suit Opens

When holding less than opening points and the hand is not worthy of a pre-emptive (1) open, then the open is pass. The open of a suit at the 1-level is essentially opener's

longest suit, but with the following restriction: since major games are of importance, an open of a major promises at least 5 cards; and so by consequence a minor suit open only promises at least 3 cards. Sometimes, even under these restrictions, we will have a situation where our two longest suits are of equal length. If the two suits are 5-5 or 6-6, then we open as follows: the higher ranked suit, over the lower ranked suit. That is major over minor; spades over hearts; diamonds over clubs. Without a 5 carded major, the open must be in one of the minors: if the two suits are 4-4, then we open the diamonds over the clubs; if the two suits are 3-3, then we open the clubs. Note that the $1\clubsuit$ open can be looked on as a denial open, for it says that opener cannot say $1\spadesuit$, $1\heartsuit$ or $1\diamondsuit$. A consequence of this style are the following: if opener begins with $1\diamondsuit$ and only holds 3 diamonds, then he has exactly the hand shape 4:4:3:2. This style of minor opens is called the *better minor*. Since 5 carded majors are important, when opener is weak it is wise to open 1-major even when holding a longer minor.

2 The First Response

In this chapter we assume that the open was some suit at the 1-level. In general, responder bids with the following priority: if the open was a major, then support if possible; else bid a new major if possible; else support the opened minor; else bid no-trumps. But in fact it is slightly more complicated than that, sometimes even with support for the opened major, responder will not directly support; sometimes even when he can show a new major, he won't; sometimes when he can support the opened minor, he will prefer to bid no-trumps. The main differences stem from whether the open were a major or a minor, so we will consider these two cases separately: section 2.1 discusses the responses after a 1-major open; section 2.2 discusses the responses after a 1-minor open. A jump shift response is where responder jumps a level to make his new suit response, such responses have particular meanings: showing 16+ points and at least 6 cards in the bid suit; we will discuss such actions in section 7.6. Hence in the sequel of the chapter we do not consider such holdings of responder.

2.1 Responding after a 1-Major Open

A 1-major open promises at least 5 cards in the bid suit, and in principle at least 13 points. Responder needs hold only 3 cards for there to be a fit and this is in principle responder's priority. But what responder actually does depends on what he wants to achieve. If finding a major major game is the only goal, then our fit response structure after a 1M open could be as follows: a direct response of 4M would be a game support response, thus with opener promising at least 13 points, responder would necessarily need to be also holding at least 13 points. A 3M jump support response from responder is thus showing fewer points, but from this bid opener has two options, he will either pass or bid game depending on his strength. The fact that opener has only two possible paths after a 3M response, means that responder's point range needs to be suitably limited; hence with two options, we assign a two point range, thus 3M would promise 11-12 points. Finally, a 2M response would show fewer points yet, but there are now four possible paths after 1M-2M: pass; 3M-pass; 3M-4M; 4M, hence we should assign a four point range, 7-10, but

in fact we will play the simple support response as 6-10 points. Hence when holding 0-5 points the response would be to pass. What this paragraph gives is reasoning behind the point ranges 0-5, 6-10, 11-12 and 13+.

But finding just any major game is not just our goal, there are two points that need to be taken care of: the possibility of a slam; and the preference of playing in a 4-4 major game fit, rather than a 5-3 major game fit. For this we need to modify the basic structure as outlined above. If responder holds a fit and at least 13 points, then he should not directly raise to game, for such a bid takes away all the bidding space that could be better used to explore for a potential slam, instead he should make a *wait and see* bid. If responder holds at least 11 points, then responder should only bid 3M in response when there is no chance that there is a 4-4 fit in the other major, otherwise again responder should make a *wait and see* bid. In both cases, the modification to our structure so far is for responder to *wait and see* and he does that by first changing suit, as we will presently discuss. Note that we can now redefine the meaning of the direct game support response; we will say that such a bid is pre-emptive, as given in section 11.4.

If responder cannot make a support response, for he either has no fit or his hand fits one of the exceptions of the previous paragraph, then he does some other action. This effectively means he bids his suit, with the priority towards bidding the other major. A simple new-suit response at the 1-level promises at least 4 cards in the bid suit. Note that the strength of responder's hand is unlimited, he could be sitting there holding more than 20 points. A simple new-suit response at the 2-level raises the stakes and so responder needs some kind of strength compensation, hence responder promises at least 11 points. In principle this promises at least four cards in the suit, but as we will later see there are circumstances for when responder can do such action with fewer cards. Again, responder's strength is unlimited. If responder is unable to show his suit, since he is not strong enough to respond at the 2-level, then he makes the denial response of 1NT. Note that we can deduce that a 1NT response shows 6-10 points, and is thus limited and so non-forcing. Note that in special circumstances responder will be strong enough to consider a jump-shift response, see section 7.6 for full details. Hence we obtain from this paragraph, that all new-suit responses are forcing, whereas a 1NT response is non-forcing.

We are now in the position to fully discuss the correct responses after a 1-major (1) open. We have already argued that responder will pass when holding 0-5 points and a fit, thus even without a fit responder is more inclined to pass. On the other hand, with 6+ points responder is obliged to say something. What he says, and why, will be discussed in two cases: *i*: that the open were 1♥; *ii*: that the open were 1♠.

***i*: The open was 1♥. If responder has a fit,** then he responds as follows: (2) holding 6-10 points responder bids the simple support response of 2♥; if responder holds 11-12 points, exactly 3 hearts and at least 4 spades, then responder should try to find a spade fit over resigning to play in a 5-3 heart fit, so responds 1♠; if responder holds 11-12 points and has no interest to search for a spade fit over a heart fit, then responder bids the jump support response of 3♥; holding 13+ points, responder changes suit by bidding his suit, although this may be a false suit when responder only holds the opened suit in length. Note, a major suit should *never* be a false suit: if you give a dog a bone, don't expect him to let it go.

If responder has no fit, or his hand fits one of the exceptions of the previous (3) paragraph, then he does some other action. This effectively means he bids his suit if he can, with the priority towards bidding the other major. A simple new-suit response at the 1-level promises at least 4 cards in the bid suit and 6+ points; a simple new-suit response at the 2-level promises 11+ points and in principle at least 4 cards. Why in principle? Well, if responder does not have 4 cards in his bid suit, then he must necessarily have a fit, and so by consequence, responder holds at least 13 points. A 1NT response is denial, from which we can deduce that responder has 6-10 points, no fit and not 4 cards in spades. A 2NT response is similar to a 1NT response for it denies the same fit and lack of length in the spades, but further shows a balanced hand and 11-12 points. Finally, a response of 3NT is as 2NT, except shows 13-15 points.

***ii*: The open was 1♠. If responder has a fit,** then he responds in the follow- (4) ing way: holding 6-10 points responder bids the simple support response of 2♠; if responder holds 11-12 points, exactly 3 spades and at least 5 hearts, then responder should try to find a heart fit over resigning to play in a 5-3 spade fit, so responds

2♥ (note the subtle differences between the meanings of 1♠-2♥ and 1♥-1♠); if responder holds 11-12 points, exactly 3 spades and exactly 4 hearts, then responder should still try to find a heart fit over the spade fit, but he cannot respond 2♥ for he only holds 4 of them, thus he responds 2♣ or 2♦, his better minor (the longer; or else clubs when 3-3). If responder holds 11-12 points and has no interest to search for a heart fit over a spade fit, then responder bids the jump support response of 3♠; holding 13+ points, responder changes suit, although as with the 1♥ open, sometimes responder will need to respond a false suit.

- (5) **If responder has no fit**, or his hand fits one of the exceptions of the previous paragraph, then he does some other action. This effectively means he bids his suit if he can, with the priority towards bidding the other major. A simple new-suit response at the 1-level promises at least 4 cards in the bid suit and 6+ points; a simple new-suit response at the 2-level promises 11+ points and in principle (as for the responses after a 1♥ open) at least 4 cards except for when the response is 2♥, which promises at least 5 cards in length. A 1NT response is denial, from which we can deduce that responder has 6-10 points and no fit, but note that this does not deny that responder holds 4+ cards in hearts. A 2NT response is similar to a 1NT, but also denies 4+ hearts and further shows a balanced hand and 11-12 points. Finally, a response of 3NT is as 2NT, except shows 13-15 points.

2.2 Responding after a 1-Minor Open

In this section we consider that the open were a 1-level minor suit. Much of the logic from the previous section holds true in this section, the main difference is responder's priority. In the previous section responder's priority was to support opener's major open, now responder's priority is to show a major if he can, not just to support the opened minor. We will consider two cases: *i*: the open was 1♣; *ii* the open was 1♦.

- (1) ***i*: The open was 1♣.** Responder is obliged to respond with 6+ points, with fewer he passes. Responder's priority is not to support but to show a major if he can by way of the 1♥, 1♠ responses. For that responder needs at least 4 cards in the named major and at least 6 points. Note if responder holds both majors with at

least 4 cards, then he responds first with the longer major; else when both majors are of equal length: with 4-4, the response is the lower ranked hearts; with 5-5 or better, the response is the higher ranked spades. If responder does not hold a major suit, only then does his priority turn towards supporting the opened minor. Since the open only promises 3 cards in length responder will need at least 5 cards to fit. The fit responses are as for the major opens: simple support $2\clubsuit$ shows 6-10 points; jump support $3\clubsuit$ shows 11-12 points; when holding 13+ responder should change suit (which in fact can only be $1\Diamond$, since we cannot bid a major as a false suit). When responder cannot fit, then his attentions turn towards bidding his suit, which now can only mean diamonds, hence responds $1\Diamond$, which shows in principle at least 4 diamonds and 6+ points. Finally, if responder holds an exact 3334 hand then we see he cannot bid a major since he has no 4 carded major, he cannot support since he only has 4 clubs, and he cannot bid $1\Diamond$ for he only has 3 diamonds. In this case responder bids no-trumps: $3NT$ being game will show 13-15 points; $2NT$ shows 11-12 points and finally $1NT$ shows 6-10. Note that responder is entitled to respond in no-trumps instead of bidding $1\Diamond$ if he feels his hand warrants such action. Note also that responder may well bid a 4 carded major even when he holds more cards in diamonds, particularly if he is weak and feels that his hand can only justify one bid. Note also that if responder is too strong and cannot bid a new suit naturally then he must bid a false bid, which can only be in diamonds, hence there may be occasions where responder bids $1\Diamond$ and does not hold 4 diamonds, but if this is the case, then we are assured that responder holds a big hand.

ii: The open was $1\Diamond$. Again responder is obliged to say something when holding (2) 6+ points, with fewer he passes. Responder's priority is exactly the same as over a $1\clubsuit$ open. If responder can show a major then he does so with $1\heartsuit$ or $1\spadesuit$, in both cases the bid shows at least 4 cards in the named suit and 6+ points. Otherwise responder can support when holding at least 5 diamonds, simple support $2\Diamond$ shows 6-10 points, jump support $3\Diamond$ shows 11-12 points; with 13+ points and support responder should change suit (which in fact can only be $2\clubsuit$, since we cannot bid a major as a false suit). Otherwise responder can show his suit, which can now only be clubs, but for this he needs at least 11 points to respond at the 2-level. Hence $1NT$ is the denial, from which we can deduce that responder has 6-10 points, no 4 carded major and no diamond fit. $2NT$, $3NT$ deny holding either 4 carded major

and shows 11-12 and 13-15 points respectively. As with the previous paragraph, instead of supporting the opened minor, responder may feel that the hand is best bid by directly responding in no-trumps. Finally, we need to discuss responder's actions when he holds a 4 carded major, but also longer clubs and at least 11 points: in principle he is strong enough to bid $2\clubsuit$, but holding a major the preference tends towards responding with the major. In fact when holding fewer than 13 points responder should always prefer bidding his major than a new minor. When holding at least 13 points, responder knows that game is there, in this case he is entitled to respond $2\clubsuit$. In essence the main reason why responder should respond a minor over a major is when he feels that if opener can support his minor there may be a chance of going for the minor suit slam.

3 Opener's Rebid

In this chapter we want to discuss the situation that the bidding has gone open-response. In general we have that opener should support if the response was a major, otherwise to make a rebid that describes his hand: his shape and his strength. If we were to consider only the hand shape we would have the following general guidelines: Balanced hands are shown by rebidding no-trumps; two-suited hands are shown by rebidding the second suit; single-suited hands are shown by rebidding the opened suit. If we were to only consider hand strength, then we would have the following general guidelines: weak hands rebid simply, strong hands rebid with a jump. But if we take both parameters into consideration, which we will need to do, then we will see that these two guidelines do not easily interlock. In other words exceptions abound. We will discuss the combination of these two guidelines at the chapter's close. The chapter is split into four sections. Section 3.1 discusses opener's rebids after hearing a support response; section 3.2 discusses opener's rebid actions after a new suit at the 1-level response; section 3.3 discusses opener's rebid actions after a new suit at the 2-level response; and to complete the chapter we have in section 3.4 opener's rebids after a no-trump response.

3.1 Rebids after Support Responses

In this section we consider that the response was either a simple support or jump support. Hence we have four cases to consider, depending on whether the opened suit was a major or a minor, and whether the support was simple or with a jump.

i: The bidding was 1M-2M. In this case responder promises the fit and 6-10 points. Since the bidding system is built around the principles of finding a major fit and game points, all that remains is to discover whether there are enough points for game, but since responder has not denied holding 4 cards in the other major, there is still the issue of finding a 4-4 major fit over the known 5-3 major fit.

If opener does not hold 4 cards in the other major, then he reasons as follows: (1) if opener has enough points that even opposite responder's minimally promised 6

there is game, which we reason to be at least 19 points, then opener's rebid is game 4M; if opener has too few points that even if responder has his maximum 10 then game is not possible, which we can reason to be at most 15, then clearly opener need go any further so he passes; thus when opener holds 16-18 he is not sure whether game is there because it all depends on whether responder is minimum or maximum. In this case opener invites game with 3M, responder will accept with a maximum by bidding 4M, whereas will refuse the invite when holding a minimum by passing.

- (2) **If opener does indeed hold 4 cards in the other major**, then opener's action is dependent of his strength. If he is too weak to even invite for game, then opener passes. But if opener is strong enough to at least invite then instead of bidding 3M or 4M he bids the other major simply. Thus after 1♥-2♥ opener rebids 2♠; whereas after 1♠-2♠ opener rebids 3♥. Responder is either minimum or maximum, and he either holds 4 cards in the other major or he doesn't, hence responder has one of four hands. If the bidding were 1♥-2♥-2♠: if responder holds a spade fit too, he would bid 3♠ or 4♠ depending on whether he is minimum or maximum; if responder did not hold a spade fit, then he would bid 3♥ or 4♥ again depending on his strength. A similar action is taken after 1♠-2♠-3♥ except that responder only has three continuations, he can either bid 3♠, 4♠ or 4♥. So something has got to give, and this depends on whether we want the 3♥ bid as forcing. If not then responder can pass. Personally I prefer 3♥ to be forcing, as it could also be used in the search for a slam. In this case, the bid of 3♠ would also encompass all minimum bids by responder. On the other hand, even when responder has a minimum hand and hearts, it does mean he has a double fit and thus his hand may be worth bidding game with anyway. Note in all cases if responder bids weak, opener is still entitled to bid game, in which case he holds the appropriate strength depending on whether responder showed that he was minimum or maximum.
- (3) **ii: The bidding was 1M-3M.** Here we have a similar logic to the above but less space to play with. But one thing is for sure, the jump response denies 4 cards in the other major. Hence opener has two available actions: either he passes or bids game. Since responder has promised at least 11 points, opener should be bidding game when he holds at least 14 points, thus with 12-13 opener is entitled to pass.

iii: The bidding was 1m-2m. In this case responder is showing a 5 carded fit, 6-10 points and denies 4 cards in either major. Again, if opener cannot justify game even when responder holds a maximum 10 points, the opener passes. On the other hand, even with an established minor fit, opener's intentions when searching for a game is to play in 3NT rather than 5m. The main reason why not is when responder has a severe shortage in length and in strength in either of his major suits. The reason for this is that opener knows that responder does not hold 4 cards in either major, so if opener too is short in either major then it means the opposition are long: 3NT could be in jeopardy from the opening lead.

If opener has no major suit worries, then he can happily nominate no-trumps (4) himself. If opener is sitting with 18+ points, opposite a known minimum of 6 points and knowledge that a fit exists, opener can rebid 3NT. If opener wants to invite game he bids 2NT; responder will accept with 3NT when holding a maximum, or else either pass or bid 3m when responder feels that his hand brings less when playing in no-trumps rather in trumps.

If opener has a worry in a major, then he cannot rebid no-trumps directly. In (5) which case opener can bid a second suit. Typically this will be one of the majors, and if this is the case then opener is sending the message that he wants to invite game, but is worried about the *other* major. Since responder does not have a 4 carded major, opener can even rebid a false major if it is information about the other major that he needs. Responder can either have a minimum or maximum hand, and he can either have a stopper or not in the other major. So responder bids accordingly: 2NT minimum points and no stop; 3NT maximum points and a stop; 3m minimum points and no stop; 4m maximum points and a stop.

iv: The bidding was 1m-3m. In this case we have that responder has shown 11- (6) 12 points, a five carded fit and no 4 carded major. Again, opener's main emphasis is on finding 3NT and again the main worry is a shortage of length and strength in either of the major suits. All the same: opener passes when he is weak and has no ambitions for making a game; opener bids 3NT when he has at least 14 points and enough in both majors to ease any worries; and finally opener rebids a major if he has weakness in the other major, to which responder will bid 3NT when he holds a

stop in the other major; else he will bid **4m**.

3.2 Rebids after a New Suit 1-level Response

In this section we consider that the open were at the 1-level and the response was a new suit also at the 1-level. Such a response shows 6+ points and at least 4 cards in the named suit. Importantly, the response is forcing, so the one thing opener cannot do is pass, he must rebid. There are three situations we need to consider: *i*: the general case where the open was a minor and the response was a major. *ii*: both suits were minors, that is **1♣-1♦**; *iii*: both suits were majors, that is **1♥-1♠**.

- (1) ***i*: The bidding was 1m-1M.** As ever, since the response was a major, opener's rebid priority is to support the major. For this opener needs to hold at least 4 cards in the responded suit. Here we can appeal to the same logic as for responder when he can directly support the opened major except we adjust the point ranges accordingly.

If opener can support the major response. A rebid of **4M** is game, and so promises at least 19 points, since opener knows that there is a guaranteed minimum of 6 points sitting opposite. A rebid of **3M** promises 17-18 points, the two point range corresponding to the logic that responder has only two courses of action: pass or bid game. A rebid of **2M** promises 13-16 points, again the four point range corresponds to the four possible continuations: pass; **3M**-pass; **3M-4M**; **4M**. In fact this range is bound below by the minimum number of points required for an opening bid, hence often we say that such a rebid shows 12-16 points.

- (2) We have already seen that the sequences **1M-2M**, **1M-3M** and **1M-4M** (although the latter is just in theory, not in practise) correspond to the point ranges 6-10, 11-12 and 13+ which were calculated from the fact that opener has in theory at least 12 points. In the previous paragraph we see that the sequences **1m-1M-2M**, **1m-1M-3M** and **1m-1M-4M** correspond to the point ranges 12-16 (which is 6-10 plus 6), 17-18 (which is 11-12 plus 6), 19+ (which is 13+ plus 6) which were calculated from the fact that opener has in theory at least 12 points (which is 6 more than responder's promised 6). Hence, for the continuations of the bidding, the same

logic is applied as in section 3.1, except there is no need to look for the other major fit as well, since the major fit now found is indeed a 4-4 fit.

If opener cannot support the major response, then his rebid action is dictated by the shape of his hand. There are three hand shapes that opener can have: *a* balanced; *b*: two-suited; *c*: single suited. We will look at each of these in turn as three separate cases.

***i:a*: Opener has a balanced hand**, then opener must have either 12-14 points (3) or 18-19 (with 15-17 opener would have begun with 1NT, whereas with 20+ opener would have begun with either 2NT, 2♣ or 2♦). Hence if opener has 18-19 points then he jump rebids in no-trumps with a rebid of 2NT. Holding just 12-14 points, opener rebids 1NT but only if he does not hold a four carded major that can be bid at the 1-level. If opener holds 4-4 in the majors, then he responds with the lower ranked hearts. Note that although a 1NT rebid denies holding a 4 cards in any rebiddable major, the 2NT rebid does not. Note that in some sequences we can deduce that opener has extra length in his opened suit, for example after 1♣-1♥-1NT we can deduce that opener must have at least 4 clubs.

***i:b*: Opener has a two-suited hand**, then opener has 5+ cards in his opened suit and 4+ cards in his second suit. If opener can rebid his second suit at the 1-level, then holding 12-18 points he does so simply which we call *a new suit rebid at the 1-level*; holding 19+ then opener rebids the suit with a jump, which we call *a jump-shift rebid*. If opener can only rebid his second suit at the 2-level, then there are two possibilities: either the new suit is lower ranked than the opened suit, or else it is higher ranked. If 2-of second suit is lower than 2-of the opened suit, then opener rebids as follows: holding 12-18 points, he rebids the second suit simply, which we call *a new suit rebid at the 2-level*; holding 19+ points, he rebids the new suit with a jump, which is once again *a jump-shift rebid*. If 2-of the second suit is higher than 2-of the opened suit, then opener rebids as follows: holding 12-16 points, he rebids his opened suit simply, which is the *denial rebid*; holding 17+ points he can rebid his second suit simply, which we call *a reverse*. Hence there are four actions for opener to rebid a second suit: *a new suit rebid at the 1-level* e.g. 1♦-1♥-1♠; *a new suit rebid at the 2-level* e.g. 1♦-1♠-2♣; *a jump-shift rebid* e.g. 1♦-1♠-3♣; *a*

reverse e.g. $1\Diamond-1\spadesuit-2\heartsuit$. We continue now to explain why we have the complication and where the different point strengths come from.

- (4) *The jump-shift rebid.* The question we need to ask is why, in the given example of $1\Diamond-1\spadesuit-3\clubsuit$, should opener rebid $3\clubsuit$ when he could well have bid $2\clubsuit$? This is the essence of the jump-shift: rebidding a suit at a level higher than necessary. Clearly, such action must be backed up with strength, in fact we will say that such action is game-forcing. Thus opposite a minimum 6 points from responder, this entails that opener needs at least 19 points to jump-shift. The logic is reasonable: by making a jump-shift opener has taken away much of the space that responder needs to decide where the best contract is, whether it be a part-score, game invitational, game or even a slam investigating hand; thus instead of responder having all the options and none of the space, we remove some of the options. For responder this makes life a lot easier: once the issue of strength is taken away, the only remaining question is whether there is a fit or not, and this depends on what distribution opener shows via his jump-shift. Since opener has bid two suits, we say that he is at least 5-4, meaning at least 5 in the opened suit and at least 4 in the rebid suit.
- (5) *The new suit rebids at the 1 and 2-level.* Now if opener has the same hand distribution as in the jump-shift, but has fewer than 19 points then he cannot jump-shift. What he can do though is to simply rebid his second suit. Thus a simple new suit rebid, whether it be at the 1-level or 2-level, is bound in strength to at most 18 points; with 19+ opener can jump-shift. If the new suit rebid is at the 2-level then opener shows the same shape as in a jump-shift, but if the new suit is at the 1-level, then although opener still promises at least 4 cards in the rebid suit, he has not promised any extra length in the opened suit. Sometimes though we can deduce that opener has an extra card in his opened minor, for example after $1\Diamond-1\heartsuit-1\spadesuit$ responder now knows that opener has 4 diamonds, for otherwise opener would have an 4:4:3:2 hand shape and with such a hand opener would have rebid his support in hearts; on the other hand after $1\clubsuit-1\heartsuit-1\spadesuit$ responder knows nothing perhaps opener has a 4:3:3:3 hand or even 4:2:2:5 hand shape. A 1-level rebid essentially means that opener has starting the bidding again, but this time he has only promised 4 cards in his “opened” suit instead of 5.

The reverse rebid. Compare the example reverse sequence to the sequence $1\heartsuit-$ (6) $1\spadesuit-2\diamondsuit$, which is just a new suit rebid at the 2-level as explained in the previous paragraph. Both sequences promise a 5-4 distribution, but crucial difference is the level that responder has to go to if he wants to come back to opener's first suit. After $1\heartsuit-1\spadesuit-2\diamondsuit$ responder can bid $2\heartsuit$; but after $1\diamondsuit-1\spadesuit-2\heartsuit$ responder has to say $3\diamondsuit$. This means that if responder prefers to play in the first suit, instead of the second suit, then he is *obliged* to be playing at the 3-level, even though he may only have a bare minimum of 6 points. Thus opener must have the compensation in strength to be playing at the 3-level needs approximately 23-24 points; hence opposite a minimum of 6 means to a reverse opener needs to have at least 17+ points. Note that a reverse *always* shows strictly more cards in the first suit than in the second suit. This is *not* the case for jump-shifts whereby the second suit could be equally long as the first. Note that if opener is too weak to reverse then obliged to rebid his opened suit, as we will later discuss. Also note that there is *never* any need to jump shift in the reverse suit, a reverse already shows 17+ points and as we will see is forcing.

i:c: Opener has a single-suited hand, then opener has 6+ cards in his opened (7) suit, does not hold 4+ cards in any other suit and has 11-18 points (with fewer than opener could have considered a pre-emptive open, with greater than opener would have at least made a semi-forcing open). Opener's rebid action are simple: holding 17-18 points, opener rebids his opened suit with a jump to the 3-level, which we call the *jump denial rebid*; holding 12-16 points then opener rebids simply his opened suit, the *denial rebid*. Note how the point ranges reflect similar point ranges for supporting the responded major. Further the fact that we jump with 17+ points allows us to think of the jump denial as being a "single-suited reverse". These rebids are denials, since in essence they deny the ability to rebid anything else. The jump denial rebid says that opener is strong enough to reverse so since he didn't implies he has no second suit; and he cannot be balanced otherwise he would either have opened 1NT else rebid 2NT. Hence we can deduce that the jump denial must promise at least 6 cards in the suit. For the denial rebid, we know that opener cannot support responder's major; opener cannot rebid a second suit, for either he has no second suit or else he is too weak to reverse; opener cannot rebid no-trumps, for his hand is not balanced; opener cannot jump in his opened suit, for he is not strong enough. Hence we can deduce that opener must have at least 5 cards in his

opened suit and 12-16 points. Sometimes we can deduce that opener has at least 6 cards in his hand, for example consider the sequence $1\Diamond-1\Heart-2\Diamond$, here opener denies holding 4 hearts (otherwise he would have supported), denies 4 spades (otherwise he would have rebid $1\Spade$), denies 4 clubs (otherwise he would have rebid $2\Club$), which means he could have a 3:3:4:3 hand shape but this is balanced, and he has denied (otherwise he would have rebid $1NT$), similarly he cannot have a 3:3:5:2 hand. All that remains is that opener has at least 6 diamonds. On the other hand, after $1\Diamond-1\Spade-2\Diamond$ it is possible for opener to only have 5 diamonds, but if that is the case then opener must have 4 hearts and is too weak to reverse.

- (8) **ii: The bidding was $1\Club-1\Diamond$.** Now that we have completed the general case we continue with the first of our two special cases that the open and response were the two minors. In fact all of the rebids carry the same meaning as their equivalents as given in the general case *i*. The only difference, the reason for why we did not include this sequence in with the general case, is opener's priority is no longer the same. Now responder's priority is to rebid a new major if possible, otherwise to rebid no-trumps, otherwise to support the diamonds, otherwise to rebid the opened suit clubs. Following this priority we find: the new suit rebids of $1\Heart$ or $1\Spade$ promise 12-18 points, show at least 4 cards in the named major, and promises no extra length in clubs (opener could still be 3-3 in the minors); rebids of $2\Heart$ and $2\Spade$ are jump-shifts, so are game-forcing, 19+ points, and promise at least a 5-4 distribution; rebids of $1NT$ and $2NT$ show balanced hands 12-14 and 18-19 points respectively, where again there is a priority to rebid $2NT$ instead of rebidding either major; supporting diamonds promises at least 4 cards in diamonds and so necessarily opener must have at least 5 clubs (otherwise when holding 4-4 in the minors he would have opened $1\Diamond$); $2\Diamond$, $3\Diamond$ and $4\Diamond$ show 12-16 and 17-18 points, with 19+ points respectively; finally rebidding the opened suit clubs with $3\Club$ shows a single suited hand and 17-18 points, whereas the $2\Club$ rebid is the denial, although again we can deduce that from such a rebid, opener must have at least 6 cards in clubs. Note that if the bidding has gone $1\Club-1\Diamond-4\Diamond$ opener has jumped over $3NT$, something that is normally not desired when there is only a minor fit. But the bidding more or less agrees neither player has anything in either major, and so $3NT$ would probably be fraught with danger. On the other hand, there may even be a shout at a diamond slam.

iii: The bidding was $1\heartsuit$ - $1\spadesuit$. Here we return to the usual supporting the responded major priority. Hence if opener holds at least 4 spades then he supports in the usual manner: $2\spadesuit$, $3\spadesuit$, $4\spadesuit$ promising 12-16, 17-18, 19+ points respectively. With the fit known responder bids on in the usual manner, exactly as given in case *i*. If opener cannot support then he describes his hand further: bidding no-trumps when his hand is balanced, as usual 1NT and 2NT mean 12-14 and 18-19 points respectively; rebidding a new suit shows in *principle* a 5-4 distribution, $2\clubsuit$ and $2\diamondsuit$ promises 12-18 points, whereas $3\clubsuit$ and $3\diamondsuit$ being jump-shifts are game forcing 19+ points. The rebids of $2\heartsuit$ and $3\heartsuit$ are respectively the denial and jump denial rebids, the latter showing a single suited hand in hearts and 17-18 points, whereas the former says that opener can make no other bid. There is one hand pattern that we have not taken into account: when opener has 15-17 points and a balanced hand (opener cannot open 1NT when holding 5 cards in a major). With such hands opener must rebid in his better minor, (rebidding $2\clubsuit$ when 3-3 in the minors), which is necessarily 3 cards in length. This is why new suit rebids are just 5-4 in *principle*. All the same, we can still make the deduction that the denial rebid of $2\heartsuit$ can only be made when opener holds at least 6 cards in hearts. (9)

3.3 Rebids after a New Suit 2-level Response

In this section we consider that the open were at the 1-level and the response was a new suit also at the 2-level. Such responses show 11+ points and crucially, is not just forcing (which means that opener cannot pass), but *autoforcing* to 2NT (which means that the bidding is not allowed to finish lower than 2NT). It is the autoforcing nature which distinguishes opener's rebids after a 2-level response from opener's rebids after a 1-level response. There are three situations we need to consider: *i*: the general case where the open was a major and the response was a minor. *ii*: both suits were majors, that is $1\spadesuit$ - $2\heartsuit$; *iii*: both suits were minors, that is $1\diamondsuit$ - $2\clubsuit$.

***i*: The bidding was 1M-2m.** Responder has promised 11+ points and opener (1) will assume that responder has at least 4 cards in his responded minor (if responder has less than 4 cards in his responded minor, then he necessarily holds undisclosed support for the opened major). Opener's action is to further describe his hand but

since the response was a minor opener's priority is not necessarily to support the minor. The meanings of many of the bids are the same as for section 3.2. The differences arise from the autoforcing condition imposed by the response, so that even opener's denial rebid will be forcing. This means we can be tighter in our definition of all the rebids that are higher than the denial rebid. New suit rebids show 5-4 distributions: simple new suits at the 2-level show 12-18 points; whereas jump-shifts to the 3-level show 19+ points (there might be an argument to slightly relax these ranges since if opener can only jump shift with 19+ and responder has guaranteed at least 11, it means that such sequences are almost certainly slam bound); simple new suits at the 3-level can be considered as psuedo reverses showing 17+ points; whereas a normal reverse shows the usual 17+ points. The no-trump rebids of 2NT and 3NT show 15-17 and 18-19 points respectively (note the difference, there is no no-trump rebid to show a balanced 12-14 points). Supporting the responded minor needs at least 4 cards in support, and since the rebid would be greater than the denial rebid such a rebid is thus showing strength, and least 17 points. Usually such rebids indicate a desire to look for the minor suit slam since otherwise opener may well settle to play in no-trumps. The jump denial shows what all jump denials show, 17-18 points and a single suited hand. Finally, all the remaining hands are rebid through the denial. Note that the denial is now a more general denial, since it contains hands that can support, as ever this is due to the autoforce still being in operation.

- (2) *ii: The bidding was 1♠-2♥*. Responder has promised 11+ points and crucially at least 5 hearts, hence opener needs only hold 3 cards to fit and support. Note, that unlike supporting a one level response where there are three possible rebids, now opener has only two support options, 3♥ and 4♥. But due to the autoforcing nature of the 2♥ response, even opener's denial rebid of 2♠ is forcing, hence no matter what responder next bids, opener can then show his support for responder's hearts. Hence we now have three ways for opener to support the responded major: going through the denial bid is the weakest and shows 12-14 points; bidding game directly, 4♥, shows a hand that is only interested in game; finally supporting to the 3-level is like the support of the 2-level minor responses from the first case, shows 17+ points and is thus indicating slam interest. The rebids of 2NT and 3NT show the same point ranges as in the first case, 15-17 and 18-19 respectively. Bidding new

suits, $3\clubsuit$ and $3\diamondsuit$, being at the 3-level are considered as psuedo reverses, showing 5-4 distribution and 17+ points. The jump denial, $3\spadesuit$, shows a single suited hand and 17-18 points. Finally the denial rebid of $2\spadesuit$ picks up all the remaining rebids.

iii: The bidding was $1\diamondsuit$ - $2\clubsuit$. As ever the 2-level response sets up an autoforcing (3) till 2NT situation. Responder promises 11+ points and in 4+ clubs (if he has less than 4 clubs, then it is because he has a hand that is too strong to directly fit, and he cannot lie in a major). All new suits, $2\heartsuit$ and $2\spadesuit$, are usual reverses showing at least 5-4 distribution and 17+ points. No-trumps shows 12-14 points for 2NT and 18-19 points for the jump rebid 3NT. Supporting the response with $3\clubsuit$ shows the now usual 17+ points. The jump denial shows the usual single suited 17-18 pointed hands. Finally, the denial rebid of $2\diamondsuit$, from which we can deduce that opener must have at least 5 cards in diamonds. Note that opener should rebid 3NT even when holding a 4 carded major, there is no danger of a missed major game; if responder has a 4 carded major yet decided to respond $2\clubsuit$ instead of showing his major implies that responder has at least 13 points, and now that responder knows that opener has at least 18 points, he should certainly be on the lookout for a slam.

3.4 Rebids after a No-trumps Response

In this section we consider the rebids after responder has bid some level of no-trumps. We will consider the three cases: *i*: the response was 3NT; *ii*: the response was 2NT; *iii*: the response was 1NT.

***i*: The bidding was $1x$ -3NT.** Even though 3NT is game and is normally a (1) sign-off, there are two reasons for opener to rebid, both are about finding the best contract: if opener has a long single suited major then he is entitles to rebid his major once again; the second reason is when opener feels as though a slam is still possible, which is discussed in chapter 7.

***ii*: The bidding was $1x$ -2NT.** We know that responder has 11-12 points, balanced (2) hand and denies any support or interest in any major suit. Essentially, opener's rebids are restricted to passing or bidding game. Again, if he has a single suited major

of at least 6 cards in length, then opener could consider to rebid his major: at the 3-level is weak and non-forcing, although responder may then take the bidding to game; at the 4-level is game, for which opener needs at least 16 points.

- (3) **iii: The bidding was 1 \clubsuit -1NT.** The 1NT response is the denial response. This means that responder can have all sorts of hands, although he has denied a fit and is limited to holding 6-10 points. Note that the 1NT response covers wildly different hands depending on what the opened suit was: if the open were 1 \clubsuit , then a 1NT response is more balanced; whereas after a 1 \spadesuit open, anything goes, even long hearts suits. The rebids are similar to when opener rebids after a new suit at the 1-level, except that the response now is not forcing, so opener is under no obligation to rebid. All new suit responses show 5-4 distribution: simple new suits cover 12-18 points; jump shifts promise 19+ points, reverses show 17+ points. Rebidding 3NT takes care of the balanced hands that are 18-19 in strength. Rebidding 2NT naturally enough invites game, responder bids 3NT when maximum otherwise passes when minimum, hence opener figures to have 15-17 points to invite. The jump denial rebid shows a single suited hand and 17-18 points. What would normally be the denial rebid, at least now promises a sixth card, since opener is under no obligation to rebid. Finally the actual denial rebid is clearly the pass. Passing includes all those hands that are balanced hands and 12-14 points; as well as hands that are 5-4 but too weak to reverse (since the 1NT response denies holding 4 cards in any suit higher ranked than the open).

Now that we have covered all the cases for opener to make his rebid, we turn our attentions back towards the loose strand mentioned at the chapter's open. The issue was how the two given guidelines could be combined. We have then the following. Rebids of no-trumps do imply that opener has a balanced hand; the converse also holds but with two exceptions: when opener has a balanced hand but can rebid a new suit at the 1-level; and when opener has a balanced hand, 15-17 points and opens 1M, then opener may be obliged to rebid with a better minor. Clearly, these two exceptions then imply that the fact of rebidding a second suit does not imply that opener has a two-suited hand: a new suit 1-level rebid does not promise 5 cards in the opened suit; and after a 1M open, some 2m rebids may be only on 3 cards. But otherwise we do indeed have that rebidding a second suit implies that

opener has a two-suited hand. The converse also holds but again with an exception: if opener is too weak to reverse, then he has a two-suited hand but rebids with his opened suit. Clearly, this exception then implies, that rebidding the opened suit does not imply that opener has a single-suited hand: perhaps opener is just too weak to reverse. The converse though does hold, when holding a single-suited hand then opener does indeed rebid with his opened suit.

4 Responder's Second Bid

In this chapter we consider that the bidding has already gone open-response-rebid and we will look at responder's next action: responder's second bid. In general, if we look at chapter 2, we find that there are four kinds of responses: support responses; limited non-support responses (no-trumps); unlimited responses at the 1-level; and unlimited at the 2-level. There is a big difference between an unlimited response at the 1-level and one at the 2-level, and this in turn means that the reasoning behind opener's rebid is different, and this in turn means that the reasoning behind responder's second bid is different. So to consider responder's second bid we will separate into four cases. The first case where we consider responder's action after a support response has been covered in section ???. The other three remain to be covered in the following sections: section 4.1 considers responder's second bid after his response was already limited; section 4.2 considers responder's second bid after his response was a new suit at the 1-level; section 4.3 considers responder's second bid after his response was a new suit at the 2-level.

4.1 After a Limited Response

In this section we consider responder's second bid after he has already limited his hand through his response. There are two kinds of limited responses, support responses and no-trumps. The continuations after a support response have already been covered in section ???. Concerning no-trump responses, the 2NT and 3NT responses are both very unambiguously defined; hence opener has made his rebid based on the very solid foundation of what responder has; hence since responder has already described his hand, he has no further reason to bid on, he should accept what opener has rebid. On the other hand there is real concern with the 1NT response; which says that responder denies holding support, denies holding 4 cards in any of the suits that are higher ranked than the opened suit, and holds 6-10 points. But a 1NT response could well be made with a weak single suited hand, where the suit is lower ranked than the opened suit. So in general we have that the bidding has gone 1 \clubsuit -1NT-rebid.

i: The rebid was 3NT. Typically responder will pass this bid, it is game. But (1) responder's response of 1NT does not mean that responder wants to play in no-trumps; he could well be holding a long single-suited hand which is lower ranked than the opened suit. In this case responder might bid his suit now, because he fears that he may not be able to enjoy his suit for lack of entries. This is the same thinking behind making a transfer bid when holding a weak hand opposite a 1NT open, see section ???. Thus if responder takes out the 3NT rebid, he is showing a weak hand, a 6 carded suit and little else. Such bidding is non-forcing, but opener is entitled to raise the suit to game if necessary.

ii: The rebid was 2NT. Opener's rebid is inviting game, so responder's actions (2) are relatively simple. When holding maximum points for his known range, 8-10, then he raises to 3NT, otherwise when minimum he passes. But similar thinking applies as in the previous paragraph, if responder is weak yet holds at least 6 cards in his suit, then he is entitled to bid it now. Clearly, bidding his suit at the 3-level is weak and non-forcing, whereas jumping shows that he is maximum. Note that responder shouldn't jump above 3NT unless his suit is a major, but compare this to the previous paragraph, where responder is freely bidding his suit at the 4-level. The point is that even though the combined strengths between opener and responder are the same (opener has at least 18 to bid 3NT directly and responder will take out with a minimum, say 6 points, which combined is 24 points; opener has around 16 to invite and responder has at least 8 to be maximum, again is a combined 24), how these points are distributed is different. In the second case, responder holds more points than in the first case, so figures to have either an almost solid suit, or else an outside entry; either way 3NT is still a good contract.

iii: The rebid was a new suit at the 2-level. Opener has therefore shown a 5-4 (3) hand and 12-18 points. Although the rebid is non-forcing, it is highly encouraging since opener could have 18 points. Thus when holding 8+ points responder should say something. Since the response was 1NT we know that responder is not rich in values and responder gives his *simple preference*. The principle of simple preference is applicable in many other sequences so we define it in general as follows: responder calculates which of opener's two suits gives more trumps when combined with his holding, under the condition that responder will only prefer the second suit if the

difference is strictly greater than one card. Responder can also give a simple preference towards his own suit if he has at least 6 cards in length. Note that simple preference of opener's major suit open, cannot be support, since responder would have directly supported. Note that in this case, responder has not actually bid a suit, but it is feasible that he has no preference to either of opener's suits, but does still hold at least 6 cards in suit lower ranked than the open. Passing is showing simple preference towards the second suit and since responder should bid when holding at least 8 points, then a pass indicates that responder has just 6-7 points and a strong dislike of playing in the opened suit. In this case, since responder is already limited by his 1NT response, holding 8-10 points and preference for the second suit, responder can raise the suit. Note that so far we have not mentioned 2NT as a possibility for responder's second action: preference to no-trumps is taken by responder in his rebid if he were to have passed, and responder does not want the contract to be at the 3-level when he is weak. But there is one special circumstance where 2NT does have a meaning: 1♠-1NT-2♥-2NT, responder is refusing either major preference, and offers minor preference, in other words, responder holds 5-5 in both minors.

- (4) ***iv*: The rebid was a reverse.** In this case opener has shown a 5-4 hand, 17+ points and is forcing for one round. One thing is for sure and that is that responder cannot hold support for the reversed suit, if he had the suit he would have responded with the suit at the 1-level. Opposite 17+ points, if responder has 8+ points, then he knows that game should be bid. Hence responder needs to convey this information to opener: whether he has 6-7 points or 8+. When holding just 6-7 points responder now bids the *moderator* 2NT, so called since its role is to moderate opener's behaviour when he holds only 17-18 points. All other bids therefore show at least 8 points and so are game-forcing: supporting the opened suit shows 3+ carded support (but note that if the open were a major, this action cannot be a fit, since otherwise responder would have directly supported); bidding 3NT shows a hand that responder is happy to play in 3NT with; a new suit can either be possible or impossible (since responder has denied holding certain suits due to his 1NT response): clearly possible suits are natural and show at least 6 cards in length, whereas impossible suits show a stop in this suit and denies a stop in the final unbid suit (holding stops in both unbid suits, responder would have now bid 3NT).

v: The rebid was a jump-shift. In this case opener has shown a 5-4 hand, 19+ (5) points and is game-forcing. Being game-forcing responder's next action is similar to the game-forcing actions after a reverse. Thus we have: supporting the opened suit shows 3+ carded support (but note that if the open were a major, this action cannot be a fit, since otherwise responder would have directly supported; such a bid would therefore be a form of denial); bidding 3NT shows a hand that responder is happy to play in 3NT with; a new suit can either be possible or impossible (since responder has denied holding certain suits due to his 1NT response): clearly possible suits are natural and show at least 6 cards in length, whereas impossible suits show a stop in this suit and denies a stop in the final unbid suit (holding stops in both unbid suits, responder would have now bid 3NT).

vi: The rebid was a jump repeat of the opened suit. In this case the rebid (6) has promised a single-suited hand and 17-18 points. Responder's actions are somewhat limited since any suit bid below 3NT are necessarily impossible. Holding just 6-7 points responder has no chance for game and should pass; his only other action would be to bid his suit and that would have to be at the 4-level and there is no guarantee that responder's suit at the 4-level plays any better than opener's suit at the 3-level. Holding 8+ points responder would typically raise opener's major (needing just 2 cards for a fit) or else sign-off in 3NT.

vii: The rebid was a simple repeat of the opened suit. In this case the rebid (7) has promised a single-suited hand and 11-16 points. If responder holds 6-7 points then he would pass. Holding 8+ points responder's priority is to support the opened suit and for that he needs just 2 cards; otherwise responder could bid his own suit when holding at least a 7+ carded suit. Finally, when opener's suit is a major, then a 2NT bid by responder would show 5-5 in the minors.

4.2 After an Unlimited 1-level Response

In this section we assume that the response was a new suit at the 1-level, and so in general the bidding has gone 1 x -1 y -rebid. The response of 1 y shows 4+ cards in the bid suit and 6+ points. Crucially though such responses are *unlimited* which is

the difference between this section and with the section prior.

i: The rebid was a new suit at the 1-level. Here we are covering four cases, all of which can be described with the sequence **1m-1x-1M**: opener has shown 4 cards in his second suit, has not promised any extra length in his opened suit, denies support in responder's major and holds 12-18 points. In essence opener has "opened" the bidding with **1M** but has only promised 4 cards in his suit instead of 5. Thus responder's second bid is based on the same logic required for responder to make his initial response, as given in chapter 2 but with a few modifications. Responder's

- (1) priority is to support the rebid major, needing therefore at least 4 cards. **With support for the rebid major**, holding 6-10 points responder will simply raise **2M**; holding 11-12 points responder will jump raise with **3M**; holding 13-15 responder will raise to game; holding 16+ responder will need to make a forcing bid, what we called a *wait and see* bid in chapter 2, but now can only be achieved through the conventional fourth suit forcing bid. **Without support for the rebid major**,
- (2) responder's action depends on his strength. **Holding 6-10 points**, responder bids an unbid major if he can, (which can only be in the form **1♣-1♦-1♥-1♠**), but note this bid is unlimited, 6+ points; else supports the opened suit **2m** holding at least 3 cards in support; else repeats his responded suit **2x** simply when holding at least 6 cards in length, else bids **1NT**, a sort of denial. Pass is the actual denial, and says that responder does not have a fit in the rebid suit, but does have preference
- (3) to play there and that he holds only 6-7 points. **Holding 11-12 points**, responder follows a similar pattern to the above, except with a jump: **3m** is jump support for the opened suit; **3x** shows 6+ cards in responder's suit; else **2NT** when responder has a stop in the fourth suit; else the fourth suit force when no other clear action
- (4) is available. **Holding 13+ points**, responder has enough strength for game which either means that responder bids **3NT** when holding a stop in the fourth suit, or else bids the fourth suit force.

ii: The rebid was 1NT. Here opener has shown a balanced hand 12-14 points, denies holding 4 cards in support of responder's major and denies holding 4 cards in any suit that could have been shown as a 1-level new suit rebid. Responder's

- (5) second action is again dependent of his strength. **Holding 6-10 points**, responder knows that there can be no game and so his emphasis is on finding the best part-

score. Thus if he has a fit for the opened suit then he can simply bid that now; else when holding at least 6 cards in his own suit he could repeat his responded suit simply at the 2-level; else when holding a 5-4 distribution, where the his second suit is lower ranked than his first suit, responder can bid his second suit now (opener will pass or correct) simply at the 2-level; else responder will pass. **Holding 11-12 (6) points**, responder makes similar actions to the above except with a jump: with support for the opened suit responder will fit at the 3-level; else when holding a 5-4 distribution, if the second suit is higher ranked than the first suit, then responder can show his suit at the 2-level (a kind of responder's reverse) which will be forcing, otherwise he needs to jump to the 3-level in his second suit which is not forcing but will be highly encouraging for opener; else responder bids **2NT** to invite game. **Holding 13+ points**, then responder is in the game zone; holding a fit for an (7) opened major, responder jumps to game in the suit; holding 6 cards in his major then responder bids 4-of his major; holding just 5 cards in his major, responder should bid some other suit at the 3-level and hope that opener does pass; else signs off in **3NT**. One problem with this basic structure is that there is no obvious forcing bid, one solution would be to incorporate the Roudi convention, see section [13.3](#).

iii: The rebid was 2NT. Here opener has shown a balanced hand 18-19 points (8) and denies holding 4 cards in support of responder's major. Although this rebid is not forcing, it is highly encouraging, for at worst the combined total is $18+6=24$. Responder has only two weak actions: repeating his own suit simply at the 3-level shows at least 6 cards in the suit and at most 7 points; and pass which responder will only do when at a bare minimum and only 4 cards in his responded major. All further bids by responder are game-forcing and so responder makes a descriptive second bid; supporting the opened suit with a fit; showing a second suit when 5-4 (note that opener may hold a second suit higher ranked than the response, since the **2NT** rebid has not denied such a holding); repeating his major suit with a jump, that is to game, shows a suit of at least 6 cards in length; finally **3NT** is a game sign-off. As with the previous case we can benefit through use of a convention, checkback Stayman, see section [13.4](#).

iv: The rebid was a simple new suit at the 2-level. Here we have four sequences that can be expressed as $1x-1M-2m$, in which case opener has shown a 5-4

- hand shape, denied 4 cards in the responded major and has 12-18 points; but if the open were a major, then the rebid minor might be false, in which case opener has a balanced hand and 15-17 points. All the same, responder treats the rebid as a natural 4+ carded suit. Note that since opener could be sitting there with 18 points,
- (9) responder should make some noise when holding at least 8 points. **Holding 6-10 points** responder's second bid uses the exact same logic as that given in section 4.1, built around the principle of simple preference. Responder gives simple preference to the opened suit by bidding $2x$. Responder gives simple preference to the rebid suit by passing with 6-7 points, else simply supports to $3m$ when holding 8-10 points. Responder gives simple preference to his own suit when he has at least 6 cards and
- (1) has no real preference to either of opener's suits. **Holding 11-12 points**, responder's second bid uses a similar logic to the above, except he now makes a jump to show his extra strength. With a fit for the opened suit, responder bids $3x$; with 6 cards in his own suit then he repeats it with $3M$; with a fit in the rebid suit or else with a stop in the fourth suit responder bids $2NT$ (note that responder cannot bid $3m$ as this shows just 8-10 points); otherwise responder can bid the fourth suit force, see section 13.1. We could call this action jump preference except that now responder guarantees a fit, not just preference.
- (2) **Holding 13+ points**, responder has four actions to make: holding a fit for the opened major suit, then he raises to game when holding just 13-15 points, with 16+ he goes first through the fourth suit force; otherwise when holding a stop in the fourth suit he can himself bid $3NT$; otherwise he can bid his own major suit at the 4-level if he has at least 6 cards in length; else responder can use the strong denial of the fourth suit force, see section 13.1.
- (3) **v: The rebid was a reverse.** This covers four sequences which can be expressed as $1m-1M-2x$. In all opener has promised 5 cards in his first suit, 4 cards in his second suit, strictly more cards of the first suit than the second, denies four cards in support of the responded major and shows at least 17 points. These reverses are forcing for one round, but not necessarily game-forcing (we can think of reverses as forcing to the 3-level). Responder's action is dependent on two factors: whether he holds at least five cards in his responded major or not; and whether he has only 6-7 or 8+ points (hence game values). Essentially responder's second bid has the following priority: support opener's rebid suit if it were a major; else to show a fifth card in his responded major; else to bid something else. So, if opener's rebid suit

is a major and responder holds at least 4 cards in support, then responder bids the game when holding only points for game, approximately 8-10 points, with 11+ then responder can support simply which indicates slam interest; otherwise, when holding at least 5 cards in his responded major, responder simply bids it; otherwise when holding slam interest points and 3 cards in the opened suit then responder simply supports; otherwise holding 8-10 points and a stopper in the fourth suit, responder can bid **3NT**; finally we have the two denial bids, the strong denial bid when 8+ points is the fourth suit force, see section 13.1, but with 6-7 points only responder's weak denial is **2NT**: the so-called moderator since such a bid tells opener to moderate his behaviour when holding only 17-18 points.

vi: The rebid was a jump-shift. Now we have eight sequences covered. In all (4) opener has promised 5 cards in the first suit, 4 cards in the second suit, although the two suits could be of equal length, denies 4 cards in support of responder's major and at least 19 points. These jump-shifts are game-forcing and hence responder's next action is easier than in the previous cases. Holding just game going points and having no interest in slam responder bids as follows: if responder can support the rebid major when holding 4 cards in support; else support the opened major when holding 3 cards in support; else bid his responded major when holding at least 6 cards in length; else bid **3NT** when holding a stopper in the fourth suit; else bid the fourth suit force, see section 13.1. If responder has slam interests then he makes his bids below the game level, including supporting a minor at the 4-level. Note that since responder cannot pass, his denial bid is the fourth suit force, see section 13.1.

vii: The rebid was the jump denial. This shows very specifically that opener (5) has 6+ cards in his bid suit, 17-18 points and denies 4 card support in responder's major. Such bids are non-forcing but highly encouraging. All non-pass bids by responder are therefore game-forcing. Hence responder's action is relatively clear, he can support and raise to game in opener's major; or else try his luck in **3NT**; or else try game in his own major when he holds at least 6+ cards. There is little point in responder introducing a new suit to look for a fit there since opener is known to not be able to fit, hence such action indicates that responder has 5 cards in his responded major. Bidding below game is considered stronger action than bidding game directly and so such instances are considered as showing slam interest.

- (6) **viii: The rebid was the simple denial.** In all cases we can deduce that opener has at least 5 cards in his suit, sometimes we can deduce a sixth card though, denies support in responder's major, denies the ability to show a second suit, denies holding a balanced hand and has 12-16 points. With 6-10 points responder need not think about game and so basically makes the bid that leads to the best part-score: if he has a 5-4 distribution where his second suit is lower ranked than his responded suit then he can show it; if he has 6+ cards in his own suit he can rebid that simply; else he is entitled to pass. Holding 11+ points responder can make similar bids as above, but with an extra level: thus bidding a new suit with a bid higher than 2 of the responded suit shows 5-4 distribution and is forcing; 2NT shows 11-12 points and interest to play in no-trumps; rebidding his responded suit at the 3-level shows a single suited hand with at least 6 cards in the responded suit and 11-12 points; raising the opened suit shows support and 11-12 points. With 13+ points responder can bid directly to game if that is the correct contract to be, whether it be 3NT or else raising opener's major with support, or else bidding the responding once again at game when it is a major. A convention that fits neatly into this case is third suit forcing, see section 13.2.

4.3 After an Unlimited 2-level Response

In this section we assume that the response was a new suit at the 2-level, and so in general the bidding has gone $1x-2y$ -rebid. The response of $2y$ can either be a wait and see bid, or else is natural showing 4+ cards in the bid suit and 11+ points. Hence any rebid by opener that promises at least 14 points sets up a game forcing situation. There are only two kinds of rebid that do not promise 14+ points, when opener rebids a new suit below his opened suit and when opener rebids his opened suit. In such cases we will use the *autoforcing* nature of the 2-level new suit responses: this is the difference between this section and with the previous section.

- (1) **i: The rebid was a jump in the opened suit.** In general the bidding can be described by the sequence: $1x-2y-3x$; opener has shown a single-suited hand with at least 6 cards in his bid suit, and 17-18 points. Hence the rebid has set up a game

forcing situation. Responder's second bid is then as follows: if \mathbf{x} is a major, then bidding $4\mathbf{x}$ is game and is thus a sign-off; bidding $3\mathbf{NT}$ is similarly so; a new suit at the 3-level shows a 5-4 distribution and can either be used to show a hand that wants to play in $3\mathbf{NT}$ but has a shortage in the unbid suit, or else is a slam going hand; bidding a new suit at the 4-level already has refused the desire to play in $3\mathbf{NT}$ and is thus showing 5-4 distribution and slam interest; finally if responder rebids his own suit then he again this bid must be at the 4-level so again responder is refusing to play in $3\mathbf{NT}$, hence such a bid must again be slam interest and showing his own long at least 6 carded suit (and thus has at most a singleton in opener's suit).

ii: The rebid was a simple repeat of the opened suit. In general the bidding can be described by the sequence: $1\mathbf{x}-2\mathbf{y}-2\mathbf{x}$; opener has bid his denial rebid and thus his hand is limited to at most 16 points. Hence this is one of the two situations whereby opener has not set up a game force and so we use the autoforcing nature of the response. Responder's second bid is then as follows. **Holding 11-12 (2) points** responder can only do one of the two following actions, both of which are non-forcing: bids $2\mathbf{NT}$ to show a balanced/semi-balanced hand; and bidding $3\mathbf{y}$ to show a single suited 6 carded suit. Except with the sequence $1\spadesuit-2\mathbf{m}-2\spadesuit-3\spadesuit$ which is discussed below, all other bids by responder are thus showing 13+ points and are therefore game-forcing. **Holding 13+ points** responder can either sign-off in (3) the game by bidding $3\mathbf{NT}$ or else $4\mathbf{M}$ when \mathbf{x} is a major (in which case it is clear that responder's first bid was a wait and see response). Finally new suit bids by responder whether at the 2 or 3-level are game forcing and show 5-4 distribution. Finally, supporting the opened suit at the 3-level by bidding $3\mathbf{x}$ shows a fit with the opened suit but has different strengths depending on what the opened suit was: if \mathbf{x} were spades (hence the bidding has gone $1\spadesuit-2\mathbf{m}-2\spadesuit-3\spadesuit$) then the strength is just 11-12 points since responder could be holding a hand of 3 spades, 4 hearts and 11-12 points (hence the response was a wait and see bid - opener didn't bid hearts, so responder knows there is no 4-4 heart fit, so reverts back to the 5-3 spade fit); if \mathbf{x} were hearts, then the strength is 16+ and is slam interest. Clearly the response was a wait and see bid whereby responder is not interested in looking for a 4-4 spade fit (otherwise he would have responded $1\spadesuit$), and he holds more than 13-15 points (otherwise he would have now bid game); if \mathbf{x} were diamonds, then the difference with the cases when \mathbf{x} was a major, is that the rebid implies new information for

responder (that opener has at least 5 diamonds) and so it is now possible that responder has support, whereas earlier in the auction he did not. Having and bidding a diamond fit is good only when looking for a potential diamond slam, otherwise responder would look for no-trumps. Hence bidding $3\Diamond$ would indicate 16+ points and be slam interest.

iii: The rebid was a simple support of the responded suit. In general the bidding can be described by the sequence: $1x-2y-3y$; opener has shown 4 carded support, 17+ points and has set up a game forcing situation. Thus such a rebid is of slam interest. But there is one problem, perhaps there is no actual fit, for when the response was a false suit. But if this was the case, then responder must have made a wait and see bid in a false suit and this can only be when responder has a fit for the opened suit and is too strong to support directly. Hence responder's second

(4) action needs to clarify whether the fit is in the opened suit or the responded suit. If responder does indeed hold a fit with the opened suit then he needs to show the fit now. Bidding game is considered as a sign-off whereas bidding the fit at the 3-level

(5) indicates that the slam ambitions has not been squashed. Hence if responder does not bid the opened suit now, then it is implicit that his responded suit was natural and hence the support rebid of opener has set the trumps. So either responder can sign-off in the appropriate game (typically meaning $3NT$, the only exception being $4\heartsuit$ for when the response was $2\heartsuit$) or else makes a slam going bid.

iv: The rebid was a reverse/psuedo-reverse. So we have two cases whether the rebid was a reverse or psuedo-reverse. **If the rebid was a reverse** then in general the bidding can be described by the sequence: $1x-2m-2M$ where $2M$ is a higher ranked bid than $2x$; opener has shown a 5-4 distributed hand and 17+ points.

- (6) Again, the rebid has set up a game forcing situation. Responder makes his second bid as follows. Bidding $3M$ shows 4 card support, and is slam interest. Note that with a 4 carded major, since the response was a new suit at the 2-level, this implies that responder must have at least 13 points anyway, and so there is *never* any reason for responder to directly bid to game. Bidding $3x$ shows a 3 carded fit and again slam interest. Without a fit responder can either bid no-trumps when holding a stop in the fourth suit, bidding $2NT$ shows a slam interested hand, whereas $3NT$ is a game sign-off; or else rebid his responded suit when holding at least 6 cards in

length, which again being at the 3-level is a slam interested hand. What remains is the denial bid by responder the fourth suit force, when responder holds no fit in either suit of opener, no stop in the fourth suit and no 6 cards in length in his own suit.

If the rebid was a psuedo-reverse then in general the bidding can be described by the sequence: $1\mathbf{M}-2\mathbf{x}-3\mathbf{m}$ where opener has shown a 5-4 distributed hand, 17+ points and again, the rebid has set up a game forcing situation. Responder makes his second bid as follows. Bidding game is sign-off: $4\mathbf{M}$ says that responder has a fit and thus implies that the initial response was a wait and see bid. Bidding $3\mathbf{NT}$ denies the major fit but else shows the ability to play the contract there. Thus three bids remain and since they are all below game are considered as slam interested: $3\mathbf{M}$ shows a fit and thus again implies that the response was a wait and see bid; $4\mathbf{m}$ shows a fit with opener's rebid suit; $3\mathbf{x}$ shows a suit of at least 6 cards in length and no fit. The denial bid, when responder holds five cards in his responded major or holds no stop in the fourth suit and so cannot bid no-trumps is the fourth suit force. (7)

v: The rebid was a simple new suit. In general the bidding can be described by the sequence: $1\mathbf{M}-2\mathbf{m}-2\mathbf{x}$ where $2\mathbf{x}$ is a lower ranked bid than $2\mathbf{M}$; opener has shown a 5-4 distributed hand and 12-16 points. This time the rebid does not set up a game forcing situation so we will exploit the autoforcing nature of the response. Responder makes his second bid as follows. **Holding a fit in opener's major,** (8) implies that the response was a wait and see bid. If the open were $1\heartsuit$ then the only reason responder made a wait and see bid that was not $1\spadesuit$ is because he was too strong to directly support. In this case responder will show his fit: $4\heartsuit$ is game and shows just game values 13-15 points, with 16+ points responder is on the slam hunt and so shows his strength and fit by bidding $3\heartsuit$ on his second turn. If the open were $1\spadesuit$ then responder could have made a 2-level wait and see bid for the same reasons as above, but also when he holds 3 card spade support and 4 cards in hearts and 11+ points. If the rebid was $2\heartsuit$ then if responder supports the hearts it shows that this was indeed the reason that responder made his wait and see bid. Thus if responder ignores opener's rebid heart suit and shows the delayed fit in spades, then we use the same reasoning as in the previous consideration: bidding $4\spadesuit$ game shows 13-15 points, whereas bidding $3\spadesuit$ starts the slam ball rolling. All that remains is to

- discuss when the rebid was $2\heartsuit$, hence the particular case $1\spadesuit-2\clubsuit-2\heartsuit$. Now we have all three reasons for why responder made a wait and see response. If responder holds 11-12 points then he made his wait and see bid because he holds 4 hearts on the side of his 3 card spade suit. Opener's rebid has told responder that no heart fit exists so responder must come back to spades. Thus $3\spadesuit$ shows 11-12 points whereas with 13-15 responder can bid game directly $4\spadesuit$. With 16+ points responder must first make a forcing bid before agreeing the spade suit, hence will first go through the fourth suit force. **Without a fit in opener's major**, then we know that the response was natural. It could still be a wait and see bid, since responder could be holding 4 cards in hearts. Responder's second bid then follows the following priority: support the rebid major (which can only be hearts) $3\heartsuit$ shows 11-12 points, $4\heartsuit$ shows 13-15 points; else when holding a stop in the fourth suit and an interest to play in no-trumps we have 2NT shows 11-12 points and 3NT shows 13-15 points; repeating the responded minor shows a suit of at least 6 cards in length and 11-12 points; supporting the rebid minor, $3x$ is slam interest and thus shows 16+ points, with fewer points responder should be thinking of looking for the no-trump game; finally we have the two denial bids: the fourth suit force and simple preference of the opened major. Note that the latter is *never* a fit and due to the autoforcing nature of the response is still forcing although the hand is limited to 11-12 points. Hence the fourth suit force in this case is game forcing.
- (9)

- vi: The rebid was no-trumps.** We have two cases depending on whether the rebid was 2NT or else 3NT . **If the rebid was 2NT** , then opener has shown a balanced hand but his strength is dependent on which suit he opened with: if the open was a minor, then the 2NT rebid would show 12-14 points and would thus not be considered as forcing; but if the open were a major, then the 2NT rebid would be showing 15-17 points and would therefore set up a game-forcing position.
- (1) All the same responder's actions follow similar logic. The only non-forcing action of responder is to pass (which can only make sense after $1\heartsuit-2\clubsuit-2\text{NT}$): hence any further bid by responder is game-forcing. If responder holds a fit in the opened major, hence it is clear that his response was a wait and see bid, then by bidding 4M would be a game sign-off, whereas bidding 3M would show slam interest. Otherwise, bidding 3NT would also be a game sign-off; repeating the responded suit at the 3-level would show a good six carded suit and slam interest; showing new

suits would show 5-4 distribution, but we need to look in a little more detail what responder's intentions are to deduce the strength of such action. If the open was a major then the rebid of **2NT** implies that opener cannot hold a side 4 carded suit. Thus the only reason for responder to show a second suit is to show to opener that he does hold 5 cards in his responded suit. This is only new news if the response was in a minor (since $1\spadesuit$ - $2\heartsuit$ already shows 5 cards in hearts). Thus responder's intentions is clearly to find to lay the groundwork for a slam in his responded minor. On the other hand, if the open was a minor (hence we are in the particular case $1\diamondsuit$ - $2\clubsuit$ -**2NT**) then if responder's second bid shows a second suit then this can only be in a major, and it can still be the case that opener holds 4 cards in either of the majors. Hence such action is primarily to look for the major game. But note that in this case responder must have at least game forcing points, otherwise he would have directly shown the major as a response instead of responding $2\clubsuit$.

If the rebid was **3NT** , then opener has shown a balanced hand and in all cases 18-19 points. Thus opposite a minimum 11 count, we are now not only in a game forcing situation but almost a slam interested auction by default. Responder's actions are as follows: If responder holds a fit with the opened major , then he can (2) bid **4M**. But clearly the response was a wait and see bid: if the open were $1\heartsuit$, then responder is only responding **2m** because he holds at least 13 points, thus his second bid of $4\heartsuit$ should be considered as slam interest; if the open were $1\spadesuit$, then responder could have been waiting to see whether opener does indeed hold four hearts, which the rebid of **2NT** therefore denies, thus responder may only hold 11 points when he bids $4\spadesuit$ at his second turn and so such action is non-forcing. If responder was strong enough to go onto slam then perhaps he could directly go into Blackwood, but it needs to be agreed that such action is agreeing spades as trumps. If responder repeats his own suit, then he is showing a single suited hand of at least 6 cards in trumps. If this suit is a major, (which can only be the particular case $1\spadesuit$ - $2\heartsuit$ -**3NT**- $4\heartsuit$) then this is a sign-off in game; if this suit is a minor then clearly taking **3NT** out to repeat a minor suit at the 4-level is slam interest. Finally, if responder bids a new suit at the 4-level would, as in the previous case, show a 5-4 distribution and following similar logic to that case we have: after $1\diamondsuit$ - $2\clubsuit$ -**3NT**-**4M** would show a hand looking for the major fit, but such action implies that responder does indeed hold at least 13 points and so is slam interest; whereas after 1M - 2m -**3NT**- $4x$ we

have that responder is showing 5 cards in his responded minor and interest for slam.

5 The 1NT Open

The opening bid of 1NT promises a balanced hand with 15-17 points. We further (3) assume that a 1NT open denies holding a 5 carded major.¹ Since the opening bid is so precise, responder knows directly where the final contract should be, whether it be game, possible game or just a mere part-score.

As ever, the bidding structure is built around finding major games. Opener cannot be holding a 5 carded major, but he does guarantee holding at least 2 cards in all suits. Thus for responder the interest lies in whether he holds a 4 card major or a 3 card major, depending on whether responder holds a 4 card major or 5 card major respectively. Thus by way of two conventions responder can investigate the major holdings of opener. Section 5.1 considers the Stayman convention, used to find 4-4 major fits; section 5.2 considers transfers, used to locate 5-3 major fits.

5.1 Stayman

The Stayman convention is where the direct response of 2♣ to a 1NT open asks (1) the following question: “*which 4 card majors do you hold?*”. We discuss here the Stayman with four responses²: 2♦ is no 4 card major; 2♥ and 2♠ shows 4 cards in the bid suit; and 2NT promises 4 cards in both majors. Thus typically, responder bids Stayman when he holds at least one 4 carded major (including 5-4 major hands), thus from the answer responder knows whether there is a fit or not. Since one answer is 2NT, a Stayman enquiry must be at least game-invitational. Further, if responder holds a four carded major and hears a 2NT response to his 2♣ Stayman enquiry, then there is a guaranteed major fit.

Two of the Stayman variation are discussed in future sections: the first drops 2NT as a response and so the convention is appropriately called Stayman with 3 responses, it is written out in full in section 16.4; the second variation uses 2♣ to ask opener

¹[1NT open : denies / not denies a 5 carded major]

²[Stayman : 3 / 4 / Puppet responses]

if he holds a five carded major and is called puppet Stayman, section 16.5.

5.2 Transfers

- (1) A transfer bid is one where the suit bid indicates the suit above, and typically promises at least 5 cards in this suit. Thus, after a 1NT open, a response of 2♦ promises 5 hearts and demands of opener to bid 2♥. Similarly, a 2♥ response promises 5 spades and demands of opener to bid 2♠. Responder is entitled to pass, and thus can transfer with as few points as none. One advantage of transfers to the majors is that it allows the stronger hand, the 1NT opening hand, to be declarer. Thus not only does the strong hand remain hidden from the defense but also it receives the opening lead.

[1NT-2♠ : tranfer to either minor / transfer to clubs / Baron]

- (2) The minors can also be shown by way of transfer bids, but have to be shown at the 3-level. One way is to have the 2♠ response to indicate clubs, and 3♣ to indicate diamonds. This has two disadvantages: first is that the 2♠ bid is a transfer over two bids, highly inefficient, (see Baron, section 16.2, for a better use of the bidding space); second the 3♣ bid is now taken away. It is nice to have all the 3 level bids to retain the same meaning, as given in section 7.8. A solution to the second problem is to incorporate both minors into the club transfer. Thus as a base we agree that 2♠ is the club transfer, then opener will complete with 3♣, whereby responder will either pass or correct to 3♦. Since transferring into a minor means the contract is to be played at the 3-level it demands a 6 carded minor suit, not just 5.

For the continuations of the bidding a useful convention is Smolen, section 5.6.

5.3 Bidding Game after a 1NT Open

Let us first consider the situation where game is being searched for directly. Considering 3NT needs a combined 25 points whereas a major game needs 26 points,

opposite a guaranteed 15 from opener, responder needs only 10 points to look for game.

Clearly, if responder does not hold a 4 or 5 carded major, then there cannot be a (1) major fit, thus responder replies directly 3NT.

If responder holds a 6 carded major, since a fit is guaranteed, responder first trans- (2) fers into the major then after hearing the completion of the transfer bids directly game.

When holding a 5 card major, responder also transfers, but after hearing the com- (3) pletion, now bids 3NT. Thus responder has effectively bid 3NT directly, but on the way has shown a 5 carded major. Thus opener can choose his preferred game, to bid 4 of the major when holding a 3 carded fit, or else pass and remain in 3NT.

Similarly, when holding a 4 carded major, responder first asks about opener's 4 (4) carded majors by way of Stayman. If opener gives an answer that reveals a fit, then responder just bids game directly in the fit. If there is no fit, then responder just signs off in 3NT. Again, the 3NT rebid is saying that responder would have bid 3NT directly, but instead was looking for a 4-4 major fit on the way.

5.4 Inviting Game after a 1NT Open

The same thought processes apply as in the previous section. If responder has (1) enough points to consider game when opener is maximum, but not when he is minimum, then he is in the invitational zone. Thus 8-9 points. Without any interest in the majors a response of 2NT invites 3NT: opener will bid game with a maximum 17, pass with 15, and think deeply when holding 16 points.

When holding a 6 carded major in response to the 1NT open, responder first trans- (2) fers to the suit and then rebids this suit at the 3-level. Opener will either accept the invitation by bidding game, or else refuse by passing.

- (3) When holding a 5 carded major responder also transfers, but his rebid is now 2NT. Thus again, responder has effectively bid 2NT directly to invite, but on the way has shown a 5 carded major. Opener can accept by either bidding 3NT without a fit, or 4 of the major, when with a fit. To refuse the invite, opener can pass without a fit or bid 3 of the major with a fit. Even after this responder may go on, for a fit in opener's hand may increase his hand strength.
- (4) When responder holds a 4 carded major and invitational points then he can Stayman, 2♣. If a fit is revealed responder can invite with 3 of the suit.³ If no fit, than again, responder bids 2NT. Opener can pass or convert all bids to his preferred game or part-score.

5.5 Part-Score Bidding after a 1NT Open

- (1) Finally, when responder is too weak to invite the normal action is to pass. When responder is weak and holds a long major suit of at least 5 cards then it is better to be playing in a 2-level suit contract, rather than to leave opener stranded in 1NT. Thus responder transfers into the major and passes the completion. The cloud of this action is that an extra trick is demanded, the silver lining is that opener can use dummy's trumps, thus make tricks. In other words, dummy's long suit doesn't become stranded from declarer. Similarly, when transferring into a minor by way of 2♠, responder will either pass or correct to 3♦.

Hands correspond to the table on the facing page.

1a: Holding 15 points and a balanced hand, the correct open is 1NT. With 9 points responder calculates that between them there are 24-26 points, thus if opener is maximum he wants to be in game. Without a four card major, there is no chance of there being a major fit, so attentions are turned towards no-trumps. Thus he invites with 2NT. Opener passes with his minimum hand.

1b: After the 1NT open, responder now has 10 points, thus enough for game. Instead of bidding 3NT directly, responder holding 4 spades responder should

³[Stayman 4 responses after 2NT answer : natural / transfer]

Responder	a	b	c
Opener	♠ 10 8 2 ♥ J 5 4 ♦ K J 8 3 ♣ A 5 2	♠ Q 10 8 2 ♥ J 5 ♦ K J 8 5 3 ♣ A 2	♠ 10 8 2 ♥ J 9 8 5 4 ♦ K J 8 ♣ A 2
1	1NT – 2NT	1NT – 2♣ 2♠ – 4♠	1NT – 2♦ 2♥ – 2NT 4♥ –
2	1NT – 2NT 3NT –	1NT – 2♣ 2♦ – 3NT	1NT – 2♦ 2♥ – 2NT 3NT –

investigate whether opener too has 4 spades. Thus he bids 2♣, Stayman. Opener answers 2♠, he does have a 4 card spade suit, thus delighting responder who signs off in the spade game, 4♠.

1c: After the 1NT open, responder with 9 points is in the inviting range, and holds a 5 card heart suit, thus he transfers by bidding 2♦. Opener complies by completing the transfer, 2♥. Responder therefore bids 2NT. Note how 2NT is the same as bidding 2NT directly, except responder has shown *on the way* a 5 card heart suit. Opener has the heart fit, and after re-evaluating his hand punts 4♥.

2a: With 17 points and a balanced hand, the only correct open is 1NT. As above responder bids 2NT, which opener accepts for being maximum, 3NT.

2b: After the 1NT open, as above responder bids 2♣, Stayman. Without a 4 card major opener answers the question in the negative, 2♦. Thus responder knows that there is no major fit, so reverts to game plan b, 3NT.

2c: After the 1NT open, as above responder transfers to hearts, 2♥, opener completes the transfer, 2♠, and responder invites with 2NT. Opener being maximum can accept the invitation. Holding only a doubleton heart opener has no heart fit and so bids 3NT.

5.6 Combining Stayman and Transfers

We have already seen that Stayman is the convention used to find a 4-4 major fit, whereas transfers helps to uncover the 5-3 major fits, but by bringing these two conventions together we can be even more expressive. The two cases of interest are: *i*: when responder holds a 5-4 major combination; *ii*: when responder holds a 5-5 major combination.

We consider case *i* first; say the open is 1NT and responder holds a hand containing 5-4 in the majors. Note also that this case also covers 6-4 combinations as well. It would be wrong to transfer into the 5 carded suit and then rebid the 4 carded suit, as this ignores the fact that Stayman will reveal whether there is a 4 card major in opener's hand; and if there is then a fit is directly located. Thus such hands are not transfer hands, but rather Staymanic hands, and thus the response is 2♣. If opener answers in either major, then a fit has been found, and responder reasons in the same way as in section 5.1. If opener answers a negatively with 2♦, responder's attentions turn to finding the possible 5-3 fit, and this is done by rebidding one of

- (1) his majors. How he does this depends on the kind of strength he has. With a hand that only wants to invite game, (which is a minimum hand for even responding with Stayman), responder shows his 5 carded major at the 2-level. Opener now knows that responder holds 5 cards in this suit, 4 cards in the other major and 8-9 points and will act appropriately; supporting with a fit, otherwise reverting to no-trumps,
- (2) and bidding game when holding a maximum. With a responding hand worth game directly, opener rebids his 5 carded major at the 3-level. Again, this indicates to opener that responder holds a 5-4 major combination. Again opener can take the

appropriate action; supporting with 3 cards, otherwise sign off in 3NT. Finally if (3) responder is too weak to respond Stayman, that is fewer than 8 points, but nevertheless holds a 5-4 major hand, the correct bid would be to transfer to the 5 carded major and pass.

Case *ii* is when responder holds at least 5-5 in the majors. Note that this case also (4) covers the responder's major 6-5 distributions. Note further that since the 1NT open denies holding two doubletons, opener must have at least one 3 carded major, thus responder can automatically re-evaluate his hand knowing that there is a major fit. The problem remains in how to find the fit. Responder now uses transfers. Thus, the action of transferring into one major, then rebidding the other now shows a 5-5 shape. Again, how this is done is dependent on the strength of the hand. If responder wants to invite game, he transfers first into hearts, by way of 2♦, and after hearing the obligatory 2♥, rebids 2♠. If he is strong enough to force game, the correct bidding would be to first transfer into spades by way of 2♥, and then after the obligatory 2♠, rebid 3♥. Opener will now know the fact that responder has 5-5 in the majors and his appropriate strength, and can thus make the correct choice of contract. Finally, when holding fewer points, responder should bite the bullet and transfer into one of his majors, and then pass.

Hands correspond to the table on the next page.

1a: Opener has 15 points and a balanced hand, so begins with 1NT. Responder has the 8 points to invite game, and holding a four card major Stayman's with 2♣. Unfortunately opener cannot help as his bid of 2♦ says that he holds no 4 card major. Responder then bids his 5 carded major at the 2-level, 2♥; which means to opener that responder holds 8-9 points, 5 hearts and 4 spades. Opener without a heart fit and being minimum bids 2NT. Thus for responder with a minimum hand opposite and no major fit, passes.

1b: After the 1NT open, responder holds another 5-4 hand, but now 11 points means he has enough for game. The Stayman question of 2♣ yields the 2♦ negative answer. Responder shows his hand by bidding his 5 carded major at the 3-level, 3♠, thus opener understands that responder is sitting with 4 hearts, 5 spades and enough points to push to game. With a spade fit opener

Responder	a	b	c	d
	♠ 9 5 4 3 ♥ A K 10 8 3 ♦ J 7 2 ♣ 3	♠ K 9 7 5 3 ♥ A K 10 3 ♦ J 2 ♣ 6 3	♠ Q 7 5 4 3 ♥ A 10 9 8 3 ♦ 7 2 ♣ 3	♠ K 9 7 5 3 ♥ A K 10 8 3 ♦ J 2 ♣ 3
Opener				
1 ♠ 10 8 6 ♥ Q 4 ♦ A K 6 3 ♣ A Q 7 4	1NT – 2♣ 2♦ – 2♥ 2NT –	1NT – 2♣ 2♦ – 3♠ 4♠ –	1NT – 2♦ 2♥ – 2♠ 3♠ –	1NT – 2♥ 2♠ – 3♥ 3♠ – 4♠
2 ♠ 8 6 ♥ Q J 4 ♦ A K 3 ♣ A Q J 7 4	1NT – 2♣ 2♦ – 2♥ 4♥ –	1NT – 2♣ 2♦ – 3♠ 3NT –	1NT – 2♦ 2♥ – 2♠ 4♥ –	1NT – 2♥ 2♠ – 3♥ 4♥ –

supports to game, 4♠.

1c: After the 1NT open, responder holding 5-5 in the majors knows that there must be a major fit, and so can evaluate his hand directly at 8 points, thus he is enough to invite. Thus he transfers with 2♦, opener completes with 2♥ and now responder shows his second suit, 2♠, which must be a five carded suit, otherwise he would have used Stayman originally. Opener supports with 3♠ leaving the door open for responder to accept or not the invitation to game. Being just minimum a pass is not so bad.

1d: After the 1NT open, responder now holds 11 points and 5-5 in the majors. Thus transfers to spades first with 2♥, opener completes with 2♠, and now responder comes back with 3♥. Opener supports the spades with 3♠, preserv-

ing space for control-bidding if responder wants to search for a slam. In this case responder is happy to sign off in 4♠.

- 2a:** With 17 points and a balanced hand the open is a clear 1NT. Responder Staymans with 2♣, opener without a major answers 2♦. Again, responder bids 2♥ promising the 5 hearts, 4 spades and game inviting points. With a fit in hearts now found opener with his maximum signs off in 4♥.
- 2b:** After the 1NT open, responder's Stayman 2♣, and 2♦ denial, responder bids 3♠; showing 5 spades, 4 hearts and game going points. Opener without a fit signs off in 3NT.
- 2c:** After the 1NT open, responder transfers 2♦, opener completes with 2♥ and responder continues with 2♠, showing 5-5, invitational points. Opener with a maximum and a heart fit signs off in 4♥.
- 2d:** After 1NT, 2♥ transfer completed with 2♠, responder's 3♥ shows 5-5 in the majors and game going points. Opener with a heart fit shows his support with 4♥. Responder may feel a slam is a possibility, and ideally would like to know the whereabouts of the spade ace. For now though we'll let responder play just in game.

6 Strong Openings

We have already seen we can open the bidding with as few as 11 points, when we hold at least a six carded suit. Partner will respond with at least 6 points, anything less leads to a pass. Thus, we open at the 1-level all hands that will not miss game if partner hasn't the strength to muster a simple response. On the rare occasions that we are dealt such hands that only require partner to hold about 3-4 points for game to be bid we cannot run the risk of opening at the 1-level and seeing the bidding finish at the 1-level, as partner passes. Thus we can deduce that such hands are those that are of at least 22 points, (note how this fits in with a 1-open being 11-21 points). These hands are called **semi-forcing** and we open them by commencing with a $2\clubsuit$ open. We will explore the $2\clubsuit$ open and following bidding in section 6.1. Better still we may be dealt a rockcrusher, a hand that as long as partner is sitting there with 13 cards, we are strong enough alone to make game. Naturally enough these hands are called **game forcing** and we open them with a bid of $2\diamondsuit$. This open and following bidding will be further looked at in section 6.2. We should note that although traditionally $2\clubsuit$ has always been considered the game forcing open, we will instead present the modern approach whereby $2\diamondsuit$ is our game force. Essentially there is not much in it, but we will mention one advantage in the appropriate section. Finally, concerning balanced hands, so far we have ways to open and show balanced hands for all point ranges between 12-19. In section 6.3 we will discuss what we do when we pick up balanced hands with 20+ points. More complicated is the way to show strong two-suited hands, so we include that within the conventions, see section 17.8.

6.1 Semi-Forcing Opens

- (1) A semi-forcing open of $2\clubsuit$ means that we are too strong to open at the one level and yet too weak to game-force with a $2\diamondsuit$ open. The hand can fall into one of two categories: a normal unbalanced hand shape which is too strong for a 1-open, that is more than 21 points (see page ??), thus 22-23 points; or a single suited hand which is too strong to open at the 1-level with the intention to jump rebid this suit, that is more than 18 points, (see page ??), thus 19-20 points. Opener's rebid will

establish which of the hand types it is.

The response to a $2\clubsuit$ open is a simple $2\diamondsuit$ relay; this means nothing, it is a waiting (2) bid, that takes up the minimum amount of bidding space so that opener can better describe his hand through his rebid.

A simple rebid, without a jump, is made with a hand that is too strong to have (3) opened at the one level, thus it promises at least 5 cards and 22-23 points. Opener may or may not have a second suit. Assuming opener's suit was a major, then responder bids on in the same way had the open been at the 1-level, with the following priority: support if possible; bid another major, which promises only 4 cards; bid $2NT$ if holding a balanced hand and some points; bid a minor if it is of at least 5 cards. Opener will then continue in a similar fashion, supporting a major, rebidding a second suit, nominating no-trumps. Note, the nature of a semi-forcing open is that opener is limited, once opener has shown his suit responder does have the right to pass. If responder does say anything then it is considered game forcing, although this only needs 4+ points.

If opener rebids with a jump, then he holding one of those hands that is single suited (4) and thus falls into the 19-20 point range. Again responder may take the bidding further, but at least the knowledge is there, opener does not have a second suit, thus if responder were to bid his own suit this must be of at least 5 cards in length.

Naturally enough opening with at least 19 points offers greater chances for a slam to be there. Say responder is lucky enough to hold enough points for the scent of slam blood. In such cases it is important to know for responder whether his points will be working for partner or not. Opposite a hand that promises 22-23 points, any honours responder may have can be considered as working honours. Say responder has a long suit headed by the queen-jack, it is likely that opposite to this sits either the ace, king, or even both, thus responder's suit is a source of tricks. On the other hand, such a suit sitting opposite a distributional hand with 19-20 points are unlikely to bring in much, since this suit is probably short in opener's hand. Instead, if these 3 points were invested into one king honour, this is more likely to be of important value.

Sometimes distributional semi-forcing hands appear in responder's hand and partner has opened the bidding. In such cases responder is typically holding a single suited hand with at least 16 points, (see page ?? for a similar responding slam investigation, and thus similar point range). Thus if the open were $1\Diamond$, and responder held such a single suited hand, say in spades, with 16+ points, then instead of responding $1\spadesuit$, responder will jump to $2\spadesuit$. (Note that this doesn't limit a $1\spadesuit$ response to being less than 16: a $1\spadesuit$ response can be made with even as much as 20+ points, the only reason responder didn't say $2\spadesuit$ is that his spade suit is not long.)

Responder	a	b
Opener	\spadesuit Q 9 3 \heartsuit 10 5 4 \diamondsuit 9 8 7 4 \clubsuit Q 10 3	\spadesuit J 9 6 3 \heartsuit 5 \diamondsuit 9 8 7 4 \clubsuit K 10 8 3
1 \spadesuit A K 8 2 \heartsuit A K J 7 6 \diamondsuit K 10 2 \clubsuit A	$2\clubsuit - 2\diamondsuit$ $2\heartsuit - 4\heartsuit$	$2\clubsuit - 2\diamondsuit$ $2\heartsuit - 2\spadesuit$ $3\spadesuit - 4\spadesuit$
2 \spadesuit 8 \heartsuit A K Q 9 7 6 3 \diamondsuit K J 10 \clubsuit A 5	$2\clubsuit - 2\diamondsuit$ $3\heartsuit - 4\heartsuit$	$2\clubsuit - 2\diamondsuit$ $3\heartsuit - 4\heartsuit$

Hands correspond to the table on the facing page.

- 1a:** Opener has 22 honour points and an unbalanced hand. It is too strong for a $1\heartsuit$ open and so is opened with a semi-forcing $2\clubsuit$. Responder bids the statutory $2\diamondsuit$ relay. Opener then bids his suit without a jump, $2\heartsuit$, thus promising a 5 carded suit and 22-23 points. Responder then with 4 points and a fit bids simply $4\heartsuit$. Notice had responder had more points and wanted to consider a slam the correct fitting bid would be $3\heartsuit$. Notice had the open been $1\heartsuit$ with the intention of reversing in spades, with only 4 points responder would have passed and a lovely $4\heartsuit$ contract would have gone begging.
- 1b:** After the $2\clubsuit$ open, $2\diamondsuit$ relay, $2\heartsuit$ rebid, responder can not support, so instead shows his spade suit, $2\spadesuit$, promising just 4 cards. Opener can support this and so bids $3\spadesuit$. There is no need for opener to bid $4\spadesuit$, the bid of $2\spadesuit$ has already decided that at least game is going to be played. But perhaps responder has slam intentions, and if so then opener is not going to take away the precious control-bidding space. Unfortunately for opener, responder has no slam hopes as he signs off in $4\spadesuit$.
- 2a:** Opener only has 17 honour points but the quality of his suit is that will come to 7 tricks, plus the outside ace, gives a hand that can make 8 tricks without breaking sweat. Thus this is a hand that is worth a semi-forcing open. In a way we are adjusting the strength of the hand, adding a further point for each extra trump; thus the hand is a 19 pointed hand, and thus we are indeed able to justify a $2\clubsuit$ open. Naturally enough the response is $2\diamondsuit$. Now then opener jumps to $3\heartsuit$, to show that his hand is a distributional semi-force. With only 4 points and a fit, responder signs off in $4\heartsuit$.
- 2b:** The open is $2\clubsuit$, relay of $2\diamondsuit$ and rebid $3\heartsuit$. Responder now has no fit, but realises that there is no reason to show his spades, he only has 4 and opener certainly doesn't have 4. As is often the case, with a long good suit opposite a shortage, it is better to play in the suit rather than attempt no-trumps. For this reason responder signs off in $4\heartsuit$.

6.2 Game-Forcing Opens

- (1) If as opener we are greeted with a hand that is even bigger than a semi-forcing open, we are holding a game forcing hand. Following similar logic to that of above, this could either mean a hand that is so full of honour points you take ten minutes to count, and recount, them i.e. 24+; or a hand that is distributionally top heavy towards one suit that you can make game without thinking. Clearly responder holds fewer interesting cards than opener thus it is easier to find the correct contract if it is responder who describes his details to opener. The response structure to a 2♦ open exploits this: 2♥ promises no aces and not two kings; 2♠ promises one ace; 2NT promises no aces, but two kings; and 3♣ promises at least one ace and king. From the response given opener now knows whether slam is a possibility, typically if two aces are missing there should be no intention to go further than game. Thus opener bids his suit and the bidding continues until a fit is found. It will then be opener's prerogative whether or not to push on further than game into slam.

6.3 The 2NT Open

- (1) An opening bid of 2NT promises a balanced hand with 20-21 points. The responses are relatively similar to the 1NT open as we have Stayman and transfer bids. Note that after a 1NT open there are ten steps before we get to 3NT, thus as we saw in chapter 5 we can be very descriptive with respect to the strength and shape of responder's hands. But, after a 2NT open there are only five steps before 3NT and thus we naturally lose much of our description. Clearly if responder is not interested in searching for a major game then he can pass or bid 3NT.
- (2) The response of 3♣ is thus Stayman, the responses are the same as after 1NT-2♣ except at the three level: 3♦ denies a four carded major; 3♥ and 3♠ shows four cards in the named suit and denies four cards in the other suit; and finally 3NT shows four cards in both majors, responder will then bid his major suit.

Note that the two variations for Stayman after a 1NT open are also valid after a 2NT open: the first variation drops the 3NT response and is thus appropriately

called Stayman with 3 responses, see section 16.4; the second variation uses 3♣ to ask opener if he holds a five carded major and is called puppet Stayman, section 16.5.

When responder bids 3♦ or 3♥ then this is a transfer to hearts and spades respectively; opener will complete the transfer with 3♥ or 3♠ respectively. Responder will then continue in the usual way: pass when weak; otherwise 3NT when only holding 5 cards in the major; and 4♥ or 4♠ when holding a six carded major. (3)

If responder wants to transfer into a minor suit then this is done via the 3♠ bid, (4) similar to the use of 2♠ over a 1NT open. Thus opener will bid 4♣ to which responder will either pass or correct to 4♦. There is a variation whereby 3♠ is the transfer just to clubs, and 4♣ would be the transfer to diamonds.

Note also we can use similar logic to that of section 5.6 when holding a 5-4 or 5-5 major suit combination. With 5-4 hands responder Staymans with 3♣; if opener (5) answers with a major then this will be a fit and responder will act accordingly. If opener answers 3♦, then now responder bids his 5 carded major. Opener can then bid the major game if he has a fit, otherwise sign off in 3NT. If responder holds (6) 5-5 in the majors then he uses transfers. Note that the 2NT open guarantees that opener has at least one 3 carded major, thus responder when holding 5-5 in the majors knows that there is a fit, the work is only in finding it. If he is weak and has no interest in game then he should just transfer into one of the majors and pass. Otherwise he first transfers into hearts, by way of a 3♦ response, and then bids 3♠ after hearing opener complete the transfer with 3♥. Opener can then chose the best game contract. There is a extension of this, using the 4♦ response.

If opener holds a balanced hand with more points yet we do have bidding sequences (7) that cover these. With 22-23 points, we open with the semi-force and rebid 2NT; with 24-25 points we open with the game force and rebid 2NT. Although highly unlikely with more points yet we could consider a semi-forcing open followed by 3NT to be 26-27 points and finally game-force open, 3NT rebid as 28-29 points. We could go on, but we won't. Note that after 3NT reply, should still play transfers and Stayman, with the agreed acceptance that 4NT is the equivalent no-trump game, not Blackwood.

Responder	a	b	c	d
Opener	♠ 8 2 ♥ Q J 6 ♦ Q 6 4 3 2 ♣ Q 7 4	♠ 8 6 3 2 ♥ J 6 2 ♦ Q 6 4 2 ♣ Q 7	♠ 2 ♥ Q J 8 6 4 2 ♦ Q 6 4 2 ♣ 7 4	♠ J 8 6 3 2 ♥ Q 9 6 4 ♦ Q 2 ♣ 7 4
1 ♠ A K 4 ♥ A 9 ♦ K J 10 9 ♣ A J 10 8	2NT – 3NT	2NT – 3♣ 3♦ – 3NT	2NT – 3♦ 3♥ – 4♥	2NT – 3♣ 3♦ – 3♠ 4♠ –
2 ♠ A K Q ♥ A 9 5 3 ♦ K J 9 ♣ A J 8	2♣ – 2♦ 2NT – 3NT	2♣ – 2♦ 2NT – 3♣ 3♥ – 3NT	2♣ – 2♦ 2NT – 3♦ 3♥ – 4♥	2♣ – 2♦ 2NT – 3♣ 3♥ – 4♥
3 ♠ A K 9 4 ♥ A ♦ A K J 10 ♣ A J 10 8	2♦ – 2♥ 2NT – 4NT 5NT – 6♦	2♦ – 2♥ 2NT – 3♣ 3♠ – 4♠	2♦ – 2♥ 2NT – 3♦ 3♥ – 4NT 5♦ – 6♥	2♦ – 2♥ 2NT – 3♣ 3♠ – 4NT 5♠ – 6♠

Hands correspond to the table above.

1a: With 20 points and a balanced hand the open is a clear 2NT. Opposite with 7 points and no 4 carded major responder signs off in 3NT.

- 2a:** With 22 points and a balanced hand opener is too strong for a direct 2NT open, and so begins with a semi-forcing 2♣. The response is the relay 2♦ and now opener can rebid 2NT. This shows exactly the same type of hand as a 2NT opener but 22-23 points. Responder again without the major fit and knowing there is a combined maximum of 30 points decides that 3NT is enough.
- 3a:** Hands that are 4441 are not particularly easy to bid, especially when they are so strong. Here opener opts to show it as a balanced hand, thus begins with 2♦, the game forcing open. Responder holding no high honours just denies with 2♥ and thus opener can now rebid 2NT, to show his 24-25 count. Responder with 7 points knows that there are at least 31 points between the two hands can consider looking for a diamond slam, if a fit is located. For the time being responder has no such bid available and so opts for a quantitative 4NT. Although opener is minimum 24 points, the fact that responder is bidding 4NT, instead of Stayman or transfers is indicative that he holds at least one 4 carded minor. Opener therefore knows that there is a fit, and thus he hand is worth a maximum, and thus worth a slam. Bidding 6♣ or 6♦ would promise a 5 carded suit, so these cannot be said. Instead then opener tries with a 5NT bid, hoping that responder is on the same wavelength. Naturally enough responder realises what is going on and bids his suit, thus 6♦.
- 1b:** After the 2NT open, responder now holds 5 points, thus enough for game, and a 4 carded spade suit. The response is a Stayman 3♣ bid. Opener without a major answers 3♦ and so responder signs off in 3NT.
- 2b:** After the semi-forcing 2♣, 2♦ relay and 2NT rebid, promising 22-23 points, responder Staymans with 3♣ and now opener replies 3♥, showing 4 hearts. Responder has no fit and not enough slam strength, signs off in 3NT.
- 3b:** After the game forcing 2♦, responder without high honours denies with 2♥, opener rebids 2NT promising balanced hand and 24-25 points. Again responder Staymans with 3♣ and opener comes back with 3♠. Even with the knowledge of a fit, responder can reason that a spade slam might be pushing the boat too far, and so signs off in 4♠. One evaluation is that responder knows that both hands are balanced so there is no long suit to establish.

- 1c:** After the **2NT** open responder holding a 6 card heart suit and 5 points is looking for game, and so transfers into hearts with $3\heartsuit$. Opener completes the transfer with $3\heartsuit$. Responder would pass this when holding just 5 hearts, but the sixth heart favours a $4\heartsuit$ contract, thus $4\heartsuit$ it is.
- 2c:** After the $2\clubsuit$ - $2\diamondsuit$ -**2NT** sequence, responder again transfers with $3\heartsuit$, and opener completes with $3\heartsuit$. Responder can count for a combined strength of 28 points and so signs off in $4\heartsuit$, since he holds a six carded heart suit.
- 3c:** After the game forcing $2\diamondsuit$, denial $2\heartsuit$ and **2NT** rebid, showing 24-25 points, responder transfers with $3\heartsuit$ and again opener completes the transfer with $3\heartsuit$. Again, responder's sixth heart means there is a fit and so can bid game. But, responder also knows that there is a combined point count of 30 points and with the fit can consider slam. Thus he bids **4NT** Blackwood, $5\diamondsuit$ shows 4 aces which is enough for responder to sign off in $6\heartsuit$.
- 1d:** After the **2NT** open, sitting with 5 points and a 5-4 major combination responder begins with a Stayman $3\clubsuit$, to which opener denies a 4 carded major by way of the $3\diamondsuit$ response. Responder can bid $3\spadesuit$ to show he has 5 spades and by inference 4 hearts, (otherwise he would not have needed to have Staymanned). Opener holding spade support bids $4\spadesuit$ which completes the bidding.
- 2d:** The bidding progresses as follows: $2\clubsuit$ - $2\diamondsuit$ -**2NT**. Again, as with the previous pair of hands, responder Staymans with $3\clubsuit$, to which opener bids $3\heartsuit$ showing 4 hearts. Slam is too far off, so responder signs off in $4\heartsuit$. Note how the superiour 4-4 heart fit is found rather than the 5-3 spade fit.
- 3d:** After $2\diamondsuit$ - $2\heartsuit$ -**2NT**, responder Staymans with $3\clubsuit$, opener replies $3\spadesuit$ showing 4 spades. With a 9 carded fit and at least 29 high card points responder can attempt for slam, **4NT** is thus Blackwood, the response of $5\spadesuit$ shows it that can be shown and thus responder signs off in $6\spadesuit$ with a smile.

7 Slam Investigations

Although slams occur infrequently when they do come around you do not want to be missing out. Slams need about 33 points to make (in other words there are not two aces missing). But brute force in points is not the only factor towards successful slam bidding, distribution also plays a role. Importantly a slam can be beaten if the defence can take two top winners directly, thus there are two conventions that help in determining whether there are two top losers between two hands, and thus helps decide whether a slam remains possible: Blackwood is used to see if there are enough aces, as will be discussed in section 7.1; and Control Bidding is used to determine whether within one suit there opposition are able to cash both the ace and king, as will be discussed in section 7.2. Since the magic number for slams is 33, it is clear that at least one of the players must hold at least 16/17 points. In the sections that follow on, we will investigate the different situations, following the pattern of the initial chapters, whereby one player is interested in slam because he holds, undisclosed, at least 16 points: section 7.5 considers the situation when responder has a fit with opener; section 7.6 considers when responder holds his own single-suited hand; section 7.7 considers the situation whereby responder is able to support opener's new suit rebid; section 7.8 considers the situation by responder when opener has opened 1NT or 2NT; finally section 7.9 considers the situation when responder is keen on slam after hearing opener begin with a strong 2 open. Note, that all these considerations are from the viewpoint of responder. Normally, opener has no reason to think slam is a possibility, his job is to describe best his hand and let responder take over. But situations do arise, and they too will be mentioned in the appropriate sections.

7.1 Blackwood

Blackwood is the convention that determines how many aces a partnership holds. It is important that a trump fit has first been agreed. When that is the case then a bid of 4NT is not natural, instead it asks "*how many aces do you hold partner?*". The player who bids 4NT is called the questioner, whereas his partner is therefore

the answerer. The answers are simple¹: 5♣ shows 3 or 0 aces; 5♦ shows 1 ace; 5♥ shows 2 aces; 5♠ shows 2 aces and the king of trumps, (thus 5♥ would deny the king of trumps).

The continuation of the bidding is as follows: if there are two or more aces missing, then there can be no slam possible, so questioner signs off by bidding the trump suit at the 5-level; if one ace is missing and the king of trumps, then a slam is at best a finesse, the position of the trump queen can become a vital factor on whether to bid slam or not; if just one ace, or just the trump king, is missing then questioner should sign-off in the small slam (otherwise it would have been meaningless to even Blackwood in the first place); finally if there are no aces missing nor the trump king, then questioner has the possibility to explore for a grand slam, by continuing and asking for kings.

Thus for questioner to consider a grand slam by asking for kings he needs the following two conditions to be satisfied: *i*: there is no ace missing, nor the trump king; *ii*: if he finds that there is no king missing then he will bid the grand slam, (for again, there is no point to ask a question and ignore a positive answer). To ask for kings questioner bids 5NT, the answers are again simple: : 6♣, no further kings, (remember we have already taken into account the trump king); 6♦, 1 king; 6♥ 2 further kings; and 6♠ the 3 remaining kings. Again questioner will sign off in the appropriate contract.

Note that before Blackwood is used a trump fit is normally explicitly agreed, although sometimes even an implicit fit is sufficient. When there has been no trump fit, then a bid of 4NT then cannot be Blackwood, instead it is quantative, as explained in section 17.3.

There are a few disadvantages to Blackwood, and hence there exist many Blackwood flavours. The first disadvantage is that if missing at least two aces the contract to sign-off is at the 5-level, in some cases control-bidding, section 7.2 would have helped. Sometimes the contract to sign-off in is at the 6-level, especially when the trump is a minor, even though it is known that a slam cannot be made, in which case it is

¹[**Blackwood** : (30-41) / Roman Key Card / Kickback / Relay Kings]

useful to play kickback Blackwood, section 17.4. We have already argued that missing an ace and the trump king leaves a slam with at best 50% success, practically zero chance if the trump queen is also missing, but Roman key card Blackwood, section 17.1 solves that problem. Sometimes even missing two aces a slam can be made if there is a void in one of the suits that an ace is missing, which is why one should not ask Blackwood when holding a void; instead there is exclusion Blackwood, see section 17.6 to help fill this void. Finally, when searching for a grand slam, perhaps it is not the number of kings that is important, but the holding of a particular king; here Relay king responses can be of great aid, see section 17.5.

7.2 Control Bidding

If the opposition can cash two top tricks in a suit then a slam cannot be made. Blackwood helps find whether there are two aces missing, control bidding helps find whether the opposition hold both the ace and king of a suit and that they can win both tricks. Thus we define a control in a suit as either the ace, the king, a singleton or a void in the suit. Thus it is clear, that holding a control in a suit means that the opposition cannot cash two winners in this suit. The point of control-bidding is to establish between partners that there is a control in every non-trump suit. Hence the slogan: “power is nothing without controls.”

To start a control bidding sequence we need to first establish a trump fit, preferably at the 3-level (for more details see the remaining sections from this chapter). For example take the sequence 1♥-2♦-2♥-3♥: responder has shown a heart fit, but is too strong to have supported directly with 3♥ and is still too strong to now bid 4♥. Hence responder has 16+ points, sitting opposite at least 13 from partner gives a total of at least 29/30 points; the slam zone. Thus all the bids between 3♥ and 4♥ can be used to show/deny controls²; if it is found that a suit is not controlled, the bidding can always be signed-off in 4♥, otherwise Blackwood can be brought into play. Thus if the idea is that both players bid sequentially their controls: thus say the bidding continued with 3♠-4♦-4♥: we have that opener has spades controlled;

²[Control Bidding : standard / relay]

responder has diamonds controlled but not clubs (otherwise he would have bid $4\clubsuit$); and thus opener also has a lack of club control which is why he signs-off in $4\heartsuit$ (otherwise he would have either continued to control bid with $4\spadesuit$ or else Blackwood with $4\mathbf{NT}$). Note a bid is a control bid if and only if a fit has been agreed and the bidding is game forcing (for example, $1\spadesuit$ - $2\spadesuit$ - $3\diamondsuit$ is not a control bid, since $3\diamondsuit$ is only an invite for game, to control bid diamonds opener must bid $4\diamondsuit$ instead).

Often the bidding helps decide whether a control-bid is an honour or a distributional control. All the same, combining both control-bidding and Blackwood enables the partnership to more clearly find out whether a control-bid was a honour or a distributional control. Note that if the control bidding goes above $4\mathbf{NT}$, Blackwood can no longer be bid, thus any further control bid promises exactly the first round control, thus by inference the first and second round controls can be distinguished.

Control bidding too has its disadvantages, sometimes the meanings of a control bid is ambiguous, but such problems are overcome using relay control bidding, see section 17.2. A final note, often in bridge literature we see the term cue bidding instead of control bidding; but this can lead to confusion since cue bidding is also used to mean bidding the opposition's suits. We will avoid all such confusion by sticking to the name control bidding.

7.3 Slam Interest when Supporting Opener's Major

- (1) Consider the case when opener has opened his major suit and responder has a fit and at least 16 points. Thus a slam may be there. As we have already seen supporting directly limits the hand to at most 12 points, with any more the correct action is to respond by introducing a new suit. Consider the open were $1\heartsuit$ and responder held a fit and at least 16 points. Thus he changes suit, say bids $2\clubsuit$. Of course it would be nice for responder to change to a suit that he holds, but if he does not have a suit to bid then he *lies in the minor*. The point being is that the new suit response is forcing. Opener will say something, so let us assume that opener continues by

rebidding weakly with either $2\Diamond$ or $2\heartsuit$, thus opener has not promised any extra length in hearts. Thus, if responder now bids hearts he is saying that he already had a fit from the beginning and thus holds at least 13 points. Thus responder is game forcing. Naturally enough, if responder now bids $4\heartsuit$ then that is indeed game, and would show 13-15 points. But holding at least 16, responder now bids $3\heartsuit$. This indicates to opener that a slam might be feasible. If opener agrees to look for a slam he does this by now control-bidding. When opener is at the weak end of his range then he may decline the slam offer and instead just signs-off in game. If responder is sitting with a monster hand though he too may consider to continue bidding. Note that responder is the one who is in charge, if anyone is to Blackwood it should be him.

A useful convention that complements this section is 2-over-1 and the forcing no-trump, section [15.3](#).

Hands correspond to the table on the following page.

- 1a:** With 12 points and a 5-4 distribution the open is a clear $1\heartsuit$. Responder has 11 honour points, but the 4 card fit allows him to re-evaluate to 13 points. Thus he is too strong to support hearts directly, so instead changes suit, thus bids $2\Diamond$. This $2\Diamond$ is autoforcing the opener need to bid $3\Diamond$ instead can show his strength by bidding $2\heartsuit$. Responder then realises that there is no sniff of a slam, so signs off in $4\heartsuit$.
- 1b:** After the $1\heartsuit$ open responder finds himself again with a fit and thus after re-evaluation, 19 points. Thus he is already on the slam hunt. So, first change suit as a response, for it is forcing, $2\clubsuit$. Opener now can show his second suit and bids $2\Diamond$, thus showing a point range of 12-18. Instead of bidding $4\heartsuit$, responder keeps the bidding low and bids $3\heartsuit$. This shows a stronger hand than one were $4\heartsuit$ is bid directly, and invites opener to consider slam and start control-bidding. In this case opener has the king of spades and so bids $3\spadesuit$. Had opener bid $4\clubsuit$, he would deny holding either of the first or second round controls in spades, and if this were also true for responder then they can sign off in $4\heartsuit$, safe in the knowledge that had they bid slam, the opposition could cash the ace, king of spades to defeat the contract. Anyway, responder then control-bids his clubs, $4\clubsuit$, opener $4\Diamond$. Note, we do not control-bid in the

Responder	a	b
Opener	<p> ♠ A 7 6 ♥ Q J 5 3 ♦ A 10 4 2 ♣ 6 2 </p>	<p> ♠ A 7 6 ♥ Q J 5 3 ♦ A 4 ♣ A Q 6 2 </p>
<p>1</p> <p> ♠ K 10 8 ♥ A 9 8 7 2 ♦ K Q 9 5 ♣ 5 </p>	<p> 1♥ – 2♦ 2♥ – 4♥ </p>	<p> 1♥ – 2♣ 2♦ – 3♥ 3♠ – 4♣ 4♦ – 4NT 5♦ – 6♥ </p>
<p>2</p> <p> ♠ K 10 8 ♥ A K 8 7 2 ♦ K Q 9 5 ♣ K </p>	<p> 1♥ – 2♦ 3♦ – 4♥ 4NT – 5♠ 6♦ – </p>	<p> 1♥ – 2♣ 2♦ – 3♥ 3♠ – 4♣ 4NT – 5♣ 7♥ – </p>

trump suit, these bids are normally sign-offs, or at least waiting bids. Now responder, the stronger of the two hands, takes control and asks Blackwood 4NT, for which opener replies 5♦, one ace. Responder signs off in 6♥. Had responder instead 5♥ that should be passed by opener as it means, “thanks to your Blackwood response I now know that we are missing two aces, and so there is no slam”.

2a: Opener now has 18 points and a 5 carded heart suit, so opens 1♥. As before, responder is too strong to directly support, so bids 2♦. Opener also has diamonds and so bids 3♦. Note that opener promises at least 17 points,

(similar as for a reverse), to make this bid as he is voluntarily bidding over an autoforcing bid. Responder then shows his delayed heart support and limited to 15 points by bidding 4♥. Opener though persists, since he is sitting with 18 points, and looking at a probable double fit, so bids 4NT, Blackwood. Responder answers with 5♥, two aces, and opener without missing two aces can attempt slam. Since 4-4 fits are better than 5-3, opener bids 6♦. Responder can always convert this to 6♥ if he feels that is the better slam, but with these hands it would be wise to leave the making diamond slam, than bid the unmakeable 6♥.

2b: After the 1♥ open, 2♣ response opener rebids a gentle 2♦. No need to rush things, besides, 3♦ would promise 19+ points and opener only has 18. Responder though is too strong than to bid 4♥ and so bids 3♥ instead, indicating that he is interested in slam. This would undoubtedly bring a raised eyebrow or two, since opener has yet to fully unleash the power of his hand; responder is considering a heart slam even though opener has only promised 12 points. Opener should be thinking of finding the grand slam. So, to get the ball-rolling opener commences the control-bidding; 3♠, shows a spade control; 4♣, a club control. Opener could continue control-bidding diamonds, but what he really needs are the missing aces, thus he brings out the 4NT bid, Blackwood. Responder replies with, 5♣, 3 aces, (if it were 0, responder shouldn't have been looking for slam in the first place). Opener can now account for all the aces and kings; had a king been missing and opener is attempting to find the grand slam, a bid of 5NT would be asking for kings. Here though, he doesn't need that information as he holds all four. Further opener knows that responder must have some further points for his 3♥ bid, which can only be in the form of a smattering of queens and jacks, all of which helps opener decide to push to 7♥. Note when bidding a grand slam the whereabouts of the queen of trumps is of massive importance. With these pair of hands, when responder's hand goes down on table declarer will mightily relieved to see her there. This problem can be solved if the Blackwood responses were modified, see chapter 17.1 for Roman key card Blackwood.

It's interesting to note how the bidding would progress had opener not taken

control, and instead just continued control-bidding. The bidding will follow the exact same course as that for hands **1** and **b**, all the way till responder signs off in 6♥. What should opener now do, for responder has gone off to slam armed only with the knowledge that opposite is an opening hand, responder has no idea that there are in fact 18 points opposite. “To bid, or not to bid?”, that is the question.

7.4 Slam Interest when Supporting Opener’s Minor

Consider opener has begun with a 1-level minor open and that responder has slam potential in this minor suit. As with the previous section supporting directly limits the hand to at most 12 points, so this action cannot be taken. As with the previous chapter the idea would be to bid another suit. Naturally enough, if responder held a major suit then this would be the obvious candidate. Let us assume that opener cannot support responder’s major and makes his natural rebid. His rebid can be

- (1) either: *i*: a simple new suit rebid, in which case responder does a fourth suit forcing
 - (2) bid, ignores the response and rebids simply the opened suit; *ii*: a new suit jump shift, which being game forcing needs responder to just simply support the opened
 - (3) suit, as long as this is below game it must be game-forcing; *iii*: a new suit reverse, in which case responder needs to simply support the first suit, remembering that after a reverse responder’s only weak bids are repeating his suit and the 2NT mod-
 - (4) erator; *iv*: no-trump rebid, in which case responder needs to first go through Roudi,
 - (5) ignores the response and then support the opened minor; *iv*: a simple repetition of the opened suit, in which case responder uses the third suit forcing convention,
 - (6) ignores the response then simply supports the opened minor; *vi*: finally a jump in the opened suit, in which case responder supports at the 4-level.
- (7) But if responder does not hold a second suit (which is possible for supporting a minor requires at least 5 card support) then he has a slight problem. In the previous section the solution was to lie in the minor, but here that can only be the other minor. All the same lying in a minor is better than lying in a major; if you give a dog a bone he will not let go, conclusion: *don’t lie in a major*. Thus, responder changes

suit, lying in a minor if necessary. As with the previous paragraph responder's next action is then dependent on what opener rebids: *i*: if opener rebids a new suit simply, the responder does the fourth suit force, ignores the response and then supports opener's minor; *ii*: if opener does a new suit jump-shift rebid, the responder needs only support the original opened suit; *iii*: if opener reverses, then responder needs only support the opened suit; *iv*: if opener rebids no-trumps, again responder goes via Roudi before supporting simply; *v*: if opener rebids the opened suit, responder needs to go first through third suit forcing before supporting; *vi*: if opener jump rebids the opened suit, responder needs only support; *vii*: finally, opener supports the false minor...

Note that second bids by responder of the original opened minor at the 3-level are (8) limited to 11-12 points, whereas bidding the minor at the 4-level is limited to 13-15 points. Thus with 16+ points responder needs to use the conventional fourth suit forcing, third suit forcing, Roudi and Checkback Stayman bids, chapter 13.

A further convention can be used to help solve the problems of this section, called inverted minors and is written in full in section 14.2.

7.5 Slam Interest after Support for Responder

Consider the situation where opener supports the new suit response. We begin by recapping the point ranges as given in chapter ???. There are three situations: *i*: The response was at the one level, (generally speaking it would have been a major), then opener's support bids show the following ranges: simple support rebid 12-16 points, jump support rebid 17-18 points and game rebid 19+ points; *ii*: The response was a minor at the 2 level: a simple support rebid is directly 15+ points; *iii*: The response was a major at the 2 level, in other words we are talking only about the 1♠-2♥ sequence: simple support rebid is 17+ and jump support rebid, (which is game), is 15-16 points.

In all but two cases from the above, opener's support rebid limits his hand, so the decision to go to slam falls onto the shoulders of responder. If he has slam interest

a control-bid is all that is needed to get the dance started. In the two cases where opener's support rebid is unlimited, responder may sign off in game if he holds minimum for his hand. Thus if responder holds more than minimum he too may continue, and can do so in the same way, by control-bidding.

7.6 Slam Interest through Jump Shift Responses

- (1) Consider that responder holds a single suited hand with at least 16 points. Say that the open were $1\Diamond$, and that responder's suit were spades. If responder were to simply bid $1\spadesuit$, he will have problems in describing his hand later on; since from any rebid by opener, say it were $2\clubsuit$, further bids of responder of $2\spadesuit$, $3\spadesuit$ and $4\spadesuit$ although all show the same hand shape, are limited to 6-10, 11-12 and 13-15 points, respectively. Furthermore, this last bid removes the important control bidding level. The solution to the problem is to not respond $1\spadesuit$, but instead make a jump shift response of $2\spadesuit$: this relays exactly the information; 16+ points and a long single suited hand. Opener will support with at least 2 cards, otherwise further describe his hand. Once support is agreed the bidding follows the usual control bidding, Blackwood route.

7.7 Slam Interest after Opener's New Suit Rebid

Consider that opener begins with a suit bid, the response is a new suit and then opener rebids a new suit. This can be done in one of three ways: *i*: a new suit simple rebid; *ii*: a new suit jump-shift; *iii*: a new suit reverse rebid. This section deals with responder's actions for when he supports this new suit and is considering slam action. Although we will look at each case individually, there is a common theme, that is if you ask a question but ignore the answer, then there must be a reason: slam going strength. We consider the three cases: *i*: opener rebid a new suit simply; *ii*: opener rebid a new suit as a jump-shift; *iii*: opener rebid a new suit as a reverse.

- (1) In case *i* opener has rebid a new suit simply. Let us take as example bidding sequence

1♥-1♠-2♦, then our consideration is for how responder can support diamonds and show slam interest. A simple support of 3♦ would be taken as limited 8-10 points; a jump bid of 4♦ could be taking up too much bidding space; 3NT and 5♦ would be taken as sign-offs denying slam interest. All that remains is for responder to make a forcing bid so that he can later support the diamonds. In this case the obvious forcing bid is the fourth suit, 3♣. No matter what opener replies, responder will then bid diamonds as cheaply as possible, thus establishing diamonds as the trump suit and initiating a control-bidding future. Note that in some cases game after fourth suit forcing responder's next bid is game in opener's second suit, e.g. 1♠-2♣-2♥-3♦-3♠-4♥, the slogan should not be forgotten, responder is looking for slam.

In case *ii* opener has rebid with a new suit jump-shift rebid, say 1♦-1♥-2♠, then our (2) consideration is for how responder can agree spades and show slam interest. Since jump-shifts are agreed as being game forcing and bid below game is necessarily forcing. Thus clearly the obvious candidate is to bid 3♠. So in general for responder to agree the opener's jump-shifted suit and start a control-bidding sequence he bids supports simply. Apart from two exceptions, this bid by responder will be below game, the exceptions being after 1♠-2m-3♥, whereby to support simply *is* game and there is no reason for opener to continue. In these cases we use the fourth suit force to establish slam interest, agree the hearts and to start the control-bidding. Note to control-bid directly would in no way be agreeing the heart fit, 3♠, 3NT, 4m would all be natural in their own way.

In case *iii* is for when opener has made a new suit reverse bid, say after 1♦-1♠-2♥, (3) then our consideration is for how responder can agree hearts and show slam interest. There are only two ways for responder to show a weak hand, that is by rebidding his suit 2♠, and the moderatot 2NT. All other bids are game forcing. If responder only wanted to bid the heart game he would bid 4♥, so as with the previous case the correct bid to establish hearts and start a control-bidding sequence is the simple support 3♥. Note that we include within this paragraph the psuedo-reverses such as 1♠-2♥-3♣, in which case the bid 4♣ establishes the minor fit and instigates a control-bidding sequence.

7.8 Slam Interest after 1NT and 2NT Opens

Consider that the open were either 1NT or a sequence that leads to 2NT. Normally responder's interests lies in finding the correct game, and the conventions of Stayman and transfers are used to best investigate whether a major fit exists. Naturally enough these conventions can too be used when responder is strong enough to consider a slam.

When responder has a balanced hand and no interest to look for a major fit, then he may bid a direct bid of 4NT. As mentioned earlier, without a fit 4NT is not Blackwood but quantitative, see chapter 17.3. Baron, chapter 16.2, is a convention that helps find 4-4 minor suit slams after 1NT opens.

- (1) When responder has a long suit of at least 6 cards, then there is a guaranteed fit. Here responder shows his slam intent by bidding directly at the 3 level his suit. Thus 3♣, 3♦, 3♥, and 3♠ are all bids that show single suited hands and slam intentions. Note how this mirrors responder's approach in section 7.6, responder's jump-shift response. Opener will then control bid. Note that responder does not transfer first. Thus all other sequences of showing a single suited hand through transfers, say 1NT-2♦-2♥/3♥/4♥ are limited. Note also that if 3♣ were used as a transfer to diamonds then another way would be needed to show a long single suited club suit.

We first consider that responder holds a slam going hand and a five carded major. Further, responder cannot hold either 4 or 5 cards in the other major, as we will discuss later. Thus two cases remain: *i*: responder has a side suited minor; *ii*: re-

- (2) sponder has no side suit at all. In the first case responder first makes the transfer into his major suit, and then bids his side suit minor, thus 1NT-2♥-2♠-3♦ would show a slam going hand by responder where he holds 5 hearts and 4 diamonds. Opener's actions are by in order of priority: support the minor at the 4 level when holding at least 4 card support; support the major at the 3 level when holding a 3 card fit; otherwise bid 3NT. Note that a making 4-4 minor slam is better than a 5-3 major slam going one-off. With a fit agreed the bidding follows the usual route of control bidding and Blackwood. Without a fit, responder may make a further efforts to entice opener; rebidding his minor would show a 5th card in the minor,

and is thus guaranteed a fit, (opener has denied 3 card support for the major, so there must be at least 3 cards in every remaining suit). Opener will then control bid. In the second case responder first transfers into his major suit and then rebids (3) the other major at the 3-level, thus $1\text{NT}-2\Diamond-2\heartsuit-3\spadesuit$ would show a slam going hand by responder where he held 5 hearts and no side suit. Similarly, $1\text{NT}-2\heartsuit-2\spadesuit-3\heartsuit$ would show a slam going 5 carded spade hand. With support, opener with directly control-bid otherwise sign-off in 3NT .

All that remains is the action of responder when he holds at least one 4 carded major. As we would expect, responder starts with a Stayman $2\clubsuit$ bid. Note that this includes those hands which are 5-4 in the majors. We will also see that bidding Stayman includes hands which do not contain any major, but do include slam going hands in a 5 carded minor. All the same, responder's subsequent action is dependent on whether opener answers with the suit responder holds or not. We will look into each Stayman response separately.

The Stayman answer is $2\Diamond$ it denies a 4 carded major: A rebid of $3\clubsuit$ or $3\Diamond$ would (4) show 5 cards in the named minor, similar to rebidding a minor after a transfer bid. Opener will support the minor when fitted otherwise sign-off in 3NT . Responder can bid on by showing a sixth card in the minor by bidding it at the 4-level if necessary. Note that strictly speaking by bidding a minor responder is implicitly showing the other major, but in fact, this need not be the case. Thus although Stayman normally would promise at least one 4 carded major, if responder's rebid is a minor then he may well only be holding a slam going hand and 5 cards in the named minor. If responder holds 5-4 in the majors then the $2\Diamond$ Stayman reply only knocked the (5) 4-4 fit on the head, there is still the possibility that there is a 5-3 fit flying around. In this case responder rebids with $3\heartsuit$ when holding hearts and $3\spadesuit$ when holding spades. With a fit, opener can control-bid, otherwise without a fit signs-off in 3NT . Remember, bidding like this at the 3-level is game-forcing, if responder rebid at the 2-level then that would just be inviting game.

The Stayman answer was either $2\heartsuit$ or $2\spadesuit$, showing the suit, and this is responder's (6) major. Then similar to the treatment of slam going hands with just a 5 carded major, responder rebids the other major. Thus, $1\text{NT}-2\clubsuit-2\heartsuit-2\spadesuit$, would agree a heart

fit and a slam going hand, similarly $1\text{NT}-2\clubsuit-2\spadesuit-3\heartsuit$ would agree the spade fit and a slam going hand; in both cases opener continues by control-bidding.

- (7) The Stayman answer was either $2\heartsuit$ or $2\spadesuit$, showing the named suit, but this is not responder's suit: If responder also holds a 5 carded side suited minor then he bids it now at the 3-level. Note that this does not imply that responder holds the other major, he could be bidding this way just to show a slam going 5 carded minor hand. Opener will agree the fit at the 4-level and thus start the control-bidding, otherwise sign-off in 3NT , to which again, responder may make a further attempt by bidding the minor one more time to show a 6-4 hand. If responder bids the other minor over 3NT then he shows a 5-4 slam going hand in the minors.
- (8) The Stayman answer was 2NT , showing both majors, then either responder has a fit, or else he only bid Stayman to show a slam going 5 carded minor hand: If the latter were the case then responder bids his minor at the 3-level; opener supports at the 4-level to start the control-bidding bandwagon, or else signs-off in 3NT . After 3NT , responder may bid the other minor if he has a 5-4 minor slam going hand.
- (9) If though responder does have a fit then he needs to bid something other than his major at the 3-level (which is just inviting game), and other than his major at the 4-level, which is just a game sign-off. Instead he bids $4\clubsuit$ to show hearts and $4\diamondsuit$ to show spades. In both cases opener will start to control-bid.

Other slam investigating tools can be used in conjunction with what has been presented above, notably splinters, section 17.7.

Similar considerations apply when the open is 2NT , or some 2NT rebid after a strong $2\clubsuit/2\diamondsuit$ open. A direct bid of 4NT would be quantitative, see chapter 17.3.

- (1) When holding at least one 4 carded major, responder should first Stayman with $3\clubsuit$. If the answer is a fit then responder can start to control-bid. If the answer is 3NT showing both majors then responder continues as follows: $4\heartsuit/4\spadesuit$ is game and are sign-offs; $4\clubsuit/4\diamondsuit$ shows a heart/spade fit respectively and slam ambitions. If the answer denies a fit then responder continues with the knowledge that no major 4-4 fit exists. If responder was bidding Stayman with a 5-4 major hand then after a

denial answer of $3\Diamond$, responder bids his 5 carded major. Either opener will deny even this fit with a bid of $3NT$, or else will bid the major game. When with slam ambitions responder can always carry on with Blackwood.

If responder has a five carded major then he first transfers into the suit. Opener will complete the transfer. But there is now no satisfactory way to indicate to opener that he has slam hopes without going over the $3NT$ safe haven.

A solution to this problem is given by **fit transfers**³. The idea is that opener will (2) only complete the transfer when he holds a fit; when without he will rebid $3NT$ directly. Thus responder can no longer just transfer when holding a bust, instead he must pass. Thus playing fit transfers if opener completes the transfer, then responder knows that there is a fit and so can start to control bid.

We now consider responder holds a slam going hand and 5-5 in the majors. Now (3) responder will transfer first to the spades and then rebid $4\heartsuit$. This is just an extension of the basic system as given in section 6.3. If playing fit transfers then we do exactly the same, first transfer to spades by way of $3\heartsuit$. Either opener will fit with $3\spadesuit$ or else will bid $3NT$, in which case responder will bid $4\heartsuit$. Note that $2NT-4\Diamond$ can be used to show 5-5 in the majors and only game possibility, opener will chose the major game he prefers.

We now consider responder holds a slam going hand and 5-5 in the minors. Here (4) bids of $4\heartsuit$ and $4\spadesuit$ show such hands and a singleton in the bid suit. If opener likes what he hears he can continue towards slam, or else signs off in the better game.

7.9 Slam Interest after a Strong 2 Open

Clearly after strong 2 opens, a slam is a serious consideration. Naturally enough the reasoning is similar to that found in the previous sections of this chapter. When the bidding is forced to game, any agreement in trump fit below game is thus slam interest. Note that the direct response to a game forcing open is usually meant

³[Fit transfers over $2NT$ / $2\clubsuit-2NT$ / $2\Diamond-2NT$]

to show a number of controls, and thus instantly opener may know that slam is a no-go area. This highlights the fundamental difference between a semi-forcing $2\clubsuit$ open and a game-forcing $2\diamondsuit$ open; in the former it is responder who determines how high the bidding should go, in the latter it is opener. Thus such a sequence as $2\clubsuit$ - $2\diamondsuit$ - $2\spadesuit$ - $3\spadesuit$, the $3\spadesuit$ bid by responder agrees spades and initiates a control-bidding sequence. After say $2\clubsuit$ - $2\diamondsuit$ - $3\heartsuit$, responder agrees hearts by directly control-bidding. After a game forcing open, $2\diamondsuit$ - $2\heartsuit$ - $2\spadesuit$ - $3\spadesuit$ again responder's $3\spadesuit$ bid agrees the spade fit, but opener is not obliged to control-bid; perhaps the response of $2\heartsuit$ has already indicated to him that a slam is a non-prospect, in which case opener will sign-off in the spade game.

- (2) Normally, after a semi-forcing $2\clubsuit$ open, responder is obliged to make the $2\diamondsuit$ relay, but in special circumstances the relay may be broken. Thus after a $2\clubsuit$ open if responder were to bid $2\heartsuit$, $2\spadesuit$, $3\clubsuit$ or $3\diamondsuit$ then he is showing a solid suited 7 playing trick hand. The point is that if opener also holds such a hand but obviously in another suit, then between these two suits there are 14 tricks, thus the only concern is to find controls in the remaining two suits. Hence a slam can be found with very few points, but plenty of distribution.

8 Overcalls

Overcalling can be dangerous business as we expose ourselves to the opposition, who know more about which side holds the balance of the points. A bad overcall can easily land us into an unmakeable contract, doubled. Not only that, although some overcalls take up the opposition's bidding space, some overcalls actually give more bidding space to the opposition, as will be discussed in the next chapter. Thus we need to tread carefully. In section 8.1 we consider what it means to make a simple suit overcall and how the bidding progresses. In section 8.2 we look at the particular case of the 1NT overcall. Since simple overcalls are limited in strength, other action needs to be taken for when these limits are surpassed; namely doubling. Section 8.3 investigates the continuation following a double as an overcall. Finally, in section 8.4 we look at how we intervene over a 1NT open. On the other hand, when there is no suitable overcall to be made we may end up passing with as many as 15 points, such circumstances will be considered when we look at protective bidding in chapter 12. In the conventions we have ways to show two overcallable suits at the same time, section 18.1.

8.1 Simple Overcalls in Second Seat

A simple overcall plays two roles: it not only acts as an opening bid, but also as (1) a competitive bid. Thus a slogan for an overcall is that it is a “*competitive open*”. Thus, in principle an overcall promises a 5 card suit and at least 10 points; that is the 12 points to open, competitively adjusted down by 2 points to 10. We will see later, the maximum strength for an overcall is 17 points. Thus essentially a simple overcall falls between 10-17 points. Since overcalls by nature fall into competitive auctions, the quality of the suit needs to be *good*. Thus if the overcalling side do not buy the auction, the defence now has a better indication of where to attack. Naturally the higher ranked a suit the more competitive it is. Thus a simple overcall of 2♣ and 2♦ should promise at least 12 points and a 6 carded suit, for they can easily be outbid by a major fit in the opposition's hands. The most interesting overcall is 1♠, which at favourable vulnerability can be made with as few as 8 points. On the other hand, after a 1♦ open the 2♣ overcall is also quite destructive as this makes

it more difficult for the opposition to find a major fit. Vulnerability is a big factor to overcalling, since going down doubled vulnerable, wins little favour from partner. Thus when vulnerable an overcall should promise at least a minimum opening hand. Clearly, when the conditions of an overcall do not apply, then the denial call is pass.

For the remainder of this section we assume that the third player passes, see section 9.6 for the action of overcaller's responder when the third player speaks.

- (2) In response to an overcall the priority as ever is to support if it was a major. All strong forcing sequences to go through the cue-bid, since this is available, as will be later discussed; thus allowing all direct supports to be weak and pre-emptive: simple support shows 3 cards; jump support shows 4; double jump shows 5 (this follows the law of total tricks: *"when the points are evenly distributed, support to the level corresponding to the combined number of trumps"*). All direct supports are essentially weak, less than 11 points and can be made with few points if the hand is distributional. As a whole, non-game bids are not invitational, but game bids can either be weak and distributional, or strong enough for game direct.
- (3) When fitted and holding 11+ points, responder can take one of two actions: holding a good 5 carded second suit we jump in this suit, such bids being called **jump-fits**; otherwise he cue-bids the opened suit, holding 3 card support the response is a simple cue-bid, with 4 or more support the response is a jump cue-bid. Note that although the jump cue-bid promises at least a 4 card support, the simple cue-bid in fact does not promise a fit, as we will see later. When holding game going points, naturally enough responder can jump directly to game, but as mentioned above, bidding game can also be a hand that is weak but distributional.

Without a major fit, the emphasis on responder is to bid his suit, especially if it is a major. Since an overcall is considered as a competitive open, a normal responder is obliged to respond with 6 when opposite 12 points, thus opposite the overcalled promise of 10 points, with 8+ points overcaller's responder is now obliged to speak. Note that an open and a response promise a combined $12+6 = 18$ points, whereas an overcall and response also promise a combined $10+8 = 18$ points. Thus with 7 points and no fit, responder passes. Thus game is not missed if the overcall is any

strength upto 17 points. With more, overcaller instead doubles, which is discussed in section 8.3. This is why the point strength of an overcall is 10-17 points.

Unlike responding to an opening bid, not all new suit responses to an overcall are forcing. In fact all new suit responses at the *same* level as the overcall are considered forcing, promising at least 4 cards and at least 8 points. A new suit response at a *new* level is considered non-forcing. They alert overcaller to a misfit with his original overcalled suit, (not even a doubleton in support), thus naturally the suit proposed needs to have length, thus we stipulate at least 6 cards. This nips a potential bidding war with partner in the bud. Such bids can be made with fewer than 8 points, when the hand is distributional. (4) (5)

Note that by supporting a minor open, responder denies the ability to respond a major; for either he does not hold a 4 carded major, or else his hand is too weak, that is less than 8 points.

No-trump responses are denial in flavour. Simple no-trump responses need not hold a stop, but jumps do. Thus after a 1-level overcall a 1NT response shows 8-12, 2NT 13-14 and 3NT 15-17 points, (note these ranges are the usual 6-10, 11-12, 13-15 point ranges but incremented by two points); and after a 2-level overcall, the usual point ranges apply, 2NT is 11-12 and 3NT is 13-15 points. (6)

With strength and no clear action to make, responder may cue-bid. Essentially, responder has enough strength to jump in no-trumps but has no stop. Note that the cue-bid has been previously mentioned as the action responder takes when he is strong and fitted. But now it is considered as the strong denial bid. (7)

Thus the only forcing responses are either a new suit at the same level or a cue-bid. We now discuss overcaller's continuations.

If the force were a new suit, then overcaller rebids with the following priority: support if the new suit is a major (needing 4 cards for a fit); show a second suit (which promises only 4 cards, since with 5 the preference would have been to make a two-suited overcall directly, see section 18); jump in the overcalled suit (to show extra (8)

values and a 6 carded suit); bid no-trumps, **3NT**, being game would need to be at least 17 when opposite a minimum 8 points, **2NT** would therefore be 15-16 points, and thus **1NT** would be 12-14 points, and note that all of which promise a stop in the opposition's suit; cue-bidding asks for a stop in their suit, with the obvious implication that no-trumps is the desired destination (a kind of strong denial bid); and finally rebidding simply the overcalled suit is weak, 10-11 points and denial.

- (9) Had the forcing response been a cue-bid, (remember this need not promise a fit), then the rebids of overcaller follow a similar priority: show a new major (which promises 4 cards); jump in overcalled suit (promises extra length); no-trumps, **3NT** being game opposite a minimum of 11 points, requires at least 14 points, **2NT** would therefore be 12-13 points, and again all no-trump rebids promise the stop in the opposition's suit; cue-bidding is again the strong denial asking for a stop for no-trumps; and finally simply rebidding the overcalled suit is denial.

Hands correspond to the table on the next page.

1a: After the $1\Diamond$ open on the right hand side, holding 13 points and a good looking 5 carded heart suit, the correct overcall is $1\heartsuit$. Assuming third player passes. Opposite holding a heart fit and 8 points responder bids $2\heartsuit$. The point of this bid is to make life harder for opener to re-open. Overcaller will pass this as he knows that partner is not interested to look further.

1b: After the $1\Diamond$ open on the right hand side, and the $1\heartsuit$ overcall as above, now responder holds 11 points and a heart fit. Thus responder is too strong to raise hearts directly thus makes a cue-bid, $2\Diamond$, since the fit is of 3 cards. Overcaller will then bid again; but having no second suit, no extra heart length but on the other hand he does indeed hold a diamond stop and 13 points, **2NT** is the correct bid. Note how to bid **2NT** overcaller is required a minimum of 12 points whereas the cue-bid promises at least 11, thus making a minimum of 23 points, about right for 8 tricks. Responder then shows the fit, $3\heartsuit$, and thus shows he has just a bare minimum to cue-bid otherwise he would have bid game.

1c: After the $1\Diamond$ open, $1\heartsuit$ overcall, pass in third seat, responder holding 8 points is obliged to bid. Having no heart fit supporting is a non-option, but he does

Responder	a	b	c	d	e
Overcaller	a ♠ 10 3 ♥ J 8 4 ♦ K 5 4 ♣ K J 10 6 2	b ♠ A 10 8 2 ♥ J 8 4 ♦ Q 5 ♣ K J 10 6	c ♠ A 10 8 3 2 ♥ Q 4 ♦ 5 ♣ K 10 8 6 2	d ♠ A ♥ Q 8 4 3 ♦ 5 4 ♣ K J 10 8 6 2	e ♠ A 10 ♥ Q 4 ♦ J 5 4 ♣ K Q J 10 8 6
1 ♠ Q 9 7 ♥ A K 9 6 5 ♦ A 10 2 ♣ 8 7	(1♦)-1♥-2♥ -	(1♦)- 1♥ -2♦ - -2NT-3♥ -	(1♦)- 1♥ -1♠- -1NT -	(1♦)-1♥-3♣- -4♥ -	(1♦)- 1♥ - 2♦ - -2NT-3NT -
2 ♠ K Q 9 7 6 ♥ A 9 6 5 ♦ 10 2 ♣ A 7	(1♦)-1♠-1NT- -2♥- 2♠ -	(1♦)- 1♠-3♦- -4♠ -	(1♦)-1♠-4♠- -	(1♦)-1♠-2♣- -	(1♦)-1♠-2♦- -2♥-3♣- -4♣-5♣ -

hold a 5 card spade suit. Thus naturally enough bids $1\spadesuit$. Being a bid of the same level as the overcall this is forcing, thus assuming the opposition remain quiet overcaller now needs to bid. The $1\spadesuit$ response only promises 4 cards, thus overcaller cannot support. Instead, overcaller must further describe his hand. If he were weak, he would just rebid his overcalled suit, but here he holds a genuine opening hand. The diamond ace is an important card for it assures overcaller that he holds a stop in the opened suit, and so the correct rebid is $1NT$, the hand being limited to 15 points (otherwise the overcaller would have said $1NT$ directly, see section 8.2). Responder holds only 9 points and thus knows that game is not there. Thus, he can either pass or perhaps bid $2\spadesuit$ if he feels that his diamond singleton makes $1NT$ too risky.

- 1d:** After the $1\diamond$ open, $1\heartsuit$ overcall and third seat pass, responder holds a 4 card heart fit, 10 points and a nice looking club suit. From his perspective $4\heartsuit$ may be in with a shout if the clubs come good. Only partner can tell him. Fortunately the response of $3\clubsuit$, jump-fit, tells overcaller exactly this information. Holding a better than minimum hand, and knowing a fit exists overcaller can then plump for $4\heartsuit$. Had he been weaker, but had some help in clubs that could also convince overcaller to try game.
- 1e:** After the $1\diamond$ open, $1\heartsuit$ overcall, pass from third seat, responder holds a 13 pointed, long club suited hand, with no fit. A $2\clubsuit$ bid would be an underbid, since it is non-forcing, (new level, non-forcing). $3\clubsuit$, as above is a jump-fit. he has the correct point count for $2NT$, but this is not so appealing for he holds no stopper. The only bid left then is the cue-bid, $2\diamond$. Thus as with hands **1b** only replies $2NT$, thus responder can sign off in $3NT$.
- 2a:** After the $1\diamond$ open, overcaller holding 13 points, 5 spades and 4 hearts bids, has one correct bid, $1\spadesuit$. Note that double is not appropriate. It's all fine and well when responder complies and responds a major, but when he comes back $2\clubsuit$ overcaller will find himself in a corner; pass might hurt, $2\spadesuit$ would promise a bigger hand than this, see later page 80. After a third seat pass, with 8 points responder is obliged to speak, and without a fit come back no-trumps, $1NT$, showing 8-12 points. Note that although responder holds a diamond stop it is not required. Overcaller will know what's going on, if a $3NT$ game

is to look for he can further enquire whether responder does indeed hold a stop by cue-bidding diamonds. All the same, with this hand opener knows that game is a long shot. Perhaps it'll be best to pass, but a 4 card heart suit is hard to keep hidden, $2\heartsuit$ then by overcaller. Responder is too weak for game and so gives a simple preference, $2\spadesuit$.

- 2b:** After the $1\diamond$ open, $1\spadesuit$ overcall, third seat pass, responder holding 11 points and a 4 card support jump cue-bids, $3\diamond$, to pass this information over to overcaller. Overcaller, signs off in $4\spadesuit$, his better than minimum hand further gains strength with the knowledge of a fit opposite.
- 2c:** After the $1\diamond$ open, $1\spadesuit$ overcall, third seat pass, responder holding 5 card support jumps directly to $4\spadesuit$, following the law of total tricks.
- 2d:** After the $1\diamond$ open, $1\spadesuit$ overcall, third seat pass, responder with a singleton spade is looking at a potential misfit. On the other hand he does hold a nice 6 carded club suit, and so bids $2\clubsuit$. New level, non-forcing, (remember the cue-bid suffices if responder wants to force). This bid therefore alerts overcaller that responder holds a long club suit and at most one spade. The point of the bid is to avoid a rebid of $2\spadesuit$, then $3\clubsuit$, leading to a partnership bidding battle and thus disaster. As above though it is hard to hide a heart suit. For overcaller his consideration is that the worst that can come from bidding $2\heartsuit$ is to end up in $3\clubsuit$ (doubled perhaps). The club ace is quite handy card to have.
- 2e:** After $1\diamond$ open, $1\spadesuit$ overcall, pass in third seat, as with hands **1e** responder cue-bids $2\diamond$. Opener then describes his hand by bidding $2\heartsuit$. This cuts no ice with responder, still with no major fit, and no diamond stop no-trumps still isn't looking good. Thus responder shows his clubs, $3\clubsuit$. By cue-bidding then bidding clubs, highlights responder's lack of support, lack of diamond stopper, but all the same at least 13 points. (With 12 he could have bid **1NT**, as said earlier, **1NT** may be made without a stop). Overcaller though with his singleton club may fancy his chances in $5\clubsuit$, reasoning that responder's points must be somewhere. If this were the case there is still room to invite, thus a bid of $4\clubsuit$. From responder's perspective it may be a bit thin to play

in 5♣, but the clubs are quality and the ace and queen in partner's suits will certainly help fill in gaps. Let's punt 5♣.

8.2 The 1NT Overcall

- (1) The 1NT overcall is similar to the 1NT open in many ways. Firstly it shows a balanced hand, and clearly further holding a stop in the opposition's suit. But being a balanced hand poses some problems, especially since the player sitting in third seat, over the 1NT overcaller, has the probable knowledge of who has the majority of the points, since he can use the fact that his partner has opened. If he deems that they do indeed hold the balance he may well not hesitate to double. With no long suit to run to, this could be problematic. Thus, as an extra security we play the 1NT overcall *not* as 15-17 as with a 1NT open, but increase the bounds by one point, 16-18. Thus to recap, a 1NT overcall promises a balanced hand, 16-18 points and a stop in the opposition's suit.
- (2) Assuming the third player passes, the responses to a 1NT overcall follow exactly as if the overcall were an open, except for the obvious one point difference with the promised range. Thus 2♣ would still be Stayman, 2♦ and 2♥ would still be transfers to 2♥ and 2♠, respectively; see chapter 5.

8.3 Strong Overcalls, Doubles

In principle when we double, X, we hope that their contract is not making, thus we are doubling the stakes; if they go down, we make more points; if they make, they make more points. In such cases these are called penalty doubles. In practise it is not worth making a penalty double of low level contracts, particularly since we are not likely to hold a powerful hand *and* length in their suit. Besides, even if this were the case, the opposition could still be making their contract or even move the goal-posts by bidding a new trump suit. Thus we give new meaning to low level doubles.

The idea therefore is that when we are too strong to make the normal overcall, we (1) double. Thus as we saw in section 8.1, a simple overcall promises a good 5 carded suit and 10-17 points. With 18+ we therefore now double. Here we could slogan an overcall of a double as a “*semi-forcing overcall*”. But further, since this is *not* for penalties, partner is *obliged* to bid, even with 0 points. Only in super exceptional cases can partner pass. Hence we call such a double take-out, (sometimes known as an informative double). Thus a second slogan for a double overcall is that they are “*non-passable overcalls*”.

Since it is guaranteed that partner will bid after our double, we can also double on (2) hands that are weaker in strength, but stronger in distribution. That is to say, that we hold support in all. Thus a double can be done with as few points as 11, when holding a 5440 hand; 12+ points for 4441 hands; 13+ points with 4432 hands, particularly when the two 4 carded suits are the majors; note in all these hand shapes the shortest suit is the opposition’s opened suit. Hence in the worst case scenario, whatever suit partner responds in, we guarantee a semi-fit. Normally, responder will choose a 4 carded major, thus if a double is made with only a 3 carded major, then the loss in shape needs to be compensated by extra points. Thus if the open were 1♦, holding a 4:3:2:4 hand, a double would require 14 points. Thus we have a third slogan for doubles as overcalls, “*guaranteeing a semi-fit overcall*”.

We assume that the intermediate third seated player passes, then the responses to (3) a double follow the same pattern as for an overcall, except that the “non-passable overcall” and “guaranteeing a semi-fit overcall” slogans are abided by. Thus if the response to an overcall would have been pass, that is with 0-7 points, then now as pass is no longer an option, a bid must be made, this naturally being responder’s longest suit. Thus a simple new suit response promises a 4 card suit and 0-7 points. With 11+ points, the double as a “semi-fit guarantee” responder can respond in (4) exactly the same way as if overcaller had overcalled in his suit, thus he cue-bids, (note this does not mean a jump cue-bid). Thus with the intermediate range of 8-10 (5) points, responder jumps in his suit. Responder may chose though to respond 1NT, (6) showing 8-10, 2NT 11-12, and 3NT 13-15 points, and in all cases a stopper. When (7) holding 13+ points, game should be bid. If responder holds a 5 carded major, then with the expectation of at least a 3 carded fit promised by the double, responder

- (8) can jump directly to the game. Finally if we are strong and unsure where the final contract lies, we can cue-bid, the strong denial. Note that the cue-bid can also be bid by responder when holding at least 4-4 in both majors, (assuming the open were a minor) and 8-10 points for this will allow doubler to show his longer major (as he could be 4-3 in the majors) and thus we guarantee finding the fit.
- (9) Assuming responder bids simply to the double, overcaller's rebid identifies the original double as either weak or strong. After a weak double, overcaller is entitled to pass, (the weaker the double the more distribution, thus the guarantee of a fit) or
 - (1) agree a fit with the responded suit. If overcaller rebids with a new suit, this therefore implies a natural overcall which was too strong to bid as such, thus promising
 - (2) a minimum five card suit and 18-19 points. With a stronger hand of 20+ (possible, particularly after aggressive weak third seat opens), he rebids by cue-bidding their
 - (3) opened suit. A 1NT rebid by doubler shows a balanced hand too strong for a direct 1NT overcall, see section 8.2, thus is 19-20 points.
- (4) If after a new suit rebid from doubler, showing an overcall that was too strong just to overcall, a simple repetition by responder of his suit is a clear weakness. Had he held the 6 or more points that are needed for a game then he would make any other bid, as these are encouraging. Further in this case, a repetition by responder of his suit should be promising at least a 6 carded suit.
- (5) Note that the only forcing rebid by doubler is the cue-bid; since for all other rebids doubler has limited his hand, thus responder will continue if interested. In this case of a cue-bid rebid by doubler, responder has only one discouraging bid, that is a simple repetition of his suit, which further doesn't promise any extra length.

Hands correspond to the table on the facing page.

1a: After an open of 1♦, holding 12 points and a diamond shortage a double is the perfect bid. Whatever suit partner, he will find 4 card support opposite. Good competitive action. In response partner bids his 4 card heart suit 1♥, showing anywhere between 0-7 points. Doubler passes, showing that his double was indeed a weak double. If the opponents stay alive by competing doubler is entitled to keep competing by supporting.

Responder	a	b
Doubler	♠ J 8 3 ♥ K 9 7 6 ♦ 9 8 7 ♣ 6 5 4	♠ J 8 3 ♥ 9 7 6 ♦ K 9 ♣ A J 6 5 4
1 ♠ K Q 7 2 ♥ A J 10 8 ♦ 4 ♣ Q 10 9 3	(1♦)-X-1♥ -	(1♦)-X-3♣ -
2 ♠ A K 7 6 2 ♥ A J 10 ♦ 5 4 ♣ K Q 3	(1♦)- X -1♥- -1♠ -	(1♦)- X -3♣- -3♠-4♠ -
3 ♠ K Q 7 2 ♥ A J ♦ A Q 5 4 ♣ K 9 3	(1♦)- X -1♥- -1NT -	(1♦)- X -3♣- -3NT -
4 ♠ A K 7 2 ♥ A Q 10 ♦ A 10 ♣ K Q 9 3	(1♦)- X -1♥- -2♦-2♥ -	(1♦)- X -3♣- -5♣ -

- 1b:** After the $1\Diamond$ open and double from partner, responder holding 9 points jumps in his suit, $3\clubsuit$. For doubler this promises 9-10 points and denies interest in looking for a major. A minor game is out of reach, $3NT$ is a no go since diamonds are knowingly open, so again, as with the previous pair of hands above, doubler passes.
- 2a:** After the $1\Diamond$ open, an overcall of $1\spadesuit$ would be an underbid; with 17 points and a diamond shortage, the hand is worth 18 points, thus the principle is to double first. Responder, as with **1a**, bids $1\heartsuit$, now doubler may bid $1\spadesuit$. The very fact that opener is *not* supporting means that the original double was strong. Responder now knows that there is a 5 card spade suit opposite, 18-19 points. With only 3 points responder passes, and can at least be happy that he holds a fit for partner.
- 2b:** Following **1b**, the $1\Diamond$ open, double, and $3\clubsuit$ jump response, opener bids $3\spadesuit$. As with **2a**, being a *new* suit means the double were a strong double. Thus both players know game is to be bid, and now doubler has shown his 5 card spades suit, with 3 card support responder bids $4\spadesuit$.
- 3a:** After the $1\Diamond$ open, a balanced hand holding 16-18 points and a diamond stop the perfect call would be $1NT$. Here the hand is stronger still, 19 points, thus following the reasoning of hand **2**, we double. Responder bids $1\heartsuit$, now doubler bids $1NT$, showing a hand that is too strong for a $1NT$ overcall, thus 19-20 points. Responder's 3 points don't help in the search for game, thus passes.
- 3b:** After the $1\Diamond$ open, double and eventual $3\clubsuit$ jump response, doubler signs off with $3NT$.
- 4a:** After the $1\Diamond$ open, a balanced hand and 22 points doubling is the clear option. Responder comes back the now familiar $1\heartsuit$. Back through to doubler and being so strong is able to cue-bid $2\Diamond$. Responder is non-plussed, with only 3 points the only weak bid he has left is a repetition of his suit, hence $2\heartsuit$, promising 0-4 points and not necessarily a fifth heart. Desperate times need desperate measures. Doubler without a fit is wise to pass and respect partner, he has shown the strength of his hand and responder is still not biting at the bait.

4b: After the $1\Diamond$ open, double, pass, the $3\clubsuit$ from responder makes doubler sit up. Opposite 8-10 points and a club fit game is the obvious option, thus $5\clubsuit$. Actually $5\clubsuit$ is very much a team's contract; $3NT$ would be the better pairs contract for the diamond suit is stopped by the ace. Doubler can even ask if partner has the suit further covered with a cue-bid of $3\Diamond$. On the other hand, with more bidding technique there might be a shout for looking for a club slam.

8.4 Overcalling a 1NT Open

Overcalling a 1NT open is considered more dangerous than overcalling a suit open, basically since the player sitting behind the overcaller has a very good idea who has the balance of the points, for his partner promises 15-17 points, and his fingers may be itching towards making a penalty double. On the other hand, there are many bidding structures for after a 1NT open, and if we stay quiet too often the opposition will more likely than not find their best contract. But another consideration must be taken into account and that is that by staying quiet will the opposition finish in a doomed 3NT contract; overcalling only alerts them to the fact that they have a named weakness and instead they might investigate another contract, but this contract makes. Thus to overcall a 1NT open¹ requires more than a normal (1) overcall would require: thus at least 12 points and a good quality suit of at least 6 cards in length. A double of the 1NT open would be showing a hand that is too strong to simply overcall. It is not a take-out double, but more penalty in flavour. If third player passes, partner is entitled to pass. On the other hand, partner may well feel that 1NT may make so, so he pulls the double when holding weakness.

We will treat all suits as being equal, but in section 18.2 we see how the overcalling structure can be redesigned to allow a bid to show both majors.

¹[Defence to 1NT : natural / Landy / Capelletti / Crash / MeCMA]

8.5 Overcalling in Fourth Seat

In this section we consider how the player in fourth position overcalls after there has been an opening bid followed by a response. There are three main situations: *i*: the response was a support response; *ii*: the response was a non-support new suit response; *iii*: the response was 1NT. We look at these three situations separately.

- (1) In case *i*, since there was a support response there are still three suits remaining unbid. On the other hand, the support response may have taken the bidding a level higher than had it been a simple new suit bid. Over a simple support response, the considerations of overcaller are similar to those had he been in the direct seat after the 1♥ open except that he needs to take into account that opener knows how the points of the deal are distributed. Perhaps bidding will push them up a level, or perhaps they will punish overcaller with a double. Thus although similar in shape, to overcall now would require a little more strength than a usual direct overcall, say 12+ points. Again, the points can be adjusted if there is some trump length compensation. Note that if the opposition still buy the contract in their suit, then it will be partner leading out, and most probably he will lead the overcalled suit. Thus suit quality is imperative. When holding a hand with at least 17 points overcaller may elect to double, as if he were in the direct seat. Naturally enough, if his hand fits the bill of being short in the opened suit and holding support or semi-support in all three outside suits, opener can again double. Thus a double again takes the role of both being the non-passable overcall as well as being the overcall that guarantees the semi-fit. Note that responder may support with a hand that may not be strong in points, but with compensational distribution. If responder jump supports then overcaller needs to fully justify his bid, for he is introducing a new suit at a potentially dangerous high level. Thus he needs extra length, more than extra strength.
- (2) In case *ii* we consider that after the open, the response were a non-support new suit. Although the opposition have yet to establish a fit, they have established who has the balance of the power. Again, a new suit overcall would show a hand of similar overcalling strength to usual, but to be on the safe side, would require a little more strength, 12+ points. Again a double would show either a strong hand (albeit unlikely) or distributional, showing fit potential in the two remaining unbid

suits. It should be noted that a cue-bid of the *responded* suit is natural². They might (3)
have bid the suit, but a response need only be made on four small rags.

In case *iii* the response was 1NT. Although there has only been one suit bid nat- (4)
urally, now responder has denied holding any of the suits ranked higher than the
opened suit. All the same a new suit overcall would be like in the previous para-
graphs, showing good quality suit and at least 12 points. A double now would show
the same kind of hand that would have doubled the original open. Note that even
though responder has not bid a suit, sometimes a suit can be deduced. If this is the
case then a double would be treated like this suit had been shown, but as ever a
double would have priority towards any unbid major.

8.6 Overcalling a Conventional Bid

Overcalling a conventional bid can be advantageous for it can disrupt the opposi-
tion's tight control on the bidding. Further, a double can be used as a lead indication.
But care must be taken, especially with doubling, for it gives the opposition further
bidding space as can be seen in section 9.8. There are four conventions we consider
in the basics part: Stayman, Transfers, Blackwood and control bids.

Say the open were 1NT and the response is a Stayman 2♣ bid. A simple suit over- (1)
call would naturally show the suit. This could be important especially since some
pairs use Stayman even with no points. A double would indicate a club lead. This
should also imply a suit of some kind. Overcalls after a transfer bid follow the same
logic, especially since transfers promise no points. Again a double would indicate
the suit bid and would be lead indicational.

The other two conventional bids are slam investigating thus any overcall should be
pre-emptive in flavour. Again doubles of control bids are lead indicative.

²[Fourth seat overcalls, cue-bid of response is : natural / two-suiter]

9 Coping with Interference

In general the structure of a bidding system is for opener and responder to find the correct game, if it is there, otherwise to stay in the safest part-score. The situation slightly changes when the opposition start bidding, for not only must we still find our games if they are there, but when not, to find the best way to compete, whether it be bidding to a safe part-score, or defending against their contract, perhaps even doubling them. The most important observation is that when the opposition intervene with a bid (or double), although that may take away some bidding space, some compensation is made in that two further actions can be taken, namely pass and double (or redouble). Thus the meaning of any bid then becomes dependent on what these actions mean.

In section 9.1 we consider the action responder takes when there has been an intervening bid. In section 9.2 we consider responder's actions when instead there was an intervening double. In section 9.3 we consider responder's actions after there was an intervening 1NT overcall, whereas section 9.4 we consider the responses to opener's 1NT when there has been an intervention. In section 9.5 we consider the actions of opener after there has been an intervention after hearing partner's response.

9.1 Responding after a Suit Intervention

Let us consider the general situation by way of an example: say partner opens 1♥, and before we get the chance to respond our right hand opponent intervenes with a 2♣ overcall. Our first thought is, *“what would we have done had there been no overcall?”*. Our answer can fall into one of three types: first, we can still make the same bid, (e.g. 2♦), in other words their overcall has done us no damage; second, we are now obliged to bid at a level higher, (e.g. we would have said 1♠, but now the 2♣ overcall obliges us to say 2♠); third, we would have responded in the same suit as the overcall, (e.g. we would have said 2♣). Thus although the intervention has introduced some problems we now have the further actions of passing and doubling that can help find the solutions.

- (1) By way of explanation let us consider further the example we began in the previous

paragraph: Opener opens with 1♥, and our right hand opponent intervenes with 2♣. Without intervention we are obliged to respond with 6+ points, as this keeps the bidding alive and allows partner to rebid. On the other hand because of the intervention since opener still has the opportunity to make a rebid, we lose this obligation. Thus since a response is voluntary we strengthen them to being 8+ points; with fewer we pass.

If we can still make our natural response then we do so; thus 2♦ would still be 11+ (2) points and a diamond suit. If their overcall has taken away the bidding space that (3) we would have used then generally speaking we double. This is called a **Sputnik Double**, or **Negative Double**. In our example sequence, the double replaces the possibility of responding 1♠. This action promises at least 8 points. Opener will continue bidding exactly as if there had been a 1♠ response. Note that with a 5 card spade suit the strength of a double may be weakened back to 6 points.

If spades were bid then this would mean a bid of 2♠. We call such a bid a **Dis-** (4) **turbed Bid**¹ for it is greater than opener's denial rebid of 2♥, without jumping. In other words their overcall has disturbed our responding. Disturbed bids promise a 5 carded suit and at least 10 points. Thus in our example a double caters for all spade holdings upto the requirements of a 2♠ response. Supporting opener simply, (5) 2♥, with a jump, 3♥, and a double jump, 4♥, is considered weak and pre-emptive; the level being determined by how many trumps we hold, 3, 4 or 5 respectively. Since 3♥ is now considered weak, when holding 11+ points and a fit, we instead bid the Truscott 2NT (see section 9.2 for a similar treatment). Supporting need not (6) hold 8 points, instead we revert back to promising at least 6. If it is still possible to bid 1NT, then it would retain its denial meaning, but the range of 6-10 points, is (7) tightened to 8-10, and further requires responder to hold a stop in the opposition's suit. Since 2NT now means fit, how would we show a hand that would have bid a natural 2NT? Clearly such a bid would mean a balanced hand (without heart support nor 4 spades, otherwise our preference would be to follow the major trail first) of 11-12 points and some cover in their suit. Thus it is most probable that we would have considered bidding their suit had they not intervened. In this case it is worth considering leaving them in their contract, preferably doubled, for we have

¹[Disturbed Bids : strong / weak]

the balance of the points and we have a nice trump holding sitting behind them. But we *cannot* double, for partner will take this as Sputnik. Instead we pass, and hope that partner will reopen the bidding with a double, to which we then pass.

- (8) This is called making a **Penalty Pass**. Finally, cue-bidding their suit, $3\clubsuit$, can be considered the strong denial. Essentially it asks opener to bid no-trumps if he has a stop in the opened suit. If the cue-bid is at the 2-level then it requires at least 11 points (since the call is equivalent to the strength of 2NT), whereas if he cue-bid is at the 3-level it is game forcing so is at least 13 points. If we had the game points and the stop then we would ourselves bid 3NT directly, (although again it might be worth looking to hit them for a large penalty).

There is a variation in playing disturbed bids, instead of being strong they can be played as weak and pre-emptive.² Thus in our running example, after a $1\heartsuit$ open and $2\clubsuit$ overcall, holding a hand that holds 10+ points and say 5 spades they would double first and show spades later. Note, as in section 9.5, if the fourth player gets busy by entering the auction, this method would require opener to double when holding 3 card support.

- (9) Generally speaking a Sputnik double promises 4 cards in any unbid major. Thus after the bidding of $1\clubsuit$ open, $1\diamondsuit$ overcall, a double shows both majors, holding just one we would bid it, thus promising only 4 cards in the suit. There is one exception, that is after a $1\diamondsuit$ open and $2\clubsuit$ overcall. The overcall has cut out a lot of space and if we insisted on a double showing both majors, holding just one would put us in a pickle; if we passed and the player in fourth seat supported the overcall, there is a good chance that our suit goes by unbid. Thus a double is the best option, thus in this case it only promises one of the majors. Finally we have a bonus bid: after a minor open, $1\heartsuit$ overcall, based on the logic above double would promise 4 spades; thus bidding $1\spadesuit$ would promise a 5 card suit. Based on this logic we see that some overcalls are worthless for they only give the opposition more fire-power, such as $1\diamondsuit$ after a $1\clubsuit$ open; whereas other overcalls are more damaging such as $2\clubsuit$ after a $1\diamondsuit$ open.

Assuming responder's bid shows something natural, then generally speaking opener

²[Disturbed Bids : strong / weak]

continues bidding in the normal fashion. But consider that the fourth seated player bids, most often supporting the overcall (similar considerations also apply when the fourth player is the overcaller, see section 9.5). Again space has been taken away, but again there is the added ability of passing and doubling.

Double would indicate a strong opening hand. Opposite a no-trump response the double is to collect a large penalty, otherwise it is for take-out. When the choice of doubling is available, bidding a suit implies a limited weaker hand. The double also has a secondary meaning, that of being able to show a 3 card support to partner's responded suit, assuming that the response has only promised 4 cards, but where there is a possibility that responder may hold 5 cards. When holding major support, opener bids it in the same way as usual, simple support being 12-16, jump support 17-18 and game support being 19+ points. Without support opener follows the usual pattern for rebidding. He shows a second suit when possible, noting that if the second suit is a disturbed bid or even a reverse then it is *not* strong, since strong hands are first bid through a double; bids no-trumps when holding a balanced hand including a stop in the overcalled suit. The strength of the bid depends on how strong responder is and how high the fourth player bids. Essentially a rebid of 2NT promises 12-14 points, whereas a jump to 3NT would promise 18-19 points. Bidding 3NT without jumping requires enough points to make game based on what responder has promised with his response; and rebids his first suit when holding extra length, 5 cards for a minor open, 6 if it were a major open. Finally, opener has the option to pass, clearly this is the denial rebid in this situation. Clearly it is a weak hand that is without support, not even with 3 cards for a major; without a second biddable suit; without a stop in the opposition's suit. Thus in essence the type of hand opener would have is a balanced hand, 12-14 points, and no stop in the opposition's suit.

Note that had the fourth player doubled then all rebids would remain the same except that opener would redouble instead of doubling.

Finally what action do we take as opener when partner has passed and that the player in fourth seat also passes. It is important to realise that a pass by partner can mean one of two things: either he is weak, less than 8 points; or he has penalty

passed. To find out which one, a good measure is look at the length in their suit. The longer we have, the more likely that partner is short, thus his pass could not have been a penalty pass, and thus he is weak. On the other hand if we are short in their suit then there could be length in partner's hand, thus we should be inclined to reopen with a double. If partner takes out the double then you know that he was weak. Thus at least the action of our reopening double is to compete against their part-score.

Hands correspond to the table on the next page.

- 1a:** With 13 points and a 5 card heart suit the open is a clear $1\heartsuit$. The opposition intervene with $2\clubsuit$. Had there been no intervention responder with 6 points would have had to have said $1\spadesuit$. But now the obligation to bid is longer there so responder can show his weakness by passing. Assuming this gets back to opener, he can now evaluate the situation; either responder passed with a weak hand, or he would have liked to have doubled. Since opener is short in clubs, it is reasonable to believe that responder could indeed be long, thus opener reopens with a double. Although responder is long in clubs he is in no position to consider leaving the double in, so instead must bid, and so does so with $2\diamondsuit$. Although this only promises 4 cards, it also denies any interest to play in hearts, $2\diamondsuit$ seems just as feasible as any part-score, thus opener passes it out.
- 1b:** After the $1\heartsuit$ open, responder with a heart fit and thus 12 points including distribution would have bid $3\heartsuit$ had there been no intervention. but there has been a $2\clubsuit$ overcall. Now, a $3\heartsuit$ response would be weak and pre-emptive, designed to make life hard for the opponents to bid $3\clubsuit$, or even investigate a spade fit. We'll see with hands **1e** that there is no reason to use **2NT** as natural, thus we use it instead to show exactly the hand we would have bid $3\heartsuit$ with. Thus here, responder says **2NT**. Hence with the knowledge of there being a fit and 11-12 points opposite opener can bid $4\heartsuit$.
- 1c:** After a $1\heartsuit$ open responder would have been ready to say $1\spadesuit$, unfortunately the intervention of $2\clubsuit$ makes that impossible. On the other hand, it has enabled responder the right to use the double as a call, and this is exactly what he does, the sputnik double. For opener this promises exactly what a $1\spadesuit$ response

Responder	a	b	c	d	e
Opener	<p>♠ K 10 5 4 ♥ 7 ♦ K 9 6 2 ♣ 9 8 3 2</p>	<p>♠ 5 4 ♥ A 7 3 2 ♦ K 10 9 2 ♣ K 8 3</p>	<p>♠ K 10 5 4 ♥ A 7 ♦ K Q J 2 ♣ 9 8 3</p>	<p>♠ K 10 5 4 2 ♥ 7 ♦ K J 9 2 ♣ K 8 3</p>	<p>♠ K 5 4 ♥ 7 3 ♦ K 9 2 ♣ A Q 10 9 3</p>
<p>1</p> <p>♠ A 8 3 ♥ K J 10 9 6 ♦ A 8 5 ♣ J 4</p>	<p>1♥-(2♣)- P - X - -2♦ -</p>	<p>1♥-(2♣)-2NT- 4♥ -</p>	<p>1♥-(2♣)- X - 2♥- -3♣- 3♠- -4♠ -</p>	<p>1♥-(2♣)-2♠- 3♠ -</p>	<p>1♥-(2♣)-P - X - -P -</p>
<p>2</p> <p>♠ A Q J 8 ♥ K Q 10 9 6 ♦ A 8 5 ♣ 4</p>	<p>1♥-(2♣)- P - X - -2♦ - 2♠ -</p>	<p>1♥-(2♣)-2NT- 4♥ -</p>	<p>1♥-(2♣)- X - 3♠- -3NT- 4♣- - 4♦ - 4♥- -4NT- 5♥- - 6♠ - -</p>	<p>1♥-(2♣)-2♠- 4♠ -</p>	<p>1♥-(2♣)-P - X - -P -</p>

would have promised, except that it is of at least 8 points. Opener though has no spade fit and so has to find the bid that best describes his hand. He would like to say 1NT, but this requires a stop in clubs, which he doesn't have, thus he is resigned to having to rebid his hearts 2♥. For responder this means that opener cannot support spades, cannot bid no-trumps and cannot bid diamonds. So opener must have either a sixth heart or is lacking a club stop. Responder though isn't finished, he does have 13 points, so has always been considering game. Now that he knows there is no 4-4 spade fit the choices become either 4♥ if opener does indeed hold a sixth heart, otherwise 3NT if partner holds a club stop. One way to find out is to bid their suit, 3♣, (see page 135, the section on fourth suit forcing, for something similar). Opener then comes back 3♠, saying he holds a 3 card spade suit; he knows that responder cannot though have 5 spades, for with this many points he would have said 2♠ as his first response, see the following case. Thus his 3♠ bid denies a sixth heart and a club stop, but is at least offering some help in spades. Responder then is left with a difficult decision, to play in a 5-2 heart game, or 4-3 spade game, or even to pass. Being brave we'll say he punts 4♠, perhaps the ace of hearts will come in handy.

- 1d:** After the 1♥ open, responder would have 1♠, but the intervention of 2♣ means that to show spades he is obliged to say 2♠. But this he can do, for he holds *both* a 5 card spade suit and at least 10 points. Opener holds a 3 card fit so can bid 3♠, showing his weakness. Being bare minimum responder passes. Note that having a singleton in partner's long suit is indicative of wasted values and so even with a fit responder's hand doesn't grow any bigger.
- 1e:** After the 1♥ open responder was all ready to say 2♣, or perhaps even 2NT directly. Instead there has been a surprising intervention of 2♣. Thus responder has the opportunity to punish this slack opponent who most probably overcalled with a 5 card suit, (see chapter 8.1 to avoid a similar fate). A double would be sputnik, so instead he penalty passes. As with hands **1a** opener reopens with a double, and now responder can pass while rubbing his hands with glee.
- 2a:** With 16 points and a 5-4 shape opener begins with 1♥. As with hands **1a**

responder passes after the $2\clubsuit$ overcall. Again opener reopens with a double for he is short in clubs and again responder comes back $2\diamondsuit$. Although this action by responder is weak he could have anything up to 9 points; his original pass saying that he couldn't support, he couldn't do a sputnik double for lack of spades, and lacks enough points to bid his diamond suit. So with 16 points opposite game is still a long shot, but there is knowledge that there are no wasted club values, (responder didn't pass the double). It is fair enough then for opener to make one further bid, the worst case being playing in $3\diamondsuit$, instead of passing $2\diamondsuit$. Thus opener continues with $2\spadesuit$, showing his second suit. Note how it is better for opener to double first rather than bid $2\spadesuit$ directly, since it first offers the chance to leave them in doubled, see hands **2e**. Responder does indeed hold the spades but even with an adjusted 8 count can't really justify a raise to $3\spadesuit$. If opener were really strong enough to consider $4\spadesuit$ opposite this hand he would have bid stronger than just $2\spadesuit$, instead cue-bidding $3\clubsuit$.

2b: After the $1\heartsuit$ open, $2\clubsuit$ overcall, 2NT support response, again with this hand opener has no reason not to play in game, thus $4\heartsuit$.

2c: After the $1\heartsuit$ open, $2\clubsuit$ overcall, sputnik double, opener with spade support bids as if he heard a $1\spadesuit$ response, thus bids $3\spadesuit$, promising 17-18 points. (Note: $2\spadesuit$ would be 12-16 points, exactly had the bidding gone $1\heartsuit$ - $1\spadesuit$ - $2\spadesuit$ without interference). Responder is now sure of game but with 13 points could well lead to a slam. What really interests him first is whether there are two top club losers, and the only way to find this out is to hear a club control-bid from partner, thus his only bid is 3NT , (see page ??). Note that when there is a major fit, our emphasis is on playing in the major game, not 3NT . Also if responder really wants to play in 3NT , why would he not want to try and leave them in a doubled contract? Opener obliges with $4\clubsuit$; responder continues with a $4\diamondsuit$ control bid; opener $4\heartsuit$ control bid; responder now brings out the Blackwood 4NT ; $5\heartsuit$, 2 aces and not the king of trumps; thus responder signs off in $6\spadesuit$.

2d: After the $1\heartsuit$ open, $2\clubsuit$ overcall and $2\spadesuit$ response, opener can jump directly to $4\spadesuit$. Had responder held more points he could consider looking for a slam, instead though he is minimum for his bid and so passes.

2e: After the $1\heartsuit$ open, $2\clubsuit$ overcall, penalty pass, opener with only a singleton club reopens with a double. Responder is happy to see that and thus passes it to convert the double to penalties.

9.2 Responding after a Double

We assume that after an open there has been an intervening double and look at the actions of responder. Generally speaking responder bids in exactly the same way had the doubler passed since the double has taken away no bidding space. On the other hand the calls of pass and redouble can now be added to the armoury.

- (1) If the philosophy of responding after an intervening pass is to find the best game contract, now that the opposition have come into the auction with a double, the emphasis nows becomes in competing, most probably for the part-score. Thus if the open were a major, responder preferential action is to support: simple support is weak, 6-10 points and promises 3 card support; jump support is also weak, 6-10 points, and promises a 4 card fit. Clearly, in both cases the ranges can be weakened with more distribution. Note that we have lost the 11-12 support point range. Thus with such support hands, in fact with 11+ points, the correct bid is **2NT**: this bid is often called the Truscott **2NT**.
- (2) But now we have lost the natural **2NT** response. In fact this is no loss, for when holding such a balanced hand with 11+ points and no fit for partner, then clearly responder holds cover in all the other suits. The correct call now is redouble. The idea is that this informs opener where the balance of the points lie, and opens up the option of hitting them for a penalty double. Thus if the opposition run to some suit, both opener and responder will be watching and waiting to bring out a tasty double. If the opposition name a suit, then a double by either opener or responder says that they hold at least 4 cards in the suit. In principle these doubles are intended for penalties, especially if game is not in the running. On the other hand, the doubles of their suits can be used to find stops to see if **3NT** is a feasible game.
- (3) Responder's actions after a minor open follow the same thoughts as for normal responding; bidding a major over supporting. Supporting a minor follows a similar

pattern to the above procedure for supporting the majors: both simple and jump supports are weak, although here to be more competitive we allow simple support to be made with 4 cards and jump support with 5 cards; 2NT is Truscott, strong 11+ and fit.

As is usual responder wants to show a major. This he can simply do by bidding it in the normal way. But as with responding after an overcall, any action that is voluntary is considered as at least 8 points. With fewer responder should be happy to pass and wait and see where the auction goes. A 1NT response remains as denial, but is now 8-10 points. Note, with 11+ the response would be redouble, thus a simple response of a new suit at the 2-level does not promise 11+ points, but just 8+ points. (4)

Note that the opposition's double essentially knocks a possible slam on the head, there is little point for bids that are slam going to retain their original meaning. Instead they take on a more competitive meaning. In this situation the obvious candidates to be reassigned a meaning are the jump shift responses, see section 7.6. Thus after a double, a jump shift response shows a weak single suited hand, that is a suit of at least 6 cards and 6-10 points. (5)

9.3 Responding after a 1NT Overcall

Assume that after the open the opposition intervene with an overcall of 1NT. Normally this would be showing a balanced hand, and a range falling somewhere between 15-18 points. Thus, for a point strength perspective with at least 15 points out there is little chance of there being a game. Thus attention is turned towards finding the best part-score.

As a base the assumption is that opener is sitting with a hand that is worth at least 12 points, thus responder when holding at least 9, calculates that a combined 21 count over their 19 points, puts opener and him in the majority. Thus any hand holding at least 9 points the correct bid is double, the intention is to hit them hard when they have no fit. If they do scramble to a fit, then at least opener is aware of the point distribution and can also consider competing. (1)

- (2) All other bids thus necessarily show less than 9 points, and are therefore competing in nature. As a base let all bids be natural, showing 5 carded suits. Support naturally shows enough cards to guarantee a fit. This structure can be made more interesting at the expense of having to use an extra convention, Landrik as given in section 18.4.

9.4 Responding to 1NT after an Intervention

From chapter 5 we already know that a 1NT open promises 15-17 points, balanced hand and no 5 carded major. The intervention can either be a suit overcall or a double. In either case dangers exist that were not there had there been no intervention.

In the first case a suit overcall indicates a potential weakness, and makes no-trumps less of a safe haven. But just as we have conventions to help us find the best contract after a 1NT open when there has been no interference such as Stayman and transfers, we need other conventions that can best cope with these problems, see Rubensohl in section 16.3.

- (1) If they double the 1NT open to show a big hand then there is a danger of going down for a large penalty. If responder does not want the pain of leaving partner in the slow death that is 1NT X, then he needs to bid something as an escape. Since the double takes no bidding space we could agree to play Stayman and transfers, systems on. One problem is that if responder's hand is either long in a minor, or else he only has minors as 4 carded suits, then there is no suitable way for responder to find a good escape. Hence the **SOS Redouble**.³ Redouble asks opener to bid his 4 carded suits up the line, this way responder can pass or bid in the hope of finding a fit; a suit at the 2-level is therefore natural and shows a 5 carded suit. This treatment is very basic, a more complicated treatment can be found in the Halmic convention 16.6.

³[**SOS XX** / Halmic / XX-transfers]

9.5 Rebidding after an Intervention

In this section we consider the situation from opener's perspective, when after the open and the response the player in fourth seat intervenes, either with a bid or a double, (see section 8.5). We follow very similarly to the situation discussed in section 9.1, from page 90 onwards. Now opener is rebidding after an intervention. Again space has been taken away from opener, but again by way of compensation opener has the extra bids of pass and double.

Naturally a double would indicate a strong opening hand. Opposite a no-trump (1) response the double is to collect a large penalty, otherwise it is for take-out. When the choice of doubling is available, bidding a suit implies a limited weaker hand. A double has a secondary meaning, in particular when the responded suit is a major, showing at least 4 cards, but where there might be 5 or more. Now a double would include those hands that hold 3 card support and at least opening points. This is known as a responsive, or support, double.

When holding support, in particular major support, opener bids it in the same way (2) as usual. Thus say after the sequence: $1\Diamond$ -(pass)- $1\spadesuit$ -($2\heartsuit$): $2\spadesuit$ promises 12-16; $3\spadesuit$ 17-18 and $4\spadesuit$ 19+ points.

Without support opener follows the usual pattern for rebidding. He shows a second (3) suit when possible, (note that if the rebid is a disturbed new suit, then it is not strong, since strong hands will go through a double first); bids no-trumps when balanced holding a stop in the overcalled suit and with the appropriate point count, $1NT$ is 12-14, $2NT$ as a jump is 18-19 points, $2NT$ without a jump is 12-14 when opposite an 11+, whereas opposite a possible bare 6 points shows extra strength, $2NT$ after a major open is thus 15-17 points; finally the rebid of the opened suit promises extra length, 5 cards in a minor, 6 in a minor.

Thus pass is the denial rebid: opener cannot support, has no competitive second (4) suit, has no stop in their suit and has no extra length in the opened suit. Thus we

can essentially think of opener's rebid pass as being a hand that is similar to a 1NT rebid without a stop in their suit.

- (5) Note that if the overcall were a double, then all rebids remain the same except that the redouble replaces the double.

9.6 Responding to an Intervention, after an Intervening Bid

In this section we consider the action of the fourth player after there has been an open, intervention and a response. We need to consider two cases: *i*: the intervention were a simple new suit overcall; *ii*: the intervention were a double.

Let us consider case *i* first. As a base we will assume that the open were a suit at the one level and the overcall were a simple new suit overcall. Then responder can either support opener, bid a new suit or double, or bid no-trumps; each of these cases we will deal with separately.

For the first case let us assume that responder's bid were a new suit, so let us take for example the bidding (1♦)-1♥-(1♠). If the third player has not bid, then we would be in the situation as given in section 8.1, whereby the responder of overcaller is obliged to bid when holding at least 8 points. But now the third player does indeed speak, and so we are in a similar situation as in section 9.1, whereby the responder of overcaller is no longer required to bid when holding the lower end of the point range. In other words with 8-9 points he is not obliged to bid, with 10+ he is. Let us put all this together: opener's bid promises at least 12 points, overcaller promises at least 12 points, responder promises at least 8 points and finally if responder of overcaller is obliged to speak then he holds at least 10 points; thus when all four players are obliged to speak they are promising at least 12+10+8+10=40 points, the *whole pack* of points. So it is fair to say that such situations where all four players are bidding their own suits do not occur so often. What does occur more often is when at least one partnership completes in a fit.

Let us return to the running example. As ever the priority is to support the overcall: (1) with 3 card support then give simple support $2\heartsuit$; with 4 card support jump support $3\heartsuit$; with 5 card support double jump support $4\heartsuit$. Each of these bids need not promise any real strength. Without support, but with a holding in the fourth suit, (2) here that is clubs, responder should show this suit if he holds, as we said above, at least 10 points, $2\clubsuit$. If the suit can be shown at the 1-level, then responder only requires 4 cards; if it can only be shown at the 2-level then it would require at least 5 cards; if it can only be shown at the 3-level then it would require 6 cards. Similar to the response of an overcall without interference, the only forcing responses are new suits at the same level and cue-bids of opener's suit. Without a fit or the ability (3) to bid his own suit, yet holding at least 10 points responder of overcaller needs to tell partner that he indeed holds such strength. He can thus bid no-trumps when he holds stops in both the oppositions' suits, although since the points are more or less 20-20, only a bid of $1NT$ would make sense. A double by responder of over- (4) caller is for penalties, since three suits have been bid there is no choice of suit being given. The only positive action remaining is for responder of overcaller to cue-bid (5) the opened suit. This would be the kind of strong denial bid, alerting overcaller that the balance of points are between overcaller's and his partner's hands. Overcaller will bid no-trumps when holding a stop in the opened suit otherwise will describe his hand further. Finally with nothing positive to say responder of overcaller passes.

Note that a double by responder is sputnik, and so is equivalent to bidding an actual (6) suit. Thus all the deductions from the previous paragraph remain valid, except now responder from overcaller will redouble instead of doubling.

Our next case is when responder has supported opener. Responder can support opener simply, or with jumps, but it is usual that the level shows the length of support rather than extra strength. In all cases the thought processes are the same, it is just that after a jump support some accuracy is lost. As a running example we shall assume the former, that responder has supported simply and let us take as an example the bidding $(1\heartsuit)-1\spadesuit-(2\heartsuit)$. The priority is again for responder of overcaller (7) to support: with 3 card support he bids simply $2\spadesuit$; with 4 card support he jumps $3\spadesuit$; and with 5 card support he double jumps, $4\spadesuit$; these actions need not promise

- (8) any real strength. Without a fit responder of overcaller is obliged to respond with at least 10 points. Similar to the first case if responder cannot agree a fit, he can bid his suit $3\clubsuit$ or $3\diamondsuit$, for where there are now two unbid suits. Again a new suit at the 2-level would promise at least 5 cards, whereas at the 3-level would promise at
- (9) least 6 cards and imply a misfit. Responding no-trumps by the partner of overcaller would show the stop in the opened suit and the same strength as had the third
- (1) player passed, thus **2NT** would be 13-14 points, **3NT** 15+. A double would not be for penalties as there are two unbid suits, so this gives overcaller the choice between
- (2) these. Finally a cue-bid would ask for overcaller to bid no-trumps when holding the stop in the opposition's suit. Finally, responder of overcaller passes when has nothing else to say.

- Our final case is when responder to opener bids a no-trumps, or to be more precise
- (3) **1NT** as this is the more interesting bid. Again supporting is the usual competitive action: simple support promises 3 cards, jump support 4 cards and double jump
 - (4) support promises 5 card support. Without support bidding a new suit is weak for
 - (5) otherwise, as we will see, responder of overcaller will double. Since the overcall promises at least 10 points, a double by responder of overcaller alerts overcaller that his side holds the balance of power, thus a double shows at least 11+ points.

Now we turn our attentions to case *ii*: that the intervention were a double. As a base we will assume that the open were a suit at the one level and the overcall is double: then responder can either support opener, bid a new suit, redouble or bid no-trumps; each of these cases we will deal with separately.

- (6) Let us consider first, that the third player bids a new suit simply. Let us take as an example $(1\diamondsuit)\text{-X}\text{-(}1\spadesuit\text{)}$. Advancer's actions are similar to the case when responder in third seat has passed see section 8.3; except that, due to responder's bid, he is no longer obliged to bid. Thus if advancer bids, he is voluntarily bidding, thus he does not have 0-7 points, but the higher part of this range: 6-7 points. Thus with 0-5 points advancer is entitled to pass. Essentially all other bids by advancer have the same meaning as if responder has originally passed: if advancer bids one of the unbid suits simply, $2\clubsuit$ or $2\heartsuit$ in our example, then he is showing at least 4 cards in the named suit and 6-7 points. If advancer bids one of the unbid suits with a jump,

3♣ or 3♥ in our example, then he is showing at least 4 cards in the named suit and 8-10 points; 1NT, 2NT, 3NT each show an interest in playing in no-trumps, 8-10, 11-12 and 13-15 points respectively, and should guarantee a stop in the opened suit (since doubler is expected to be short there); for 3NT advancer guarantees extra that he has the responded suit also stopped; X shows at least 4 cards in responder's suit, doubler may decide to leave the double in and penalise responder, but perhaps it could lead to a fit in this suit (sometimes the responder will purposefully bid a false suit, to put advancer off the scent of the correct contract); finally advancer is left with the two cue-bids: the cue-bid of the responded suit, 2♠, (being a higher ranked bid than the opened suit cue-bid, 2♦) may as well show at least 4-4 in both unbid suits and 8-10 points (that is advancer can bid both 3♣ and 3♥); finally the opened suit cue-bid, 2♦, is the strong denial, showing 11+ points and no clear bid.

Let us now consider that responder can support opener's suit. Normally no matter (7) how high responder supports he is showing a weak pre-emptive support hand, his trump length being the deciding factor to how high he bids. In principle advancer should really try to enter the auction, his partner has doubled indicating competitive distribution but no clear idea in which suit; the suit depends on advancer entering the auction. Essentially, advancer's actions are similar to the previous case. Let us take as an example bidding (1♥)-X-(2♥), advancer bids in the following way: with 0-5 points he passes; bidding a new suit simply, 2♠, 3♣, 3♦, shows the named suit and 6-7 points; jumping in a new suit (without skipping over 3NT if the new suit is a minor), 3♠, shows 8-10 points; 2NT, 3NT show an interest in no-trumps, 11-12, 13-15 points and guarantees a stopper in the opponents suit; X is special for it shows 8-10 points and at least 4-4 in the two suits of the opposing rank than the open (if the open were a major, this double by advancer would show both minors; if the open were a minor, advancer's double would show both majors); finally the cue-bid, 3♥, is the strong denial, 11+ and no clear action.

Let us now consider that responder bids no-trumps, advancer has the following op- (8) tions: he passes as a denial; he doubles when he wants to penalise them, in other words advancer figures that he has enough points, which when combined with doubler's assumed minimum 13 is enough to consider the opposition's no-trump contract is doomed; advancer can bid a new suit, which since he is refusing the option of using

a penalty double is being made with one of two options: either he has a weakish hand and holds a long suit of at least 5 cards, in which case advancer's new suit is bid at the 2-level; or else he feels that game will score better than doubling, in which case he bids at the 3-level, showing an invitational (non-forcing) hand and at least 4 cards in the named suit; finally with no clear action, or with a game forcing hand that does not want to double, advancer can cue-bid the opened suit.

- (9) Our final consideration is when responder redoubles, essentially showing a strong hand and no support for his partner's open. Thus advancer has to tread carefully, the indications are that the hand belongs to the opposition. This does not mean that advancer passes blindly when weak points: his partner has doubled to let him chose the best contract. Thus essentially advancer bids exactly as if responder had passed: a simple new suit is natural, 0-7 points; a jump in a new suit shows the suit and 8-10 points; 1NT, 2NT and 3NT show 8-10, 11-12 and 13-15 points respectively, plus the stop in the opened suit; the cue-bid is the strong denial; and finally passing is the weak denial.

9.7 Rebidding as Overcaller after an Intervention

In this section we discuss overcaller's action after there has been a response but opener has rebid all the same.

- (1) If the response to the overcall were a fit, by either directly supporting or else using the jump cue-bid, and no matter whether opener rebids his suit or a new suit or doubles, then overcaller just further competes with extra length or else passes. If there is space to show a second suit then this would be inviting game, if there is no space then overcaller will double to invite. If there is space to invite but all the same overcaller decides to double, then this is a penalty double, showing some side strength in opener's suit. If opener's rebid were a double then redoubling is inviting game.

If the response to the overcall were some non-supporting forcing response, that is either a new suit at the same level as the overcall or else a simple cue-bid, then

there are three cases to consider, opener has rebid his own suit, opener has rebid a new suit and opener has doubled. The considerations we have now for overcaller are similar as those found for opener in section 9.5.

Let us first assume that responder has bid a new suit at the same level as the overcall and that opener has rebid his opened suit. Let us take as an example bidding sequence $(1\clubsuit)-1\heartsuit-(P)-1\spadesuit-(2\clubsuit)$. Since $1\spadesuit$ shows only 4 spades then to support overcaller needs 4 cards. If he has this then this is his priority and he does this with $2\spadesuit$ or $3\spadesuit$. Note that $3\spadesuit$ does not show a fifth spade, for if it did then ideally overcaller would have made a two-suited overcall in the first place, see section 18. So instead it shows strength, $2\spadesuit$ is competitive whereas $3\spadesuit$ is more game invitational, $4\spadesuit$ is naturally an attempt at game. Without direct support overcaller can double to show a three card support, but note that a double is also the strong denial. Otherwise overcaller can further describe his hand. Bidding his second suit shows a 5-4 distribution. In the running example this would be $2\diamondsuit$, but note that $2\diamondsuit$ is a bid lower than 2 of the overcalled suit so responder to overcaller can always come back to $2\heartsuit$ if necessary. Sometimes if overcaller bid his new suit this would force responder to reply at a level higher, similar to a reverse. Such bids would thus have to be strong by overcaller. Rebidding the overcalled suit $2\heartsuit$ shows a sixth card in the suit. Since opener rebid overcaller does not need to bid again unless he has extra values that the original overcall had not already promised. Otherwise overcaller passes. If the forcing response by overcaller's partner were a cue-bid and that opener still bids his suit again, then let us take as an example bidding sequence $(1\clubsuit)-1\heartsuit-(P)-2\clubsuit-(3\clubsuit)$. Overcaller needs only bid if he has something else worth showing. With a weak overcall then overcaller would now normally pass, otherwise with 12/13+ points there is a possibility of game and so should bid on. The priority would be to bid no-trumps $3NT$ when holding a stop in the opened suit. Without it opener can bid a second suit if he has it, $3\diamondsuit$, especially if this keeps the bidding below $3NT$. He can show extra length in his original suit by rebidding it $3\heartsuit$. He can double as a strong denial bid, saying that he has strength but no clear action to take (perhaps he has a second suit that takes the bidding above $3NT$). Partner can always convert this double to a penalty double if he thinks that no clear game is on. Finally as already mentioned, passing is the weak denial.

- (4) In the second case we assume that the response to the overcall is again a non-support forcing bid, but this time overcaller rebids a second suit. We start with a new suit response. Let us take as example the bidding (1♣)-1♥-(P)-1♠-(2♦). Again with a major fit this is the priority, 2♠ is simple support, 3♠ jump support and 4♠ game support; as above all bids based on strength not length. Otherwise with a strong hand and stops in both suits opener can bid no-trumps 2NT with 14-15 points (with any more the overcall would most probably been 1NT directly). Cue-bidding either of opener's suits, 3♣ or 3♦, is a strong denial asking for a stop in the named suit to play in no-trumps. Rebidding his overcalled suit 2♥, 3♥ shows extra length and appropriate strength. Double would be the strong denial and finally passing is the weak denial bid.
- (5) We now consider when the response were a cue-bid and again opener rebid a new suit. Let us take as example (1♣)-1♥-(P)-2♣-(2♦). Overcaller needs only bid if he has something extra to say. With 12/13+ points there is a good chance of game so overcaller should bid, with a weak overcall then overcaller would now normally pass. The priority would be to bid no-trumps 2NT or 3NT when holding a stop in both the opener's suits. Without them opener can bid a second suit if he has it, 2♠, especially if this keeps the bidding below 3NT. He can show extra length in his original suit by rebidding it, 3♥. Double is the strong denial bid, saying that he has strength but no clear action to take (perhaps he has a second suit that takes the bidding above 3NT). Partner can always convert this double to a penalty double if he thinks that no clear game is on. Finally as already mentioned, passing is the weak denial.
- (6) In the final case we assume that opener rebids with a double. All actions now taken by overcaller are the same had opener rebid his opened suit, except doubles are replaced by redoubles.

9.8 Answering to a Convention after an Intervention

There are four conventions considered within the basics part: Stayman, transfers, Blackwood and control bidding. In this section we consider the subsequent action

to be taken by answerer when there has been some kind of intervention over the questioner's bid. We will look at each convention in turn.

We will start with Stayman, thus we can assume the open is 1NT and the response was a Stayman 2♣. There are two situations to consider depending on whether the intervention was a suit overcall or a double. First the double; we will assume that this asks for a club lead. The double does not take away any space, but it does introduce a danger, for the safe haven of a no-trump contract is being temporarily questioned. Thus we need to incorporate a way to not only give the correct information concerning the major suits, but also whether the side holds a club stop or not. The double in fact gives opener two further bids, pass and redouble. Simply (1) put if responder has the stop then he can give his normal response 2♦, 2♥, 2♠ and 2NT, and the bidding will continue as normal; without the stop but holding at least one four card major opener will redouble; finally without either a stop nor a four card major opener will pass. After a redouble responder knows that opener has at (2) least one four card major, thus he will bid either 2♥ or 2♠ to show his suit (or 2♥ when holding both). This means that the contract will be right-sided. After a pass (3) responder knowing that neither a stop nor a four carded major is opposite will bid 2NT/3NT when holding a stop and the appropriate number of points; 2♥/2♠ to show five cards in the named suit (and thus implies four cards in the other major); 2♦ would show a natural diamond suit, bid as an offer of a potential safe haven; finally redouble could be used to show a four carded club suit, perhaps there is a play for 2♣ XX.

Let us now consider the situation after a transfer bid: assume the open were 1NT and responder transfers with 2♦, double indicating a diamond lead. Again, to play in no-trumps requires a diamond stop. If opener completes the transfer, 2♥, then (4) he is showing a fit and a stop; redouble shows a fit and denies a stop; pass is the denial bid, hence no fit and no stop. Note that we could insist that the fit showing bids are restricted to three card fits, with four carded fits the law of total tricks says we should compete to the three level, hence a bid of 3♥ shows a four carded fit and weak points (or with stop?) whereas a cue-bid of 3♦ shows a strong hand (or no stop?) and four carded fit. After fit bids, the bidding follows the usual route (5) except we should note that if opener does not have the stop and responder does then

- responder should be the player to bid their suit, so that the contract is right-sided. Thus, say after 1NT-2♦-(X)-XX: responder should bid 2♥ if he only wants to play there; 3♥ invites game and does not promise any extra heart length; and 4♥ is game, again no extra heart length is promised. After a pass from opener, responder bids as if the response were 2♥, i.e. say the bidding were 1NT-2♦-(X)-P: responder will bid 2♥ is that is where he wants to play; 2♠ would show 5-5 in the majors; 2NT and 3NT would show the diamond stop and hands of appropriate strength; 3♥ would show extra heart length and invites game; whereas 4♥ would be game.
- (6)

Let us now consider the situation after a Blackwood bid: assume that a fit has been found and questionner bids a Blackwood 4NT and we assume that there is now an intervening bid. If the intervening bid were a suit bid then answerer replies as follows: Double shows 0 or 3 aces; Pass shows 1 or 4 aces; next bid up shows 2 aces without the trump king; next bid up again, shows 2 aces with the trump king. Thus if the trump suit is hearts, and the intervening bid is 5♦ then: Double shows 0 or 3 aces; Pass shows 1 or 4 aces; 5♥ shows 2 aces without the king of trumps; and 5♠ shows 2 aces and the trump king. Notice how in this case the intervening bid does not actually cost us any bidding space. If the intervening bid were a double then a similar logic applies: instead of Double we Redouble shows 0 or 3 aces; the other bids remain as above. This treatment is thus called **DOPI-ROPI**: **D**ouble **0** aces, **P**ass **1** ace - **R**edouble **0** ace, **P**ass **1**. DOPI-ROPI not only helps us to economise the available bidding space, but it also helps decide the final contract: if we find out that there are too many aces missing for a slam, questionner can penalise the intervention by passing the double, doubling the pass or even passing the redouble!

- (7) The essence of DOPI-ROPI is that whenever there is a question bid where the responses are in steps, and there is an intervening bid Double shows the first step; Pass shows the second step; next bid shows the next step, etc. Thus DOPI-ROPI can be applied not only after an intervention of Blackwood, but also to a 2♦ open, and to say conventions Roudi and third suit forcing. Thus as an example say the open is a game-forcing 2♦, and the intervention is 2♠: double is equivalent to a 2♥ response; pass is equivalent to a 2♠ response; 2NT is equivalent to a 2NT response; and so on.

Let us now consider the situation after a control bid. A control bid shows either

a first round control ace or void; or a second round control king or singleton: thus control bidding checks that no suit has two quick losers. The usual situation for an intervention is a double to indicate that suit to be led. So it is possible that the lead is through a king control, to the ace (indicated by the double). As an example let us say that spades are trumps and that questionner control bids $4\Diamond$, which is then doubled: answerer bids on (including the bid of $4\spadesuit$) when he holds himself a first round control in diamonds, (thus keeping the door to the grand slam still open); redoubles to deny the first round control, but indicates diamond help, that is that he holds a singleton or the queen, thus questionner knows that if he holds the king control alone, even if the opposition lead this suit they cannot bring in two quick winners; finally answerer passes as a denial. After answerer's bid or a redouble the bidding can continue as usual. After a pass, questionner has to decide what to do and he does this almost exactly as answerer above: questionner bids on when he holds himself a first round control in diamonds, (thus keeping the door to the grand slam still open); redoubles to deny the first round control, but indicates that his control is not just the king control alone; finally questionner signs off in game as denial.

10 Competitive Bidding

10.1 Penalty Doubles versus Take-Out Doubles

The double is perhaps the most dangerous weapon in our armoury: used correctly it can be lethal; used incorrectly the blood is our own. Simply put, is the double penalties or take-out? In the following section we will discuss this issue and try to draw up some guidelines that indicate what a double means.

First a slogan: *The system is not built around finding the perfect penalty double, but to find our best contract. If the opposition go down, then that is already good; if we can double them for penalties, then that is a bonus.* Thus there is no point having many doubles defined as penalties, and sitting waiting for the opponents to fall into one of our traps; instead we make as a default that all doubles are take-out. We have come across many instances of take-out doubles: the initial take-out double as given in section 8.3; the sputnik double as given on page 89; the responsive, or support, double as given on page 99 among others. All we need now discuss is the circumstances when we switch the meanings of our doubles from take-out to penalties. Note that essentially, once this switch has been made, the switch remains in effect.

A take-out double means that doubler has no clear action to take and is offering partner a choice: Thus *if no choice exists, then a double must be for penalties.* Thus if the auction becomes competitive where many suits have been bid naturally and then we hear a double from partner, if there is no choice it cannot be for take-out. For example: 1♦-P-1♠-P; 2♦-P-P-2♥; X: opener is offering no choice to responder; he has no spade fit, if he has clubs then why doesn't he say 3♣, that would offer responder the choice of the minors. On the other hand, opener's bidding till now has not denied the heart suit. So penalties it is.

- (1) Since bidding is all about finding our best contract and that in turn means we are looking for a major fit. Thus *if we have found our major fit, or even a minor fit when we know there is no major fit available, then all doubles become penalties.* But

even this has notable exceptions. Take for example the sequences $1\heartsuit-2\heartsuit-(3\diamond)-X$ and $1\spadesuit-2\spadesuit-(3\heartsuit)-X$: here we have found a major fit, but we have not found our best contract, since it is not clear whether we should be playing at the 3-level or in game and we have no room to explore. Thus here the double means exactly that, doubler has a choice of bids and so lets partner come in on the decision; bidding at the 3-level directly is thus competitive. On the other hand, with the overcalls that do not take up all the bidding space, doubles become for penalties.

The second situation is as follows: *if partner makes a bid that perfectly describes the shape of his hand, then all doubles become penalties*. Thus if partner opens with a pre-emptive bid, he is saying that he holds just this long suit and is weak on points, in other words he is more or less setting trumps; thus if trumps are set, there is no choice; no choice, then there is no take-out. Other such situations are when partner has shown a two-suited 5-5 hand by way of a Michaels, Ghestem bid etc, then again, there is no choice, so again doubles are penalties. An example: $3\diamond-(3\spadesuit)-X$: opener has pre-empted, then the double is penalising the spade overcall.

It is often the case that when anyone makes a natural bid of no-trumps, either by way of a **1NT** open, **1NT** overcall, **2NT** open, **1NT** rebid etc, then again all subsequent doubles are for penalties. But again this case has a few exceptions. Say the bidding goes **1NT-2♠-X**, then it is more use for us to have this bid to show invitational points and shortage in the bid suit, as given within the section on Rubensohl, see page 171. A similar treatment even holds when responder passes the **1NT** open, fourth seat re-opens and opener doubles, for example: **1NT-P-P-2♠-X**, again this will not be penalties, opener is just being competitive. On the other hand, a double of a **1NT** response is not penalties.

Generally speaking, if partner makes a take-out double then we are obliged to speak; but this is not always the case. If we have no good option towards the choices partner is offering and we are sitting with length in the opposition's suit, then it is permissible to pass, and the take-out double is therefore converted into penalties. This is the principle behind the penalty pass as given on page 89. Note that once a take-out double has been converted to penalties, then as we would expect all subsequent doubles are penalties. An example: $1\heartsuit-2\clubsuit-P-P; X-P-P-2\diamond; X$: here we have

that opener re-opens the bidding with a double, which is take-out, but responder converts the double to penalties by passing. The player in fourth seat then takes it out by bidding a belated $2\heartsuit$ and this is now doubled by opener. Since responder has converted a take-out double to penalties, then so it is that this double is now for penalty. Note that it is not the level of the bidding that defines whether a double is take-out or not; but what is relevant is that the higher the level, the more likely it is that partner will convert a take-out double to penalties.

- (2) There are still some doubles which are defined at the outset as penalty. Clearly doubling the opposition's artificial suit bids to indicate a lead are in principle penalty, since the opposition have no intention of playing with this suit as trumps. There are still two other situations where a double is penalties and the bidding was not artificial; both are still lead indicating. The Lightener double is normally used against slams: a double of the final contract by the player receiving the opening lead demands for an unusual lead, typically dummy's first suit, for he will ruff it. A lightener double is therefore used to direct partner to make the killing lead. Lightener doubles can also be used when the opposition explore a slam, but stay at the 5-level, and we are sitting with a useful void. They stopped at 5-level because they are missing two aces, if we can get a ruff in as well then the contract is broken. Against $3NT$, if no natural suit has been bid, for instance after $1NT-3NT$, a double indicates a spade lead. This is just arbitrary: again the idea is to direct partner towards the killing lead, not just to double the points. Note, if partner does not make any of these lead directing doubles, then negative inferences can be drawn.

10.2 Competing against Sacrifices

In this section we consider dogfight bidding: competitive bidding that flies high, typically at or above game level. Note that if both sides are bidding to game, then this cannot be just due to honour points. Typically one side has the majority of the points and is bidding game from that perspective; the other side are bidding on trump length and are hoping that their sacrifice costs less. Sometimes the points may be more or less equal but both sides have very good fits. Further, since the combined lengths one side has in two suits, the other side has the same com-

bined length in the other two suits, thus double fits are also an issue: as an example consider that north-south have a double fit in the majors, and let NS_M be the combined number of cards north-south have in both majors, then we have the following equation: $26 - NS_M = NS_m = 26 - EW_m$; thus $NS_M = EW_m$; thus east-west have exactly the same combined length in the minors.

Our main concern is a counter-defence to a sacrifice bid by the opposition against our game contract. Say for example we have established that we hold a spade fit and at least 26 points, thus game is our intention; but the opposition sacrifice, with say $5\clubsuit$. Note that this sacrifice could happen directly after we have bid $4\spadesuit$, or perhaps during control-bidding. All the same we need to get the most out of this contract; do we double their sacrifice, bid $5\spadesuit$ or even continue to search for slam? Clearly their bid gives us three options: bid, pass or double. But note that since their bid is a sacrifice then if they were to be left in this contract it *will* be doubled. Thus an initial pass is *forcing*, the minimum partner can do opposite is to double. The following describes the actions given that we are in a forcing pass scenario (so is not valid if for example we are in a double-fit scrap, were the points are evenly divided). So let us say that we are at the end of a bidding sequence, where it is opener who has bid $4\spadesuit$, and his left hand opponent sacrifices with $5\clubsuit$, responder's actions are as follows: bidding $5\spadesuit$ or double (for penalties) says this is where responder wants to be; bidding a non-trump suit, $5\diamondsuit$ or $5\heartsuit$, is a control bid; otherwise pass, which is denial for it says that responder does not know where the best spot is. Opener should respect responder's bid, if he bids $5\spadesuit$ or doubles, he should pass; if responder had passed, then opener *must* bid something for the pass was forcing. Again, opener bids $5\spadesuit$ or double (for penalties) says this is where opener wants to be; bidding a non-trump suit, $5\diamondsuit$ or $5\heartsuit$, is a control bid; otherwise double is the denial bid. No matter what opener bids, if responder decides to go further, in particular by pulling the double, by bidding a new suit, then this is the strongest option responder originally had: that is $\dots 4\spadesuit-(5\clubsuit)-P-(P)$; $X-(P)-5\diamondsuit/5\heartsuit$ is stronger action than had the bidding gone $\dots 4\spadesuit-(5\clubsuit)-5\diamondsuit/5\heartsuit$.

11 Pre-emptive Bidding

There are two sides to bridge bidding: one is to find our best contract, the other is to disrupt the opposition in finding their best contract. Most of the book deals with the former, this chapter discusses the second. A pre-emptive bid by name means to strike first, to hit before being hit. In bridge terms this means to make life difficult for the opposition before they make it difficult for us. The typical way of doing this is to take away bidding space from the opposition when the belief is that the contract belongs to them. Clearly the higher we bid, the more bidding space is denied to the opposition; on the other hand, if we go down doubled then that could prove too costly. Thus a balance needs to be found.

11.1 Pre-emptive Opens

Consider picking up a hand that holds only 9 honour points, but a good quality 6+ carded suit. The weakness in strength dictates that the hand should be passed. If this is the case then what will happen? If partner has an opening hand then all is well and nothing is lost, but if the opposition have the balance of the points, they could well go uncontested to their ideal contract, whether it be a part-score or even game. In the end it turns out that had our long suit been trumps then playing in our suit gives less away in terms of scoring, even if we go down in our contract doubled. Say our long suit is spades and they bid to some contract in hearts, compare: $2\heartsuit$ by them making = 110 is worse for us than $2\spadesuit$ doubled non-vulnerable down one = 100 (the difference of ten points is crucial in pairs bridge); $4\heartsuit$ making vulnerable = 620 is worse for us than $4\spadesuit$ doubled non-vulnerable down three = 500 (the 120 difference is 3 imps in a teams match, but two down scores 300, a difference of 320 translating to 8 imps). Naturally enough, these examples highlight the two important parameters which play an important role; whether the scoring is teams or pairs; and the vulnerability.

So what can we do instead of passing? How can we disrupt their bidding? The answer is to make a pre-emptive strike, to open at a high level. Such bids takes up a lot of bidding space, it establishes to partner that this is where we believe

the hand plays: if we are to defend a contract, then we are offering no defence; if partner wants to change trump suit, then we guarantee no support; if the balance of the points belongs to the opposition, then they have less space to find their ideal contract. Clearly the higher we open, the more we disrupt the opposition, but then the less likely that we make our contract, and thus the more likely they will double us and this will cost a lot. The balance is found in the length of the trump suit. Clearly, whatever tricks a hand can make with a 6 carded suit, an extra trick should be able to be made when holding a 7th trump. In other words, the higher we open, the more trumps we promise. We will discuss the following cases: *i*: the 2-level major opens; *ii*: the 3-level opens; *iii*: the 4-level and higher opens.

In case *i* we discuss the 2-level major opens. Such an open shows 6-10 points and a (1) good six carded trump suit. Note that with 11 points, then the hand becomes valid for a 1-level open. Note further that such hands in a minor suit cannot be opened at the 2-level, for the bids $2\clubsuit$ and $2\diamondsuit$ are already used to show the strong opens. Since pre-emptive opens deny some kind of defence, then this also means that we should not long in there pre-supposed suit, the other major: that is we deny holding four cards in the other major. There is no point pre-empting and going down, against an opposition who would only have gone down in their contract anyway.

If responder wants to constructively bid on, then he can use a symmetric way of thinking. For example say responder holds a hand that would have opened $1NT$, but before he can make this open, partner has opened $2\heartsuit$. Note that since the roles are now switched around: when we say “opener” we mean the actual responder; whereas by “responder” we mean the actual pre-empting opener. Then it is clear how the bidding will initially go: “opener” will start with $1NT$; “responder” holding a 6 carded heart suit and 6-10 points will initially transfer to the hearts by way of $2\diamondsuit$; “opener” will complete the transfer with $2\heartsuit$; “responder” will pass when holding just 6-7 points, will bid $3\heartsuit$ to invite when holding 8-9 points, and bid game when holding 10 points. The chances are greater that “responder” will say something rather than passing out the $2\heartsuit$. Hence in the actual world, after a $2\heartsuit$ open, if responder holds a hand that is worth a $1NT$ open, then responder should make some noise rather than passing. Another example: say opener begins with $2\spadesuit$ and responder is sitting holding a weak open and balanced hand. Symmetrically

responder will have the following initial sequence of three bids in mind: 1m-1♠-1NT. Now “opener” knows that “responder” holds 6 spades and 6-10 points, so he will normally bid 2♠, perhaps even push his hand to a 3♠ bid. Let’s say that in either case “opener” will pass. Hence returning to the actual world after a 2♠ open responder may as well pass.

- (2) After a 2-major open as usual responder’s priority is to support. Clearly responder only needs 2 cards for support, hence such support is quite often. A simple raise will typically show 3 trumps (hence totalling 9 trumps) and be pre-emptive; it is *not* invitational. A jump raise to game can either be pre-emptive, but also constructive if that is just where responder wants to play, no more and no less. If responder wants to play in 3NT, then he may bid that directly. If responder wants to invite game, or even consider a slam, then the correct response is an artificial 2NT. Note that a 2NT response accepts that the opened suit will be trumps. There are many response structures over the 2NT bid, here we discuss two: *a*: the Ogust responses; *b*: the feature responses.
- (3) Case *i:a*, the Ogust¹ responses to a 2NT enquiry rely on the combination of two pieces of information: whether the hand is weak (6-7 points) or strong (8-10 points); and whether the trump suit is weak (just two from the ace, king, queen and jack) or strong (holding 3 from these cards). The responses are as follows: 3♣ shows weak points, weak suit; 3♦ shows weak points, strong suit; 3♥ shows strong points, weak suit; 3♠ shows strong points, strong suit; 3NT shows exactly AKQJ of the opened suit (note that with such a hand, opener can have nothing outside, otherwise he is strong enough to have made a 1-level open).
- (4) Case *i:b*, the feature² responses to a 2NT enquiry are as follows: when holding a weak hand then opener repeats his suit at the 3-level, the denial bid; all other responses are thus strong: a new suit at the 3-level shows a feature, an ace or king in the named suit; a new suit at the 4-level denies a feature but does show a splinter (a singleton or void) in the named suit (note after 2♥-2NT-4♥ shows a spade splinter); finally 3NT is the strong denial response, *not* repeating the opened suit at the

¹[Responses to Weak 2M-2NT : Ogust / Feature]

²[Responses to Weak 2M-2NT : Ogust / Feature]

4-level. The feature responses are more descriptive than the Ogust responses since when opener has a strong hand by bidding a feature he effectively denies holding a strong suit (otherwise when holding a strong hand, strong suit and a feature, the hand is almost worth a 1-level open).

Note if the opposition intervene over the **2NT** enquiry by either bidding or doubling, (5) then we can counter with use of DOPI-ROPI, see section 9.8.

After a **2NT** enquiry and appropriate response, responder continues: signing off at (6) the 3-level in the suit is a sign-off; opener's response to the **2NT** did not excite responder. If responder bids game in the opened suit or **3NT**, then clearly he likes what he has heard from opener and his bid is where he believes is the best place to be. If responder bids anything else then it is a control bid and shows interest in looking for slam; **4NT** is Blackwood of appropriate flavour.

A new suit response by responder therefore denies a fit. Since there is no need to (7) pre-empt in another suit over partner's pre-empt, such action is forcing; and since opener has effectively denied support in any suit outside of his own long suit, then the responded new suit must be at least 5 cards in length. Typically if the new suit is a major, then responder is trying to find a better major game, but if the new suit is a minor then responder is trying to find the minor slam; otherwise he would either bid **3NT** or at least go through the **2NT** enquiry. After a new suit response by responder, opener's priority is to support, needing at least 3 trumps, or even two trumps with a high honour and some distribution. Without support, holding a second suit of at least 4 cards (which will be a minor suit, since the 2-major open denies holding 4 cards in the other major) opener can bid it which will always be at the 3-level. Bidding no-trumps, (which is **3NT** except for the single case of $2\heartsuit$ - $2\spadesuit$ -**2NT**) is the strong denial bid, showing a maximum hand for the pre-empt. Finally the weak denial response is a simple repeat of the opened suit at the 3-level.

For the continuations, we only consider if opener has denied a fit and come back a (8) new suit. If responder agrees the new suit, a simple raise to the 4-level is then a slam try; a game raise of 5-of the minor is a sign-off, as are bids of **3NT** or 4-of the opened major. If responder bids the opened suit at the 3-level then this too is a

sign-off: responder has tried to find a better fit, but has failed.

- (9) Case *ii* we consider the 3-level opens in all the suits, not just the majors as in the previous case. Such opens are similar in flavour to the 2-major opens, except that they promise an extra trump. Thus a 3-level open promises 6-10 points and a good seven carded suit. Note that since more bidding space is taken away from the opposition, then so too has space been taken away from responder. All the same, responder knows more than the opposition, he knows the strength and shape of partner. Typically, responder will either pass or raise. Opposite a known seven carded suit, responder need not hold much by way of support. A raise to any level is typically pre-emptive showing weak hands and length in trump support, but if the raise is to game then this can be considered also as constructive. This makes life difficult for the opposition, for they are asking themselves whether the game raise was weak and pre-emptive, or strong and constructive. A new suit by responder is again forcing, showing a 5 carded suit at least and asking opener to support if possible: but note that $3\spadesuit$ - $4\heartsuit$ is to play so is the one new suit non-forcing sequence. $3NT$ can either be played as natural or else as an enquiry, since holding a weak hand and seven carded suit, it is unlikely that responder will want to play in $3NT$ with a stranded dummy.
- (1) Case *iii* we consider the 4-level and higher opens. These opens are all almost self-contained, they show 6-10 points and: an 8 carded suit for 4-level opens; 9 carded suits for 5-level minor opens (with 9 carded majors there is no need to bid above game). Being longer in the trump suit more or less says to responder that opener really has no interest to play in anything other than the opened suit. Hence responder typically passes or raises (that is raising a 4-level minor open to game). Note again, that after a 4-level major open, responder's pass need not deny strength.

11.2 Pre-emptive Overcalls

Consider the opposition have opened at the 1-level, say $1\diamondsuit$, and we are sitting in the second seat holding 9 honour points and a seven carded spade suit. Perhaps the hand can be considered as a $1\spadesuit$ overcall. If that is the case, perhaps responder

will double to show hearts and then it is a question of how high they go in their heart suit. In other words, although the $1\spadesuit$ overcall has taken away the ability to respond $1\heartsuit$, the opposition have not lost anything for they can now double. On the other hand, had the overcall been $2\spadesuit$, $3\spadesuit$ or even higher, then the opposition have less room to swing their cat. In other words the conditions are similar to opening a pre-empt. Now say that the opposition hold a combined total of 26 honour points, split 13-13, then they have in principle game. But if we open in first seat with $3\spadesuit$, then perhaps they will not compete, for neither opponent knows that his partner is sitting with 13 points; each opponent might fear that it is responder who is sitting with the missing points. All the same, whatever action they take, has an element of risk. Now compare this situation to when they have opened and we now make a pre-emptive overcall. At least the opponent responder knows that his partner has an opening hand and so the risk of further action is diminished. But just because his partner opens, does not mean that they have a fit, and so a pre-emptive overcall can at least hinder them by not giving them enough bidding space to properly consider the fit. This is why in comparison to making a pre-emptive open, we have a little more urgency to make a pre-emptive overcall. Hence we can consider pre-emptive overcalls to be perhaps weaker than the prescribed 6-10 points, and if so, then needs compensation in suit quality.

Hence all jump overcalls are considered pre-emptive, including $2\diamondsuit$ over a $1\clubsuit$ open. (1)
 2-level overcalls promise 6 carded suits; 3-level overcalls promise 7 carded suits; 4-level overcalls promise 8 carded suits etc. The advances are exactly as if overcaller had opened his pre-empt.

11.3 Opening in Third Seat

Opening in either the third or fourth seat means that partner is limited for he has already passed; but the advantage is definitely with the third seated player, since he sits before the fourth seated player and so can start the bidding. The fewer points the third player holds, the more likely it is that the fourth player holds more points. Thus the stage is set for a pre-emptive bid. But even if third player does not hold a (1) hand suitable for say a weak 2 or 3 as given in section 11.1, he may still be able to

pre-empt, simply by opening at the 1-level when normally with his hand he should pass. What opener needs in this case is a good quality 5 carded suit and around 10+ points, in other words exactly what opener would need to overcall. In fact we have the following slogan: *A third seat open is equivalent to overcalling before the opening bid.* Naturally enough, opening a minor suit at the 1-level is not really pre-emptive, thus we have that if a third seat open is weaker than normal, then the open were a major: this means that minor opens are normal in strength; but does not mean that a major open *is* weak, it could well be a normal and strong.

Without playing anything special, responder bids on in the usual way, although care needs to be taken, especially if the opposition get in on the action and opener remains quiet. On the other hand, in this special third seat position we are changing the meanings of some of the bids, so perhaps it is better to change the meanings of some of the responses accordingly: in other words to use a convention, such as Drury, section 15.4.

11.4 Pre-emptive Support Responses

Consider that the open is a suit at the 1-level and responder holds a hand that lacks in points but gains in trump support. In other words, responder believes that if the opened suit is trumps, his hand can contribute some help, but if the opposition buy the contract, then he has no defensive tricks. Thus it is imperative for responder to try to buy the contract before the opposition, an ideal setting for pre-emption. Thus we would expect as a response a jump of some kind in trumps. We have already seen that a jump to the 3-level shows 11-12 points, so is constructive rather than pre-emptive. Unless we want to change the meanings of 3-level jump support responses then we must jump even higher: to the 4-level. Note that had the open been a major then we are talking about jump-to-game responses and note further that such responses do not show hands with 13+ points and support; instead responder changes suit, see section ???. Thus we can use such double jump support responses as pre-emptive: typically showing 5 carded support (confirming a ten carded fit, hence a response to the ten trick level: 4-level) and 6-10 (weaker is still possible). After such a response, barring monster hands opener will pass. Thus if responder

(1)

decides to bid game directly rather than bid slowly, he is taking responsibility if a slam is missed. Further, such a response from responder should make opener think twice about doubling if the opposition start to compete in the fourth seat.

We have already considered some pre-emptive responses. In sections 9.1 and 9.2 we have seen that if the second player overcalls or doubles then such double jump responses are still pre-emptive, in fact even the jump responses to the 3-level are considered pre-emptive holding 4 carded trump support. Further we have the direct support responses to an overcall are pre-emptive, see section 8.1.

Two conventions consider the 3-level support responses as pre-emptive: with respect to a major open we have Bergen, see section 15.5, whereas for a minor open we have the inverted minors convention, see section 14.2.

11.5 Overcalling after a Pre-emptive Open

11.6 Responding after a Pre-emptive Overcall

In this section we consider that partner has opened the bidding with a suit at the 1-level, and the overcall is some pre-emptive overcall. We will distinguish three cases: *i*: the pre-empt is at the 2-level; *ii*: the pre-empt is at the 3-level; *iii*: the pre-empt is at a higher level.

In case *i* we have a 2-level jump overcall. Except for $1\clubsuit$ -($2\diamond$) which we will concentrate on later, the overcalled suit is a major. This is important for when we discuss the meaning attached to a double. Note that whatever action responder takes, the player in fourth seat can still muddy the waters further by supporting the overcalled suit. Thus it is important that responder can show what he has before even more bidding space is taken away from him. In all but one of the cases, the open is a minor, so let us first look at the major open case: $1\heartsuit$ -($2\spadesuit$).

After a $1\heartsuit$ open and $2\spadesuit$ overcall responder's priority is to support. If game is (1)

where responder wants to be then he simply bids game; if responder only wants to compete then he supports simply $3\heartsuit$; if responder wants to invite then he bids 2NT instead; bidding 3NT is game and thus shows a stop and denies a fit; double shows in essence the two unbid minors but in principle would be the bid made when responder wanted to make a natural 2NT response; cue-bidding $3\spadesuit$ is the strong denial asking for opener to bid 3NT when he holds a spade stop; finally pass can either be the weak denial or else is a penalty pass.

- (2) If the open were a minor then we can generalise the bidding as follows $1\text{m}-(2\text{M})$. Hence responder will first try to find a fit in the other major, otherwise revert to searching for no-trumps, and only then will he settle on the opened suit. His actions are therefore similar to had the overcall been just 1M , compare the following with section 9.1. Hence double would be Sputnik, showing 8+ points and 4+ cards in the other major; bidding the other major at the 3 level would show 10+ points and 5+ cards in the suit. Note that after a $2\heartsuit$ overcall we have as bonus the $2\spadesuit$ bid, thus in this case we can tighten a double to mean just 4 cards whereas with 5+ responder will bid $2\spadesuit$; bidding 2NT would show 11-12 points and a stop in the overcalled suit; bidding 3NT , being game, is thus natural, showing at least 13 points and a stop in the overcalled suit; bidding the other minor would deny holding the other major and deny holding a stop and would show 10+ points and at least 5 cards in the named suit; finally the two denial bids: the cue-bid 3M is the strong denial, effectively asking for opener to bid 3NT when holding the a stop in the overcalled suit; supporting the opened minor 3m , is thus the weak denial showing a 5+ carded fit and is competitive by nature, hence non-forcing. Naturally enough a pass by responder can either be for nothing or else is a penalty pass.
- (3) Back to our one case where the overcall is not a major: $1\clubsuit-(2\diamond)$. Here we have a slight problem of ambiguity, similar to when the bidding goes $1\diamond-(2\clubsuit)$: now we have two unbid majors. On the other hand the overcall albeit pre-emptive still allows responder to bid $2\heartsuit$ and $2\spadesuit$. Thus these bids will show 5+ cards in the named suit and 8+ points; double will promise 8+ points and at least one 4 carded major; 2NT and 3NT remain as normal showing 11-12 and 13+ points both holding a stop in diamonds; $3\clubsuit$ shows support and is non-forcing competitive; $3\diamond$ is the cue-bid asking for opener to bid 3NT when he holds the diamond stop.

In case *ii* we have a pre-emptive overcall at the 3-level. The issues are similar to the previous case; responder will prefer to support opener's major; otherwise will try to show the unbid major; otherwise will search for no-trumps. Note that due to the opposition's 3-level bid, unless responder is supporting, then his bid is game forcing, there just isn't any room to explore. In all cases so far where there has been an open and overcall, double has been some kind of Sputnik double showing some kind of length in at least one of the unbid majors. Of course when this leads to a fit, then all is well, but when no fit is found then the attentions turn towards searching for a stop for 3NT. But here all this has to be squeezed into the 3-level, in fact how does one ask for a stop in the opponents suit when their bid was at the 3-level? So something's got to give. Hence the proposition of Marty Bergen to redefine the meaning of a double after a 3-level pre-emptive overcall: instead of using double to show the other major, it is used to show game strength and *denies* a stop, in other words the double is primarily used to find THREE no-trUMP: hence the name thrump double. Thus, if responder has support for the opened major he can compete at the 3-level has a stop and wants to play in 3NT he bids 3NT; if he has a stop but also holds at least 5 cards in an unbid major which he can bid at the 3-level, then he bids the suit; if he has no stop he doubles. Opposite a double, opener's priority is to bid 3NT if he has the stop, otherwise since he knows that 3NT has no play, he can bid a second suit (with a preference to a major) if he has one, or else reverts back to his first suit. He may also opt to pass the double and convert it to penalties, particularly if he has no clear game. Hence note that through the thrump doubles when neither player holds a stop, there is still a chance that a major fit can be found. (4)

For the final case *iii*, we consider that the pre-empt were at the 4-level or higher. Since the overcall is higher ranked than 3NT, that option is thrown out of the window. But again the question is whether double should be used as sputnik or as a frump double (along the same lines as a thrump double but naturally looking for Four no-trUMP to play). Naturally enough, if opener has a stop he should bid 4NT, otherwise he could decide to pass and convert to penalties. It's difficult to judge correctly when forced to make a decision so soon so high. At the 5-level perhaps it is best to give up the fight, and play double as penalties directly. (5)

12 Protective Bidding

In this chapter we discuss the protective situation: if you pass, then the bidding is all over. Thus in all cases partner has already had the opportunity to bid but has decided to pass. Hence our action protects partner for although he has passed, this does not mean that he has nothing.

12.1 Protective Opens

In this section we consider the protective open: in other words the bidding has gone pass-pass-pass to us. One thing to note is that if we bid, we must make our contract or else bring their contract down, since we could have passed and given away nothing. One main consequence of this is that there is no point in pre-empting.

Any hand that would have opened at the one-level in first or second position will also be opened in this the fourth position. As we have seen in section 11.3 third seat opens can also be done with weaker than normal hands, but this action has a pre-emptive flavour. Thus if we do open in fourth seat when weak, then it is really with the intention of making a positive score. Remember that partner has already passed instead of opening, so if we are weak then game is not a strong possibility, thus we must be prepared for a part-score battle. The spade suit is of most interest; if we are short in spades, the question is whether we can compete against any spade intervention from the opposition: if we cannot, then perhaps we should decide to pass, best give them nothing, than give them a spade part-score. One way to measure whether we have enough strength combined with spades is to use the **Rule of 16**: if the combined total of points plus spade length is greater or equal to 16, then we are strong enough to open in the fourth seat.

- (1) We have already mentioned that there is no point in pre-empting with a fourth seat open, thus we assign new meanings to the usual pre-emptive $2\heartsuit$ and $2\spadesuit$ opens: they show a single-suited hand with at least a 6 carded suit and 11-14 points. Essentially, they show hands that in first or second seat, opener would have said his major at the 1-level, and then over whatever response offered by responder, he would have

rebid simply his suit. Thus, now opening a major at the 1-level and rebidding the major simply as a rebid shows a stronger hand, thus 15-16 points. All other actions are exactly the same. Note that even in the fourth seat the Drury convention is useful to have, see section 15.4.

12.2 Protective Reopens

In this section we consider that the bidding has gone as follows: open-pass-pass to us. There are three main cases: *i*: the open were a suit at the 1-level; *ii*: the open were 1NT; *iii*: the open were pre-emptive.

Let us consider case *i*. Clearly, if we have a hand that would have overcalled when sitting in the direct second seat, then we should be strongly considering to also overcall in the protective seat. This does not mean that we will make the exact same overcall. Before we discuss our actions we need to filter out what information we can from the sparse bidding sequence that has so far been presented to us. Firstly, responder is weak, 0-5 points; hence in principle they have not missed a game in the opened suit. This does not mean that they have no chance of making any game; perhaps responder could have mustered a response had the open been in a different suit and this could have led opener towards game. This indicates that if they were to make game (opener could have as many as 21 points) it will be in a suit that is lower ranked than the open (hence hearts are the danger suit if the open were 1♠). Secondly, and more importantly, partner has passed instead of overcalling. This does not mean that he has nothing, see chapter 8: partner has passed because he is not strong enough to overcall (0-9 points); or else he may have the strength but has no long suit to overcall with (he has a balanced hand and is too long in opener's suit to have made a distributional double); or else perhaps he has the strength and the length but no suit quality. All the same we are in the situation: either we pass and leave the opposition in their contract; or we bid to protect partner who might have originally passed even though he holds some semblance of strength. We will consider the following actions of reopener: *a*: double; *b*: bidding no-trumps; *c*: bidding a new suit; *d*: cue-bidding the opened suit.

- (1) We consider case *i:a* the reopen after a 1-level suit open, is double. Essentially, any hand that reopener would have doubled in the direct seat he now doubles. In the direct seat, a double ranges anywhere from a distributional 11/12 count, upto 18+ and any distribution. In the reopening seat, there are more hands for which reopener can now double with: in other words, when the hand is distributional a reopening double can be done with weaker hands still. How weak is dependent on a few factors: the shortness in the opened suit (the shorter the better; the less wasted values in their suit, the better); the holdings in the unbid majors (if holding both unbid majors, the better); the level of advancer's bid (if the double forces advancer to bid at the 2-level (for when the open were 1♠) then reopener would need a better hand than one which allows advancer maximum space to respond a suit at the 1-level (for when the open were 1♣)). When the conditions are just right, then this means that even with as few as 6-7 points, reopener can double.

- (2) For the continuations of the bidding we need to consider the two cases of whether opener passes or opener bids. We will first assume that opener passes. After the double, advancer would normally bid his longest suit with a preference towards the unbid majors. A simple new suit by advancer thus shows 0-10 points and an expected 4 carded suit. With 11-13 points then advancer must find some other bid, typically this means jumping. This can still be made with only a four carded suit, but note that if advancer holds a five carded suit then it will not be good in quality, for he did not directly overcall. A jump to the 3-level in a minor does indeed show a good 5 carded suit, since strictly speaking a minor overcall should be done with quality six carded suits. Two sequences need special attention: (1♣)-pass-(pass)-X; (pass)-2♦: guarantees a five carded suit, if advancer had only four cards then he would either be bidding a major or no-trumps; (1♠)-pass-(pass)-X; (pass)-3♥: leaves little space for reopener, thus should be a five carded suit. If advancer replies with 1NT then he is showing a hand worth 7/8-11 points and no interest to in the unbid majors. Note that after a 1♣ open, this bidding is more constructive than after a space eating 1♠ open; 1NT is likely to be a good playable spot rather than struggling in a minor at the 2-level. Similarly, a 2NT reply from advancer would show the 12-14 points; whereas a 3NT reply although unlikely will show an almost 1NT direct overcall. In all no-trump bids advancer should hold a stop, since responder will be on lead and he will be otherwise leading opener's suit through reopener.

After a **1NT** response, if reopener is at all worried about advancer holding a stop, he can always cue-bid the opened suit. Advancer's strong denial is the cue-bid: this takes care of all hands that are strong but cannot otherwise be safely shown. Finally, advancer may convert the double to penalties if he so wishes. If opener bids over the reopen then the slogan is simple: *fight for the contract till the 2-level*. Thus advancer is entitled to compete even with fewer than otherwise points.

We consider case *i:b* after an opening suit bid, the reopen is in no-trumps. A **1NT** (3) reopen promises: 11-14 points when the open were a minor; 11-16 points when the open were a major. Simply put, if after a major open, reopener could not bid **1NT** holding 15-16 points, then he will have to double first; this will most probably bring out a 2-level response from advancer, to which reopener will need to bid **2NT** to show his hand. Note that if no-trumps is the final destination, then it will be opener who will make the opening lead: hence since a major open guarantees length, a reopening **1NT** should be done with perhaps more caution than after a minor open. Note that after a minor open, some hands that could be reopened with **1NT** should perhaps be reopened with a double, since this will draw out a simple 1-level new suit response. The issue of a stop is also of interest since it is not necessary to have a stop for a **1NT** reopen, but if that is the case then reopener should be maximum for his **1NT**. On the other hand a **2NT** reopen guarantees a stop alongside the fact that reopener holds a balanced hand and 19-20 points.

Note that if a **1NT** reopening bid is at some point doubled for penalties, then re- (4) opener's redouble is take-out for the minors.

We consider case *i:c* after an opening suit bid, the reopen were a new suit. We need (5) to consider many cases. If the reopen is a new suit at the 1-level, then we need to be more flexible than in the direct position due to the urgency to bid something. Note that a direct overcall promises three properties: at least 10 points; the suit of at least 5 cards; and the suit of good quality. Thus in the protective seat we are allowed to weaken the chains of these restrictions: if one property is lacking, the other properties should compensate. Thus the reopen can be made with a four carded suit only, if the hand is better than minimum and the suit is of good quality; the reopen can be made with fewer points than 10, even as low as 6, if the suit

is of good quality and at least 5 cards in length; finally the reopen can be made with a suit of low quality if the suit is longer than five or else, the hand has extra strength. The maximum number of points needed to reopen is related, as usual, to the maximum number of points that advancer can have and pass; anything more and reopener will double.

- (6) If the reopen is a simple new suit at the 2-level then indeed reopener will have a hand that would justify a normal direct overcall: 5 carded good quality suit and 10+ points. We need this extra security since it is possible that responder has a holding in the suit. Note also that such a 2-level reopen denies interest in the suits that could have been reopened at the 1-level; since otherwise it is likely that the reopen would have been double rather than forcing the bidding up a level. Note that it is not necessary to reopen in the longest suit: if the reopen is only strong enough to make one bid, then perhaps it is better to reopen a four carded suit at the 1-level, rather than a longer suit at the 2-level.
- (7) If the reopen were a jump in new suit at the 2-level, then again there is no need to have this bid as pre-emptive. Instead we give it a constructive meaning: 15 or so points and a good six carded suit. Note that such action is normally in a major. On the other hand, such a jump in a new suit to the 3-level being typically in a minor is therefore looking for **3NT** as a possible contract and so is thus showing a very good hand and long strong suit.
- (8) For the continuations of the bidding we need to consider the two cases of whether opener passes or opener bids. We will first assume that opener passes. Clearly the priority is to support a reopened major: simple support to the 2-level will promise 8-12 points and at least a 3 card fit; jump support to the 3-level shows 13-14 points; simple support to the 3-level shows the upper range of the 2-level simple support, 11-12 points; without a major fit, or else over a minor reopen, advancer's next priority is to bid no-trumps but only if he has a stop: **1NT** promises 9-12 points; **2NT** as a jump would then show 13-14 points; **2NT** as a simple advance will be 11-12 points; finally advancer can bid a new suit, which unless mentioned are all non-forcing: a new suit at the same level as the reopen would be weak and misfit; a new suit at a higher level without a jump would be a good suit, thus since advancer

had not originally overcalled his hand must be weak; finally a jump in a new suit at the 2-level or 3-level is a fit jump, so is thus forcing.

If opener rebids after the reopen, essentially the same principles apply as above (9) except: we need less points to support (remember to fight for the contract upto the 2-level); bidding no-trumps should be done with care; bidding new suits are as before; and finally doubling is penalties. Note advancer should not act on unclear hands unless he has maximum values.

Finally, we consider case *i:d* the cue-bid reopen. This would show a very strong (1) hand. Reopener could have doubled, but he has a hand that does not want to run the risk that the double will be converted to penalties by advancer.

In case *ii* we consider the reopen after a 1NT open. Thus the bidding has gone (2) 1NT-pass-pass. What we know is that opener is limited to the maximum of his no-trump range, and responder has taken this into account is his bid of pass. So responder may have more than 6 points, but definitely too few points to consider even inviting a game. Thus reopener and advancer figure to hold at least a combined 16 points. Note also that responder did not transfer either, so he does not hold a long major. If in the direct position, we are playing a system of overcalls against a 1NT open, then it is system *on* also in the fourth position. But as ever, there are hands which should be passed in the direct position, but some noise should be made in the protective seat: in particular if reopener holds a good quality six carded suit with perhaps as few as 6 points; for otherwise, if reopener passes, then he will not be on lead and there is no point waiting for partner to make the miracle lead. Non-systematic doubles are for penalties: against a 15-17 1NT this should be 15+ points; against 12-14 this should be 13+ points.

Finally, we consider case *iii* where the open were a pre-emptive bid followed by two passes...

12.3 Protective Rebids

In this section we consider the action of opener after the bidding has gone open-overcall-pass-pass. Hence if he passes then the auction is over. Note that we need not consider the case that the overcall was double, since advancer would normally have taken the double out. Thus we need to discuss three situations: *i*: the overcall were a simple suit overcall; *ii*: the overcall were 1NT; *iii*: the overcall were preemptive.

- (1) We begin with case *i*, that the overcall were a simple new suit overcall. Responder passed because with his hand he was unable to make a bid, as discussed in section 9.1. There are generally three reasons for responder's pass: either he was too weak to bid, that is 0-7 points; or he was unable to bid 1NT for lack of a stop in the overcalled suit; or he in fact made a penalty pass. From opener's point of view one thing is for sure: the more cards opener holds in the overcalled suit, then the less likely it is that responder make a penalty pass, and thus the more likely that responder has a weak hand. Conversely, if opener is short in the overcalled suit then he should reopen with a double on almost any hand; either responder will convert the double to a pass, implying that his original pass was indeed a penalty pass, but if responder takes the double out then he must be weak; normally responder will support the open, or if he shows a new suit then this shows misfit with the opened suit and at least a 5 carded suit. Typically, a non-double reopening rebid by opener, means that opener is not that short in the overcalled suit. Repeating the opened suit shows extra length, typically 6 cards minimum, but need only be better than minimum; a jump in the opened suit would show a 7 carded suit. A new suit will show a second suit naturally, and should imply a fifth card in the first suit. Otherwise opener is balanced, in which case he will be passing or else when holding 18-19 points and a stop in the overcalled suit reopen rebids with 1NT. If opener has no clear action but is too strong to pass, then his strong denial is double.
- (2) In case *ii* the overcall was 1NT. In this case we have a very clear picture of what responder's hand is: he does not have 9+ points, for otherwise he would double the 1NT overcall for penalties. Had responder bid a new suit then this would have shown less than 9 points, but a 5 carded suit. Thus responder's pass says that he is

neither strong, nor distributional, hence is more or less balanced. Essentially, opener bids in a similar philosophy as if he was reopening after a 1NT open: double is for penalties, 15+ points; repeating the opened suit shows a 6 carded suit; bidding a new suit would typically show 5-5 distribution.

In case *iii* we consider when the overcall was pre-emptive...

12.4 Protective Overcalls

In this section we consider that there has been an open and response, but instead of rebidding opener passes. Thus clearly the response was not forcing, the two typical cases being: *i*: the response was simple support; *ii*: the response was 1NT. An interesting observation for this section is that both players of the overcalling side have had the opportunity to speak, but both declined to do so. In both cases the pass of the second seat overcaller denies all the hands for which he would have overcalled with, see section 8; the pass of fourth seat overcaller denies all the hands for which the player would have bid, as can be found in section 8.5.

In case *i* we assume that the response was a simple support and this was passed by (1) opener. The danger of this situation is that the opposition have found their ideal contract: a fit and no interest to go any higher. Passing is like raising the white flag. The consequences of bidding is that perhaps the overcalling side will be able to buy the contract; perhaps it might push the opener and responder to a higher level; or it could backfire, leaving the overcalling side licking their wounds after being doubled. The general strength should be around the 10 points mark, as if in normal overcalling. Unlike reopening after an open, there seems too much danger overcalling now a 4 carded suit, if advancer holds 4 cards in the suit then perhaps he would have originally doubled. Thus a new suit overcall would guarantee at least 5 cards in the named suit. On the other hand it is clear that the suit is of low quality; holding a good quality 5 carded suit and at least 10 points, overcaller would have originally overcalled. Double would show a hand that would have been happy to double originally, except that something was obviously missing; which typically translates to being a lack of 4 cards in all unbid majors; but as ever, in the protective seat, the

rules have to be bent.

- (2) In case *ii* we consider the 1**NT** response being passed by opener. In this case we are in a similar situation to the previous case but we need to take into account the following two facts: *1*: the opposition have not necessarily found their ideal contract; *2*: any suits that responder holds must be lower ranked than the opened suit. All the same, if overcaller holds such a hand so that he need not worry about either of these facts, then he can make a protective overcall. A new suit will be as above: at least 10 points and at least 5 cards in the suit, so again the suit will be low in quality, hence if advancer finds himself on lead, then this is a case where he need not feel pushed into leading partner's suit. A double would show shortage in the opened suit, and is thus similar to a direct double except something is missing: again the usual suspect is an unbid major lacking the appropriate length.

Part II

Conventions

13 Responding with a 5 Card Major

One of the strengths of playing system built around five card major opens is that a major open guarantees at least 5 cards. On the other hand, a major response only promises 4. Assuming that opener's rebid is not one of support how do we as responder show a fifth card in our responded major suit? The answer to this question depends on what the rebid of partner was. The rebid can be one of four types: if it is a new suit, then we use the Fourth Suit Forcing convention, section 13.1; if it is a repeat of the first suit, then we use the Third Suit Forcing convention, section 13.2; if it is a rebid of 1NT then we use the Roudi convention, section 13.3; finally if it is a rebid of 2NT then we use the Checkback Stayman convention, section 13.4.

13.1 Fourth Suit Forcing

Fourth suit forcing¹ solves the following problem: How to show a five card major as responder when opener rebids a new suit; e.g. after such a sequence as 1♥-1♠-2♦. Further, the convention can be exploited to help responder find out even more about opener's hand.

Consider the bidding has gone 1♥-1♠-2♦, thus opener holds any hand that fits the (1) following criteria: at least 5 hearts, at least 4 diamonds, not 4 spades, and between 12-18 points. Further let us assume that responder has enough points to consider game. The question is which game? 4♥, 4♠, 3NT, and even 5♦ are all feasible! It all depends on whether opener has 6 hearts, 3 spades, a club stop or 5 diamonds respectively. To find out, all responder needs to do is ask opener to describe his hand further, and the question is asked by bidding the *nonsense* bid of 3♣. Being the fourth suit it makes little sense for it to be considered natural, since opener is very unlikely to hold four clubs, after having already shown 9 cards of his hand. Thus bidding the fourth suit says: *please further describe your hand*. Since the convention is designed to find the best game contracts responder must have the appropriate strength. Often bidding the fourth suit force leaves no option but to go towards game, thus responder needs game going points to start the ball rolling.

¹[Fourth Suit Forcing]

But sometimes responder can just invite game, in particular when there is enough bidding space available for opener to stay low when he is weak. A general rule of thumb is called Levy's theorem: *If the sixth bid in a fourth suit forcing sequence will be higher than 2NT, then the sequence is forcing to game.*

- (2) Consider the sequence $1\clubsuit-1\diamond-1\heartsuit-1\spadesuit$: since opener's $1\heartsuit$ rebid only shows a hand that holds 4 hearts and 3 diamonds, there is still the possibility of him holding 4 spades. Thus the $1\spadesuit$ bid is left as being natural, not fourth suit forcing. Thus if responder wants to make a fourth suit forcing bid instead he bids $2\spadesuit$.
- (3) We now discuss the continuations of the bidding once responder has made a fourth suit forcing enquiry. Since there are many possible ways to bid three suits we will take as our example sequence one of those that appears most often and thus the discussion of the fourth suit force continuations is more useful. The key ingredients is that the response were a major at the 1-level, the rebid is a simple new suit, so let us take as our example the bidding $1\diamond-1\spadesuit-2\clubsuit$: opener has shown a 5-4 distributed hand, no 4 carded major support and 12-18 points. Responder's bid of $2\heartsuit$ is the fourth suit force: the one guarantee is that it promises to opener that responder has at least 11 points, thus the strength of opener's hand can be split into three ranges: weak, not enough for game 12-13; intermediate, 14-16; and finally strong, 17-18. Essentially opener replies with the following priority: support with three card support for responder's major, $2\spadesuit$ is weak 12-13, $4\spadesuit$ is intermediate 14-16 and $3\spadesuit$ is strong 17-18 (note how the bids are inverted, to allow more space to investigate slam); bid no-trumps when holding a heart stop $2NT$ is weak and $3NT$ is intermediate or more; show a fifth card in his second suit simply is weak, and with a jump (as long as it is lower than $3NT$) shows a strong hand; rebid the first suit as a weak denial, although with a jump (as long as it is lower than $3NT$) would show extra strength and a sixth card in the suit; finally rebid the fourth suit as a strong denial, to which responder will bid $3NT$ when he indeed holds a stop.

As a discussion a direct bid of $4\spadesuit$ may be considered rash since partner may only have made the fourth suit forcing bid while holding four spades. But on the other hand it may not be so bad, since responder would only be bidding the fourth suit force with a four carded major if he is looking for the stop to play in $3NT$. By jump-

ing to game even on a three carded suit would imply that opener has at most one card in the fourth suit, so 3NT is not looking like an optimistic contract. The worst case scenario is that responder is left in a 4-3 major game, a not so bad contract compared with a dead in the water 3NT. So jumping to the major game could say that opener does not have anything, not even half a stop in the fourth suit, although he has undisclosed strength, perhaps the best game would be indeed in the worst case in a 4-3 major fit. In fact this idea can be extended with respect to showing a splinter in the fourth suit, see page 192.

The principle of fourth suit forcing appears in many other bidding situations. For example, consider the competitive auction where the opposition are coming in with their suit. By bidding their suit we are asking the same question as by bidding the fourth suit. Similarly if we are the opposition and partner overcalls, we bid their suit to show strength, which asks partner to describe his hand further.

If there is enough space in the bidding we can gain a bonus bid. Take for example the two sequences, $1\heartsuit-1\spadesuit-2\clubsuit-2\diamondsuit$ and $1\heartsuit-1\spadesuit-2\clubsuit-3\diamondsuit$. The first sequence is fourth suit forcing, whereas the second sequence is *natural* showing 5 diamonds and 5 spades. (4)

Rebidding the 4th suit force, for example with the sequence, $1\heartsuit-1\spadesuit-2\clubsuit-2\diamondsuit-2\heartsuit-3\diamondsuit$, (5) the bid of $2\diamondsuit$ is the 4th suit force, $2\heartsuit$ is denial, then $3\diamondsuit$ is the rebid of the fourth suit. This asks partner if he truly has *nothing* in the fourth suit, not even half a stop, say, Q x x, or J x x, to play in 3NT. If still the answer is no, then opener rebids his denial bid once again.

Playing fourth suit forcing allows us to better describe our hands. Thus inferences can also be made when partner does *not* use it. For example consider partner opens $1\heartsuit$, we respond $1\spadesuit$ and partner rebids $2\clubsuit$: then $2\diamondsuit$ is fourth suit forcing; $2\heartsuit$ is simple preference; $2\spadesuit$ is preferential to spades over opener's 5 hearts and 4 clubs, thus promises a 6 carded spade suit; 2NT is a balanced hand 11-12 points; $3\clubsuit$ is club fit, 11-12 points; $3\diamondsuit$ is the jump in the fourth suit so promises 5 spades and 5 diamonds; $3\heartsuit$ is 11-12 points 3 card heart fit; $3\spadesuit$ is 11-12 points 6 card spade suit. Note that if fourth suit forcing is available then all the strong forcing bids go through it, thus in this example such a bid as $3\spadesuit$ is non-forcing.

Hands correspond to the table on the facing page.

- 1a:** With 13 points and a 5-4 hand, opener begins with the 5 card hearts suit, 1♥. Responder with 15 points and 5 spades responds 1♠. Opener cannot support spades, since the response only promises 4, thus he continues by best describing his hand. Thus 2♦, showing a second suit, and 12-18 points. Responder has enough points to fourths suit force, and so does so with 3♣. Opener complies and responds 3♠, saying that he holds 3 spades, (and therefore has shown 12 of his 13 cards, very effective!). Responder can sign off in 4♠.
- 1b:** After the 1♥ open, responder with 13 points and a 4 card spade suit replies 1♠. Opener as above rebids 2♦. Now responder is keen to try for 3NT, but is missing a stopper in the fourth suit clubs, thus he bids 3♣, fourth suit forcing. As above opener replies 3♠. Responder now has a bit of trouble: he knows that there are enough points for game, but there is no clear fit. 3NT is out of the question as the club suit is a known weakness. Thus there are 25 or so points distributed between the other three suits. Further responder can *see* opener's hand, for opener has bid 12 of his 13 cards. From the perspective of responder the best contract would be 4♠, as his small clubs can be trumped in the short suit. Note in such cases it is not so bad to play in a 7 card trump fit.
- 2a:** Again with 13 points and a 5 card heart suit the open is 1♥. As above the response is 1♠. Opener again with a second suit in diamonds is able to bid them, 2♦. As above, responder is keen to find 3 card spade support opposite, and so bids the fourth suit force of 3♣. Now opener does not hold a third spade, but instead he does hold the ace of clubs. Thus he can bid 3NT.
- 2b:** The sequence 1♥-1♠-2♦-3♣-3NT follows from the previous cases so far discussed.
- 3a:** Opener now has a 5-5 hand, so opens the higher ranked hearts, 1♥. As above, the response is 1♠, and now opener bids his second suit, 2♦. Responder tries the fourth suit, 3♣. Opener does not have a spade fit, nor now a club stop, but indeed does hold a fifth diamond, thus replies 3♦. Although responder is

Opener	Responder	a	b
		♠ K Q 10 6 4 ♥ K 2 ♦ A 7 5 ♣ K 10 2	♠ K Q 10 6 ♥ K 2 ♦ A 7 5 2 ♣ J 10 2
1 ♠ A 5 3 ♥ A Q 9 7 5 ♦ K 9 6 3 ♣ 9		1♥ – 1♠ 2♦ – 3♣ 3♠ – 4♠	1♥ – 1♠ 2♦ – 3♣ 3♠ – 4♠
2 ♠ 5 3 ♥ A Q 9 7 5 ♦ K 9 6 3 ♣ A 9		1♥ – 1♠ 2♦ – 3♣ 3NT –	1♥ – 1♠ 2♦ – 3♣ 3NT –
3 ♠ 3 ♥ A Q 9 7 5 ♦ K Q J 3 2 ♣ 9 7		1♥ – 1♠ 2♦ – 3♣ 3♦ – 3NT	1♥ – 1♠ 2♦ – 3♣ 3♦ – 5♦
4 ♠ A 3 ♥ A Q 9 7 5 ♦ K 9 6 3 ♣ 7 9		1♥ – 1♠ 2♦ – 3♣ 3♥ – 3NT	1♥ – 1♠ 2♦ – 3♣ 3♥ – 4♥

obviously disappointed not to find a spade fit, there is a diamond fit and he does indeed hold a club stop, so he can settle for the best game contract **3NT**.

3b: The sequence starts as from the above cases, $1\heartsuit-1\spadesuit-2\diamondsuit-3\clubsuit-3\diamondsuit$, but now responder without a club stop, but a fourth diamond decides to attempt a diamond game. Normally for a minor game one needs around 28 points, thus with this hand, responder should invite the game with $4\diamondsuit$. With these hands a diamond contract has 3 top losers, but had the spades and clubs of opener been swapped, there is less wasted values (that is no king/queen opposite a singleton), and a diamond contract now has 2 losers.

4a: Opener has 13 points and 5 hearts so opens $1\heartsuit$. The response is $1\spadesuit$. Opener rebids his second suit, $2\diamondsuit$. Responder tries the fourth suit, $3\clubsuit$, looking for a 3 card spade support. Alas, opener has no spade fit, nor has he a club stop, nor a fifth diamond, thus is obliged to respond the denial $3\heartsuit$ bid. Once the realisation that there is no spade fit, responder holding a club stop bids **3NT**.

4b: The first five bids follow from the previous cases, thus $1\heartsuit-1\spadesuit-2\diamondsuit-3\clubsuit-3\heartsuit$. Responder has a similar problem to the one faced with hands **1b**, no clear fit, no club stop, but enough points for game. Here then the best bet is to punt $4\heartsuit$, a 5-2 is not so bad and in fact, opener's bidding has not denied a holding of 6 hearts.

13.2 Third Suit Forcing

Third suit forcing² solves the following problem: How to show a five card major as responder when opener simply rebids his opened suit; e.g. after such a sequence as $1\diamondsuit-1\spadesuit-2\diamondsuit$. Remember that the rebid of the opened suit, is opener's denial rebid, opener may hold a second suit but is too weak to reverse, or he has no second suit and is thus holding at least 6 cards in his first suit, see section ??.

- (1) Similar to Roudi, section [13.3](#), the cheapest non-natural bid is used as conventional. This is always a third suit hence the name of the convention. Thus if the bidding started with $1\diamondsuit-1\spadesuit-2\diamondsuit$, then the bid of $2\heartsuit$ is the third suit force. Again, similar to

²[**Third Suit Forcing**]

Roudi, responder uses the third suit force when holding a fifth card in the responded major and at least 11 points, although such a bid needs not guarantee a fifth card in the major. Note that the sequence $1\heartsuit-1\spadesuit-2\heartsuit-3\clubsuit$ is the only third suit force which at the three level, in this case we insist that responder is strong enough to be bidding at the 3-level, hence responder needs to be game-forcing not just invitational. Note also that after $1\spadesuit-2\heartsuit-2\spadesuit$ there is no need to play third suit forcing, for the $2\heartsuit$ response already tells opener that responder holds at least 11 points and five hearts.

Even the responses to a third suit forcing bid follow the same logic as the Roudi (2) responses. Opener gives information on whether he is minimum or maximum, and whether he has three card support or not. Thus again there are four combinations, and thus just as in Roudi, the four successive bids are used. Unlike Roudi, it seems easier to play the set of “step responses”, see page 144. Let us say bid $2X$ is the third suit forcing question, then the responses are as follows: $2X+1$ shows a minimum hand and no fit; $2X+2$ shows a minimum hand and a fit; $2X+3$ shows a maximum hand and no fit; and finally $2X+4$ shows a maximum hand and fit. Thus working through our example sequence, after $1\diamond-1\spadesuit-2\diamond-2\heartsuit$ we have $2\spadesuit$ is minimum no fit; $2NT$ is minimum and fit; $3\clubsuit$ is maximum and no fit; and $3\diamond$ is maximum and fit.

Once responder has heard opener’s response, he can bid on appropriately: with a (3) major fit then he can bid the game or sign-off at the 3-level; without a major fit then the attention turns towards no-trumps. Coming back to the opener’s suit at the 3-level is considered the safe haven; note that all weak minimum responses in all cases is a bid at or below this safe haven. Finally, only in the cases where the responded major was spades, if it is also possible for responder to hold a hidden 4 carded heart suit then he may bid $3\heartsuit$; but since responder is bidding above the safe haven he must have some compensation, either with enough points to play in $3NT$ when no heart fit is established, or else knows that there is a spade fit to return to. Thus after say $1\diamond-1\spadesuit-2\diamond-2\heartsuit-2NT$: responder bids $3\spadesuit$ when holding 5 spades and not enough points for game; $4\spadesuit$ when he holds game points and five spades; responder will pass $2NT$ when he is weak and without five spades; or with enough strength will convert the $2NT$ answer to $3NT$; responder will bid the safe haven $3\diamond$ when he feels that this is the safer contract than $2NT$; finally responder will bid $3\heartsuit$ to show a four carded heart suit (and thus a five carded spade suit, otherwise with

4-4 in the majors the response would have been $1\heartsuit$ not $1\spadesuit$), if opener also holds the hearts then he will bid $4\heartsuit$, otherwise $3\spadesuit$ as denial.

Need to think about the non third-suit forcing bids.

- (4) If there is an intervention of either a suit call or a double, over the third suit forcing bid, since the responses are given in steps, then the perfect counter-defense is DOPI-ROPI, see page 108.

13.3 Roudi

Roudi solves the following problem: How to show a five card major as responder when opener rebids $1NT$; e.g. after such a sequence as $1\diamond-1\spadesuit-1NT$.

- (1) The easy solution would be to bid a second suit, as this normally implies a fifth card in the first suit. Sometimes though we do not hold a second suit and in such cases the normal action would be to lie and bid a new suit anyway. Normally when lying about suits, it is safer to lie in a minor. This means that there is always some doubt as to whether the second suit is natural or not. By playing a convention, we effectively eliminate this doubt. We will use the cheapest bid, $2\clubsuit$ as conventional, the convention being Roudi.
- (2) The Roudi $2\clubsuit$ bid asks for two pieces of information from opener's hand: whether opener is minimum or maximum; and whether opener has a 3 card fit with responder's major or not. Hence responder will use Roudi, to search for game when he holds only invitational points, and to search for the major game, when he holds a 5 carded major. Thus responder can only Roudi when he holds at least 11 points. On the other hand, a Roudi $2\clubsuit$ bid does not promise 5 cards in the responded major. Since there are four combinations for which opener can have relevant information, then we use the next four successive bids as the answers. There are three variations (see later for the other two variations) for assigning the combinations to the bids, but we will concentrate on the the following set of answers, which we will call the

“same-suit-weak responses”³ and they are as follows: $2\Diamond$ denies a fit and shows a minimum hand; 2NT denies a fit and shows a maximum hand; supporting the responded major shows a fit and a minimum hand; and bidding the other major promises a fit and a maximum hand.

Once responder has heard the answer, he can bid on appropriately: with a major fit (3) responder can bid the game, or else bid the major at the 3-level to see if opener can further evaluate his hand towards a game contract; without a major fit the attention turns towards no-trumps.

If responder does not use Roudi then we can also make inferences. In some cases (4) there is no change as from the basics: thus if responder decides to bid his major at the 2,3 or 4-level then the bids have the same usual meanings; if responder bids 3NT then again this is just the usual game sign-off. If responder bids a new suit then we have to factor out all the hands which should otherwise go through Roudi. Thus if responder bids a new suit that is as a bid cheaper than 2 of his major, then he is showing a 5-4 hand shape and 6-10 points. If responder supports opener’s minor (which can only be after a $1\Diamond$ open), then this shows a preference to play in $2\Diamond$ rather than 1NT . On the other hand, if the open were $1\clubsuit$ and responder would rather play in clubs, he cannot bid $2\clubsuit$ for that would be Roudi. Instead he bids 2NT which is a transfer to $3\clubsuit$. Note that all hands that would naturally bid 2NT would now bid through Roudi, so nothing is lost. This holds true even if the open was not $1\clubsuit$, thus in all cases a 2NT bid instead of Roudi is a transfer to $3\clubsuit$, thus such a bid is done when responder prefers to be playing in $3\clubsuit$ relative to leaving 1NT .

All that remains is when responder bids a new suit that is as a bid higher than 2 of (5) his major. At the moment we have not assigned any meaning to such bids.

There are two variations to the responses to a Roudi $2\clubsuit$ bid, both set of responses are independent of responder’s major suit. The “fixed responses”⁴ are as follows: $2\Diamond$ shows a minimum hand and denies a fit; $2\heartsuit$ shows a minimum hand and shows

³[Roudi : fixed/same-suit/step -responses]

⁴[Roudi : fixed/same-suit/step -responses]

a fit; 2♠ shows a maximum hand with a fit; and 2NT shows a maximum hand without a fit.

The “step responses”⁵ are as follows: 2♦ shows a minimum hand without no fit; 2♥ shows minimum hand with fit; 2♠ shows maximum hand without fit; and 2NT shows maximum hand with fit. It is not clear if either set of responses has an advantage over the other, but playing the step responses fit in nicely with the responses to third suit forcing, see section 13.2.

- (6) If there is an intervention of either a suit call or a double, over the Roudi 2♣ bid, since the responses are given in steps, then the perfect counter-defense is DOPI-ROPI, see page 108.

Hands correspond to the table on the next page.

1a: Opener holds 12 points and a balanced hand and so opens his suit, 1♣, with the intention to rebid no-trumps on the next round. Responder holds 11 points and a 5 card heart suit and so responds 1♥. Opener then duly rebids 1NT. Responder holding both a 5 card major and at least 11 points is able to do a Roudi 2♣ bid to pass this information over to partner. Opener, without the heart fit and minimum responds 2♦. Responder now knows opener’s hand shape *exactly*: for he opener does not hold 3 hearts, and being a balanced hand this must be a doubleton; he does not hold 4 spades, otherwise he would have responded 1♠ instead of 1NT, and since balanced hands do not contain two doubletons, he must have 3 spades; as for the remaining eight cards, to justify a 1♣ open, he must have 5 clubs, with 4-4 the open would be 1♦. Thus with there being no game, responder can choose between 2NT or even 3♣, for he knows there is a fit. The combined 23 points should persuade him to plump for 2NT.

2a: With 12 points and a balanced hand, opener commences with 1♦. As above responder comes back 1♥, and thus opener shows his hand with 1NT. Responder Roudi’s with 2♣. Opener with a heart fit, but weak, therefore answers 2♥. Although game is a long shot, responder now knowing a fit exists and

⁵[Roudi : fixed/same-suit/step -responses]

Opener	Responder	
	a ♠ 8 7 5 ♥ A K J 10 5 ♦ 8 6 ♣ K 6 3	b ♠ A 8 7 5 3 ♥ A K 10 ♦ 8 ♣ K 7 6 3
1 ♠ K Q 2 ♥ 6 2 ♦ A 9 3 ♣ Q J 9 5 2	1♣ – 1♥ 1NT – 2♣ 2♦ – 2NT	1♣ – 1♠ 1NT – 2♣ 2♠ – 4♠
2 ♠ K Q ♥ 8 6 2 ♦ A 9 4 3 2 ♣ Q J 5	1♦ – 1♥ 1NT – 2♣ 2♥ – 3♥	1♦ – 1♠ 1NT – 2♣ 2♦ – 3NT
3 ♠ K Q ♥ 8 6 2 ♦ A Q 3 2 ♣ Q J 9 5	1♦ – 1♥ 1NT – 2♣ 2♠ – 4♥	1♦ – 1♠ 1NT – 2♣ 2NT – 3NT
4 ♠ K Q 2 ♥ 6 2 ♦ A Q 9 ♣ Q J 5 3 2	1♣ – 1♥ 1NT – 2♣ 2NT – 3NT	1♣ – 1♠ 1NT – 2♣ 2♥ – 4♠

that partner might be able to judge his hand as a bad 13 count rather than a bare 12 points, thus invites with 3♥. Unfortunately this is not to be, opener's hand grows no more, and so he passes.

- 3a:** With 14 points and a balanced hand, 4-4 in the minors, the open is 1♦. Opposite responder comes back 1♥, and opener bids his hand, 1NT. 2♣ Roudi from opposite. Opener does indeed have a fit, and so supports and shows his strength by answering in the other major, hence 2♠. Responder likes what he hears, and with no hope of a slam signs off in 4♥.
- 4a:** With 14 points, opener begins with 1♣, responder 1♥ and opener 1NT. Roudi 2♣ on more time from responder. Opener has a maximum hand and no fit, and so the response is 2NT. Responder takes the bait and bids game 3NT.
- 1b:** After the 1♣ from opener, responder bids his 5 carded spade suit, 1♠. Opener rebids his weak balanced hand, 1NT. Responder though holds both a 5 carded major and with 14 points has more than enough to ask for 3 card spade support, so bids 2♣ Roudi. Opener being weak but with a fit bids 2♠, responder smiles and bids game, 4♠.
- 2b:** After the 1♦ open, 1♠ response and 1NT rebid, responder Roudi's with 2♣. Opener without a fit and minimum answers 2♦. This doesn't put off responder, his 14 points is enough for game, and so he duly bids 3NT.
- 3b:** After the 1♦ open, 1♠ response, 1NT rebid and 2♣ Roudi, opener without fit, yet maximum, bids 2NT. Responder signs off then in game, 3NT.
- 4b:** After the 1♣ open, 1♠ response, 1NT rebid and Roudi 2♣, opener does indeed have a fit and a maximum hand, and so answers in the other major, 2♥. For responder there is no chance of slam, and so signs off in game, 4♠.

13.4 Checkback Stayman

Checkback Stayman⁶ solves the following problem: How to show a five card major as responder when opener rebids 2NT; e.g. after such a sequence as 1♦-1♥-2NT.

As with Roudi, it is the club bid that is artificially harnessed, no matter which minor (1) was opened. The the bid now of $3\clubsuit$ is Checkback Stayman. Whereas in Roudi we restrict our answers to the one major suit in question, with Checkback Stayman we can find information about both. This allows opener to rebid 2NT even when he holds 4 cards in the other major; thus after $1\Diamond-1\Heart$, opener's rebid of 2NT does not deny holding 4 spades.

The responses are as follows: $3\Diamond$ denies both, thus opener has neither 3 card support (2) nor 4 cards in the other major; 3 of responder's major shows 3 card support and denies 4 cards in the other major; 3 of the other major shows 4 cards in the other major while denying 3 card support; and 3NT would show both.

Once responder has heard the answer to his Checkback enquiry he has two options, (3) whether to sign-off in game or to drive on towards slam. Naturally enough, if game is the limit then responder bids the appropriate game. If slam is a possibility then responder naturally enough can control bid if the fit has been decided. If the fit remains unnamed, due to a 3NT answer, and there is slam hopes, then when holding the heart fit responder bids $4\clubsuit$; whereas when holding the spade fit, responder now bids $4\Diamond$.

⁶[Checkback Stayman]

14 Response Structures to Minor Opens

14.1 Walsh

Walsh¹ is only concerned with the sequences after a $1\clubsuit$ open. the normal action by responder is to respond his longest suit, otherwise to bid 4 card suits up the line. Thus when holding 4 diamonds and a 4 carded major the natural way to respond is then $1\diamondsuit$. But since bidding is built around finding major fits, there is therefore an argument to show the major instead in response. Walsh is a convention that captures and exploits this “preference to the majors” philosophy.

- (1) Thus consider the open were indeed $1\clubsuit$, we are in Walsh territory. Only when responder’s hand falls into one of the following hand types is the bidding modified, all other hands responder makes the usual response: firstly, responder holds 4 diamonds and at least 4 of a major, then responder bids 1 of the major; secondly, responder holds a 4 carded major and a longer diamond suit, and he is weak, 6-10 points, then responder bypasses the diamonds and responds 1 of the major; finally, responder holds 4 cards of a major and a longer diamond suit and at least 11 points, now he responds $1\diamondsuit$.
- (2) The key to Walsh is what opener can now rebid after hearing a $1\diamondsuit$ response, (after any other response the bidding progresses as usual). If opener has a 4 carded major then the normal action is to name them. But, now there is no need for opener to do that, for if responder does indeed hold a major then he must also hold at least 11 points and so will show them with his next bid. Thus opener when holding a balanced hand can rebid no-trumps and keep his major suit hidden. If responder holds a major he must be strong and so he will bid again. The fit, if there, will always be found. Thus when opener rebids his major he is therefore denying holding a balanced hand and is thus showing 5 clubs and 4 of the major. Thus opener’s rebid is a lot more descriptive and by keeping a major hidden hinders the defence if no-trumps happens to be the final contract.

¹[Walsh]

Responder	a	b	c	d
	♠ 7 2 ♥ A 9 8 4 ♦ Q J 7 6 ♣ 10 8 2	♠ J 9 7 2 ♥ A 8 4 ♦ Q J 7 6 2 ♣ 8	♠ 7 2 ♥ A 8 4 ♦ Q J 7 6 2 ♣ 10 8 2	♠ A 9 7 2 ♥ A 8 4 ♦ Q J 7 6 2 ♣ 8
Opener				
1 ♠ K Q 5 ♥ K 10 7 2 ♦ 10 3 ♣ A J 7 6	1♣ – 1♥ 2♥ –	1♣ – 1♠ 1NT –	1♣ – 1♦ 1NT –	1♣ – 1♦ 1NT – 2♠ 2NT –
2 ♠ K Q 6 5 ♥ K 7 2 ♦ 10 ♣ A J 7 6 3	1♣ – 1♥ 1♠ – 2♣	1♣ – 1♠ 2♠ –	1♣ – 1♦ 1♠ – 2♣	1♣ – 1♦ 1♠ – 2♠ 4♠ –

Hands correspond to the table above.

1a: Holding 13 points and a balanced hand the open is the better minor 1♣. Holding 4 hearts and 4 diamonds the major takes preference and so the response is 1♥. Opener holding a heart fit supports 2♥ showing 12-16 points. Responder's hand doesn't grow enough for game to be a consideration, thus he passes. Note, that without Walsh the bidding would have proceeded as: 1♣-1♦-1♥-2♥.

1b: After the 1♣ open, responder now holds 8 points and a longer diamond suit to his 4 card spade suit. All the same, being only strong enough to bid once responder shows preference to the major and bids 1♠. Opener without spade support gives his natural rebid of 1NT, which is passed out. Without Walsh

the bidding would have been: $1\clubsuit-1\diamond-1\heartsuit-1\spadesuit-1\text{NT}$, the same contract but now the defence know more of declarer's hand.

- 1c:** After the $1\clubsuit$ open, holding 7 points and only a diamond suit the response is the usual $1\diamond$. Opener need not bid his heart suit and instead rebids 1NT , for if responder did hold a heart suit for him to bid $1\diamond$ first would imply that he holds at least 11 points. Responder passes this, thus showing that he is holding less than 11 points and thus does not hold a 4 carded major. Thus declarer's hand remains a real secret to the defence. Without Walsh the bidding would have been: $1\clubsuit-1\diamond-1\heartsuit-1\text{NT}$, being played by the weak hand.
- 1d:** After the $1\clubsuit$ open, responder holding 11 points, 4 spades and longer diamonds is in the luxury of being able to bid $1\diamond$. As with the previous hands, opener rebids 1NT . Responder then continues with $2\spadesuit$, showing that he must be holding at least 5 diamonds, 4 spades and 11 plus points. Opener without a spade fit and being a minimum 13 count bids 2NT . Had responder held 13 or more points he would sign off in game, instead it is passed. Without Walsh the bidding would have been: $1\clubsuit-1\diamond-1\heartsuit-2\text{NT}$.
- 2a:** With 13 points, 5 clubs and 4 spades, the open is a clear $1\clubsuit$. As before the response is $1\heartsuit$, opener rebids $1\spadesuit$. Although from responder's eyes opener could well be holding 3 clubs and 4 spades. Holding something in the fourth suit allows responder to bid 1NT . Without Walsh the bidding would have been the same.
- 2b:** After the $1\clubsuit$ open, and $1\spadesuit$ response, opener now has a spade fit and so gives it, $2\spadesuit$, promising 12-16 points. Responder doesn't need to get excited and so passes. Without Walsh the bidding would have been exactly the same.
- 2c:** After the $1\clubsuit$ open, and $1\diamond$ response, now opener can rebid his hand, $1\spadesuit$; thus promising a 5-4 hand shape. Responder can give simple preference towards clubs without fear this time. Without Walsh, although the bidding remains the same, after the $1\spadesuit$ rebid for responder opener could still have 3 clubs and 4 spades, and might prefer to sign off in 1NT , which although not necessarily a bad contract $2\clubsuit$ is much safer when responder knows a fit is there.

2d: After the $1\clubsuit$ open and $1\diamond$ response, opener's rebid is $1\spadesuit$, showing his hand shape. Responder supports with $2\spadesuit$. Note that this bid must be 11-12 points, for had responder held less he would have responded $1\spadesuit$ instead of $1\diamond$. Further had responder held 13-15 points he would now have bid game, $4\spadesuit$; and with 16+ points responder is in the slam zone and so would bid $3\spadesuit$, starting a control bidding sequence. Opener accepts the invite for game and signs off in $4\spadesuit$. Without Walsh the bidding would be $1\clubsuit$ - $1\diamond$ - $1\spadesuit$ - $3\spadesuit$ - $4\spadesuit$.

14.2 Inverted Minors

Normally when partner opens 1 of a minor, a support bid of 2 of the minor, would (1) show 6-10 points and a jump support to 3 would show 11-12. As then name of the convention suggests, we essentially invert these bids with their meanings; thus if partner opens $1\diamond$ a response of $2\diamond$ would be a fit and 11+ points², whereas $3\diamond$ would be a fit and 6-10. There are two main reasons why we should do this, a defensive and a constructive reason which we discuss in the following two paragraphs respectively.

For the defensive reason, let us consider that we are not playing inverted minors, partner opens $1\clubsuit$ passed to us; we hold 5 clubs and no four carded major and 6-10 points, so we respond $2\clubsuit$. Assuming partner is not strong enough to consider game, will the bidding end there? Most probably the opposition will enter the auction, why not: we have denied interest in looking for a major fit, and the bidding is only at the 2-level. Now, if we are playing inverted minors, then we would now have bid $3\clubsuit$. Although this does not guarantee that the opposition will remain silent, it does add a little extra pressure. Note that responder should not hold a side-suited 4 carded major if he jumps in the minor, instead he should respond the major, and later if necessary come back to the minor later.

For the constructive reason, let us consider that we are not playing inverted minors and partner opens $1\clubsuit$, we have a fit no outside suit and we are holding 16+ points. So what shall we say? Any kind of support bid is limited (bidding 4 of the

²[Inverted Minors 1m-2m : 11+ / GF]

minor takes away playing in 3NT, so is ill-advised). We can bid a new suit, but we shouldn't lie in a major. Thus we are obliged to bid the other minor. This could lead to problems. Inverted minors solves this problem with the simple bid of 2♣. This promises at least 11 points, and being unlimited in strength is forcing. Thus responder can show his strength on the following round of bidding.

- (2) We now need to consider the continuations of the bidding after an inverted minor. First we consider the weak, jump response. Since this bid is in essence defensive and pre-emptive any continuation by opener necessarily needs him to have a strong hand. The main emphasis is in looking for 3NT. If opener is anxious about a particular suit being unstopped then he can share his worries with partner by them both bidding their stops up the line. A bid of 3NT at some point, would indicate that the worries have passed.
- (3) After the forcing strong, simple response the bidding continues as follows: the only bid that does not force to game is a simple repetition of the minor at the 3-level, thus shows 12-13 points; all other bids are thus game forcing. New suit rebids by opener can have two variations; either we play them as stopper showing or else as natural second suits.³ The advantage of the second method is that it allows responder to directly support the minor *even* if he holds a side-suited major, but he will only do this if he has game forcing points, not just 11+. If a major fit is not found then the bidding will normally wend its way towards 3NT, but if there is a fear in a particular suit then 5 of the minor is always an option. Since 2NT is still forcing to game, then we play it as *stronger* than 3NT. Thus 3NT would show a hand that has interest in playing in 3NT (it will specifically deny holding a 4 carded major), but when stronger and holding the same hand shape opener will bid 2NT.

Consider that partner opens 1 of a minor in third or fourth seat, then the responses remain inverted except that obviously a simple support is no longer 11+ but 11-12 points.

- (4) So far we have only discussed the situation when the opposition remain obligingly silent, but the convention also has a role when the opposition make an initial suit

³[Inverted Minors 1m-2m : denies / not denies 4 carded major]

overcall, in fact, it is even more important that we do indeed play the inverted minor. If say the open is $1\Diamond$, and there is a direct overcall of say $1\spadesuit$ our attentions turn towards being pre-emptive against their possible fit, hence when weak we jump, and when strong we can still bid simply. On the other hand, if we are playing 2NT as Truscott, then there is no need to play inverted minors after a double.

14.3 Gambling 3NT

There is little use of having a direct opening of 3NT to mean anything like 25-26 (1) points balanced hand. Firstly it takes up far too much bidding space, secondly it is a hand that happens far too infrequently, and thirdly even when such hands do appear we have a perfectly adequate way of bidding them. Thus we can assign a whole new meaning to such an open. One such is the Gambling 3NT. In this case such an open will promise a single suited, at least 7 carded solid minor hand. What you hold in the outside suits is dependent of choice: either it agrees to hold no outside entry; or else one outside entry.⁴ Thus, such a hand will not be rich in points, approximately 13 say, but it will be rich in quick tricks. The idea being that as soon as we gain the lead we would have more or less made the contract. Note that when holding two or more outside entries, the hand will become strong enough to consider opening through a strong 2. The point about holding a long minor, rather than a long major, is that without a major fit the bidding tends towards finding 3NT.

The simple responses to a 3NT open are as follows: if responder sees that no suit (2) is wide open and he considers that 3NT is therefore the best contract then he may pass. There are therefore two possible reasons for bidding instead of passing: firstly responder fears that 3NT will be going down, for he holds not enough strength in the remaining suits; secondly responder thinks that there may be a shout of a slam. The continuations need to be looked up!!

Note that we can also employ the gambling 3NT not only as an open but as an (3) overcall. In this case it is imperative that the overcaller holds a stop in the opened

⁴[Gambling 3NT : with / without outside stops][Gambling 3NT : with / without outside stops]

Responder	a	b	c
Opener	♠ 8 6 ♥ K 7 5 ♦ K 10 8 7 2 ♣ Q 10 6	♠ K 8 6 ♥ K 5 ♦ K 10 8 7 2 ♣ Q 10 6	♠ K J 6 ♥ 7 ♦ K J 10 8 7 2 ♣ K Q 10
1 ♠ 2 ♥ Q J 4 3 ♦ A Q 9 4 ♣ A J 8 7	1♦ – 3♦	1♦ – 2♦ 3♦ –	1♦ – 2♦ 3♦ – 3♠ 3NT –
2 ♠ A 10 7 2 ♥ Q J 4 3 ♦ A Q 9 ♣ 8 7	1♦ – 3♦	1♦ – 2♦ 2NT –	1♦ – 2♦ 2NT – 3♣ 3NT –
3 ♠ A Q 2 ♥ 4 3 ♦ A Q 9 4 ♣ A J 8 7	1♦ – 3♦ 3♠ – 3NT	1♦ – 2♦ 2♠ – 2NT 3NT –	1♦ – 2♦ 2♠ – 3♣ 3♥ – 4♥ 4NT – 5♦ 6♦ –

suit.

15 Responses to Major Opens and Major Fits

15.1 Trial Bids

This is a constructive convention that allows for better judgement on whether to go for game or not. The convention applies in two situations: first, after a simple support response of a major, that is $1\heartsuit-2\heartsuit$ or $1\spadesuit-2\spadesuit$; second, after a simple support rebid of a major response, that is for instance $1\diamondsuit-1\spadesuit-2\spadesuit$. Note that in the first case responder has promised 6-10 points, whereas in the second case opener has promised 12-16 points. In both cases the point range shown while agreeing the major fit is 5 points, thus the same considerations apply. We will only look at the first situation, for the second is analogous.

Say the open were $1\heartsuit$, and responder comes back $2\heartsuit$, thus promising a fit and 6-10 (1) points. Opener will make his calculation, and if he finds that he wants to invite game, the normal procedure would be to bid $3\heartsuit$. Instead we can be more descriptive by playing trial bids. We describe long suit trial bids.¹ If opener has a second suit then the trial bid is to bid it. If opener has no second suit, or he needs no help in a second suit, then he makes the generalised trial bid of **2NT**. Remember, once a major fit has been agreed, the intention is to play in the major. Thus all trial bids are forcing. Essentially then, in answer to a trial bid, responder will sign off in (2) $3\heartsuit$ with a 6-7 points; bid game with 9-10 points; and with 8, or even a good 7, will bid game if he can offer help, in the form of length of honours, in the trialed suit. Note a singleton opposite a trialed suit is considered wasted values and this must be taken into account.

Note that after a trial bid, there are only two possible answers, either bid 3-of the (3) major or else bid game. But if the trial suit were also a major, then there is the possibility of supporting the trial suit, i.e. playing in the 4-4 fit instead of the 5-3 fit. After a $1\heartsuit$ open, say responder holds 3 card support, 4 spades and 6-10 points, then the correct response is $2\heartsuit$, (see page ??). If partner invites game through a

¹[**Trial Bids** : long suit / short suit / relay]

trial bid of $2\spadesuit$ then responder has the opportunity to support the trialed suit, by bidding $3\spadesuit$ or $4\spadesuit$. Thus we remain consistent with our preference of playing in 4-4 major fits rather than 5-3. In this case there are four possible answers to the trial suit question. The situation is similar for the sequence $1\spadesuit$ - $2\spadesuit$ - $3\heartsuit$ but not the same, care needs to be taken. So far we have implicitly that *all* trial bids are forcing for one round, thus if this condition is meant to hold for all then in this sequence $3\heartsuit$ must be forcing. Hence responder has only three options: bidding $3\spadesuit$ when minimum; or else choosing the best game between $4\heartsuit$ and $4\spadesuit$.

- (4) After a $1\heartsuit$ - $2\heartsuit$ sequence, as we now no longer invite game with $3\heartsuit$, this bid can take a new meaning. Simply we play it as pre-emptive and certainly *not* inviting game. Its use is designed to make life difficult for the opposition to re-open the bidding. Thus it will be typically done with a hand that is weak, but long in trumps.

A variation of trial bids is to bid the weak suit. This we call **Short Suit Trial Bids**.² A new suit is then showing a suit with three losers, and asks partner for cover in that suit. The main disadvantage of this is that the opposition become aware of an obvious weakness in declarer's hand which can be exploited.

We have already mentioned that all trial bids are forcing for one round, thus it is sometimes practical to use trial bids to help decide whether slam is a good proposition. Thus, even when the answer to the trial bid is negative, the questioner can still sign-off in game.

Hands correspond to table on the next page.

1a: With 16 points and a 5-4 shape, opener commences with $1\heartsuit$. Responder has a fit and 7 points, and so rebids $2\heartsuit$ happily. Opener has enough points to invite game so trial bids in his second suit, spades, $2\spadesuit$. This doesn't inspire responder to make any further noise.

1b: After the $1\heartsuit$ open, responder with 9 points and a fit supports with $2\heartsuit$. Opener trials in spades, $2\spadesuit$. Responder with a maximum and a fit in spades bids $4\spadesuit$ directly, preferring the 4-4 spade fit to the 5-3 heart fit. Notice that the spade

²[**Trial Bids** : long suit / **short suit** / relay]

Opener	Responder	
	a ♠ Q 2 ♥ 10 3 2 ♦ 10 9 7 5 2 ♣ K Q 8	b ♠ Q 7 6 2 ♥ A 3 2 ♦ 9 7 2 ♣ K 8 3
1 ♠ A K 8 4 ♥ K Q 8 6 4 ♦ K J 3 ♣ 2	1♥ – 2♥ 2♠ – 3♥	1♥ – 2♥ 2♠ – 4♠
2 ♠ A 8 4 ♥ K Q 8 6 4 ♦ K J 3 ♣ A 2	1♥ – 2♥ 2NT – 3♥	1♥ – 2♥ 2NT – 3NT
3 ♠ A K 4 ♥ K Q J 6 4 ♦ 3 ♣ A 9 7 2	1♥ – 2♥ 3♣ – 4♥	1♥ – 2♥ 3♣ – 4♥
4 ♠ K 4 ♥ K Q 9 8 6 4 ♦ A 3 ♣ 9 7 2	1♥ – 2♥ 3♥ –	1♥ – 2♥ 3♥ –

game is safer for a diamonds can be thrown from table under the winning hearts, and thus at least one diamond in hand can be ruffed.

- 2a:** With 17 points, balanced hand and 5 card heart suit, the open is 1♥. Note that we don't open 1NT with a 5 card major. The response is 2♥. Opener has no second suit to trial in so bids the generalised trial bid, 2NT. Again, with only 7 points, responder doesn't want to play in game, so signs off in 3♥.
- 2b:** After the 1♥ open, 2♥ response, 2NT generalised trial bid, responder with 9 points can accept the invitation. Holding a 4333 hand and no ruffing potential it is perhaps wise to give opener the chance to actually play in no-trumps, thus responder bids 3NT. For opener, his short suit is headed by the ace, and does have cover in all suits. If 10 tricks make in trumps, then the probable same 10 tricks will make in no-trumps, and if not, then 9 will do. Thus a wise pass.
- 3a:** Again, 17 points and 5-4 hand, thus 1♥ open. The response is support 2♥. Opener can trial in his second suit, clubs, with 3♣. Now responder wakes up, although his hand has only 7 points, 5 of them are the king, queen of clubs. Thus partner's second suit, and thus source of tricks, is looking good. Responder can therefore accept the invite and bid 4♥. Note, without trial bids this hand would never be inclined to accept a game invitation.
- 3b:** After the 1♥ open, 2♥ response and 3♣ trial bid, with a hand in the high end of the range, responder can cheerfully accept game. If he has any doubt, the usefulness of the king of clubs should persuade him.
- 4a:** With 12 points and a long heart suit the open is a clear 1♥. The response is 2♥. Opener knows that game is not there, and so in principle should pass, it is the safest part-score after all. On the other hand the opponents will also think that 2♥ is a safe part-score and will perhaps keep the bidding alive with a protective double, or suit bid. If they do bid, there is nothing stopping opener to compete to 3♥. But perhaps they'll find a spade fit, and their 3♠ outmanoeuvres you. Opener makes life hard for them by bidding the preemptive 3♥. If a 9 carded 3♥ contract goes off, then it is probable that with (in hindsight) a 9 card spade fit, there is a good chance that a 2♠ contract by them would make.

4b: After the 1♥ open, and 2♥ response, opener as above bids 3♥. Note this time that the opposition's fit is in diamonds, which in hindsight is no great threat, but still, if the 9 card 3♥ contract fails there is a good argument for saying their diamond contract would make.

15.2 Relay Trial Bids

3

15.3 2-over-1 and the Forcing NT

The 2-over-1 system is built around the following principle: after a one-major open, (1) any new suit response at the 2-level is *game-forcing*, 13+ points.⁴ Thus at a stroke it resolves the following dilemma: after such bidding as 1♠-2♣-2♦-3♠, should the last bid made, 3♠, be considered as game inviting or slam investigating? In other words, the change of suit response was made to either look for a potential 4-4 heart game, or else to show a hand too strong to directly support. In the basic system the sequence is considered as inviting game, showing 11-12 points, thus implicitly shows a 4 card heart suit. Thus if responder wanted to consider a spade slam opposite a 1♠ open he would need to find another forcing bid, such as fourth suit forcing. The disadvantage of this is that it takes six bids to establish a fit with opener, that existed directly. Playing 2-over-1 the issue is resolved: for the 2♣ bid is game forcing, thus after 2♦ if responder is only interested in game he would have bid 4♠. Thus, 3♠ shows slam interest.

All rebids after a game forcing 2-over-1 response follow similar logic to the basic (2) system. A rebid of 2NT retains its 15-17 point range, whereas 3NT retains its 18-19 point range. Reverses are still reverses, as are jump-shift rebids. Finally, rebidding the opened suit is denial. Thus compared to the basic system, the only rebid changes are the fit rebids.

³[**Trial Bids** : long suit / short suit / **relay**]

⁴[**2-over-1** : 1♦-2♣ 11+ / GF]

This pattern is repeated by responder for the continuation of the bidding: the only difference being a fit bid at game is weaker than a fit bid below game.

- (3) If all new suit responses at the 2-level are 13+ points all the hands that contain 11-12 points must therefore be included within the 1NT response. The 1NT response still remains its denial flavour, but since the hand is 6-12 points opener cannot pass, in other words, the no-trump is *forcing*. What we do lose therefore is the ability to have such bidding sequences as 1M-1NT-pass. On the other hand, as we'll explore later, there are many gains. Thus after a 1NT response opener is forced to rebid, and again the idea is to follow closely to the basic system. Thus opener makes exactly the same rebid he would have made had the 1NT been only 6-10 points. The only problem arises when opener would have passed, whereas now he is not allowed.
- (4) Opener can only rebid his opened suit if he holds 6 of them, exactly as in the basic system. Thus opener must bid a second suit and since there is no guarantee of holding a second suit we say that a 3 card minor suffices. Thus all 2m rebids by opener only promise 3 cards. There is only one case where a problem still arises, that being when opener holds exactly a 4522 hand shape and he is too weak to reverse in spades. Here the correct bid is 2♣ (which therefore promises only 2 cards). After the rebid responder continues as in the basic system, although it should be noted that a simple preference of returning to the opened major is in principle never a fit, (otherwise with 6-10 points responder just simply supports the opened major, as in the basic system). A new suit by responder shows a weak hand, 6-10 points, and a six carded suit. Jump preference, as in the basic system, deals with all 11-12 point type of hands: thus 2NT shows a balanced hand 11-12 points; a jump in a new suit shows a six carded suit and 11-12 points; supporting opener's second suit requires at least 4 card support and 11-12 points.
- (6) The fact that the 1NT response is forcing can further be exploited. Such sequences as 1♠-1NT-2♣-3♠ have no meaning in the basic system. It seems natural enough to let such sequences mean 11-12 points and a fit. Thus we can either assign a new meaning to the direct 3♠ response or else keep the original meaning and allow a finer distinction between hands be made. In the first case we could play the direct 3♠ bid as a barrage, showing spade length and less than 6 points. Otherwise we can distinguish between trump length, stipulating that the direct raise to 3♠ as showing

at least 4 spades, whereas the indirect route to 3♠ via a forcing 1NT, shows 3 spade support. The main advantage of knowing trump length is in the use of the law of total tricks.

The sequence 1♠-1NT-2♣-2NT also has no natural meaning in the basic system (7) and we have seen earlier this sequence would describe responder's hand as being balanced with 11-12 points. Thus the direct response of 2NT is freed and so again we may assign new meanings to such sequences. One way to play this is as Jacoby. There are a few interpretations for this, but they all agree on it being a fit bid. One version is to stipulate it as a guarantee of a 4 card fit and 15+ points, thus looking for a slam. Personally, I like to include this bid within the structure of splinters, see section 17.7. In other words to use it as a *balanced splinter*. Thus it would show a balanced hand, with a fit, 13-15 points. It should be used as a dampner on opener's slam wishes, for without long suits to establish a slam only makes when there are enough points. In these circumstances we can complete the picture of splinters. (8) That is to say, after a sequence such as 1♦-1♠: 4♣, 4♥ are splinter bids; 4♦ is the inverse splinter; 3NT is the balanced splinter; and 4♠ is the denial splinter. Thus we can now do likewise with the direct response: say after a 1♠ open: 4♣, 4♦, 4♥ are all splinters; responding 2♣, (2♦), then rebidding 4♣ (4♦) is the inverse splinter; 2NT is the balanced splinter; and finally changing suit so that on the next round game is bid, is the denial splinter.

Finally, there is the *impossible* bid:⁵ after such a sequence as 1♥-1NT-2♦ a bid (9) of 2♠ can have no natural sense. If it were meant as a natural bid then responder should have first responded with 1♠. This in fact is true too for the basic system. But we can harness this sequence to resolve a final issue that still remains open even within the 2-over-1 framework. Again it is similar to the initial dilemma we had at the beginning of the section, but instead of there being a 1♠ open, we consider a 1♥ open. Thus, consider such a sequence as 1♥-1♠-2♣-3♥, should this last bid be considered as game inviting or slam investigating? Since the 1♠ bid is not 2-over-1 then there is no reason to suggest that 3♥ is slamming. Thus, as in the basic system, 2-over-1 says that this last bid shows 11-12 points and a heart fit. If responder does indeed have slam aspirations, while holding a heart fit and holding a side 4 card

⁵[2-over-1 : impossible 2♠ bid 4:3:3:3 11-12 / strong and club fit]

suit, then again responder needs to be imaginative and find a forcing bid, whereby again the fit is only established after an inefficient six bids. But this can be resolved. Simply we say that sequences such as $1\heartsuit-1\text{NT}-2\clubsuit-2\spadesuit$ show a hand that is 11-12 points, 4 spades, and 3 hearts. With that taken care of, frees such sequences as $1\heartsuit-1\spadesuit-2\clubsuit-3\heartsuit$ as being slam going. Note that the 1NT response can now also hold a 4 carded spade suit. This leads to the following mnemonic: after a major open, a new suit response followed by a jump in the opened suit on the next round are all slam going sequences.

15.4 Drury

When we are sitting in third position and the bidding has gone pass - pass, we can open the bidding with a weaker than normal opening hand, of around say 10 points (weaker depending on vulnerability). Essentially, we are overcalling *before* the opponents have opened. Just as with overcalling the most interesting overcalls are the majors, for they are the boss suits and can outbid the minors. Thus a weak third seat open is normally only done with a major open. On the other hand, given that we have opened weak in the third seat, there is no reason for responder to know whether our open is in fact normal or is weak. One thing we do know is that responder, being already a passed hand, is limited to holding at most 12 points. But even so, there is the danger of responder getting carried away and steamrolling into an unmakeable contract, possibly doubled. Further, even if the opposition rightly buys the contract, responder may double their final making contract, based on the assumption that we are holding enough points for an opening hand. What we need therefore is something to calm responder; Drury is such a chill-pill of a convention.

- (1) Let us assume that in third seat opener bids one of a major, say $1\heartsuit$, and throughout the opposition remain silent. A $2\clubsuit$ response is now artificial for it is Drury. It asks opener whether his open was a genuine or not. If opener responds with 2 of his opened major, $2\heartsuit$, then this means that opener really does not have a genuine open.⁶ If opener responds anything else then he is promising a genuine open and

⁶[Drury : weak response is repeated suit / $2\diamondsuit$]

is just giving his normal rebid. Note that since the usual denial rebid of $2\heartsuit$ now means opener has a sub-open, then the $2\diamondsuit$ rebid now replaces the original denial rebid; thus a $2\diamondsuit$ rebid need not guarantee a diamond suit.

The Drury $2\clubsuit$ response is the only forcing response available to responder. All other (2) responses are weak and non-forcing. Thus if responder holds a fit and 11-12 points he need not jump fit, instead he will go through Drury first: if opener is sub-open then we will only be playing at the 2-level, instead of the 3-level; if opener has a normal opening hand, then responder will raise to 3 of the major. Thus using Drury, if opener has a genuine open game will not be missed; and if opener is sub-open then our bidding will not exceed the 2-level.

Note that there is a variation of the Drury responses, whereby holding a sub-opening hand opener answers with $2\diamondsuit$ and opener's normal denial rebid remains as the repetition of his opened major.⁷

Let us now consider Drury when the opposition overcall. If the overcall is a new (3) suit at the 1-level or a double, then the response of $2\clubsuit$ *remains* as Drury.

A partnership need to agree what the double of a Drury $2\clubsuit$ bid means: either it is (4) lead indicating for clubs; or it is take-out of the original major open.

15.5 Bergen

We already know that a opposite a major open, say $1\spadesuit$, the responses of $2\spadesuit$ and $3\spadesuit$ both show a fit and 6-10 and 11-12 points respectively. On the other hand there is no mention of how good the fit is; whether it is three or four carded support. Bergen⁸ is a convention that enables just this information to be obtained.

Bergen works as follows. Let the open be 1 of a major, there are four special re- (1) sponses relating to strength 6-10 or 11-12, and, support of three cards or four: a

⁷[Drury : weak response is repeated suit / $2\diamondsuit$]

⁸[Bergen]

simple support response will show 6-10 points and exactly 3 carded support; a response of **2NT** shows 11-12 points and exactly 3 carded support; a response of **3♣** shows 6-10 points and exactly 4 carded support; a response of **3♦** shows 11-12 points and exactly 4 carded support. Thus a response at the 2-level shows 3 carded support, a response at the 3-level shows 4 carded support. There are further responses that fit in: a jump support response of 3 of the major will be pre-emptive showing less than 6 points and exactly 4 carded support; a response of game will as usual be pre-emptive and be five cards in length. Again we respect that a bid at the 3-level promises 4 carded support, whereas the bid at the 4 level shows 5 carded support. Note when holding 5 carded support and at least 11 points, responder should as usual change suit first.

- (2) The continuations after a Bergen bid are as usual: after **2NT** and **3♦** where responder has shown 11-12 points, opener can sign-off in 3 or 4 of the major, or else make a control-bid to look for slam; after simple support opener can invite for game in the usual way, whereas after a **3♣** response which also shows 6-10 points, opener invites with **3♦**.

Playing Bergen we are no longer able to jump-shift in the minors. This is no big deal since such hands do not come along as often. On the other hand playing Bergen as an extra to 2-over-1 and the forcing no-trump, section 15.3, allows us to regain these semantics. When we want to jump-shift in a minor we need only bid 2 of the

- (3) minor, since this is now game forcing. Further, having the forcing no-trump available allows us to open up the direct **2NT** response away from Bergen and replace it with the balanced splinter; thus when holding 3 carded support and 11-12 points instead we would respond **1NT**, to which we would bid 3 of the major on our next bid.

Opposite third seat major opens, if the opens are always sound then there is no reason to not play Bergen, but if the open could be sub-open, then Bergen is replaced by Drury see section 15.4.

- (4) If there is a second seat intervention of either a simple suit at the one level or a double, where the fog of competitive bidding slowly descends, Bergen is a help to distinguish the length of the fit, a parameter that grows in importance when our

vision becomes clouded. In all other cases Bergen is off.

16 Structures after 1NT opens

16.1 Smolen

- (1) Consider the open were 1NT and responder holds 5-4 in the majors. We saw in section 5.6 how to deal with such a situation, responder begins with a Stayman 2♣. The only problem is when opener answers with 2♦ denying any four carded major. Smolen¹ modifies continuation of the bidding for when responder is strong enough to game force. In the original we said that responder should bid his 5 carded major at the 3-level; here with Smolen we say that responder should bid his four carded suit at the 3-level. Now, if opener has a fit for the five carded major he can bid the game. The only difference is that the contract becomes right-sided, the stronger 1NT hand will be declarer.
- (2) Smolen can also be applied to any situation whereby: a no-trump open (or rebid where the open were a strong 2♣/2♦); responder has 5-4 in the majors; and responder has enough strength for game. Thus after 2NT-3♣-3♦, if playing Smolen responder will bid 3♥ to show 5-4 spades hearts, whereas 3♠ will show 5-4 hearts spades.

16.2 Baron

This is a further convention that applies after a 1NT open and revolves around the meaning of the 2♠ response. In many systems this response is considered a transfer to 3♣, whereas 2NT would retain its normal invitational meaning. But there is an obvious inefficiency in using a bid two ranks lower to make a transfer. Baron exploits this.

- (1) Playing Baron, a 2♠ response is now a transfer for 2NT; whereas 2NT now becomes the transfer for 3♣. The interest of Baron lies only with the continuation from a 2♠ response. In answering, opener bids 2NT with a minimum hand, whereas with a maximum instead of answering directly 3NT, answers with his lowest ranking 4 carded suit. So far the advantages of Baron are not so clear, for whenever

¹[Smolen]

responder has a hand he would normally have bid **2NT** he would now respond with **2♠**. But the key to Baron is that the **2♠** bid is *forcing*, whereas normally **2NT** can be passed. Thus responder is not obliged to bid **2♠** just with hands looking for game, but also hands whereby there may be a slam if opener is maximum, and no slam otherwise. If responder only wanted to look for game, after a **2NT** answer (2) by opener he passes, (which relates to the usual **1NT-2NT**-pass sequence); after a suit bid he bids **3NT**, (thus clearly Baron loses us nothing). But if responder were (3) looking for a slam, after hearing **2NT**, he can now name his 4 card suits up the line, opener now realising that responder is indeed looking for a slam will support with a fit otherwise nominate his own suit; and had opener come back with a suit, then the same procedure of bidding 4 carded suits up the line looking for a fit is followed. If responder only holds 4 carded majors then there is no need to use Baron, instead he uses normal Stayman. But if responder holds at least one 4 carded minor, with perhaps a side 4 carded major, then he uses Baron. Thus the advantage of Baron is to uncover slams based on 4-4 minor suit fits.

Hands correspond to the table on the following page.

- 1a:** With 15 points and a balanced hand, opener begins with **1NT**. Responder holds 8 points and no 4 card major, so is keen on looking for a no-trump game. Instead of inviting with **2NT**, now playing Baron responder comes back with **2♠**; which means for opener exactly the same thing. Opener though is minimum and so answers **2NT**, to which responder passes. Note that without playing th Baron the bidding would have been **1NT-2NT**, so there is no final difference.
- 1b:** After the **1NT** open, with 14 points and a singleton there is reason for responder to believe that if a fit were found then a slam is a possibility. Responder Barons with **2♠**; opener answers **2NT**, minimum. Even so, if a fit is found responder is looking at a 16 pointed hand, and so bids his 4 carded suits up the line, **3♦**. Opener compies and bids **3NT**, denying a diamond fit and a 4 carded major. Now that all the air has gone from responder's slam balloon, responder pass deflatedly. Again, without Baron the bidding would have been: **1NT-2♣-2♦-3NT**.

Responder	a	b
Opener	♠ K Q 9 ♥ K 2 ♦ 10 8 4 3 ♣ 9 8 7 3	♠ A K Q 9 ♥ K 9 3 2 ♦ Q 10 4 3 ♣ 3
1 ♠ J 8 ♥ A Q J ♦ K 9 7 ♣ A 10 5 4 2	1NT – 2♠ 2NT –	1NT – 2♠ 2NT – 3♦ 3NT –
2 ♠ J 10 8 ♥ A Q J ♦ K Q 9 7 ♣ A 10 4	1NT – 2♠ 3♦ – 3NT	1NT – 2♠ 3♦ – 3♥ 3NT – 4♦ 4♥ – 4NT 5♣ – 6♦

2a: With 17 points and a balanced hand opener begins with 1NT. Responder Barons with 2♠, and now with a maximum opener bids his 4 carded suits up the line, 3♦. Responder doesn't really care for the suit, he's just happy to hear a positive reply, and so bids 3NT. Again, without baron the same contract is reached via: 1NT-2NT-3NT.

2b: After the 1NT open and Baron 2♠ response, 3♦ answer, responder now knows that there is a fit. Being in no need of rushing responder now shows his 4 card hearts suit. Opener knows what responder is doing, for had he held 4 hearts and wanted just game, he would have responded Stayman. not Baron. So opener bids 3NT, denying both heart support and 4 cards in spades. Re-

sponder then bids $4\Diamond$, saying to opener that diamonds are fitted, lets go slam searching. $4\heartsuit$ is then a control-bid, 4NT from responder who realises that it is best he takes control, for his solid spades might come in handy in judging the final contract, something which he could never otherwise show to opener. Opener replies $5\clubsuit$, 3 keys from 5. Missing a key, responder signs off in $6\Diamond$. Without playing Baron the bidding would have been: $1\text{NT}-2\clubsuit-2\Diamond-3\text{NT}$, a missed slam.

16.3 Rubensohl

When the open is 1NT responder is in the privileged position to know a great deal about partner's hand: 15-17 points, balanced distribution and no 5 carded major. Thus a structure of responses is born including the conventions of Stayman and transfers. Consider that the opposition intervene with an overcall, thus not only does it take away both of these conventions but it also takes away no-trumps as a safe haven, for the overcalled suit now becomes a potential problem.

The original convention for this situation was Lebensohl, but Rubensohl² can do all that Lebensohl can and more. We will make mention of Lebensohl at the section's end, but first we detail Rubensohl. Rubensohl is built on the transfer principle, and is sometimes called transfer Lebensohl.

In the following we assume that the open is 1NT and the overcall is a natural $2\heartsuit$ (1) bid. Essentially all suit bids at the 2-level are natural and to play. Thus $2\spadesuit$ shows 5 spades and the same kind of hand that would have transferred into spades and passed had there been no overcall. Thus this action is weak.

The overcall takes away bidding space, even more so if the player in fourth seat (2) decides to support his partner and this is something that needs to be taken into account by responder. The response of 3NT is natural and thus guarantees a stop in the overcalled suit. The responses of 2NT , $3\clubsuit$, $3\Diamond$ and $3\heartsuit$ are *all* transfers showing 5 cards in the suit directly above. There are three cases to consider: *i*: the

²[Rubensohl / Lebensohl]

transferred suit is a major; *ii*: the transferred suit is a minor; *iii*: the transferred suit is their suit. We will assume that the fourth player passes.

- (3) In the first case after 1NT open and 2♥ overcall, we are only considering the 3♥ response. This shows a 5 carded spade suit an game values. We will see later action that responder can do when inviting. Thus, had there been no overcall the bidding would have gone 1NT-2♥-2♠-3NT, whereby opener will pass or correct. Similarly, opener can bid 4♠ with a fit, or else 3NT, but for this latter action he would require a heart stop. Thus without a fit nor a stop in the overcalled suit, opener competes the transfer, 3♠. Assuming that opener denies both a fit and a stop, responder can continue by bidding 3NT if he holds a stop; otherwise without a stop then responder can either pass and play in a part-score, elect to play in a 5-2 major fit game, or with a second suit he could attempt to look for that game, which includes minor games. Thus if responder now bids 4♣ or 4♦ this offers opener the possibility to play in 5♣ or 5♦ if he holds a 4 card fit; to which opener will either pass or bid the minor game.
- (5) In the second case responder transfers into a minor. Naturally enough, had responder held a stop in the overcalled suit then 3NT would still be the desired destination. Thus by inference transferring into a minor *denies* a stop. Opener is obliged to complete the transfer. This responder may pass if this is only where he wanted to play in the first place, but if responder bids on then he is forcing to game. If responder has a second suit, (need only be a four carded suit), then he shows it by bidding it. Say the bidding went 1NT-(2♥)-2NT-3♣-3♠ then responder is showing a hand that contains at least 5 clubs, 4 spades, game points but no heart stop. Opener can play in 4♠ with a fit, else 3NT with the stop, or else settle for 5♣. If responder does not hold a second suit then he rebids 3NT. Opener will pass when he holds the stop, for responder does not have a stop otherwise he would not have transferred at the outset; otherwise without the stop opener would revert back to responder's minor suit.
- (6) In the third case responder transfers into the overcalled suit, in other words after 1NT-(2♥) he now bids 3♦. Thus we have a *transfer cue-bid* which is used to replace Stayman. If the overcall showed a natural minor suit then the responses are the same Stayman responses as normal; if the overcall showed a natural major suit,

then responder is looking for a 4-4 fit in the other major. Thus in our running example responder promises 4 cards in the unbid major, here spades. As with the first case of the transfer to the major, the transfer cue-bid promises game values. The subsequent bidding thus follows the same logic. With a fit, opener bids game directly, otherwise he bids **3NT** when holding a stop, otherwise when holding neither a fit nor a stop, completes the transfer, $3\heartsuit$. If opener completes the transfer then responder can now bid **3NT** when holding the stop. Without the stop, responder could offer a 4 card minor as a possible game contract with a $4\clubsuit$ or $4\diamondsuit$ bid, (note that this cannot be a 5 carded minor, otherwise responder would have first transferred to the minor). Failing that responder might well consider $3\spadesuit$ as the best contract and thus sign off there.

One advantage of Rubensohl is that even if the fourth player enters the auction, (7) normally in supporting the overcall, at least opener knows the intention and shape of responder's hand and so can take appropriate supporting action as necessary. In this situation a double by opener would be for penalties.

One final response has not yet been mentioned and that is the $3\spadesuit$ bid, which also (8) takes care of one particular case so far not covered: when responder holds a game going hand without a stop and without a long suit to transfer into. Thus $3\spadesuit$ takes the role of the strong denial bid.

Considering the overcall takes up some bidding space some accuracy is lost. Thus we sacrifice the invitational bids. Either responder can assume the role of the invite and just plough on into game regardless or else he can take other action. Traditionally a double would be for penalties but it could also be harnessed in a similar way as the sputnik double for suit opens and suit overcalls. Thus we propose to play a direct (9) double as sputnik: showing a shortage in the overcalled suit and invitational points. Opener may pass the double when holding some length, or when game is not there for he is minimum. When he is maximum he may decide to pull the double and play for **3NT**. Thus similar to sputnik doubles, when responder is long in the overcalled (1) suit he passes, waiting for opener to reopen with a double. Opener will reopen with a double when he is short in the opposition's suit, when he is long he knows that responder must be short, and since responder didn't double then he cannot have

- (2) even invitational points. Thus opener can pass. Assuming opener reopens with a double, then responder has either passed for one of two reasons. The first reason is that he is long in their suit, and wanted to penalise them, in which case he now pass the reopened double converting it into a penalty double. The other reason responder passed is that he does not have invitational points. Now responder sees that opener has reopened with a double indicating shortage in their suit, so it looks as if they will make their contract. Thus responder pulls the double out by bidding his longest suit, indicating his weakness and dislike of leaving them in doubled. His longest suit may only be four cards in length.

As mentioned at the section beginning Lebensohl³ was the original convention to solve this situation, and being played by many players it is worth a mention. Bidding directly promises a stopper in their suit and 5 cards in the named suit. If the suit named is their suit, then this replaces Stayman, in other words promises 4 cards in the other major. Thus after a 1NT open and 2♥ overcall, 3♠ shows 5 spades, strong hand and a heart stop; 3♥ shows 4 spades, strong hand and heart stop. Without the stop, responder relays with 2NT, opener being obliged to bid 3♣. Then responder bids as above, but this action denies the stop.

Clearly everything that one can show in Lebensohl can be shown with Rubensohl, but Rubensohl has two advantages: *i*: it shows more hand shapes, such as the 5-4 minor-major combinations; *ii*: it copes better with further interference, since opener knows the suit and length of responder without the need to go through a relay. Thus even if the fourth player speaks opener knows better what to do.

16.4 Stayman with 3 Responses

After an opening of 1NT, the response of 2♣ is Stayman. In section 5.1 we saw that there are four responses that opener can give. Here we drop the 2NT response, hence we now have Stayman with 3 responses.⁴ There are two advantages: we gain more bidding space; and we can now use Stayman when holding weak hands. The main disadvantage is that in some cases we need an extra step to show certain hand

³[Rubensohl / **Lebensohl**]

⁴[**Stayman** : 3 / 4 / Puppet responses]

shapes.

First let us give opener's answers to the $2\clubsuit$ Stayman enquiry: $2\diamondsuit$ denies 4 cards (1) in both majors; $2\heartsuit$ shows 4 cards in hearts; and $2\spadesuit$ shows 4 cards in spades and denies 4 cards in hearts. Note therefore that when holding both majors to 4 cards opener now responds $2\heartsuit$. Hence $2\heartsuit$ does not deny holding 4 spades.

After a $2\diamondsuit$ and $2\spadesuit$ response responder carries on bidding in the usual way. This (2) is true too for when the response was $2\heartsuit$ and responder has a heart fit: he bids $3\heartsuit$ to invite game, $4\heartsuit$ is game and $3\spadesuit$ would show a slam going hand and a heart fit. Thus we assume responder does not have the hearts. If responder also does not hold 4 spades, then this can only be because he holds a slam going hand with a 5 carded minor; in this case responder nows bids his minor at the 3-level as usual. Thus all that remains is that responder does indeed hold 4 spades, and in this case responder simply bids $2\spadesuit$. Note that this bid is forcing. opener will carry on as one would expect: 2NT will show a minimum hand without a fit; 3NT would show a maximum hand without a fit; $3\spadesuit$ would show a minimum hand with fit; and $4\spadesuit$ would show a maximum hand and a fit.

Since every response to $2\clubsuit$ is strictly less than 2NT , this means that responder can (3) always continue the bidding with 2NT . As usual such a bid just shows 8-9 points and invites 3NT , thus denying any interest in the majors, even if the Stayman response was $2\heartsuit$. The effect of this is that by playing Stayman with 3 responses, the direct 2NT response to a 1NT open becomes free. We can use it to play a more flexible way of transferring to the minors; responder can transfer to a minor not only as a weak option, but now also as at least invitational in strength. Hence, after a 1NT open, $2\spadesuit$ would be a transfer to clubs:⁵ opener will bid $3\clubsuit$ when minimum, but when he is maximum then he instead bids 2NT ; responder continues with a pass or correct bid when there is no game on, otherwise will bid something else. Similarly when responder holds diamonds instead of clubs: after 1NT responder transfers to diamonds with 2NT ; opener will bid $3\diamondsuit$ when minimum and $3\clubsuit$ when maximum; again when there is no game possible, responder will pass or correct, otherwise will bid something else.

⁵[1NT - $2\spadesuit$: tranfer to either minor / **transfer to clubs** / Baron]

- (4) Finally, the absence of a 2NT response to a 2♣ Stayman enquiry may also allow responder to use Stayman when holding a very weak hand and 5-4 in the majors. In such cases, if opener's answer is 2♥ or 2♠ responder just passes; if the answer is 2♦ then responder may pass if the hand is appropriate (say a three-suited hand of majors and diamonds) or else bids his 5 carded major at the 2-level. Note that this latter action, which would normally show 8-9 points, can now be made with 0+ points, thus we need to further modify the bidding to include the hands with at least inviting points.
- (5) Stayman with 3 responses can also be played when there is a 2NT open (or as a rebid via a strong 2 open). Thus after 2NT-3♣ opener responds in the following way: 3♦ no 4 carded major; 3♥ shows 4 hearts; and 3♠ shows 4 spades and denies 4 hearts. Again responder carries on as usual except when he has Staymaned to find a spade fit and the response was 3♥ then he should now bid 3♠. Opener will continue as usual.

16.5 Puppet Stayman

Puppet Stayman⁶ is a modification to Stayman used to find a five carded major in opener's hand. Note that the convention is valid in all the cases when Stayman is used, whether it be at the 1-level or 2-level.⁷ We will assume that the open were

- (1) 1NT. As with normal Stayman, puppet Stayman is built around the 2♣ response and also requires at least game-invitational points. Puppet Stayman uses the 2♣ bid to ask opener first whether he has a 5 carded major, the responses are: 2♦ no 5 carded major; 2♥ shows a 5 carded heart suit; 2♠ shows a 5 carded spade suit.
- (2) If opener replies in a major, then either responder has a fit in which case bidding follows the usual route by bidding the major game, or else invites with three of the major; or else responder will switch attentions to no-trumps, for even if he holds a 4 carded major, there can be no fit, for otherwise opener would be holding a 5-4

⁶[Stayman : 3 / 4 / Puppet responses]

⁷[Stayman Puppet responses after : 1NT / 2NT]

major distribution, which is not considered balanced.

If opener replies with $2\heartsuit$, although he denies a 5 carded major, he may indeed hold (3) some 4 carded major. If responder is not interested to look for a 4-4 fit then he just bids **2NT** or **3NT** as usual. If he does hold at least one 4 carded major then (4) he bids the other major suit; opener will either agree the fit by bidding game when maximum, or just bid the major at the three level when minimum. Without a 4 carded major, opener will bid either **2NT** or **3NT**, again dependent on whether he is maximum or minimum.

16.6 Halmic

Consider that the open is **1NT** and that the player in second seat has a hand that is strong enough to double, where this is meant as a penalty double. The fewer points responder has, the more likely is that being left in **1NT** doubled will prove to be a costly investment. Hence we need some financial advice and Halmic⁸ is one of those stockbroking conventions.

Halmic needs two pieces of information from responder: whether he is happy or worried to leave partner in **1NT** doubled; and whether he has a single suited or two-suited hand. A two-suited hand means 4-4 or better, thus a single-suited hand could be as bad as the dreaded 4333, but most of the time one would expect it to be at least 5 cards in length.

If responder holds enough points to feel confident concerning the chances of **1NT** (1) then responder passes; if he is worried then he bids: if he has a single suited hand then he redoubles; if he has a two-suited hand and the two suits are touching then he bids the lower ranked suit, if the suits are non-touching then he also passes.

If the player in fourth seat bids over a bid that shows weakness from responder then we are off the hook. So let us assume that fourth player passes. We now consider

⁸[SOS XX / **Halmic** / XX-transfers]

what the continuations are in the three cases whether responder has bid, passed or redoubled.

- (2) If responder has bid a suit, then opener knows which his two suits responder has and can bid accordingly by passing or correcting.
- (3) If responder has passed, then opener must redouble. There were two reasons for responder in passing, but once opener redoubles responder has the chance to further bid and so describe his hand: if responder passed because he was happy to play in 1NT X, then he should be doubly happy to pass the redouble and leave opener to play in 1NT XX (which is game! watch carefully as the player in fourth seat starts to feel uneasy!); if responder passed because he has two non-touching suits, then he now bids the lower ranked. Opener will then pass or correct.
- (4) Finally, if responder initially redoubled to show a single suited hand, opener must bid 2♣. Essentially, responder will himself pass or correct. But sometimes it is better to play in the wrong contract undoubled rather than the correct contract doubled (two down doubled is equivalent to 6 down undoubled!). Thus even if responder does not have the clubs he passes if it is not doubled. If the bidding come back to him where 2♣ has been doubled, he can now redouble to say to opener “clubs was not my suit, bid now 2♦”; and so on until either we escape into an undoubled contract or else we are doubled in our suit.

Naturally enough, the weaker the no-trump range, the more likely is that the 1NT open will be doubled and hence the more useful is such a convention as Halmic. On the other hand, a 1NT overcall may be strong in points, but it is weak in position, since the player in third seat will double when holding 9+ points, see page 97. Thus Halmic should also be used when partner’s 1NT overcall has been penalty doubled.

- (5) Note that after a double in fourth seat, the structure of Halmic breaks down: responder’s pass is no longer forcing. Thus we can play pass to obviously mean we are happy to play in 1NT X; redouble shows a single suited hand, and bidding a suit shows the lower suits of a hand with at least two suits.

17 Slam Conventions

17.1 Roman Key Card Blackwood

Blackwood is the convention whereby a fit has been agreed then bid of **4NT** asks from partner the number of aces he holds. Roman key card Blackwood¹ is a variation whereby the king of trumps is considered as an ace. We now call the four aces and the trump king, keys. Thus instead of asking partner for his aces, **4NT** now asks partner for the number of keys. In the sequel we just use the name Blackwood.

The responses are as follows: **5♣**, 3 or 0 keys; **5♦**, 4 or 1 keys; **5♥**, 2 keys and without the trump queen; **5♠**, 2 keys and the trump queen.

Missing at least two keys, slam should be avoided, and thus the Blackwooder signs off at the 5 level. Note, that if the two missing keys were both aces then clearly slam has no chance; if the two missing keys are an ace and the trump king, the slam depends on whether the trump king can be successfully finessed, a 50% chance; and this in turn depends on there being no further trump honours missing, otherwise the slam is again a non-starter.

Missing one key entitles the slam to be bid. Holding all the keys opens the possibility of bidding a grand slam. Just as the trump king is vital in finding the small slam, the trump queen is vital in finding the grand. Thus how the initial Blackwooder continues depends on whether he knows the whereabouts of the trump queen. If the trump queen is missing, then again a grand slam is at best dependent on a successful finesse, thus it is best to settle for the small slam. If the trump queen is known to be held then a bid of **5NT** asks for the number of kings (note that the trump king is naturally excluded, as it has already been bid once). The responses are as follows: **6♣**, no further kings; **6♦**, 1 king; **6♥**, 2 kings; **6♠**, 3 kings. If it is unknown where the trump queen is, that is only after a **5♣** or **5♦** response, then by bidding the next available non-trump suit the Blackwooder asks about the trump queen. The responses are as follows: 6 of the agreed suit, denies the queen; all other bids show

¹[**Blackwood** : (30-41) / **Roman Key Card** / Kickback / Relay Kings]

the queen of trumps and by going up in single steps shows further the number of kings.

Note that for either partner, when holding an unannounced tenth trump, then this is considered equivalent to holding the trump queen. Since whenever the suit breaks 2-1 (a nice 78%) the queen will be captured by the ace and king, both of which are assumed to be held if the grand slam is being looked for. Even if the suit breaks 3-0, this is noticed after playing one round, and thus if the break is on the correct side then it can be finessed, (another 11%). Thus a tenth trump is in fact equivalent to holding 89% of the trump queen.

An alternative set of responses to search for the trump queen are as follows: the next bid denies the queen (thus if space permits, slam may be avoided); 6 of the trump suit shows the queen and no outside king; otherwise bid the outside kings up the line.

Blackwood is best avoided when holding a void, since you don't want to find that any of partner's answered keys sit opposite the void. On the other hand, it is reasonable to be answering when holding a void. In this case the responses of Blackwood can be extended: 6 of the voided suit (or directly 6 of the trump suit if the void is in a suit above the trump suit) promises 1 or 3 key cards; 5NT promises a void and 2 or 4 keys.

For when there has been competition over the 4NT bid, DOPI-ROPI, see page ??, still applies

Hands correspond to the table on the next page.

- 1a:** With 16 points and a 5-4 hand shape the open is in the longer suit, thus 1♠. Responder has a spade fit and with 14 points has enough for game, thus switches suit, 2♣. Opener rebids his second suit, 2♦, promising a range of 12-18 points. Responder jumps to the spade game, 4♠, thus showing opener he has 13-15 points. Opener's hand improves slightly, according to the bidding all his points are working well. Thus tries an investigative Blackwood, 4NT. Holding one key card, the spade ace, the answer is 5♦. Opener realising that two keys are missing signs off in 5♠.

Responder		
	a	b
	♠ A J x ♥ K x x x ♦ K x ♣ Q J x x	♠ A x x x x ♥ K Q x x ♦ x x ♣ A x
Opener		
1 ♠ K Q x x x ♥ J x ♦ A Q J x ♣ K x	1♠ – 2♣ 2♦ – 4♠ 4NT – 5♦ 5♠ –	1♠ – 2♣ 2♦ – 4♠ 4NT – 5♠ 6♠ –
2 ♠ K Q x ♥ A J x x ♦ A Q x ♣ K x x	1♣ – 1♥ 3NT – 4♦ 4NT – 5♥ 6♥ –	1♦ – 1♠ 2NT – 3♥ 4♥ – 4♠ 4NT – 5♣ 5♦ – 5♥ 7♥ –

1b: After the 1♠ open again responder is too strong to directly support, thus switches suit. Since a response of 2♥ promises 5 cards responder is obliged to lie in a minor. The club ace is enough to persuade him that 2♣ gets his vote. Opener continues with 2♦ and again responder jumps to game, 4♠. Again, opener attempts a Blackwood bid, 4NT. The response is 5♠, two keys and the queen of trumps. Although responder doesn't hold the trump queen, his fifth trump (which is unannounced for responder has so far only promised 3 card support) is enough. Opener, holding the trump queen therefore now knows that partner has 5 card support. All the same, one key card is missing, so the

small slam suffices, 6♠.

- 2a:** With a balanced hand and 19 points, lacking a 5 carded major, the open is in the better minor, 1♣. Responder comes back 1♥. Opener rebids 3NT, the balanced splinter (see page 191), promising the same as a 2NT rebid, (18-19 points, balanced hand), but further includes a fit. Responder knows that there is a combined total of 32-33 points so the slam shop is open. Thus responder makes his sales pitch with a control bid, to accept the slam proposition, 4♦. Opener holding the club king can see that there are not two direct club losers, so pushes on with Blackwood, 4NT. Responder holds one ace and the trump king so replies with 5♥, which further denies the trump queen. Opener counting a missing key card signs off in 6♥.
- 2b:** After the 1♣ open, responder comes back his longer major, 1♠. Now opener has no fit so just simply bids 2NT. Responder bids his second suit 3♥. For opener although this is forcing, it is only game forcing, and that is by virtue of his 2NT bid. For him the issue of slam is out of his hands. Holding a 4 card heart fit as well as a 3 card spade fit, opener bids the game in hearts, 4♥. Responder though continues, now a fit has been established and a known combined 31 count the hand creeps into the slam zone. An initial control bid of 4♠ allows opener to do the asking, which he does, 4NT. Responder holds two aces and the trump king so replies 5♣. Opener holds the remaining key cards. Opener can therefore count on five spade, one diamond and two club tricks. If responder holds the trump queen as well that makes 12 tricks; if he further holds the diamond king, then that'll be 13. Opener then asks for the diamond king with the next available non-trump suit bid, 5♦. Responder does indeed hold the trump queen, but no further king and so the response is 5♥. Opener is happy, for even without the diamond king he can visualise 13 tricks. He starts by counting five spades, four hearts, two clubs, and one diamond trick, making 12. But since he knows responder has at most 4 cards in the minors: if responder holds at least two diamonds then by ditching the two small diamonds from his hand on the long spades, allows him to ruff one diamond from responder as the 13th trick; if responder held less than two diamonds then opener reasons that he can chuck a club from hand on the long spades, and thus ruff the long club from responder, again for the 13th trick.

Thus opener can safely bid 7♥. Note that the 5-3 spade fit is inferior, since only 12 tricks can be made in spades.

17.2 Relay Control Bids

Relay control bids² are a more efficient way to show controls between two partners. As with normal control bidding, a fit needs to have been agreed. As an example consider that the bidding has so far gone: 1♥-2♣-2♦-3♥: the bid of 3♥ agrees hearts as trumps and shows a hand that has potential slam interest. In normal control bidding opener will show his first control, say it were in clubs 4♣. Responder knows that opener controls clubs and does not control spades, for opener would have said 3♠ otherwise. If responder also does not control spades then there can be no slam so responder signs off in game, 4♥. But say responder does indeed control spades, but does not control diamonds. Then here too, would responder bid 4♥. Thus a 4♥ bid now is consistent with responder having two hands that are completely opposite: that is he can have a hand without a spade control and with a diamond control; or he could have a hand with a spade control and without the diamond control. Thus control bidding can lead to inconsistencies with the bidding. Relay control bids solve this problem. Will assume that trumps are a major (thus we can crucially use the bid of 3NT as part of the system, since it cannot be natural) and that the bid of 3M has indicated a desire to start control-bidding.

If trumps are hearts, then the relay control bids following the 3♥ bid are as follows: 3♠ denies a spade control; 3NT shows a spade control and denies club control; 4♣ shows controls in spades and clubs and denies a diamond control; 4♦ shows controls in spades, clubs and diamonds.

If trumps were spades then the relay control bids after the 3♠ bid would be as follows: 3NT denies club control; 4♣ shows club control and denies diamond control; 4♦ shows club and diamond controls, and denies heart control; 4♥ shows controls in clubs, diamonds and hearts.

²[Control Bidding : standard / relay]

Thus bringing these together we have the following picture. The next *bid* up denies the control in the next *suit* up. Necesserily, any further control bid will must control the suit that has been denied by partner, and further it shows all controls upto and including the bid suit, and denies the control in the suit above. Note how **3NT** is being used as a bid but is not a suit.

All further cue-bids follow this pattern. As an example, consider the bidding went $1\heartsuit-2\clubsuit-2\diamond-3\heartsuit$: responder control bids **3NT**, showing spade control and denying club control. Opener without club control signs-off in $4\heartsuit$, otherwise with club control continues control bidding: $4\clubsuit$ would show a club control and deny diamonds; $4\diamond$ would show clubs and diamonds. In this way no inconsistency will appear. As an example let us return to the bidding that started the discussion: instead of bidding the original $4\clubsuit$ control bid, responder would now bid $3\spadesuit$, denying spade control. If opener also lacks a spade control he thus signs off in $4\heartsuit$, and if he does have the spade control he can bid on. Say opener has no club control then he bids **3NT**. Responder does have clubs and lacks diamonds so bids $4\clubsuit$. Thus opener knows all the information.

Relay control bidding may be extended to include the minor suits too, particularly if there is a way to agree a fit at the 3-level that is game-forcing and where **3NT** is no longer a desirable contract.

As a base **4NT** can be used as Blackwood, but it can also be used as part of relay control bidding. The controls shown with bids lower than **4NT** can be of either first or second round control, bidding above **4NT** would indicate first round controls exactly. Thus say the bidding went $1\heartsuit-2\clubsuit-2\diamond-3\heartsuit-4\clubsuit$: opener shows controls in spades and clubs and denies diamonds, then responder's bid of **4NT** would show the diamond control, then show first round controls in spades and deny first round control in clubs (hence since he already showed a club control, that must be a second round control).

17.3 The Quantative 4NT

It was already mentioned in section 7.1 that for a 4NT bid to mean some flavour (1) of Blackwood then it is usual that a trump fit has been agreed. Sometimes this is not the case and in such circumstances a bid of 4NT cannot be Blackwood. Instead it is quantative. As our base example let us take the sequence 1NT-4NT; no suit has been bid, thus this cannot be Blackwood. Questionner is saying that he has a hand that is worth exploring a slam depending on whether opener is minimum or maximum. Answerer will pass with a minimum but with a maximum he will bid as follows: 5 of a suit is bidding his 4 carded suits up the line; 6 of a suit shows a 5 carded suit. If questionner can agree with the suit given by answerer then he can raise appropriately; if he doesn't then he may bid his own 4 carded suits up the line; or else answerer can sign-off in no-trumps at the appropriate level.

17.4 Kickback Blackwood

Sometimes there is a problem with always having 4NT as Blackwood. Say the fit is in hearts and wanting to know whether partner has 3 aces/keys, asks with 4NT. The answer is a not so helpful 5♠, showing 2 aces/keys with the trump queen. Hence there is no slam and there is no way to play in 5♥. A solution to this is to play kickback Blackwood.³ Simply put whatever the trump suit is a bid of the next higher bid after four of the trump suit is our Blackwood question. Thus if spades is the fit then the question is 4NT, as usual; if hearts are the fit then the bid of 4♠ is Blackwood. Similarly for the minors, a diamond fit means that 4♥ is Blackwood; and finally a club fit brings in 4♦ as the Blackwood bid.

Let us say that the fit is hearts, then 4♠ is Blackwood. Assuming we play Roman key card Blackwood, then the responses are as follows: 4NT shows 3 or 0 key cards; 5♣ shows 4 or 1 key cards; 5♦ shows 2 keys and denies the trump queen; and finally 5♥ shows 2 keys and the trump queen.

Let us write this out a bit more mathematically. Let x be the trump suit, then the bid of $4x+1$ is kickback Blackwood. Let $4x+1$ be B , then the responses are as

³[Blackwood : (30-41) / Roman Key Card / Kickback / Relay Kings]

follows: $B+1$ shows 3 or 0 keys; $B+2$ shows 4 or 1 keys; $B+3$ shows 2 keys and no trump queen; finally $B+4$ shows 2 keys and the trump queen.

Note how the highest response is always 5 of the trump suit, ($B+4=4x+5=5x$), thus no response to a kickback Blackwood question pushes to an unnecessary slam: hence we have solved our original problem.

17.5 Relay King Responses

We have already seen that with Blackwood once we have asked for aces we may continue and ask for kings. The intention is that an appropriate answer will enable the grand slam to be bid. Often the number of kings is irrelevant, what is important is which king. In this section we will describe a relay convention⁴, but it requires the use of kickback Roman key card Blackwood, as given in section 17.4.

Being mathematical, let us say that x is the trump suit, then then the bid of $4x+1$ is kickback Blackwood. Let $4x+1=B$, then the Blackwood responses can be put into two pairs: $B+1/B+2$ say nothing of the trump queen; $B+3/B+4$ deny and show respectively the trump queen. Thus Blackwooder can ask for kings in two ways.

- $B+3=C$: “Partner, do you have the trump queen?”. The responses are as follows:
 - $C+1=5x$: no trump queen;
 - $C+2$: yes trump queen but no king of suit $x+1$, although some king (otherwise response would be $C+6$);
 - $C+3$: yes trump queen, king of suit $x+1$ but no king of suit $x+2$;
 - $C+4$: yes trump queen, kings of suits $x+1$ and $x+2$, but not of $x+3$;
 - $C+5$: yes trump queen, kings of suits $x+1$, $x+2$, and $x+3$;
 - $C+6=6x$: yes trump queen, no kings.

- $B+5=D$: “Partner, which kings do you have?”. The responses are as follows:

⁴[**Blackwood** : (30-41) / Roman Key Card / Kickback / **Relay Kings**]

- $D+1$: no king of suit $x+1$, although some king (otherwise response would be $D+4$);
- $D+2$: king of suit $x+1$, but no king of suit $x+2$;
- $D+3$: kings of suits $x+1$ and $x+2$, but not of $x+3$;
- $D+4=6x$: no kings;
- $7x$: kings of suits $x+1$, $x+2$, and $x+3$.

Note that we can now ask for the trump queen and still remain safely at the 5 level when she has not been found. Note also that the response of $6x$ in all cases shows no kings. Note that the bid of **NT**'s is harnessed within the structure. Note that the responses $C+1,4,5,6$ and $D+1,3$ and $7x$ all show Blackwooder total information, there is nothing further hidden in responder's hand. On the other hand the remaining responses $C+2,3$ and $D+1,2$ do not tell the complete picture for Blackwooder. Thus if Blackwooder needs to know more so that he can bid the grand slam he can ask by bidding the next higher bid. We have two cases:

- $C+2$ and $D+1$: Both of these responses denies the king of suit $x+1$, but at least one of the kings of suits $x+2$ and $x+3$. The next question by Blackwooder is $C+3$ and $D+2$ respectively. Let this question be E . Then the responses are as follows:
 - $E+1$: shows the king of suit $x+2$ only;
 - $E+2$: shows the king of suit $x+3$ only;
 - $7x$: shows both missing kings.
- $C+3$ and $D+2$: Both of these responses shows the king of suit $x+1$, but denies the king of $x+2$. The question is whether he holds the king of $x+3$ or not. Blackwooder can ask by bidding $C+4$ and $D+3$ respectively. The answers are simple:
 - $6x$: denies the missing king;
 - $7x$: shows the missing kings.

Hands correspond to the table on the following page.

Version from June 6, 2005

Responder	a	b
Opener	<p> ♠ A ♥ Q J x x x ♦ A Q J x x ♣ x x </p>	<p> ♠ ♥ ♦ ♣ </p>
<p>1</p> <p> ♠ x x ♥ A K x x x ♦ K x ♣ A x x x </p>	<p> 1♥ – 2♦ 2♥ – 3♥ 3♠ – 3NT 4♦ – 4♠ 4NT – 5♠ 5NT – 6♣ 6♥ – 7♥ </p>	
<p>2</p> <p> ♠ x x x ♥ A K x x x ♦ x ♣ A K x x </p>	<p> 1♥ – 2♦ 2♥ – 3♥ 3♠ – 3NT 4♦ – 4♠ 4NT – 5♠ 5NT – 6♣ 6♦ – 6♥ </p>	<p>–</p>

1a: With 14 points the open is a clear 1♥. Responder holds a fit and 14 points and so is too strong to support directly; holding 5 diamonds the correct response is 2♦. Note responder should not splinter with a singleton honour. Opener is weak for his open and so just rebids simply 2♥. Responder holding just a 5 loser hand can consider a slam and so bids 3♥: game-forcing initiating

a control bidding sequence. Playing relay control bids, $3\spadesuit$ denies the spade control. 3NT shows the spade control but denies club control. $4\diamondsuit$ shows both the club and diamond controls. Hence with all suits covered responder can ask for aces; using kickback Blackwood, and hearts being the trump suit the question is $4\spadesuit$. With 3 key cards the answer is 4NT . With all keys found and that responder holds the trump queen, all responder needs is to find the diamond king in partner's hand for the grand slam. Indeed opener has already showed the diamond control, but is it the ace or the king? Thus responder asks for the kings, $5\spadesuit$. The responses using relays are as follows: 5NT denies the king of spades but also shows that opener holds some king; $6\clubsuit$ is the relay asking partner to bid on; $6\heartsuit$ denies the club king but shows the diamond king. Hearing this responder pulls out the grand from the box.

2a: The initial bids are all the same. After hearing the response

1b:

2b:

17.6 Exclusion Blackwood

17.7 Splinters

Generally speaking we need at least 32 points to consider a slam. But there are other factors that help determine whether a slam is there. Clearly when two hands fit together nicely a slam can be made with far fewer points. Splinter⁵ bids exploit this. In other words, splinters are highly descriptive bids that enable partners to judge whether the hands mesh together well. Splinters can be bid from both sides of the table, either as a direct response or as a rebid. We will consider the response situation first then follow with the rebid case later.

Consider that we hold all 40 points between our two hands, then clearly we will make 7NT . Similarly, if between our hands we hold all 30 points of three suits, and one hand holds at most one card in the fourth suit, then we would expect to make

⁵[**Splinters** : **shortage** / inverted / balanced]

- a small slam. The original splinter bid uncovers exactly these situations. Consider the open is say, $1\heartsuit$. Responder has a heart fit and enough points to consider going directly to game, although with respect to strength, not to slam, thus 13-15 points. Further, responder's hand shape is such that he holds a singleton, or void, in one
- (1) of the side suits. By double-jumping, this is a splinter bid and shows exactly that information. Thus a response of $3\spadesuit$, $4\clubsuit$ or $4\diamondsuit$ are all splinter bids which promise a heart fit, 13-15 points and either a singleton or void, in the named suit. Thus responder's 13-15 points are divided among the other three suits, (note: a splinter is never made into a singleton honour). If opener has a hand where he too holds 15/16 points among the same three suits then he can see that the two hands mesh together well and that a slam can be made. In other words there are no *wasted values*, meaning honours sitting opposite shortages. If opener's hand does not mesh well then he signs off in game; otherwise he may control-bid, use Blackwood or even just bid the slam direct. Note, if responder holds 16+ points then he is already thinking of looking for a slam even if opener holds just 13 points, and so there is no need for a splinter bid.
 - (2) Playing splinters allows further inferences to be drawn when partner does *not* splinter. As a simple example, consider the sequence: $1\heartsuit$ - $2\diamondsuit$ - $2\heartsuit$ - $4\heartsuit$. Opener's $2\heartsuit$ rebid has promised nothing more by way of points or length that he hadn't already shown with his $1\heartsuit$ open, yet all the same responder jumps to game. Thus responder started with enough points to directly jump to game. The fact that he didn't splinter suggests that he doesn't hold a singleton or void. This is useful knowledge especially if opener is now strong enough to consider slam investigations, for any control bid responder makes can only be aces or kings.

Hands correspond to the table on the next page.

- 1a:** With 12 points and 5-4 hand shape the open is the 5 carded suit, $1\heartsuit$. Responder with 14 points has enough points to go directly to game, but slam considerations dictate that another bid be made. The singleton diamond is all that responder needs to splinter, $4\diamondsuit$. Opener can see that his weak hand isn't going to fit well with partner, since his diamonds are wasted values. Thus signs off in game, $4\heartsuit$.

Responder			
	a	b	c
	♠ A J x ♥ A x x x x ♦ x ♣ K Q x x	♠ x ♥ A x x x ♦ A x x x ♣ K Q x x	♠ A J ♥ A x x x ♦ A x x x ♣ Q x x
Opener			
1			
♠ x x ♥ K Q J x x ♦ K Q J x ♣ x x	1♥ – 4♦ 4♥ –	1♥ – 3♠ 3NT – 4♣ 4NT – 5♥	1♥ – 2♦ 2♥ – 4♥
2			
♠ K Q x x ♥ K Q J x x ♦ x x x ♣ A	1♥ – 4♦ 4NT – 5♠ 6♥ –	1♥ – 3♠ 4♥ –	1♥ – 2♦ 2♥ – 4♥ 4NT – 5♣ 5NT – 6♣ 6♥ –

1b: After the 1♥ open, again responder with 13 points is strong enough for game. Here, the singleton is in spades and thus the splinter is 3♠. Now opener wakes up, for his points, few as they are, are all well placed. He can calculate that responder holds 13-15 points between the three remaining non-splinter suits and thus his 12 give a combined 25-27 points, out of a maximum 30. Slam may be a long shot, but if the missing points are sitting right a slam may be there. First the control bidding, opener is keen to know that responder has something in clubs so he makes the waiting control bid of 3NT. Responder control bids the diamond honour, (thus ace in the eyes of opener), with 4♦. Now the Blackwood is brought out and a 4NT is fired out. The response of

5♥, two keys from 5, sinks opener's hopes of slam, for there are two missing keys. Slam is called off with a simple pass.

1c: After the 1♥ open, responder with 15 points and a fit is ready for game. With no splinter available, the response is a simple change of suit, thus 2♦. Opener although he has diamonds is able to bid 2♥ and show his weakness; the 2♦ response is autoforcing, so opener knows he'll get another chance to speak. Responder then jumps to 4♥. Opener is going nowhere so passes.

2a: With 15 points the open is a clear 1♥. Responder splinters with 4♦. Now opener is happy to see that he holds no diamond wastage, and thus can calculate there are 28-30 honour points between the remaining three suits. The smell of slam gets stronger. A simple use of Blackwood brings out the surprising response of 5♠, 2 keys and the queen of trumps, a card opener already has. Thus responder is indirectly promising the trump queen by saying that he holds a fifth, and thus partnership, tenth trump. With one ace missing the small slam is bid.

2b: After the 1♥ open and 3♠ splinter, opener signs off in 4♥, for outside of spades he calculates there are 23-25 points, thus one loser at least somewhere, and he hasn't even considered the likely diamond singleton in partner's hand.

2c: After the 1♥ open, 2♦ response, opener is not strong enough to reverse 2♠, thus rebids 2♥. Responder jumps directly to game, thus from opener's eyes, responder holds 13-15 points and a heart fit. Further, responder didn't splinter, thus he cannot be sitting there with a singleton or void. Opener's 2♥ rebid could have been made with as few as 11 points, instead he is rich with his 15 count, and the stiff ace brings the hand stronger yet. Slam is in the air. Opener's slam chat up line is the Blackwood 4NT. Responder reacts accordingly, 5♣, 3 out of 5 keys. Missing no keys, even on a first date, a grand slam may be there, thus opener buys the next drink with 5NT. The answer keeps opener's hopes under wraps, 6♣, no further kings. Opener convinces himself that size doesn't matter and signs off gallantly in the small slam, 6♥.

(3) We now consider splinters as being played as rebids. Consider the open were 1♦ and the response is 1♥. If opener has a heart fit and enough points to go for game,

(which is possible considering the fit allows the hand to be re-evaluated) then the natural bid would be 4♥. Playing splinters allows opener to be a lot more descriptive. Again all the splinter bids are double jumps, they all promise fit and game going points. A new suit, 3♠ and 4♣, are the usual splinter bids showing a hand that contains at most a singleton in the named suit, and finds slams that avoid wasted values. A rebid of the opened suit, 4♦, can be viewed as an *inverse splinter*,⁶ promising a good semi-solid 6 carded suit, (note that without a fit the rebid would have been 3♦), thus finds slams where the basis is on running this long suit as a side suit. 3NT can be considered as the *balanced splinter*,⁷ promising a balanced (5) hand 18-19 points, (note without the fit the natural bid with such a hand would have been 2NT), thus warns responder that there being no long side suit, and so if a slam is to be there it needs to be based on brute strength after all. In other words slam is only to be bid when either responder holds a long side suit, or else when he holds enough points to reach 32 points. Finally, 4♥ can be considered the *denial splinter*, (6) for it says that although the fit and the points for game are there, opener is unable to show any of the other splinter bids, thus typically he is holding a 5422 hand, or else if he has a singleton then it is an honour. Although similar to inverse splinter hands, the shape is not so inviting so naturally enough one would expect a little more strength to justify bidding it.

The normal splinter bid can be considered a special case, but the remaining three cases can be ranked in the following way: hands that fit the inverse splinter need fewer points to make slam, relative to the denial splinter (since basically the 6 card suit generates an extra trick, a luxury that a 5 carded suit can only compensate by way of extra points elsewhere), and hands that fit a denial splinter need fewer points than balanced splinter hands (for the same reasons, the lack of a 5 carded side suit needs compensating in extra values elsewhere).

Splinters can be played throughout the system; instead of jumping directly to game, (7) the player bids a new suit with a jump. Such sequences are not to be confused with control-bidding; a bid is a control when a fit has been previously agreed. Thus the standard splinter sequences such as 1♥-4♦ or 1♣-1♥-4♦ fit this pattern; so too do

⁶[**Splinters** : shortage / **inverted** / balanced]

⁷[**Splinters** : shortage / inverted / **balanced**]

such sequences as $1\heartsuit-1\spadesuit-2\clubsuit-2\diamond-4\diamond$, that is jumping in the fourth suit as a reply to the fourth suit force, (see page 137); or included within the third suit forcing convention such as $1\clubsuit-1\spadesuit-2\clubsuit-3\heartsuit$ (see page ??); or such a sequence as $1NT-2\heartsuit-2\spadesuit-4\diamond$ (see page ??).

Hands correspond to the table on the facing page.

- 1a:** With 18 points and a 1444 hand the open is $1\diamond$. Responder comes back $1\heartsuit$, delighting opener, for his hand can now be re-evaluated with extra points for the singleton. Thus the hand is worth game, and so instead of bidding $4\heartsuit$ directly the singleton spade is perfect for a splinter, $3\spadesuit$. Since opener is considering game with the knowledge of there only be 6 points opposite responder can therefore know that opener must hold something like 18 points in the three remaining suits. Adding his 9 points means that within these three suits there are at least 27 from the 30 points available. Thus slam is a possibility. So instead of signing off in game, responder control bids, $4\clubsuit$. Since opener has no void in spades, his only interest is whether the aces are there, thus wheels out the Blackwood $4NT$. One key $5\diamond$ from responder enables opener to sign off in the small slam, $6\heartsuit$.
- 1b:** After the $1\diamond$ open, now responder has 8 points and a heart suit, thus $1\heartsuit$ response. Again opener splinters with $3\spadesuit$. Now responder reasons that combined between the remaining three non-splintered suits there are at most 25 points from the 30. Thus a loser exists and most likely a spade too. Thus safely signs off in game, $4\heartsuit$.
- 1c:** After the $1\diamond$ open, responder holding 11 points responds simply with $1\heartsuit$. Opener splinters with $3\spadesuit$. Opposite this spade splinter responder's hand is worth the same had he not held the spade queen, for she is wasted. Thus responder's hand is exactly as if it were hand 1, and the bidding follows the same pattern.
- 2a:** With 17 points and two suits the open is the longer, $1\diamond$. Responder comes back $1\heartsuit$. Opener then inverse splinters with $4\diamond$, showing game going hand in hearts, plus a long semi-solid diamond suit. Responder can see very well that his diamond ace is a crucial card, slam is in the air. Without being able to

Responder	a	b	c
Opener	<p> ♠ 7 5 3 ♥ Q 10 8 3 ♦ A 10 3 ♣ K 7 5 </p>	<p> ♠ Q 5 3 ♥ Q 10 8 3 ♦ A 10 3 ♣ x 7 5 </p>	<p> ♠ Q 5 3 ♥ Q 10 8 3 ♦ A 10 3 ♣ K 7 5 </p>
<p>1</p> <p> ♠ 8 ♥ A K 9 6 ♦ K Q 6 2 ♣ A Q 6 2 </p>	<p> 1♦ – 1♥ 3♠ – 4♣ 4NT – 5♦ 6♥ – </p>	<p> 1♦ – 1♥ 3♠ – 4♥ </p>	<p> 1♦ – 1♥ 3♠ – 4♣ 4NT – 5♦ 6♥ – </p>
<p>2</p> <p> ♠ A 8 ♥ A K 9 6 ♦ K Q J 6 5 2 ♣ 6 </p>	<p> 1♦ – 1♥ 4♦ – 4NT 5♣ – 6♥ </p>	<p> 1♦ – 1♥ 4♦ – 4NT 5♣ – 6♥ </p>	<p> 1♦ – 1♥ 4♦ – 4NT 5♣ – 6♥ </p>
<p>3</p> <p> ♠ 10 9 8 ♥ A K 9 6 ♦ K Q J 6 ♣ A Q </p>	<p> 1♦ – 1♥ 3NT – 4♥ </p>	<p> 1♦ – 1♥ 3NT – 4♥ </p>	<p> 1♦ – 1♥ 3NT – 4♥ </p>
<p>4</p> <p> ♠ A 8 ♥ A K 9 6 ♦ K Q J 6 2 ♣ Q 6 </p>	<p> 1♦ – 1♥ 4♥ – </p>	<p> 1♦ – 1♥ 4♥ – </p>	<p> 1♦ – 1♥ 4♥ – 4NT 5♣ – 6♥ </p>

control bid the only action responder may take is to Blackwood himself, thus 4NT. Opener comes back 5♥, 3 keys. Responder is happy then to go for the slam, 6♥.

2b: After the 1♦ open, 1♥ response and 4♦ inverse splinter, responder reasons the same as the above, and the bidding follows the same lines.

2c: Again after the initial bidding, responder reasons as above, his real delight is knowing the value of holding the diamond ace. But once knowledge of there being a missing key is known there is no hope for a grand and so responder signs off in the small slam.

3a: With 19 points and balanced hand the open is 1♦. Responder comes back 1♥ and there being a fit opener puts back the prepared 2NT rebid and instead pulls out 3NT, the balanced splinter. Responder can reason that with no long side suit between either hand a slam is going to need the full 32 points minimum. With a combined maximum of 28, responder knows that this isn't going to be a slam hand. So game it is 4♥.

3b: Again, after the bidding of 1♦-1♥-3NT, responder has no slam hopes; 4♥.

3c: Again, after the 1♦ open and 1♥ response, opener splinters with 3NT. Again responder has no long suit of his own and with a combined 30 points the slam is going to be long shot. Thus signs off in the safe game contract, 4♥.

4a: With 19 points and a 5-4 hand shape the open is the 5 carded suit, 1♦. Responder comes back his hearts 1♥ and opener bids 4♥, the denial splinter. Thus for responder, opener cannot have a singleton small card, cannot have a long six carded diamond suit, nor a balanced hand; thus unless he holds a stiff honour he holds a 5422 hand. Although the diamond ace is looking good for responder, a five carded suit is only good for five tricks. To get to the magic twelve tricks responder is going to need more by way of points outside. In this case he doesn't have such points and so he passes, leaving the contract at game.

4b: Again after the 1♦-1♥-4♥ bidding responder reasons exactly as in the previous hand. Thus passes.

4c: After the $1\Diamond$ open and $1\Heart$ response, opener shows his hand with a $4\Heart$ rebid. Now responder is looking at a 11 count and the diamond ace is certainly going to fill a large gap in opener's hand. Thus with knowledge of there being around 30 points and a nice 5 tricks in diamonds for starters, slam is going to be the desired main course. With no control bid available in spades responder takes control and Blackwoods with $4NT$. Opener answers $5\clubsuit$, three keys and so responder signs off in slam, $6\Heart$.

17.8 Two-Suited Semi-Forcing Hands

Opening a two-suited hand of at least 5-5 in distribution, normally requires opener to make three bids so that responder knows his hand shape. When this distribution is also strong enough to be considered at least semi-forcing, 20-22 points, then without any special bidding, then opener has even less bidding space to play with. Thus the need for conventional bids.⁸

We assume that opener has 20-22 points and at worst a 5-5 distributed hand shape. Further, the two suits must be of good quality, that being with a count of at least 5 Italian controls (where an ace is worth 2, a king 1). Thus the open is $2\clubsuit$, semi-forcing, and responder makes the relay of $2\Diamond$. Then the six possible two-suited (1) combinations of opener are bid as follows: $3\clubsuit$ shows clubs and a major; $3\Diamond$ shows diamonds and hearts; $3\Heart$ shows hearts and spades; $3\spadesuit$ shows spades and diamonds; $3NT$ shows the minors. The rebid of $3\clubsuit$ is the only ambiguous two-suited bid. If responder wants to know which major opener has he asks with the bid of $3\Diamond$; opener will then bid his major.

Responder will either pass or correct if he feels that game is out of reach, or else bid (2) the appropriate game.

If responder wants to look for slam then he does this by bidding the next bid that (3) is not either of opener's suits, although that does include $3NT$. Such a bid is game forcing and requests opener to further describe his hand. If opener rebids either of (4)

⁸[Two-suited Semi-Forces]

his suits, then he is showing a sixth card in that suit. Otherwise he is strictly 5-5 and so must have within the remaining two suits a most a singleton, and so opener bids his singleton. Note that if by bidding the singleton the bidding is pushed beyond game of either suit, then opener shows this singleton by way of the no-trump bids 3NT and 4NT.

- (5) So far we have only considered any 5-5 or better distributed hands, but there is also interest in the 6-4 major hands. These can be bid in the following way: $2\clubsuit-2\diamond-4\clubsuit$ shows 6 hearts and 4 spades; $2\clubsuit-2\diamond-4\diamond$ shows 6 spades and 4 hearts.

Note that playing the above two-suited convention to the $2\clubsuit$ semi-forcing open, requires many modifications to the remainder of the system outlined in section 6.1. Firstly, since the meanings of the sequences $2\clubsuit-2\diamond-3\clubsuit/3\diamond$ have been redefined, we can no longer show a semi-forcing hand with a single suited minor hand. Such hands should either be downgraded to a one-open, otherwise upgraded to a game force, or alternatively to be treated as a balanced hand. Secondly, since the meanings of the sequences $2\clubsuit-2\diamond-3\heartsuit/3\spadesuit$ have been redefined, we can no longer be use them to separate the hands that are strong in points, from those that are based on playing tricks. For this we have the following solution: in both cases opener rebids his major $2\heartsuit/2\spadesuit$. Note that this should show at least 6 cards in the bid suit, with only 5 cards opener should consider the hand as balanced, whereby the use of puppet Stayman, see section 16.5 will bring the 5 carded major to light. If responder is interested, then bidding 2NT requests opener to describe his hand further: repeating his suit, $3\heartsuit/3\spadesuit$, opener would show a hand that is based on playing tricks; otherwise he

(6) would bid his first control. Thirdly, since the meaning of $2\clubsuit-2\diamond-3NT$ has been redefined, then we make the following restrictions to the bidding of balanced hands: $2\clubsuit-2\diamond-2NT$ is as usual, 22-23 points; $2\diamond-2\heartsuit/2\spadesuit-2NT$ is 24+ points.

(7)

18 Two Suited Overcalls

When holding two suits of at least 5 cards in length there is a good chance of finding a fit, approximately 80%. Further, the odds of finding a double fit are also increased, from 50% to even 100% if the opposition too have a double fit. Thus it is advantageous to have as weapons in our armoury the ability of showing such 5-5 hand shapes. Clearly the general situation most in need of sharpening is when the bidding is competitive. Since bidding is structured around finding major games, the main consideration is how to show 5-5 in the majors. Often though we are able to show other combinations of 5-5 holdings. In section 18.1 we look at the case when the opposition commence the bidding with one of a suit, and discuss the Michaels convention; section 18.2 considers the case of showing both majors after an opposition's 1NT open, through the Landy convention; section 18.3 looks at a counter-defence to two-suited overcalls; section 18.4 looks at how the Landik convention can help responder show both majors after the opposition intervene with 1NT; section 18.5 shows how crash can help set up a good sacrifice against a strong 2 open; section 18.6 also explores the role of sacrificing through use of the unusual no-trump; finally section 18.7 talks about showing two suits when the opposition have already opened and responded.

It should also be noted that showing a two suited hand has already appeared throughout the system: jump responses to overcalls, see page 74; the response structure to weak 2 opens, see page 114; and showing both majors after a 1NT open, see page 44.

18.1 Michaels after an Opening Bid

Consider that the opposition have opened with a suit bid. An overcall promises at (1) least a good 5 carded suit. When dealt two overcallable suits the aim is to make one bid that communicates just that. This is the principle of Michaels.¹ The convention is built around the use of the cue-bid, that being the direct overcall of the

¹[Two-Suited Overcalls : (Extended) Michaels / CRO / Ghestem]

opposition's opened suit. Michaels exploits the fact of giving priority to the majors; the bid that takes up the least space, the cue-bid, indicates 5 cards in any unbid major. Thus if the open were $1\Diamond$, the overcall of $2\Diamond$ would promise a 5-5 hand in the majors. If the open were a major, say $1\Heart$, then the Michaels cue-bid of $2\Heart$ would show 5 spades and an unspecified 5 carded minor.

The strength needed to make a two-suited overcall is considered similar to a normal overcall. Similar thoughts concerning the suit quality; holding two 5 carded suits, where one suit is composed of 5 small cards, then it is better to ignore this suit and concentrate on the good suit, thus a simple overcall in the good suit suffices. Good suits imply good trick taking potential, bad suits may be hard to establish and are therefore a potential source of losers.

- (2) Opposite a Michaels cue-bid, holding 3 card support to one of the known suits, responder can support, following the same thought processes as if the overcall were made directly in that suit. Thus, say the open were $1\Diamond$, the overcall $2\Diamond$, showing 5-5 in the majors, and responder holds a spade fit. Responder bids as if the overcall were $1\Spade$. Thus simple support, $2\Spade$, is weak, perhaps as few as 0 points, since the Michaels bid is certainly forcing. $3\Spade$ would be more promising, but still more defensive rather than inviting game. If responder is keen to invite game then he may himself cue-bid, $3\Diamond$. Overcaller will then bid $3\Heart$, or $4\Heart$ depending on whether he is weak or strong. Note that opener doesn't know that responder has the spade fit, so just bids the lower ranking of his two suits. Responder will pass or correct. Finally
- (3) a response of **3NT** is natural and wants to play there. Opposite a Michaels cue-bid where one suit is unknown, and responder does not have a fit with the known suit, then a bid of **2NT** asks overcaller to bid his other suit. Thus if the bidding went, $1\Heart$ open, $2\Heart$ overcall, pass, **2NT**, pass, $3\clubsuit$, then overcaller is showing a 5 card club suit alongside the already known 5 carded spade suit.
- (4) Michaels also incorporates the **2NT** overcall. This cannot be natural, for had overcaller truly held a hand that was bigger than a **1NT** overcall, he would double first, then bid no-trumps after the response. Thus it is used to show 5-5 in the two lower ranking suits. Responding is the same as for any two-suited overcall where both suits are known, as above.

Note that after a suit open, there are always three possible 5-5 combinations that overcaller may have: say the open were $1\heartsuit$, overcaller may have 5-5 in clubs and diamonds, clubs and spades and diamonds and spades. With any combination Michaels can be bid, although sometimes the second suit is left unknown. Extended Michaels² (5) includes $3\clubsuit$ as an extra bid but it *only* applies after a major open. Thus with three Michaels bids available, all three 5-5 combinations can be shown without ambiguity: $2NT$ retains it's usual meaning, 5-5 in the minors; the cue-bid promises the other major and clubs; and $3\clubsuit$ promises the other major and diamonds. Note, importantly, all three bids are forcing as no bid shows the suit that is bid.

There are variations to showing two suits as an overcall. Ghestem³ is in fact exactly extended Michaels, but also admits a $3\clubsuit$ overcall even after minor opens. Thus after any suit open, $2NT$ shows the two lower ranked suits; $3\clubsuit$ shows the two higher ranked suits; the cue-bid shows the two extreme suits.

Another variation is CRO⁴ (also known as CRASH) also uses the three bids: the cue-bid shows two suits of the same colour; $2NT$ shows two suits of the same rank; and $3\clubsuit$ shows the other two suits; thus colour, rank, other becomes CRO. (The “other” combination can also be viewed as being of the same shape, spades and diamonds having pointed tops, \spadesuit and \diamondsuit whereas clubs and hearts have rounded tops, \heartsuit and \clubsuit ; thus colour, rank, shape becomes CRASH). Section 18.5 also uses this convention.

In many systems a $1\clubsuit$ open is a short suit, thus many partnerships agree that a (6) cue-bid of $2\clubsuit$ after a $1\clubsuit$ open is natural.⁵ In such cases the Michaels cue-bid is then $2\diamondsuit$. On the other hand this removes the weak jump overcall in diamonds.

²[Two-Suited Overcalls : (Extended) Michaels / CRO / Ghestem]

³[Two-Suited Overcalls : (Extended) Michaels / CRO / **Ghestem**]

⁴[Two-Suited Overcalls : (Extended) Michaels / **CRO** / Ghestem]

⁵[Two-suited Overcalls ($1\clubsuit$)- $2\clubsuit$ is : two-suiter / **natural**]

18.2 Landy after a 1NT Open

The Michaels cue-bid is based on the principle that the cue-bid is best used as a way to show a two-suited hand in the majors. It takes up the least amount of space is thus efficient. On the other hand after the opposition have opened 1NT, there is no cue-bid available. A convention that uses the same philosophy as Michaels, in that it use the bid that takes the least amount of space and assign it the meaning of showing a two-suited hand in the majors. This is what Landy⁶ is whereby the overcall of 2♣ shows a hand that holds 5-4 in the majors. There is no need to be so restrictive by insisting on a 5-5 shape, for such hands occur less frequently than 5-4 hands; on the other hands bidding Landy 2♣ with 4-4 suits is asking for trouble, the opposition could be itching to bring out the double. Note that as a memory guide Landy is similar to Stayman.

- (1)
- (2) After a 2♣ Landy bid, responder answers as follows: a bid of 2♦ asks overcaller to bid his longer major suit. Thus responder would bid 2♦ when it is unclear which is the best suit to play in; a bid of 2♥ or 2♠ by responder shows a clear preference to play in this suit over the other. These bids need not guarantee a fit, responder may just be bidding to play in a 4-3 fit instead of floundering in a 5-1 fit.

Alongside the Landy 2♣ bid, all the other remaining overcalls, 2♦, 2♥ and 2♠ retain their meaning.

- (3) Landy is also played in the protective seat. In fact it is safer to do so, for after a 1NT open, responder's pass denies holding a 5 carded major, otherwise he would have transferred, and denies holding 8+ points, otherwise he would have at least made some invitational noise. Thus with the points more or less split between the two sides, and that responder is not so interested in looking for majors, the possibility of finding an undoubled major fit is quite good.

⁶[Defence to 1NT : natural / **Landy** / Capelletti / Crash / MeCMa]

18.3 Invisible Cue-Bids over Two-Suited Overcalls

When the opposition intervene opener's suit by a simple overcall, there are ways and means for responder to take appropriate action: whether it be supporting opener to be competitive, or showing game interest; whether it be to bid his own suit, either directly or through use of the sputnik double; or even to engineer a way to leave them in their contract doubled. Interestingly, responder still has the ability to show these actions even when the opposition intervene with a two-suited overcall, where both suits are known.

Consider that partner opens $1\heartsuit$ and the opposition chip in with a 2NT overcall, showing in most systems the lower two-ranked suits, clubs and diamonds. Thus the bids of $3\clubsuit$ and $3\diamondsuit$ are cue-bids, since the opposition have shown these suits even though they have not been explicitly bid. This is what is meant by invisible cue-bids. Since they are cue-bids they serve no purpose in being natural, and so a more useful meaning can be attached, the following make sense for all two-suited overcalls whereby the two suits are known.

We describe first the *lower-for-fit*⁷ treatment. The cue-bid of the lower ranking suit, (1) here $3\clubsuit$, shows support for opener and 10+ points, the emphasis being in looking for game. If responder held less than 10 points and support then to be competitive supports directly, $3\heartsuit$. The cue-bid of the higher ranking suit, $3\diamondsuit$, shows 10+ points and length in the unbid suit, here being spades. Had responder held spades but fewer points, then instead he would bid them directly, $3\spadesuit$. A double promises 10+ points and tells opener that responder is happy and ready to double both $3\clubsuit$ and $3\diamondsuit$, which ever contract the opposition chose to finish in. Opener can harness this information and use it to go looking for 3NT if he feels that is the correct place to be. Responses of 2NT (when possible) and 3NT are of course natural, showing stops in the two opposition suits and 11-12 and 13-15 points respectively. Finally, a pass from responder is his denial response. Normally this would mean that responder is weak and is keeping out of the auction, but assuming the bidding comes back round to him he may decide to take further action. Let us say that after the pass (2) the answer to the 2NT bid is $3\diamondsuit$, then two passes later the bidding again arrives

⁷[Invisible Cue-Bids : higher-for-higher /lower-for-fit]

at responder's feet. A double is for penalties, and implies that responder could only double diamonds, not clubs, for otherwise he would have directly doubled. On the other hand if responder now competes by supporting opener's suit, then clearly he was hoping that they would land in $3\clubsuit$ where he was waiting to hit them with the business double. Instead they landed in $3\diamondsuit$, so responder feels that being competitive to $3\heartsuit$ is a better proposition. Note again that opener can make use of the positive and negative inferences of responder's actions to judge whether to plump for 3NT .

There is a variation for the meanings attached to the invisible cue-bids. Let us refer to the given method above by the name *higher-for-fit*,⁸ reflecting that the higher cue-bid shows a strong hand with a fit. Instead we can assign the meaning that the higher ranked cue-bid is strong with respect to the higher ranking of "our" suits, hence we can refer to this variation by the name of "higher-for-higher".

18.4 Landik after a 1NT Overcall

Landik⁹ is a convention that conveniently fits in after the opposition have intervened with 1NT . Normally this would be showing a balanced hand, and a range falling somewhere between 15-18 points. Thus, for a point strength perspective with at least 15 points out there is little chance of there being a game. Thus attention is turned towards finding the best part-score.

- (1) As a base the assumption is that opener is sitting with a hand that is worth at least 12 points, thus responder when holding at least 9, calculates that a combined 21 count over their 19 points, puts them in the majority. Thus any hand holding at least 9 points the correct bid is double, the intention is to hit them hard when they have no fit. If they do scramble to a fit, then at least opener is aware of the point distribution and can also consider competing.

All other bids thus necessarily show less than 9 points, and are therefore competing

⁸[Invisible Cue-Bids : **higher-for-higher** /lower-for-fit]

⁹[Landik]

in nature. There are two cases to consider, whether the open were a minor or a major.

We consider the first case, that being a minor open followed by a 1NT overcall. (2) Had the overcall been a suit, then responder is well equipped to investigate a major fit, in other words, by use of the sputnik double. Here double is best being used for penalties, thus we need another bid that gives the same kind of information. As is often the case (Stayman, Landy, Drury ...) the club bid is sacrificed to cater for what has been lost. Thus 2♣ replaces the sputnik double, and promises a hand holding 4-4 in the majors. Opener can bid the major if he has a strong preference or else pass the buck back to responder with a 2♦ answer. Thus even with a 5-4 major holding responder would initially enquire with a 2♣ bid. The bids of 2♦, (3) 2♥, 2♠ and 3♣ are all transfer bids showing 5 cards in hearts, spades, clubs and diamonds respectively. Finally, 2NT has no natural meaning, (otherwise responder would have just doubled), thus is given the meaning, 5-5 in both minors, similar to the unusual no-trump.

If the open were a major then there is no need to have a bid that shows both majors. (4) Thus as above we have the bids 2♣, 2♦, 2♥ and 2♠ as transfer bids showing 5 cards (or 3 card fit) in diamonds, hearts, spades and clubs respectively.

18.5 Crash after a Strong 2 Open

Often the opening bids of 2♣ and/or 2♦ show strong hands of 20+ points. Further, opener has not yet been able to show in which suit the strength of his hand lies. In many cases after such an open the opposition finish in game or even slam. Thus, the emphasis for overcaller is to indicate to partner whether there is a tasty sacrifice to be found, as well as to push the opposition around a bit.

Crash,¹⁰ uses certain bids that otherwise would have no natural meaning or else are (1) not competitive enough. Thus after a 2♣ open, the three bids are in order of taking

¹⁰[Defence to a strong 2 open : Crash]

up space, double, $2\Diamond$ and $2NT$. $2\Diamond$ could be used as natural, but it doesn't take up any bidding space and only gives the opposition the ability to pass and double, thus giving them the ability to show more about their hands as they otherwise could. Crash is a mnemonic such that double indicates a 5-5 hand in two suits of the same colour; $2\Diamond$ shows a 5-5 hand in two suits of the same rank; and $2NT$ shows two suits in the same shape. See also section 6 for a similar use of such bids. After an artificial strong $2\Diamond$ open, the three bids are X , $2\heartsuit$ and $2NT$. We will discuss later the merits of accepting $2\heartsuit$ as a crash bid, rather than as natural.

Assuming the crash bid is passed through to the partner, he replies by bidding his 3 card suits up the line. If overcaller gets a chance he will pass or correct to his lower ranking suit. Once this is done responder knows which two suits overcaller had. Responder can also derive the two suits based on what suits opener comes back. Thus say the open were $2\clubsuit$ and the overcall were $2NT$, showing 5-5 in two suits of the same shape, and opener bids his suit hearts, then responder knows that assuming that overcaller does not too hold hearts, then his two suits must have been spades and diamonds. thus if the opposition continue to play in $4\heartsuit$, the partner to overcaller can consider the merits of sacrificing in $4\spadesuit$ or $5\clubsuit$.

Playing crash, other overcalls remain natural and thus only promise one long suit. Again, this could help partner decide whether to sacrifice or not.

After a $2\Diamond$ open, the question is whether to keep $2\heartsuit$ as a natural single suited overcall. If not then that too can be harnessed as a crash bid. If $2\heartsuit$ is kept as natural, then one has to make do with only the two bids, double and $2NT$. One method is to say that a double shows spades and another, whereas $2NT$ shows a 5-5 hand without spades. Responder acts accordingly, either by bidding up the line 3 card suits, or supporting spades if that suit is known.

- (2) The above logic can also be applied in the fourth seat. Thus say the opposition have opened either $2\clubsuit/2\Diamond$ and the response has as meaning an ace count, or some other feature. Then again, the player in fourth seat has the ability to double and bid $2NT$. Again the same meanings can be given as in the previous paragraph.

18.6 The Unusual No-Trump for Sacrifices

The unusual **NT**,¹¹ as mentioned above, can in general be applied to any unusual use of a no-trump bid, and normally promises a 5-5 distribution. If there is doubt to which suits then it is always the two lowest ranked.

For example say the bidding went $1\Diamond-1\spadesuit-4\spadesuit$, then an intervention of **4NT** would be unusual, promising 5-5 in the unbid suits hearts and clubs.

Say the bidding went $1\heartsuit-3\heartsuit-4\heartsuit$ then again an intervention now of **4NT** would be unusual, showing 5-5 in the two lower ranked suits, thus being the minors. Note that with such a hand overcaller could have bid a direct **2NT** over the $1\heartsuit$ open, thus his failure to do so is indicative that his hand is weak. After such a sequence, where only one suit is bid, we could allow the **4NT** bid to include all 5-5 combinations. Responder's action is to then bid his 3 carded suits up the line. Either overcaller passes, or if it is the case that responder has bid a suit that overcaller hasn't promised bids his lower ranking 5 carded suit. Responder then knows which two suits overcaller has and can pass or correct.

Similar considerations apply when the opposition have bid three suits. Say that the opposition bid game in the following way, $1\heartsuit-2\clubsuit-2\Diamond-4\heartsuit$, then an intervention now of **4NT** would be unusual showing 5-5. Clearly the hand shows 5 spades, as this is the unbid suit. It could be agreed that the other suit could well be either clubs or diamonds, in which case responder acts accordingly, wither bidding spades with the known fit, or else the lower ranked suit where holding at least 3 cards.

18.7 Two-Suited Overcalls in Fourth Seat

The consideration of section 8.5 was to show one suit by way of an overcall, but there are also ways and means to show two suits. There are two situations we need to contemplate: *i*: the response was a non-support, either being a new suit or else a response of **1NT**; *ii*: the response showed support. We deal with both cases separately.

¹¹[Unusual No-Trump]

In the situation *i*, there are two cases, whether the opposition have bid two suits or whether the response was 1NT. We start by considering the former, that the opposition have bid two suits. Thus it is clear that any two-suited overcall would necessarily promise the two remaining suits. There are in fact three ways to show a two-suited hand, and since the suits are always the same we can be more liberal in the assignment of length and strength.

There are two cases, depending on whether we can use the 1NT bid or not. Thus if the opposition open 1♦ and respond 1♠ then the three two-suited bids are double, 1NT and 2NT. Had the bidding been 1♥-2♣ then the three two-suited bids are double, 2♥ cue-bid and 2NT. In both cases the same meanings are given in the respective cases, thus the meanings of 1NT in the first case and the cue-bid in the second case have the same meaning. All these bids have normal overcalling

- (1) strength and are limited. When holding strong hands, (albeit unlikely given that the opposition have already opened and responded), the correct action is to double first.
- (2) In the first case let us take as example the following sequence from the opposition: 1♦-1♠ then an overcall of 2NT is unusual, indicating 5-5 in the unbid suits, hearts and clubs; double indicates 4-4 in hearts and clubs; and 1NT,¹² since it is available, is also unusual, indicating a hand of 5 hearts and 4 clubs, in other words, the higher ranked suit is of length at least 5. When holding 4 hearts and 5 clubs, we would double. Thus a double shows exactly 4 cards in the higher ranked suit, and at least
- (3) 4 in the lower. Thus there is no ambiguity on the length of the unbid major. One consequence of all this is that by bidding one of the suits alone, 2♣ or 2♥, denies interest in the other unbid suit.
- (4) In the second case, let us assume the open were 1♠ and the response 2♦, we no longer have the 1NT overcall available, so instead we use the cue-bid.¹³ Thus, a bid of 2NT promises 5-5 in the unbid suits; double promises the 4-4 hand shape; and now the cue-bid, 2♠, shows the hand 5 hearts and 4 clubs. Again, one consequence is that a bid of one of the unbid suits alone indicates a hand with only that one suit.

¹²[Fourth seat overcalls, 1NT is : natural / two-suiter]

¹³[Fourth seat overcalls, cue-bid of open is : natural / two-suiter]

Although we sometimes harness the cue-bid of opener's suit as unnatural, the cue-bid of responder's suit is always taken to be natural, showing a long single suited hand. If the opposition still buy the contract, then partner will now be more willing to lead dummy's suit (often a bridge sin) because he knows it is also his partner's suit. Similarly, when the open is in a short minor, then the cue-bid of opener's minor when it is not already being used as a two-suited bid (this unique case is after $1\Diamond-2\clubsuit$), is also considered as natural. A second interpretation for these cue-bids are in showing strong 5-5 hands,¹⁴ with the intention of either playing the hand, or else doubling them if they compete; in this case the **2NT** bid would be tightened to include only the defensive 5-5 hands. (5)

Now let us look at the situation when the response was **1NT**. Say that the bidding has gone $1\Diamond-1\text{NT}$, where responder has denied holding a 4 carded major. Here, sitting in the fourth seat, overcaller may feel that there is a need to show a hand that can compete in both majors. Thus the cue-bid is harnessed to show just that kind of hand. Similarly, after $(1\clubsuit)\text{-p-}(1\text{NT})\text{-}2\clubsuit$ shows both majors. (6)

Now we return to situation *ii*, that being when the response was a support bid. Again overcaller in fourth position has two bids that enable a multiple suited hand to be shown: doubling and bidding no-trumps. Doubling would say that overcaller has at least semi-support in all the remaining three suits; bidding no-trumps would be unusual, showing length in both the lower ranked suits, **2NT** would show at least 5-4 in shape whereas **3NT** would be at least 5-5. (7)

¹⁴[Fourth seat overcalls, cue-bid of response is : natural / two-suiter]

19 Defences to other Systems

19.1 The Weak No-Trump

The open of 1NT is one of the relatively few unambiguous bids, but there are still many ways in how this can be played. In America and most of Europe the tendency is for the bid to be around 15-17 points, (sometimes 16-18). In Britain the majority of people play it as 12-14, the weak no-trump.¹ Consider the following two balanced hands,

1	2
♠ K 2	♠ K 2
♥ A 9 8 4	♥ A K 8 4
♦ Q J 7 6	♦ Q J 7 6
♣ K 10 2	♣ K 10 2

On hand **1** with 13 points a weak no-trumper would happily open 1NT, whereas a strong no-trumper would open first with a suit, then rebid no-trumps. Holding hand **2** a strong no-trumper would open 1NT without hesitation, whereas now the weak no-trumper would open a suit and then rebid no-trumps later. *Thus a weak no-trumper would bid a strong no-trump the way a strong no-trumper would bid a weak no-trump, and vice versa.* Thus when the opposition don't interfere in the bidding there is not much to separate between playing the strong or weak no-trump. The simple advantage of a weak no-trump is that they appear more frequently, and if the strength is with the opposition then the bid takes up a whole level of the bidding, so has a pre-emptive value. These advantages can be taken further on board by playing a no-trump range of 10-12, the *mini* no-trump, but this shouldn't be played by the faint hearted!

So let us now consider how we would interfere over a weak no-trump. Normally a double against a no-trump would indicate the same strength as the open, thus over a weak no-trump many people would double with at least 13 points. This may turn out nasty as the responder could be sitting with many points behind you and is itching to get a penalty double (or even a *redouble*) on top of you. Further care should

¹[Defence against weak NT : same as for strong NT / other]

be taken when doubling in the protective seat as the responder maybe sitting there with as many as 10 points, as that is the maximum for a pass opposite a weak no-trump open. A safer approach would be to keep your doubles as the same strength as normal, i.e. about 16. The key of this is that if opener is now promising less points than a strong no-trump, there are more points remaining distributed among the other three players, thus it is now more likely that you do indeed hold at least 16.

Note, since it is more likely that a weak 1NT open will be doubled, it is essential to play such a convention as Halmic, see section 16.6.

19.2 Acol/ 4 Card Majors

The standard bidding system in America and most of Europe is 5 Card Majors, (5CM), and a strong no-trump. In Britain the favoured sytem is called Acol, which essentially means 4 card majors and a weak no-trump. In many ways this is a very natural system. Consider the following hands,

1	2
♠ A K J 7	♠ A K 9 7
♥ K 8 3	♥ 8 3
♦ A 10 4	♦ A 4
♣ Q J 4	♣ Q J 8 5 4

With hand 1 in 5CM one would open with 1♣ and rebid no-trumps with a jump to indicate the strength of 18-19 points, (the spade fit can still be found). In Acol the open would be 1♠ indicating that spades is the longest, or one of his longest, suits, thus implying a minimum holding of four. The rebid would also be a jump in no-trumps. With hand 2 the bidding sequences for both 5CM and Acol are the same; an open of 1♣, with rebid of 1♠ after hearing the response of 1♥ from partner. For the 5CM players, all they can deduce from the sequence is that opener has at least 3 clubs and 4 spades, whereas for the Acol players they know partner has at least 5 clubs and 4 spades, (with only 4 clubs and 4 spades the open would be 1♠).

Without competition in the bidding the same contract *should* be reached regardless of what system you play. The finer points come out once we consider the competitive auction. The advantage of the 5CM open of $1\spadesuit$ or $1\heartsuit$ is that by promising 5 partner can support with 3. In Acol the major open only promises 4 so partner needs 4 to support. To find the 5-3 major fit, requires opener to rebid. If this happens to be a second suit, then responder now knows that the first suit has at least 5 cards. The advantage of the four card major open is that it happens more frequently and so has a slightly pre-emptive quality to it.

19.3 The Precision Club

2

19.4 Multi $2\diamond$

3

²[Defence against strong $1\clubsuit$]

³[Defence against multi $2\diamond$]

20 Ambiguous Combinations of Conventions

Sometimes playing two conventions within a system a clash will appear. In this chapter we will keep track of such clashes.

Checkback Stayman 13.4 and Walsh 14.1: (1)

Take the following sequence: $1\clubsuit-1\diamond-2\text{NT}-3\clubsuit$. Playing Walsh makes it redundant to use the bid of $3\clubsuit$ as checkback Stayman; if responder has a four carded major then he must also have at least 11+ points and thus is safe to show his major suit at the 3-level.

Splinters 17.7 and Kickback Blackwood 17.4: (2)

Take as an example the following sequence: $1\heartsuit-2\diamond-4\clubsuit-4\heartsuit$. The bid of $4\clubsuit$ is a splinter agreeing diamonds. On the other hand the bid of $2\diamond$ was just a waiting bid of responder who after hearing $1\heartsuit$ open, has a heart fit and too strong to support directly. Hence if the splinter doesn't help he will want to sign off in $4\heartsuit$. On the other hand $4\heartsuit$ is kickback Blackwood with respect to the diamond fit. It is probably better to play such sequences as being a sign-off in the major game; hence instead we use the next non-ambiguous bid as kickback Blackwood, which in our example would be $4\spadesuit$.

Trial Bids 15.1 and 2-over-1 15.3: (3)

Take the following sequence: $1\heartsuit-1\spadesuit-2\spadesuit-3\heartsuit$. The bid of $2\spadesuit$ agrees a spade fit and shows a minimum opening hand. On one hand, $3\heartsuit$ can either be a trial bid inviting game; or else it shows a slam investigating hand in hearts but first showed spades on the way. It is probably best to use this sequence as a trial bid, since a 4-4 spade fit is superior to a 5-3 heart fit.

Fourth Suit Forcing 13.1 and Walsh 14.1: (4)

The sequence we have in mind is the following: $1\clubsuit-1\diamond-1\heartsuit-1\spadesuit$. We have already said that this sequence is not fourth suit forcing. Without Walsh this sequence shows responder as holding 4 spades and longer diamonds, but when combined with Walsh

it also shows at least 11 points.

Part III

Signalling

21 Basic Signalling

Declarer has the advantage of being able to see both his hand and dummy's so that he can find the best line of play. The object of signalling is that two defenders can in essence *see* each other's hand's. Without any form of signalling, when partner plays a card we can never ask ourselves the question "*why did partner play that card?*". The point of signalling is that we can now ask this question, and the point of a signalling agreement is that our answer matches partner's reason.

Let's start with a natural signal, one that is independent of the system we choose to play. Looking at one suit in isolation, consider we hold the following hearts ♡ K 8 6 5 3 and we lead the 5, from dummy comes the 2, partner now plays the 10 and declarer takes the trick with the Ace. Hence this is what we have so far seen:

♡ Q 7 2

♡ K 8 6 5 3

♡ 10

♡ A

Is there anything we can now deduce? To answer this, we need to ask ourselves, "*why did partner play the 10?*". If he held the 9, surely he would have played it instead of the 10, since it is natural to win a trick as cheaply as possible. Thus the play of the 10 *denies* holding the 9. As we cannot see the 9 anywhere else, we can place that card with declarer. Second question: "*why did declarer play the Ace?*". If he held the Jack then surely he would win the trick with that card. We can be sure of this as we hold the King. Thus we can place the Jack with partner. Apart from knowing where the 4 is we know everything about the distribution of the heart suit,

♡ Q 7 2

♡ K 8 6 5 3

♡ J 10 (4)

♡ A 9 (4)

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Essentially there are three kinds of signal. A **Suit Preference** signal tells partner which suit we prefer when a choice is available. An **Attitude** signal tells partner whether we like or dislike a particular suit. Finally, a **Count** signal tells partner whether we hold an odd or even number of cards in that suit. During the play of a hand there are many opportunities to signal. All can be viewed as being either suit preference, attitude, count, or sometimes a combination.

21.1 Opening Lead

This is one of the strongest signals the defence can make. When deciding which card to lead we need to consider two things: the suit, and from that suit, the card. The first consideration should be made primarily independent of the second.

Which *suit* is the best one to lead? Our first clue will be to analyse the bidding, and to do this we need *not* look at our hand. We should ask ourselves whether the contract has been confidently bid, or whether the opponents have pushed the bidding too far? Has partner bid? How is declarer going to make his contract? Which are his long suits? Which suits is he weak in? Will he be needing to use his trumps for ruffing? In principle we try not to help declarer, if the bidding was confident, then maybe this is time for an *aggressive* lead, one that can be quite risky. Otherwise, if they have pushed the boat out too far and overbid, make a *passive* lead, a lead that gives nothing extra to declarer. Leading their long suits is quite aggressive as we are helping declarer potentially establish them. Leading trumps is very passive, as normally it is the first thing declarer does anyway, and so in essence we have given nothing for free. We may even be taking out declarer's trumps for ruffing value. Leading unbid suits are considered passive leads. Now we should have an idea which suits to lead and which suits not to lead.

Now we have our choice of suit in mind, we can look at our hand. Is leading this suit still a good idea? Perhaps we hold length in one of their long suits, in which case prefer not to lead it. Maybe then lead trumps as declarer will possibly try to set the other suit up through ruffs, thus take out his ruffs. Maybe we hold a high honour in the suit of our choice, in which case by underleading it we help declarer since we are

possibly giving a free finesse. Naturally, underleading high honours are aggressive leads. Maybe we wanted to lead trumps, but if we hold length or a singleton, (in which case partner has the long trumps), prefer not to. Sometimes when we are long in trumps we lead our long suit, to try and force declarer to trump with his long hand. Declarer may then have problems in keeping control of trumps and thus the hand as a whole. Leading a singleton may gain us a trick since we have created a void for us to later trump. On the other hand it may be one of declarer's long suits. A similar consideration applies for doubletons, except now it is harder to create the void in our hand before declarer has taken out our trumps. What about our long suits, were they bid by the opposition? If against no-trumps we would prefer to lead one of our long suits.

Now having put the bidding and our hand into the equation we now have a suit that we want to lead. The next question is, which *card*? First some general rules: *Leading an honour card, is considered to be "top of a sequence". Against a suit contract this can be a two card sequence, but against no trumps this should be a three, or near three, card sequence.* Top of sequence leads are normally thought of as passive. Otherwise we are leading a small card, and which small card you play depends on the agreed convention of leads that you play. The **Natural**¹ way to play is *top of a doubleton* and *lowest of three*. With four or five cards in the suit we would lead our third and fifth respectively against a suit contract, whereas we would lead fourth against no-trumps. Hence, *against no-trump contracts, "lead the fourth highest of your longest and strongest suit"*. We can tighten this since the principle is in establishing our suit, if our suit is composed of 4 or more small cards, then the convention is to lead the second highest. Hence generally the opening lead against **NT**'s is both a count and a preference signal.

Above we said that against no-trumps we lead our 4th highest, whereas against suit contracts we play 3rd and 5th. Why this difference? Simply because of the way of thinking behind the lead, with the aim of giving the most precise information to partner in one card. Thinking about it, leading the smallest card is less ambiguous than not, since partner has a better chance of seeing that the card we played is in

¹[Signalling, opening lead vs suit : 3-5 / 4 / other]
[Signalling, opening lead vs NT : 3-5 / 4 / other]

fact our smallest, (between looking at his cards and dummy's). So we would want the smallest card to be the one that is lead more often. Thus against no -trumps, as it is more likely that we are leading from a 4 card rather than 5 card suit, we want the smallest card to be showing the fourth, whereas against suit contracts it is more likely to be from 3 not 4, we want it to be the third.

The lead of the fourth highest also allows us to do a bit of mental arithmetic, **The rule of 11**: *Take the pip value of partner's lead away from 11 and this number tells us how many cards higher than partner's are held in the remaining three hands.* Since we can see two of these hands, our own and dummy's, we know something about the hidden hand of declarer. Naturally, declarer is doing the same calculation against us. Further when partner leads second highest from 4 small cards, by using the rule of 11 could help us work this out.

Other styles² of opening leads include playing 3rd and 5th against no-trumps. Some people play *Strong 10's*, which against no-trumps tells partner that they hold something like two higher, *non-touching* honours. Against suit contracts, some people play the king, when holding a combination headed by the ace/king.

21.2 Following Partner's Lead

Consider partner has lead a card and now we must follow suit. The natural tendency is to try and win the trick if that is necessary, or if we cannot, since either partner is already holding the trick, or perhaps the opposition are, to play small. As ever, whenever we *just play small*, we may as well play *something*. Here there are two styles, depending on partnership agreement:

- We can play an *attitude*³ signal whereby we encourage to say we are happy for the suit to be continued and discourage otherwise. The simplest way is *High Encouraging*, *Low Discouraging*, **HELD**, or by reversing this is perhaps more

²[Signalling, opening lead vs suit : 3-5 / 4 / other]

[Signalling, opening lead vs NT : 3-5 / 4 / other]

³[Signalling, following Partner's lead : count / attitude / preference]

economic, (in that we do not encourage by playing a high card), but possibly more effort to take note, (since low cards tend not to stick out as strong as high cards do). Playing **Italian**, an odd card is encouraging and an even is discouraging. Note that we always give the *strongest* signal first and for this we need to know the *order of preference*: For HELD it is $9 > 8 > 7 \dots > 3 > 2$; reverse HELD, $2 > 3 > 4 > \dots > 8 > 9$; Italian $3 > 5 > 7 > 9 > 8 > 6 > 4 > 2$. Thus when holding the 5 and the 3, playing the 5 is discouraging.

- We can play a *count*⁴ signal: playing the smallest shows that we hold an odd number of cards in the hand, whereas playing a higher card shows an even number of cards in the hand.

21.3 Following Declarer's Lead

Consider now the opposition has led a suit and we are in the same situation as above; if we are trying to win it, then fine, otherwise if all we are doing is playing a small card, why not make it a signal. Here there is no point making an attitude signal, since it is one of declarer's suits. On the other hand giving a count signal can at times be beneficial, since we can work out how many cards of that suit remain hidden in declarer's hand. As with all rules, there are exceptions. The most common being when declarer plays trumps. Generally speaking, when declarer starts to play trumps he does so until neither defender holds any more. So the count is completed when declarer stops taking trumps out. Hence giving count is more likely to help declarer than either of the defence. Thus best is just to play small. But what would it mean if we didn't? In other words you follow with a high trump then a lower? This is called **Trump Petering** and here are two meanings we can associate:

- We can play it as a *suit preference*⁵ signal, the idea being when we hold three small trumps. We play the cards in the order so that the last card indicates which suit we hold some feature. For example: If our three trumps are the 2,5,8 and declarer starts to play his ace, king, queen, playing 8-5-2 finishing on the smallest indicates the lowest ranked suit, 5-2-8, indicates the highest ranked and 8-2-5 indicates the middle ranked of the remaining three suits. Playing

⁴[Signalling, following Partner's lead : count / attitude / preference]

⁵[Signalling, following Declarer's lead : count / attitude / preference]

up the line, 2-5-8, is not petering, and indicates no preference. Naturally we can play this as the *first* card is the card that contains the signal, thus 8-2-5 would now indicate the highest ranked suit.

- On the other hand we can play it is a *ruffing potential* signal; we say to partner that we have a third trump and if he gets in to lead before this last trump has been removed, then we have a good chance of using it to ruff, in other words we have an outside singleton or void.

21.4 Discarding

This is also one of the strongest signals that as a defender we can make, simply because it is when we have the largest choice of cards to play. Naturally the larger the choice the more accurate a message we can send. Here there are a whole universe of systems and agreements:

- **Count**,⁶ as above, simply indicates whether we hold an odd or even number of cards in the suit we are discarding in; by playing our lowest card indicates an odd number, whereas a larger card implies an even number.
- **Laventhal**⁷ is a suit preference signal, in that we discard from a suit we do not want, and by playing a high card we indicate the higher ranked suit of the remaining two, and a low card indicates the lower ranked suit.
- **Italian**⁸ is a suit preference signal, whereby an odd card is encouraging the actual suit, whereas an even card is discouraging or perhaps played as Lavelthal in flavour.
- **Revolving**⁹ is a suit preference signal, similar to Lavelthal. We discard from a suit we do not necessarily want. A low card indicates the suit directly ranked lower, and a high card the suit ranked directly higher. A middle card is neutral. If the suit indicated is the trump suit, then just *revolve* up, or down, to the next suit.

⁶[Signalling, first discard : count / Lavelthal / Italian / Revolving]

⁷[Signalling, first discard : count / **Lavelthal** / Italian / Revolving]

⁸[Signalling, first discard : count / Lavelthal / **Italian** / Revolving]

⁹[Signalling, first discard : count / Lavelthal / Italian / **Revolving**]

21.5 Playing Count Throughout

Reading through the above we can decide to pick and choose what we want to play, for particular situations. It should be noted that count can be playing in all situations. This offers the advantage that it is easy to play one system consistently throughout. On the other hand we may well ask what the big deal is about knowing the count of a suit. So let's look into count in a bit more detail. Count is a method of defence, designed to reveal the secrets of declarer's hand. The principle is simple and the results can be highly effective; **when holding an EVEN, (2,4,6) number of cards play HIGH-LOW, when holding an ODD number, (1,3,5) play LOW-HIGH** Here are some important facts that we must be aware of:

1. Each suit has 13 cards and can therefore be distributed among the four players in one of two ways, ODD-ODD-ODD-EVEN or EVEN-EVEN-EVEN-ODD.
2. Once we know how a suit is distributed among three players, we can deduce what the fourth player holds.
3. Once we know how three suits are distributed among the three players, we can deduce the fourth suit. In other words we know how the whole hand is distributed.

Thus when partner signals in a suit that he holds an odd number of cards and you hold an odd number and dummy holds an odd number, how many does declarer hold? An even number, and combine this with any knowledge gained from the bidding and declarer's hand could become an open book.

So when is a signal count? All primary signals are count, in other words when normally we would just play the lowest card, instead we give our count. All secondary signals are count, so that if partner's first card in a suit is trying to win the trick, but the next time the suit is played he just plays a small card, then that card is count. We can play this in one of two ways, *present* count says what we count is *now*, whereas *past* count is the count of what we held *originally*.¹⁰ In some sense present count is simpler, as we just need to play count with respect to the cards we

¹⁰[Count : present count / past count]
[Count : present count / past count]

are now holding.

Thus count appears everywhere: the opening lead, highest of a doubleton, lowest of three, is count; any subsequent lead is count; our discards are count; following suit is count. In fact the real question is, when do we *not* signal count? The point of signalling is to give information to partner. Note also that declarer has the right to understand our signals, so the hope is that any information we send is more important to partner than it is to declarer. If this is not the case, then we don't give count. Also, if in playing count means we play abnormally, (for instance, playing the king from a holding of K 3, to show a doubleton), then again, we don't play count. Finally, if the count is already known, in that we already know exactly what declarer has in his hand, then count is naturally no longer needed. Finally, when following in the trump suit count is not given.

Let's put all this together and consider some examples. In the first case let us assume that the opposition are playing in no trumps, and our long suit is clubs where we hold, ♣ K Q 10 6 3. Which card would you lead? Leading the king, being an honour card lead against no-trumps, promises it is top of a three card, or near, sequence. In this case had we held the jack then the three card sequence is completed and all is well, but instead although we do not have the jack we do have the 10. So the lead of the king is correct. This is what we then see,

♣ A 9 5

♣ K Q 10 6 3

♣ 8

♣ 7

Partner's 8 is count and so is indicative that he holds two cards, thus declarer holds three cards. We have won this last trick and so we are on lead again. Should we continue with the queen or not? This depends on who has the jack? But where is the jack? If declarer holds it then it would be wrong to continue the suit, whereas if partner holds it, then it would be correct. So what should we now do? Take a risk? No! The point is our lead promises partner that we hold the queen, jack, and not the ace. From his side of the table, if he held the jack then he can see that you

must hold both the queen and the 10. Thus he should play that under our king to *fill in our gap*. Hence partner's 8 denies holding the jack. So we know that declarer holds it and the count tells us that he holds also one other card. Hence we know in practical terms the exact layout of the suit,

$$\begin{array}{ccc}
 \clubsuit A 9 5 & & \\
 \clubsuit K Q 10 6 3 & & \clubsuit 8 x \\
 & & \clubsuit J 7 x
 \end{array}$$

Thus we should *not* play the queen, *nor* a small club but instead switch suit and wait for partner to gain the lead so he can return a club through declarer's jack to your queen-ten tenace. It is worth emphasising that the 8 is *not* an attitude signal, even though the consequence is that we will not continue the suit. Consider the following almost identical situation, which for clarity we will write in diamonds:

$$\begin{array}{ccc}
 \diamond A 9 5 & & \\
 \diamond K Q 10 6 & & \diamond 8 \\
 & & \diamond 7
 \end{array}$$

Again the lead is the king and partner gives the count with the 8. As above, partner holds an even number of cards and not the jack. The only difference with this example is that declarer is now counted as holding an even number of diamonds, either two or four. Thus we know that the layout of the diamond suit is one of the following, (where the (x x) is either at East or South):

$$\begin{array}{ccc}
 \diamond A 9 5 & & \\
 \diamond K Q 10 6 & & \diamond 8 x (x x) \\
 & & \diamond J 7 (x x)
 \end{array}$$

If declarer holds two cards, that is jack-doubleton the correct continuation would be the queen, for this holds him to one trick, namely the ace. If declarer holds

four cards then we cannot stop him from winning two diamond tricks, no matter whether we continue high or low, or switch suit and wait. Putting this together, by continuing with the queen gains when declarer holds two, and loses nothing when he holds four. Notice that although the signal were the same, our conclusions derived were not: for in the first example, from the 8 we deduced that we must switch and wait, whereas in the second example, from the 8 we deduced that by continuing the queen lost us nothing.

Let us continue with the same holding as in the first case, but for clarity we will use hearts. This time partner plays the jack. So after the first trick has been played this is what we know,

♥ A 9 5

♥ K Q 10 6 3

♥ J

♥ 7

Now we can continue with the queen in the safe knowledge that we not giving anything to declarer. On this partner now plays his 2 and declarer plays his 4. Partner's 2 is present count and means that he *now* holds an odd number of hearts, thus he started with only two and so we know declarer holds the thirteenth, thus we know the whole layout,

♥ A 9 5

♥ K Q 10 6 3

♥ J 2

♥ 8 7 4

We are still on lead, and we know whichever heart we play, declarer is forced to play his ace, with the consequence being that we have successfully established our last two hearts. So which card should we play? Imagine that we didn't play any signals, we play a small heart, the ace wins. Now declarer loses a trick to partner, say in spades, who now becomes on lead. Partner knows that we have some heart winners in hand, but since he has no heart he cannot play them to us. So he must play another suit, but which one between clubs or diamonds? Playing signals we have a solution, since the third heart we played was a *suit preference* signal, showing the

suit that we held an entry in, that is the suit we want partner to lead to us if he gets in. The standard way to play this signal is as *Laventhal*. Thus, on the third heart, had we played the 10 of hearts to force the ace, we indicate something in diamonds, whereas had we played the 3 we indicate clubs.

This Lavalenthal styled suit preference signal comes into play on many occasions. Consider now they are playing in a heart contract and we hold in spades ♠ A K 10 4 3. Being top of a two card sequence we are happy to lead our ace. This is what we now see,

♠ Q 6 5	
♠ A K 10 4 3	♠ 9
♠ 7	

Partner's 9 is count, and we can see that it is his highest card, (since if partner had jack doubleton he would play the jack first, if he had the J-9 and a third he would play the smallest) thus most likely top of two cards, (otherwise singleton). Hence we can now play the king, at which point partner follows with the 2 and declarer plays the 8, and now we know how the whole spade suit lies,

♠ Q 6 5	
♠ A K 10 4 3	♠ 9 2
♠ J 8 7	

Now we know that partner will trump a heart, so our natural tendency is to play small. But then partner wins the trick and is on lead. What should he lead back? As above the card we play for him to trump is a Lavalenthal suit preference signal. Had we sent the 10 to be ruffed we indicate diamonds, (since we exclude the trump suit) and had it been the 3, then clubs are indicated.

Finally, Lavalenthal signals can be played from the opposite side of the table. Imagine against a trump contract we hold ace king doubleton in a side suit. Our intention is to play these cards out, hope partner gets the lead before we lose our trumps to

declarer, so we can score a ruff. Normally with an ace-king combination we lead the ace, but this is the exception since we should now lead the king. Partner will not know anything at first and his first card will be giving us the count. When our king holds the trick, partner's ears should prick up, and especially so once we continue with the ace. As partner's we both sing from the same song sheet he knows what the situation is, and signals accordingly: a high card indicates his entry is in the highest non-trump suit, a low card the lowest non-trump suit.

Part IV

Indexes

Bidding Sequence Index

In the following pages is the complete bidding index of the book. Here we explain how the index is to be understood so that the correct bidding sequence can be found.

We use the following notations: brackets indicate a bid by the opposition; and where possible all intermediate passes have been suppressed. Assuming we are sitting west, and we want to know what our 2♣ bid means in the following sequences:

W	N	E	S	
1♥	P	1♠	P	is represented by the sequence 1♥-1♠-2♣.
2♣				
W	N	E	S	
	1♥	1♠	P	is represented by the sequence (1♥)-1♠-2♣.
2♣				
W	N	E	S	
	1♥	1♠		is represented by the sequence 1♥-(1♠)-2♣.
2♣				
W	N	E	S	
	1♥	P	1♠	is represented by the sequence (1♥)-(1♠)-2♣.
2♣				
W	N	E	S	
		1♥	P	
P	1♠	P	P	is represented by the sequence 1♥-P-(1♠)-(P)-2♣.
2♣				

Note how the representing sequence always has the final bid unbracketed. A typical entry looks like:

The number before the point indicates the page; the number after the point indicates the paragraph on that page; a t after the point indicates that the sequence appears in a table. Page references in boldface indicate that the page number falls within the Basics part of the book; page references that are in normal typeface indicate the page number falls within the Conventions part of the book.

P	3.1	(1♣)-(P)-X-(1♥)-2♦	126.2
(P)-(P)-2♥	124.1	(1♣)-(P)-X-1♠	126.2
(P)-(P)-2♠	124.1	(1♣)-(P)-X-(1♠)-2♦	126.2
P-1♥	119.1	(1♣)-(P)-X-(1♠)-2♥	126.2
P-1♥-(X)-2♣	163.3	(1♣)-(P)-X-1NT	126.2
P-1♥-(1♠)-2♣	163.3	(1♣)-(P)-X-2♣	126.2
P-1♥-2♣	162.1	(1♣)-(P)-X-(2♣)-2♦	126.2
(P)-(1♥)-(2♣)-X	163.4	(1♣)-(P)-X-(2♣)-2♥	126.2
P-1♥-2♣-2♦	162.1	(1♣)-(P)-X-(2♣)-2♠	126.2
P-1♥-2♣-2♦-3♥	163.2	(1♣)-(P)-X-2♦	126.2
P-1♥-2♣-2♥	162.1	(1♣)-(P)-X-2♥	126.2
P-1♠	119.1	(1♣)-(P)-X-2♠	126.2
P-1♠-(X)-2♣	163.3	(1♣)-(P)-X-2NT	126.2
P-1♠-2♣	162.1	(1♣)-(P)-X-3NT	126.2
(P)-(1♠)-(2♣)-X	163.4	(1♣)-(P)-1♦	127.5
P-1♠-2♣-2♦	162.1	(1♣)-(P)-1♦-1♥	128.8
P-1♠-2♣-2♦-3♠	163.2	(1♣)-(P)-1♦-(1♥)-X	129.9
P-1♠-2♣-2♠	162.1	(1♣)-(P)-1♦-(1♥)-1NT	129.9
1♣	3.1	(1♣)-(P)-1♦-(1♥)-2♦	129.9
(1♣)-P	73.1	(1♣)-(P)-1♦-(1♥)-2NT	129.9
1♣-P	8.1	(1♣)-(P)-1♦-1♠	128.8
(1♣)-(P)-X	125.1	(1♣)-(P)-1♦-(1♠)-X	129.9
(1♣)-(P)-X-P	126.2	(1♣)-(P)-1♦-(1♠)-1NT	129.9
(1♣)-(P)-X-1♦	126.2	(1♣)-(P)-1♦-(1♠)-2♦	129.9
(1♣)-(P)-X-(1♦)-1♥	126.2	(1♣)-(P)-1♦-(1♠)-2NT	129.9
(1♣)-(P)-X-(1♦)-1♠	126.2	(1♣)-(P)-1♦-1NT	128.8
(1♣)-(P)-X-1♥	126.2	(1♣)-(P)-1♦-(2♣)-2♦	129.9
(1♣)-(P)-X-(1♥)-1♠	126.2	(1♣)-(P)-1♦-2♦	128.8

(1♣)-(P)-1♦-2NT	128.8	(1♣)-(P)-1♠-2NT	128.8
(1♣)-(P)-1♦-3♦	128.8	(1♣)-(P)-1♠-3♦	128.8
(1♣)-(P)-1♥	127.5	(1♣)-(P)-1♠-3♥	128.8
(1♣)-(P)-1♥-1♠	128.8	(1♣)-(P)-1♠-3♠	128.8
(1♣)-(P)-1♥-(1♠)-X	129.9	(1♣)-(P)-1NT	127.3
(1♣)-(P)-1♥-(1♠)-1NT	129.9	(1♣)-(P)-1NT-P-(X)-XX	127.4
(1♣)-(P)-1♥-(1♠)-2♥	129.9	(1♣)-(P)-1NT-(X)-(P)-XX	127.4
(1♣)-(P)-1♥-(1♠)-2NT	129.9	(1♣)-(P)-2♣	129.1
(1♣)-(P)-1♥-1NT	128.8	(1♣)-(P)-2♦	128.7
(1♣)-(P)-1♥-(2♣)-2♥	129.9	(1♣)-(P)-2♥	128.7
(1♣)-(P)-1♥-2♦	128.8	(1♣)-(P)-2♠	128.7
(1♣)-(P)-1♥-(2♦)-X	129.9	(1♣)-(P)-2NT	127.3
(1♣)-(P)-1♥-(2♦)-2♥	129.9	(1♣)-X	80.1, 81.2
(1♣)-(P)-1♥-(2♦)-2NT	129.9	1♣-(X)-XX	96.2
(1♣)-(P)-1♥-(2♦)-3NT	129.9	(1♣)-X-(XX)-P	104.9
(1♣)-(P)-1♥-2♥	128.8	(1♣)-X-(XX)-1♦	104.9
(1♣)-(P)-1♥-2♠	128.8	(1♣)-X-(XX)-1♥	104.9
(1♣)-(P)-1♥-2NT	128.8	(1♣)-X-(XX)-1♠	104.9
(1♣)-(P)-1♥-3♦	128.8	(1♣)-X-(XX)-1NT	104.9
(1♣)-(P)-1♥-3♥	128.8	(1♣)-X-(XX)-2♣	104.9
(1♣)-(P)-1♠	127.5	(1♣)-X-(XX)-2♦	104.9
(1♣)-(P)-1♠-1NT	128.8	(1♣)-X-(XX)-2♥	104.9
(1♣)-(P)-1♠-(2♣)-2♠	129.9	(1♣)-X-(XX)-2♠	104.9
(1♣)-(P)-1♠-2♦	128.8	(1♣)-X-(XX)-2NT	104.9
(1♣)-(P)-1♠-(2♦)-X	129.9	(1♣)-X-(XX)-3NT	104.9
(1♣)-(P)-1♠-(2♦)-2♠	129.9	(1♣)-X-1♦	81.3
(1♣)-(P)-1♠-(2♦)-2NT	129.9	1♣-(X)-1♦	97.4
(1♣)-(P)-1♠-(2♦)-3NT	129.9	(1♣)-X-(1♦)-P	102.6
(1♣)-(P)-1♠-2♥	128.8	(1♣)-X-1♦-P	82.9
(1♣)-(P)-1♠-(2♥)-X	129.9	(1♣)-X-(1♦)-X	102.6
(1♣)-(P)-1♠-(2♥)-2♠	129.9	(1♣)-X-(1♦)-1♥	102.6
(1♣)-(P)-1♠-(2♥)-2NT	129.9	(1♣)-X-1♦-1♥	82.1
(1♣)-(P)-1♠-(2♥)-3NT	129.9	(1♣)-X-1♦-1♥-2♦	82.4
(1♣)-(P)-1♠-2♠	128.8	(1♣)-X-(1♦)-1♠	102.6

(1♣)-X-1♦-1♠	82.1	(1♣)-X-1♠	81.3
(1♣)-X-1♦-1♠-2♦	82.4	1♣-(X)-1♠	97.4
(1♣)-X-(1♦)-1NT	102.6	(1♣)-X-(1♠)-P	102.6
(1♣)-X-1♦-1NT	82.3	(1♣)-X-1♠-P	82.9
(1♣)-X-(1♦)-2♣	102.6	(1♣)-X-(1♠)-X	102.6
(1♣)-X-1♦-2♣	82.2	(1♣)-X-(1♠)-1NT	102.6
(1♣)-X-1♦-2♣-2♦	82.5	(1♣)-X-1♠-1NT	82.3
(1♣)-X-(1♦)-2♦	102.6	(1♣)-X-(1♠)-2♣	102.6
(1♣)-X-1♦-2♦	82.9	(1♣)-X-1♠-2♣	82.2
(1♣)-X-(1♦)-2NT	102.6	(1♣)-X-1♠-2♣-2♠	82.5
(1♣)-X-1♦-3♦	82.9	(1♣)-X-(1♠)-2♦	102.6
(1♣)-X-(1♦)-3NT	102.6	(1♣)-X-1♠-2♦	82.1
(1♣)-X-1♥	81.3	(1♣)-X-1♠-2♦-2♠	82.4
1♣-(X)-1♥	97.4	(1♣)-X-(1♠)-2♥	102.6
(1♣)-X-(1♥)-P	102.6	(1♣)-X-1♠-2♥	82.1
(1♣)-X-1♥-P	82.9	(1♣)-X-1♠-2♥-2♠	82.4
(1♣)-X-(1♥)-X	102.6	(1♣)-X-(1♠)-2♠	102.6
(1♣)-X-(1♥)-1♠	102.6	(1♣)-X-1♠-2♠	82.9
(1♣)-X-1♥-1♠	82.1	(1♣)-X-(1♠)-2NT	102.6
(1♣)-X-1♥-1♠-2♥	82.4	(1♣)-X-1♠-3♠	82.9
(1♣)-X-(1♥)-1NT	102.6	(1♣)-X-(1♠)-3NT	102.6
(1♣)-X-1♥-1NT	82.3	(1♣)-X-1NT	81.6
(1♣)-X-(1♥)-2♣	102.6	1♣-(X)-1NT	97.4
(1♣)-X-1♥-2♣	82.2	(1♣)-X-(1NT)-P	103.8
(1♣)-X-1♥-2♣-2♥	82.5	(1♣)-X-(1NT)-X	103.8
(1♣)-X-(1♥)-2♦	102.6	(1♣)-X-(1NT)-2♣	103.8
(1♣)-X-1♥-2♦	82.1	(1♣)-X-(1NT)-2♦	103.8
(1♣)-X-1♥-2♦-2♥	82.4	(1♣)-X-(1NT)-2♥	103.8
(1♣)-X-(1♥)-2♥	102.6	(1♣)-X-(1NT)-2♠	103.8
(1♣)-X-1♥-2♥	82.9	(1♣)-X-(1NT)-3♦	103.8
(1♣)-X-(1♥)-2NT	102.6	(1♣)-X-(1NT)-3♥	103.8
(1♣)-X-1♥-3♥	82.9	(1♣)-X-(1NT)-3♠	103.8
(1♣)-X-(1♥)-3NT	102.6	(1♣)-X-2♣	81.4, 81.8
1♣-(X)-P	97.4	1♣-(X)-2♣	96.3

(1♣)-X-(2♣)-P	103.7	(1♣)-X-(4♣)-4♠	103.7
(1♣)-X-(2♣)-X	103.7	(1♣)-X-4♥	81.7
(1♣)-X-(2♣)-2♦	103.7	(1♣)-X-4♠	81.7
(1♣)-X-(2♣)-2♥	103.7	1♣-1♦	8.1, 148.1
(1♣)-X-(2♣)-2♠	103.7	(1♣)-1♦	73.1
(1♣)-X-(2♣)-2NT	103.7	1♣-(1♦)-P	88.1, 89.7
(1♣)-X-(2♣)-3♣	103.7	1♣-(1♦)-(P)-X	130.1
(1♣)-X-(2♣)-3♦	103.7	1♣-(1♦)-P-X	91.6
(1♣)-X-(2♣)-3♥	103.7	1♣-(1♦)-(P)-X-P	130.1
(1♣)-X-(2♣)-3♠	103.7	1♣-(1♦)-(P)-X-1♥	130.1
(1♣)-X-(2♣)-3NT	103.7	1♣-(1♦)-(P)-X-1♠	130.1
(1♣)-X-2♦	81.5	1♣-(1♦)-(P)-X-2♣	130.1
1♣-(X)-2♦	97.5	1♣-(1♦)-(P)-1♥	130.1
(1♣)-X-2♥	81.5	1♣-(1♦)-(P)-1♠	130.1
1♣-(X)-2♥	97.5	1♣-(1♦)-(P)-1NT	130.1
(1♣)-X-2♠	81.5	1♣-(1♦)-(P)-2♣	130.1
1♣-(X)-2♠	97.5	1♣-(1♦)-(P)-3♣	130.1
(1♣)-X-2NT	81.6	(1♣)-(1♦)-X	86.2, 206.1, 206.2
1♣-(X)-2NT	96.3	1♣-(1♦)-X	89.3, 90.9
(1♣)-X-(2NT)-P	103.8	(1♣)-1♦-(X)-XX	101.6
(1♣)-X-(2NT)-X	103.8	1♣-1♦-(X)-XX	100.5
(1♣)-X-(2NT)-3♣	103.8	(1♣)-1♦-(X)-1♠	101.6
1♣-(X)-3♣	96.3	(1♣)-1♦-(X)-1NT	101.6
(1♣)-X-(3♣)-P	103.7	(1♣)-1♦-(X)-2♣	101.6
(1♣)-X-(3♣)-X	103.7	(1♣)-1♦-(X)-2♦	101.6
(1♣)-X-(3♣)-3♦	103.7	(1♣)-1♦-(X)-2♥	101.6
(1♣)-X-(3♣)-3♥	103.7	(1♣)-1♦-(X)-3♦	101.6
(1♣)-X-(3♣)-3♠	103.7	1♣-(1♦)-X-(3♦)-P	91.4
(1♣)-X-(3♣)-3NT	103.7	1♣-(1♦)-X-(3♦)-X	91.1
(1♣)-X-3NT	81.6	1♣-(1♦)-X-(3♦)-3♥	91.2
(1♣)-X-(4♣)-P	103.7	1♣-(1♦)-X-(3♦)-3♠	91.2
(1♣)-X-(4♣)-X	103.7	1♣-(1♦)-X-(3♦)-4♥	91.2
(1♣)-X-(4♣)-4♦	103.7	1♣-(1♦)-X-(3♦)-4♠	91.2
(1♣)-X-(4♣)-4♥	103.7	(1♣)-1♦-(X)-4♦	101.6

1♣-(1♦)-X-(4♦)-P	91.4	(1♣)-1♦-1♥-(1♠)-4♥	105.4
1♣-(1♦)-X-(4♦)-X	91.1	1♣-1♦-1♥-1NT	28.2
1♣-(1♦)-X-(4♦)-4♥	91.2	(1♣)-1♦-(1♥)-1NT	101.3
1♣-(1♦)-X-(4♦)-4♠	91.2	(1♣)-1♦-1♥-1NT	75.8
1♣-1♦-1♥	18.8, 148.2	1♣-1♦-(1♥)-1NT	99.3
(1♣)-(1♦)-1♥	86.2, 206.3	1♣-1♦-1♥-2♣	28.2
(1♣)-1♦-1♥	75.4	(1♣)-1♦-(1♥)-2♣	101.5
1♣-(1♦)-1♥	89.2	(1♣)-1♦-1♥-2♣	75.8
1♣-1♦-(1♥)-P	99.4	1♣-1♦-(1♥)-2♣	99.3
(1♣)-1♦-(1♥)-X	101.4	(1♣)-1♦-1♥-(2♣)-X	105.2
1♣-1♦-(1♥)-X	99.1	(1♣)-1♦-1♥-(2♣)-2♦	105.2
(1♣)-1♦-1♥-(X)-XX	106.6	(1♣)-1♦-1♥-(2♣)-2♥	105.2
1♣-(1♦)-1♥-(X)-XX	91.5	(1♣)-1♦-1♥-(2♣)-2♠	105.2
(1♣)-1♦-1♥-(X)-1♠	106.6	(1♣)-1♦-1♥-(2♣)-3♥	105.2
(1♣)-1♦-1♥-(X)-1NT	106.6	(1♣)-1♦-1♥-(2♣)-4♥	105.2
(1♣)-1♦-1♥-(X)-2♣	106.6	1♣-1♦-1♥-2♦	28.2
(1♣)-1♦-1♥-(X)-2♥	106.6	(1♣)-1♦-(1♥)-2♦	101.1
(1♣)-1♦-1♥-(X)-2NT	106.6	(1♣)-1♦-1♥-2♦	75.8
(1♣)-1♦-1♥-(X)-3♥	106.6	1♣-(1♦)-1♥-(2♦)-P	91.4
(1♣)-1♦-1♥-(X)-3NT	106.6	1♣-(1♦)-1♥-(2♦)-X	91.1
(1♣)-1♦-1♥-(X)-4♥	106.6	1♣-(1♦)-1♥-(2♦)-2♥	91.2
1♣-1♦-1♥-1♠	28.2, 136.2, 148.2, 211.4	1♣-(1♦)-1♥-(2♦)-2♠	91.3
(1♣)-1♦-(1♥)-1♠	101.2	1♣-(1♦)-1♥-(2♦)-2NT	91.3
(1♣)-1♦-1♥-1♠	75.8	1♣-(1♦)-1♥-(2♦)-3♣	91.3
1♣-1♦-(1♥)-1♠	99.3	1♣-(1♦)-1♥-(2♦)-3♥	91.2
(1♣)-1♦-1♥-(1♠)-X	105.4	1♣-(1♦)-1♥-(2♦)-3NT	91.3
(1♣)-1♦-1♥-(1♠)-1NT	105.4	1♣-(1♦)-1♥-(2♦)-4♥	91.2
(1♣)-1♦-1♥-(1♠)-2♣	105.4	1♣-1♦-1♥-2♥	28.1, 148.2
(1♣)-1♦-1♥-(1♠)-2♦	105.4	(1♣)-1♦-1♥-2♥	75.8
(1♣)-1♦-1♥-(1♠)-2♥	105.4	1♣-1♦-1♥-2♠	28.1, 28.4, 136.2
(1♣)-1♦-1♥-(1♠)-2♠	105.4	1♣-1♦-1♥-2♠-2NT	136.3
(1♣)-1♦-1♥-(1♠)-2NT	105.4	1♣-1♦-1♥-2♠-2NT-3♥	66.1
(1♣)-1♦-1♥-(1♠)-3♥	105.4	1♣-1♦-1♥-2♠-2NT-4♣	64.7
		1♣-1♦-1♥-2♠-3♣	136.3

1♣-1♦-1♥-2♠-3♣-3♥	66.1	(1♣)-(1♦)-1♠	86.2, 206.3
1♣-1♦-1♥-2♠-3♣-4♣	64.7	(1♣)-1♦-1♠	75.4
1♣-1♦-1♥-2♠-3♦	136.3	1♣-(1♦)-1♠	89.2
1♣-1♦-1♥-2♠-3♦-3♥	66.1	1♣-1♦-(1♠)-P	99.4
1♣-1♦-1♥-2♠-3♦-4♣	64.7	(1♣)-1♦-(1♠)-X	101.4
1♣-1♦-1♥-2♠-3♥	136.3	1♣-1♦-(1♠)-X	99.1
1♣-1♦-1♥-2♠-3♥-4♣	64.7	(1♣)-1♦-1♠-(X)-XX	106.6
1♣-1♦-1♥-2♠-3♥-4♥	66.1	1♣-(1♦)-1♠-(X)-XX	91.5
1♣-1♦-1♥-2♠-3♠-4♣	64.7	(1♣)-1♦-1♠-(X)-1NT	106.6
1♣-1♦-1♥-2♠-3♠-4♥	66.1	(1♣)-1♦-1♠-(X)-2♣	106.6
1♣-1♦-1♥-2♠-3NT	136.3	(1♣)-1♦-1♠-(X)-2♥	106.6
1♣-1♦-1♥-2♠-3NT-3♥	66.1	(1♣)-1♦-1♠-(X)-2♠	106.6
1♣-1♦-1♥-2♠-3NT-4♣	64.7	(1♣)-1♦-1♠-(X)-2NT	106.6
1♣-1♦-1♥-2NT	28.3	(1♣)-1♦-1♠-(X)-3♠	106.6
(1♣)-1♦-1♥-2NT	75.8	(1♣)-1♦-1♠-(X)-3NT	106.6
1♣-1♦-1♥-3♣	28.3	(1♣)-1♦-1♠-(X)-4♠	106.6
1♣-1♦-1♥-3♦	28.3	1♣-1♦-1♠-1NT	28.2
(1♣)-1♦-(1♥)-3♦	101.1	(1♣)-1♦-(1♠)-1NT	101.3
(1♣)-1♦-1♥-3♦	75.8	(1♣)-1♦-1♠-1NT	75.8
1♣-(1♦)-1♥-(3♦)-2♥	91.2	1♣-1♦-(1♠)-1NT	99.3
1♣-(1♦)-1♥-(3♦)-P	91.4	1♣-1♦-1♠-2♣	28.2, 148.3
1♣-(1♦)-1♥-(3♦)-X	91.1	(1♣)-1♦-(1♠)-2♣	101.5
1♣-(1♦)-1♥-(3♦)-3♥	91.2	(1♣)-1♦-1♠-2♣	75.8
1♣-(1♦)-1♥-(3♦)-3♠	91.3	1♣-1♦-(1♠)-2♣	99.3
1♣-(1♦)-1♥-(3♦)-3NT	91.3	(1♣)-1♦-1♠-(2♣)-X	105.2
1♣-(1♦)-1♥-(3♦)-4♣	91.3	(1♣)-1♦-1♠-(2♣)-2♦	105.2
1♣-(1♦)-1♥-(3♦)-4♥	91.2	(1♣)-1♦-1♠-(2♣)-2♥	105.2
1♣-1♦-1♥-3♥	28.1	(1♣)-1♦-1♠-(2♣)-2♠	105.2
1♣-1♦-1♥-3NT	28.4	(1♣)-1♦-1♠-(2♣)-3♠	105.2
(1♣)-1♦-1♥-3NT	75.8	(1♣)-1♦-1♠-(2♣)-4♠	105.2
1♣-1♦-1♥-4♣	65.8	1♣-1♦-1♠-2♦	28.2
(1♣)-1♦-(1♥)-4♦	101.1	(1♣)-1♦-(1♠)-2♦	101.1
1♣-1♦-1♥-4♥	28.1	(1♣)-1♦-1♠-2♦	75.8
1♣-1♦-1♠	18.8, 148.2	1♣-(1♦)-1♠-(2♦)-P	91.4

1♣-(1♦)-1♠-(2♦)-X	91.1	1♣-1♦-1♠-2♥-3NT	136.3
1♣-(1♦)-1♠-(2♦)-2♥	91.3	1♣-1♦-1♠-2♥-3NT-3♠	66.1
1♣-(1♦)-1♠-(2♦)-2♠	91.2	1♣-1♦-1♠-2♥-3NT-4♣	64.7
1♣-(1♦)-1♠-(2♦)-2NT	91.3	(1♣)-1♦-1♠-(2♥)-4♠	105.4
1♣-(1♦)-1♠-(2♦)-3♣	91.3	1♣-1♦-1♠-2♠	28.1, 148.2
1♣-(1♦)-1♠-(2♦)-3♠	91.2	(1♣)-1♦-1♠-2♠	75.8
1♣-(1♦)-1♠-(2♦)-3NT	91.3	1♣-1♦-1♠-2♠-4♠	148.3
1♣-(1♦)-1♠-(2♦)-4♠	91.2	1♣-1♦-1♠-2NT	28.3
1♣-1♦-1♠-2♥	28.1, 28.4, 135.1	(1♣)-1♦-1♠-2NT	75.8
(1♣)-1♦-(1♠)-2♥	101.2	1♣-1♦-1♠-3♣	28.3
1♣-1♦-(1♠)-2♥	99.3	1♣-1♦-1♠-3♦	28.3
(1♣)-1♦-1♠-(2♥)-X	105.4	(1♣)-1♦-(1♠)-3♦	101.1
1♣-1♦-1♠-2♥-2♠	136.3	(1♣)-1♦-1♠-3♦	75.8
(1♣)-1♦-1♠-(2♥)-2♠	105.4	1♣-(1♦)-1♠-(3♦)-P	91.4
1♣-1♦-1♠-2♥-2♠-3♠	66.1	1♣-(1♦)-1♠-(3♦)-X	91.1
1♣-1♦-1♠-2♥-2♠-4♣	64.7	1♣-(1♦)-1♠-(3♦)-3♥	91.3
1♣-1♦-1♠-2♥-2NT	136.3	1♣-(1♦)-1♠-(3♦)-3♠	91.2
(1♣)-1♦-1♠-(2♥)-2NT	105.4	1♣-(1♦)-1♠-(3♦)-3NT	91.3
1♣-1♦-1♠-2♥-2NT-3♠	66.1	1♣-(1♦)-1♠-(3♦)-4♣	91.3
1♣-1♦-1♠-2♥-2NT-4♣	64.7	1♣-(1♦)-1♠-(3♦)-4♠	91.2
1♣-1♦-1♠-2♥-3♣	136.3	1♣-1♦-1♠-3♥	137.4
(1♣)-1♦-1♠-(2♥)-3♣	105.4	1♣-1♦-1♠-3♠	28.1
1♣-1♦-1♠-2♥-3♣-3♠	66.1	1♣-1♦-1♠-3NT	28.4
1♣-1♦-1♠-2♥-3♣-4♣	64.7	(1♣)-1♦-1♠-3NT	75.8
1♣-1♦-1♠-2♥-3♦	136.3	1♣-1♦-1♠-4♣	65.8
(1♣)-1♦-1♠-(2♥)-3♦	105.4	(1♣)-1♦-(1♠)-4♦	101.1
1♣-1♦-1♠-2♥-3♦-3♠	66.1	1♣-1♦-1♠-4♠	28.1
1♣-1♦-1♠-2♥-3♦-4♣	64.7	1♣-1♦-1NT	18.8, 148.2, 148.3
1♣-1♦-1♠-2♥-3♥	136.3	(1♣)-(1♦)-1NT	206.2
(1♣)-1♦-1♠-(2♥)-3♥	105.4	(1♣)-1♦-1NT	75.6
1♣-1♦-1♠-2♥-3♥-3♠	66.1	1♣-(1♦)-1NT	89.6
1♣-1♦-1♠-2♥-3♥-3NT	136.3	1♣-(1♦)-1NT-(X)-XX	91.5
1♣-1♦-1♠-2♥-3♥-4♣	64.7	(1♣)-1♦-(1NT)-X	102.5
(1♣)-1♦-1♠-(2♥)-3♠	105.4	1♣-1♦-1NT-2♣	28.5

1♣-1♦-1NT-2♣-2♦-4♣	64.7	(1♣)-1♦-2♣-(X)-3♣	106.6
1♣-1♦-1NT-2♣-2♥-4♣	64.7	(1♣)-1♦-2♣-(X)-3NT	106.6
1♣-1♦-1NT-2♣-2♠-4♣	64.7	(1♣)-1♦-2♣-(X)-4♣	106.6
1♣-1♦-1NT-2♣-2NT-4♣	64.7	1♣-1♦-2♣-2♦	32.6
1♣-1♦-1NT-2♦	28.5	(1♣)-1♦-(2♣)-2♦	101.7
(1♣)-1♦-(1NT)-2♦	102.3	(1♣)-1♦-2♣-2♦	76.9
1♣-(1♦)-1NT-(2♦)-P	91.4	1♣-1♦-2♣-2♥	32.6
1♣-(1♦)-1NT-(2♦)-X	91.1	(1♣)-1♦-(2♣)-2♥	101.8
1♣-(1♦)-1NT-(2♦)-2♥	91.3	(1♣)-1♦-2♣-2♥	76.9
1♣-(1♦)-1NT-(2♦)-2♠	91.3	(1♣)-1♦-2♣-(2♥)-X	105.5
1♣-(1♦)-1NT-(2♦)-2NT	91.3	(1♣)-1♦-2♣-(2♥)-2♠	105.5
1♣-(1♦)-1NT-(2♦)-3♣	91.3	1♣-1♦-2♣-2♥-2♠-4♣	64.7
1♣-1♦-1NT-2♥	28.6, 148.2	(1♣)-1♦-2♣-(2♥)-2NT	105.5
(1♣)-1♦-(1NT)-2♥	102.4	1♣-1♦-2♣-2♥-2NT-4♣	64.7
1♣-1♦-1NT-2♠	28.6, 148.2	1♣-1♦-2♣-2♥-3♣-4♣	64.7
(1♣)-1♦-(1NT)-2♠	102.4	(1♣)-1♦-2♣-(2♥)-3♦	105.5
1♣-1♦-1NT-2♠-2NT	148.3	1♣-1♦-2♣-2♥-3♦-4♣	64.7
1♣-1♦-1NT-2NT	28.6	1♣-1♦-2♣-2♥-3♥-4♣	64.7
1♣-1♦-1NT-3♣	28.6	1♣-1♦-2♣-2♥-3NT-4♣	64.7
1♣-1♦-1NT-3♦	28.6	1♣-1♦-2♣-2♠	32.6
(1♣)-1♦-(1NT)-3♦	102.3	(1♣)-1♦-(2♣)-2♠	101.8
1♣-(1♦)-1NT-(3♦)-X	91.1	(1♣)-1♦-2♣-2♠	76.9
1♣-1♦-1NT-3NT	28.7	(1♣)-1♦-2♣-(2♠)-X	105.5
1♣-1♦-1NT-4♣	65.8	(1♣)-1♦-2♣-(2♠)-2NT	105.5
(1♣)-1♦-(1NT)-4♦	102.3	(1♣)-1♦-2♣-(2♠)-3♦	105.5
1♣-1♦-2♣	18.8	(1♣)-1♦-2♣-(2♠)-3♥	105.5
(1♣)-(1♦)-2♣	207.5	1♣-1♦-2♣-2NT	32.6
(1♣)-1♦-2♣	74.3, 75.7	(1♣)-1♦-(2♣)-2NT	101.9
1♣-(1♦)-2♣	89.5, 152.4	(1♣)-1♦-2♣-2NT	76.9
(1♣)-1♦-(2♣)-X	101.1	1♣-1♦-2♣-3♣	32.6
(1♣)-1♦-2♣-(X)-XX	106.6	(1♣)-1♦-(2♣)-3♣	101.2
(1♣)-1♦-2♣-(X)-2♥	106.6	(1♣)-1♦-2♣-3♣	76.9
(1♣)-1♦-2♣-(X)-2♠	106.6	(1♣)-1♦-2♣-(3♣)-X	105.3
(1♣)-1♦-2♣-(X)-2NT	106.6	(1♣)-1♦-2♣-(3♣)-3♦	105.3

$(1\clubsuit)-1\Diamond-2\clubsuit-(3\clubsuit)-3\heartsuit$	105.3	$1\clubsuit-1\Diamond-2NT-3\clubsuit-3\heartsuit-4\clubsuit$	64.7
$(1\clubsuit)-1\Diamond-2\clubsuit-(3\clubsuit)-3\spadesuit$	105.3	$1\clubsuit-1\Diamond-2NT-3\clubsuit-3\spadesuit-4\clubsuit$	64.7
$(1\clubsuit)-1\Diamond-2\clubsuit-(3\clubsuit)-3NT$	105.3	$1\clubsuit-1\Diamond-2NT-3\clubsuit-3NT-4\clubsuit$	64.7
$1\clubsuit-1\Diamond-2\clubsuit-3\Diamond$	32.6	$1\clubsuit-1\Diamond-2NT-3\Diamond$	29.8
$(1\clubsuit)-1\Diamond-(2\clubsuit)-3\Diamond$	101.7	$1\clubsuit-1\Diamond-2NT-3NT$	29.8
$(1\clubsuit)-1\Diamond-2\clubsuit-3\Diamond$	76.9	$1\clubsuit-1\Diamond-3\clubsuit$	18.8
$1\clubsuit-1\Diamond-2\clubsuit-3\heartsuit$	191.7	$(1\clubsuit)-1\Diamond-3\clubsuit$	74.3
$1\clubsuit-1\Diamond-2\clubsuit-3\spadesuit$	191.7	$1\clubsuit-(1\Diamond)-3\clubsuit$	89.5, 152.4
$1\clubsuit-1\Diamond-2\clubsuit-3NT$	32.6	$(1\clubsuit)-1\Diamond-(3\clubsuit)-X$	101.1
$(1\clubsuit)-1\Diamond-2\clubsuit-3NT$	76.9	$1\clubsuit-1\Diamond-3\clubsuit-3\Diamond$	31.5
$1\clubsuit-1\Diamond-2\clubsuit-4\clubsuit$	65.8	$(1\clubsuit)-1\Diamond-(3\clubsuit)-3\Diamond$	101.7
$(1\clubsuit)-1\Diamond-(2\clubsuit)-4\Diamond$	101.7	$(1\clubsuit)-1\Diamond-(3\clubsuit)-3\heartsuit$	101.8
$1\clubsuit-1\Diamond-2\Diamond$	18.8	$(1\clubsuit)-1\Diamond-(3\clubsuit)-3\spadesuit$	101.8
$(1\clubsuit)-(1\Diamond)-2\Diamond$	86.3, 207.5	$1\clubsuit-1\Diamond-3\clubsuit-3NT$	31.5
$(1\clubsuit)-1\Diamond-2\Diamond$	74.2	$(1\clubsuit)-1\Diamond-(3\clubsuit)-3NT$	101.9
$1\clubsuit-(1\Diamond)-2\Diamond$	89.8	$1\clubsuit-1\Diamond-3\clubsuit-4\clubsuit$	64.7
$1\clubsuit-1\Diamond-2\heartsuit$	18.8	$1\clubsuit-1\Diamond-3\Diamond$	18.8
$(1\clubsuit)-1\Diamond-2\heartsuit$	74.3	$(1\clubsuit)-1\Diamond-3\Diamond$	74.2
$1\clubsuit-1\Diamond-2\heartsuit-2\spadesuit$	31.4	$(1\clubsuit)-1\Diamond-3NT$	75.6
$1\clubsuit-1\Diamond-2\heartsuit-3\heartsuit$	31.4, 67.2	$1\clubsuit-1\Diamond-4\Diamond$	18.8
$1\clubsuit-1\Diamond-2\heartsuit-3NT$	31.4	$(1\clubsuit)-1\Diamond-4\Diamond$	74.2
$1\clubsuit-1\Diamond-2\heartsuit-4\heartsuit$	31.4	$1\clubsuit-1\heartsuit$	8.1
$1\clubsuit-1\Diamond-2\spadesuit$	18.8	$(1\clubsuit)-1\heartsuit$	73.1
$(1\clubsuit)-1\Diamond-2\spadesuit$	74.3	$1\clubsuit-(1\heartsuit)-P$	88.1, 89.7
$1\clubsuit-1\Diamond-2\spadesuit-3\heartsuit$	31.4	$1\clubsuit-(1\heartsuit)-(P)-X$	130.1
$1\clubsuit-1\Diamond-2\spadesuit-3\spadesuit$	31.4, 67.2	$1\clubsuit-(1\heartsuit)-P-X$	91.6
$1\clubsuit-1\Diamond-2\spadesuit-3NT$	31.4	$1\clubsuit-(1\heartsuit)-(P)-X-P$	130.1
$1\clubsuit-1\Diamond-2\spadesuit-4\spadesuit$	31.4	$1\clubsuit-(1\heartsuit)-(P)-X-1\spadesuit$	130.1
$1\clubsuit-1\Diamond-2NT$	18.8	$1\clubsuit-(1\heartsuit)-(P)-X-2\clubsuit$	130.1
$(1\clubsuit)-(1\Diamond)-2NT$	206.2	$1\clubsuit-(1\heartsuit)-(P)-X-2\Diamond$	130.1
$(1\clubsuit)-1\Diamond-2NT$	75.6	$1\clubsuit-(1\heartsuit)-(P)-1\spadesuit$	130.1
$1\clubsuit-(1\Diamond)-2NT$	89.5	$1\clubsuit-(1\heartsuit)-(P)-1NT$	130.1
$1\clubsuit-1\Diamond-2NT-3\clubsuit$	29.8, 211.1	$1\clubsuit-(1\heartsuit)-(P)-2\clubsuit$	130.1
$1\clubsuit-1\Diamond-2NT-3\clubsuit-3\Diamond-4\clubsuit$	64.7	$1\clubsuit-(1\heartsuit)-(P)-2\Diamond$	130.1

1♣-(1♥)-(P)-3♣	130.1	(1♣)-1♥-1♠-(X)-2NT	106.6
(1♣)-(1♥)-X	86.2, 206.1, 206.2	(1♣)-1♥-1♠-(X)-3♠	106.6
1♣-(1♥)-X	89.3	(1♣)-1♥-1♠-(X)-3NT	106.6
(1♣)-1♥-(X)-XX	101.6	(1♣)-1♥-1♠-(X)-4♠	106.6
1♣-1♥-(X)-XX	100.5	1♣-1♥-1♠-1NT	28.2
(1♣)-1♥-(X)-1NT	101.6	(1♣)-1♥-(1♠)-1NT	101.3
(1♣)-1♥-(X)-2♣	101.6	(1♣)-1♥-1♠-1NT	75.8
(1♣)-1♥-(X)-2♦	101.6	1♣-1♥-(1♠)-1NT	99.3
(1♣)-1♥-(X)-2♥	101.6	1♣-1♥-1♠-2♣	28.2, 148.3
1♣-(1♥)-X-(2♥)-P	91.4	(1♣)-1♥-(1♠)-2♣	101.5
1♣-(1♥)-X-(2♥)-X	91.1	(1♣)-1♥-1♠-2♣	75.8
1♣-(1♥)-X-(2♥)-2♠	91.2	1♣-1♥-(1♠)-2♣	99.3
1♣-(1♥)-X-(2♥)-3♠	91.2	(1♣)-1♥-1♠-(2♣)-X	105.2
1♣-(1♥)-X-(2♥)-4♠	91.2	(1♣)-1♥-1♠-(2♣)-2♦	105.2
(1♣)-1♥-(X)-2♠	101.6	(1♣)-1♥-1♠-(2♣)-2♥	105.2
(1♣)-1♥-(X)-3♥	101.6	(1♣)-1♥-1♠-(2♣)-2♠	105.2
1♣-(1♥)-X-(3♥)-P	91.4	(1♣)-1♥-1♠-(2♣)-3♠	105.2
1♣-(1♥)-X-(3♥)-X	91.1	(1♣)-1♥-1♠-(2♣)-4♠	105.2
1♣-(1♥)-X-(3♥)-3♠	91.2	1♣-1♥-1♠-2♦	28.1, 28.4, 135.1
1♣-(1♥)-X-(3♥)-4♠	91.2	(1♣)-1♥-(1♠)-2♦	101.2
(1♣)-1♥-(X)-4♥	101.6	(1♣)-1♥-1♠-2♦	75.8
1♣-1♥-1♠	16.5	1♣-1♥-(1♠)-2♦	99.3
(1♣)-(1♥)-1♠	86.2, 206.3	(1♣)-1♥-1♠-(2♦)-X	105.4
(1♣)-1♥-1♠	75.4	1♣-1♥-1♠-2♦-2♥	136.3
1♣-(1♥)-1♠	89.2, 90.9	(1♣)-1♥-1♠-(2♦)-2♥	105.4
1♣-1♥-(1♠)-P	99.4	1♣-1♥-1♠-2♦-2♥-2♠	66.1
(1♣)-1♥-(1♠)-X	101.4	1♣-1♥-1♠-2♦-2♥-3♣	64.1
1♣-1♥-(1♠)-X	99.1	1♣-1♥-1♠-2♦-2♠	136.3
(1♣)-1♥-1♠-(X)-XX	106.6	(1♣)-1♥-1♠-(2♦)-2♠	105.4
1♣-(1♥)-1♠-(X)-XX	91.5	1♣-1♥-1♠-2♦-2♠-3♣	64.1
(1♣)-1♥-1♠-(X)-1NT	106.6	1♣-1♥-1♠-2♦-2♠-3♠	66.1
(1♣)-1♥-1♠-(X)-2♣	106.6	1♣-1♥-1♠-2♦-2NT	136.3
(1♣)-1♥-1♠-(X)-2♦	106.6	(1♣)-1♥-1♠-(2♦)-2NT	105.4
(1♣)-1♥-1♠-(X)-2♠	106.6	1♣-1♥-1♠-2♦-2NT-3♣	64.1

1♣-1♥-1♠-2♦-2NT-3♠	66.1	1♣-1♥-1♠-3♥	28.3
1♣-1♥-1♠-2♦-3♣	136.3	(1♣)-1♥-(1♠)-3♥	101.1
(1♣)-1♥-1♠-(2♦)-3♣	105.4	(1♣)-1♥-1♠-3♥	75.8
1♣-1♥-1♠-2♦-3♣-3♠	66.1	1♣-1♥-(1♠)-3♥	99.2
1♣-1♥-1♠-2♦-3♣-4♣	64.1	1♣-(1♥)-1♠-(3♥)-P	91.4
1♣-1♥-1♠-2♦-3♦	136.3, 191.7	1♣-(1♥)-1♠-(3♥)-X	91.1
(1♣)-1♥-1♠-(2♦)-3♦	105.4	1♣-(1♥)-1♠-(3♥)-3♠	91.2
1♣-1♥-1♠-2♦-3♦-3♠	66.1	1♣-(1♥)-1♠-(3♥)-3NT	91.3
1♣-1♥-1♠-2♦-3♦-3NT	136.3	1♣-(1♥)-1♠-(3♥)-4♣	91.3
1♣-1♥-1♠-2♦-3♥	136.3	1♣-(1♥)-1♠-(3♥)-4♠	91.2
(1♣)-1♥-1♠-(2♦)-3♠	105.4	1♣-1♥-1♠-3♠	28.1
1♣-1♥-1♠-2♦-3NT	136.3	1♣-1♥-1♠-3NT	28.4
1♣-1♥-1♠-2♦-3NT-3♠	66.1	(1♣)-1♥-1♠-3NT	75.8
1♣-1♥-1♠-2♦-3NT-4♣	64.1	(1♣)-1♥-(1♠)-4♥	101.1
(1♣)-1♥-1♠-(2♦)-4♠	105.4	1♣-1♥-(1♠)-4♥	99.2
1♣-1♥-1♠-2♥	28.2	1♣-1♥-1♠-4♠	28.1
(1♣)-1♥-(1♠)-2♥	101.1	1♣-1♥-1NT	15.3
(1♣)-1♥-1♠-2♥	75.8	(1♣)-(1♥)-1NT	206.2
1♣-1♥-(1♠)-2♥	99.2	(1♣)-1♥-1NT	75.6
1♣-(1♥)-1♠-(2♥)-P	91.4	1♣-(1♥)-1NT	89.6
1♣-(1♥)-1♠-(2♥)-X	91.1	1♣-(1♥)-1NT-(X)-XX	91.5
1♣-(1♥)-1♠-(2♥)-2♠	91.2	(1♣)-1♥-(1NT)-X	102.5
1♣-(1♥)-1♠-(2♥)-2NT	91.3	1♣-1♥-1NT-2♣	28.5, 142.1
1♣-(1♥)-1♠-(2♥)-3♣	91.3	1♣-1♥-1NT-2♣-(X)-P	144.6
1♣-(1♥)-1♠-(2♥)-3♦	91.3	1♣-1♥-1NT-2♣-(X)-XX	144.6
1♣-(1♥)-1♠-(2♥)-3♠	91.2	1♣-1♥-1NT-2♣-(X)-2♦	144.6
1♣-(1♥)-1♠-(2♥)-3NT	91.3	1♣-1♥-1NT-2♣-(X)-2♥	144.6
1♣-(1♥)-1♠-(2♥)-4♠	91.2	1♣-1♥-1NT-2♣-2♦	142.2
1♣-1♥-1♠-2♠	28.1	1♣-1♥-1NT-2♣-(2♦)-P	144.6
(1♣)-1♥-1♠-2♠	75.8	1♣-1♥-1NT-2♣-(2♦)-XX	144.6
1♣-1♥-1♠-2NT	28.3	1♣-1♥-1NT-2♣-(2♦)-2♥	144.6
(1♣)-1♥-1♠-2NT	75.8	1♣-1♥-1NT-2♣-(2♦)-2♠	144.6
1♣-1♥-1♠-3♣	28.3	1♣-1♥-1NT-2♣-2♦-2NT	143.3, 144.7
1♣-1♥-1♠-3♦	137.4	1♣-1♥-1NT-2♣-2♦-3♣	64.4

1♣-1♥-1NT-2♣-2♦-3NT	143.3	1♣-1♥-1NT-3♦	28.6
1♣-1♥-1NT-2♣-2♥	142.2	1♣-1♥-1NT-3♥	28.6
1♣-1♥-1NT-2♣-2♥-2NT	143.3	(1♣)-1♥-(1NT)-3♥	102.3
1♣-1♥-1NT-2♣-2♥-3♣	64.4	1♣-(1♥)-1NT-(3♥)-X	91.1
1♣-1♥-1NT-2♣-2♥-3♥	143.3	1♣-1♥-1NT-3NT	28.7
1♣-1♥-1NT-2♣-2♥-3NT	143.3	1♣-1♥-1NT-4♥	28.7
1♣-1♥-1NT-2♣-2♥-4♥	143.3	(1♣)-1♥-(1NT)-4♥	102.3
1♣-1♥-1NT-2♣-2♠	142.2	1♣-1♥-2♣	17.7
1♣-1♥-1NT-2♣-(2♠)-P	144.6	(1♣)-(1♥)-2♣	207.5
1♣-1♥-1NT-2♣-(2♠)-XX	144.6	(1♣)-1♥-2♣	74.3, 75.7
1♣-1♥-1NT-2♣-(2♠)-2NT	144.6	1♣-(1♥)-2♣	89.5, 152.4
1♣-1♥-1NT-2♣-2♠-3♣	64.4	(1♣)-1♥-(2♣)-X	101.1
1♣-1♥-1NT-2♣-(2♠)-3♣	144.6	(1♣)-1♥-2♣-(X)-XX	106.6
1♣-1♥-1NT-2♣-2♠-3NT	143.3	(1♣)-1♥-2♣-(X)-2♦	106.6
1♣-1♥-1NT-2♣-2♠-4♥	143.3	(1♣)-1♥-2♣-(X)-2♠	106.6
1♣-1♥-1NT-2♣-2NT	142.2	(1♣)-1♥-2♣-(X)-2NT	106.6
1♣-1♥-1NT-2♣-2NT-3♣	64.4	(1♣)-1♥-2♣-(X)-3♣	106.6
1♣-1♥-1NT-2♣-2NT-3NT ...	143.3,	(1♣)-1♥-2♣-(X)-3NT	106.6
144.7		(1♣)-1♥-2♣-(X)-4♣	106.6
1♣-1♥-1NT-2♦	28.5, 143.4	1♣-1♥-2♣-2♦	32.6, 140.1
(1♣)-1♥-(1NT)-2♦	102.4	(1♣)-1♥-(2♣)-2♦	101.8
1♣-1♥-1NT-2♥	28.5	(1♣)-1♥-2♣-(2♦)-X	105.5
(1♣)-1♥-(1NT)-2♥	102.3	1♣-1♥-2♣-2♦-(X)-P	142.4
1♣-(1♥)-1NT-(2♥)-P	91.4	1♣-1♥-2♣-2♦-(X)-XX	142.4
1♣-(1♥)-1NT-(2♥)-X	91.1	1♣-1♥-2♣-2♦-(X)-2♥	142.4
1♣-(1♥)-1NT-(2♥)-2♠	91.3	1♣-1♥-2♣-2♦-(X)-2♠	142.4
1♣-(1♥)-1NT-(2♥)-2NT	91.3	1♣-1♥-2♣-2♦-2♥	141.2
1♣-(1♥)-1NT-(2♥)-3♣	91.3	(1♣)-1♥-2♣-(2♦)-2♥	105.5
1♣-(1♥)-1NT-(2♥)-3♦	91.3	1♣-1♥-2♣-2♦-2♥-2NT	141.3
1♣-1♥-1NT-2♠	28.6	1♣-1♥-2♣-2♦-2♥-3♣	64.5, 141.3
(1♣)-1♥-(1NT)-2♠	102.4	1♣-1♥-2♣-2♦-2♥-3NT	141.3
1♣-1♥-1NT-2NT	28.6, 143.4	1♣-1♥-2♣-2♦-2♠	141.2
1♣-1♥-1NT-2NT-3♣	143.4	(1♣)-1♥-2♣-(2♦)-2♠	105.5
1♣-1♥-1NT-3♣	28.6	1♣-1♥-2♣-2♦-(2♠)-P	142.4

1♣-1♥-2♣-2♦-(2♠)-XX	142.4	(1♣)-1♥-2♣-(3♣)-3♦	105.3
1♣-1♥-2♣-2♦-2♠-2NT	141.3	(1♣)-1♥-2♣-(3♣)-3♥	105.3
1♣-1♥-2♣-2♦-(2♠)-2NT	142.4	(1♣)-1♥-2♣-(3♣)-3♠	105.3
1♣-1♥-2♣-2♦-2♠-3♣	64.5, 141.3	(1♣)-1♥-2♣-(3♣)-3NT	105.3
1♣-1♥-2♣-2♦-(2♠)-3♣	142.4	1♣-1♥-2♣-3♦	32.6, 191.7
1♣-1♥-2♣-2♦-2♠-3♥	141.3	1♣-1♥-2♣-3♥	32.6
1♣-1♥-2♣-2♦-2♠-3NT	141.3	(1♣)-1♥-(2♣)-3♥	101.7
1♣-1♥-2♣-2♦-2♠-4♥	141.3	(1♣)-1♥-2♣-3♥	76.9
1♣-1♥-2♣-2♦-2NT	141.2	1♣-1♥-2♣-3♠	191.7
(1♣)-1♥-2♣-(2♦)-2NT	105.5	1♣-1♥-2♣-3NT	32.6
1♣-1♥-2♣-2♦-2NT-3♣	64.5	(1♣)-1♥-2♣-3NT	76.9
1♣-1♥-2♣-2♦-2NT-3NT	141.3	1♣-1♥-2♣-4♥	32.6
1♣-1♥-2♣-2♦-3♣	141.2	(1♣)-1♥-(2♣)-4♥	101.7
1♣-1♥-2♣-2♦-3♣-3NT	141.3	1♣-1♥-2♦	16.6
1♣-1♥-2♣-2♦-3♣-4♣	64.5	(1♣)-(1♥)-2♦	86.2, 206.3
1♣-1♥-2♣-2♦-3♣-4♥	141.3	(1♣)-1♥-2♦	75.5
1♣-1♥-2♣-2♦-3♦-4♣	64.5	1♣-1♥-(2♦)-P	99.4
1♣-1♥-2♣-2♥	32.6	(1♣)-1♥-(2♦)-X	101.4
(1♣)-1♥-(2♣)-2♥	101.7	1♣-1♥-(2♦)-X	99.1
(1♣)-1♥-2♣-2♥	76.9	1♣-(1♥)-2♦-(X)-XX	91.5
1♣-1♥-2♣-2♠	32.6	1♣-1♥-2♦-2♥	30.3
(1♣)-1♥-(2♣)-2♠	101.8	(1♣)-1♥-(2♦)-2♥	101.1
(1♣)-1♥-2♣-2♠	76.9	1♣-1♥-(2♦)-2♥	99.2
(1♣)-1♥-2♣-(2♠)-X	105.5	1♣-(1♥)-2♦-(2♥)-P	91.4
(1♣)-1♥-2♣-(2♠)-2NT	105.5	1♣-(1♥)-2♦-(2♥)-X	91.1
(1♣)-1♥-2♣-(2♠)-3♦	105.5	1♣-(1♥)-2♦-(2♥)-2♠	91.3
(1♣)-1♥-2♣-(2♠)-3♥	105.5	1♣-(1♥)-2♦-(2♥)-2NT	91.3
1♣-1♥-2♣-2NT	32.6	1♣-(1♥)-2♦-(2♥)-3♣	91.3
(1♣)-1♥-(2♣)-2NT	101.9	1♣-(1♥)-2♦-(2♥)-3NT	91.3
(1♣)-1♥-2♣-2NT	76.9	1♣-1♥-2♦-2♠	30.3, 135.1
1♣-1♥-2♣-3♣	32.6	(1♣)-1♥-(2♦)-2♠	101.2
(1♣)-1♥-(2♣)-3♣	101.2	1♣-1♥-(2♦)-2♠	99.3
(1♣)-1♥-2♣-3♣	76.9	1♣-1♥-2♦-2♠-2NT	136.3
(1♣)-1♥-2♣-(3♣)-X	105.3	1♣-1♥-2♦-2♠-3♣	136.3

1♣-1♥-2♦-2♠-3♦	136.3	(1♣)-1♥-2♥-(2♠)-3♣-3♥	104.1
1♣-1♥-2♦-2♠-3♥	136.3	(1♣)-1♥-2♥-(2♠)-3♣-3♠	104.1
1♣-1♥-2♦-2♠-3♠	136.3, 191.7	1♣-1♥-2♥-2♠-3♥	155.2
1♣-1♥-2♦-2♠-3♠-3NT	136.3	(1♣)-1♥-2♥-(2♠)-3♥	104.1
1♣-1♥-2♦-2♠-3NT	136.3	1♣-1♥-2♥-2♠-4♥	155.2
1♣-1♥-2♦-2♠-4♥	136.3	(1♣)-1♥-2♥-(2♠)-4♥	104.1
1♣-1♥-2♦-2NT	30.3	1♣-1♥-2♥-2NT	155.1
1♣-1♥-(2♦)-2NT	99.3	1♣-1♥-2♥-2NT-3♥	155.2
1♣-1♥-2♦-3♣	30.3, 64.3	1♣-1♥-2♥-2NT-4♥	155.2
(1♣)-1♥-(2♦)-3♣	101.5	1♣-1♥-2♥-3♣	155.1
1♣-1♥-(2♦)-3♣	99.3	(1♣)-1♥-2♥-(3♣)-X	104.1
1♣-1♥-2♦-3♦	30.3, 67.3	(1♣)-1♥-2♥-(3♣)-3♦	104.1
(1♣)-1♥-(2♦)-3♥	101.1	(1♣)-1♥-2♥-(3♣)-3♦-3♥	104.1
1♣-1♥-(2♦)-3♥	99.2	(1♣)-1♥-2♥-(3♣)-3♦-4♥	104.1
1♣-(1♥)-2♦-(3♥)-P	91.4	1♣-1♥-2♥-3♣-3♥	155.2
1♣-(1♥)-2♦-(3♥)-X	91.1	(1♣)-1♥-2♥-(3♣)-3♥	104.1
1♣-(1♥)-2♦-(3♥)-3♠	91.3	1♣-1♥-2♥-3♣-4♥	155.2
1♣-(1♥)-2♦-(3♥)-3NT	91.3	(1♣)-1♥-2♥-(3♣)-4♥	104.1
1♣-(1♥)-2♦-(3♥)-4♣	91.3	1♣-1♥-2♥-3♦	155.1
1♣-1♥-2♦-3♠	137.4	1♣-1♥-2♥-3♦-3♥	155.2
1♣-1♥-2♦-3NT	30.3	1♣-1♥-2♥-3♦-4♥	155.2
(1♣)-1♥-(2♦)-4♥	101.1	1♣-1♥-2♥-3♥	14.2, 156.4
1♣-1♥-(2♦)-4♥	99.2	1♣-1♥-2♥-4♥	14.2
1♣-1♥-2♥	14.1, 148.3	1♣-1♥-2♠	16.4
(1♣)-(1♥)-2♥	86.3, 207.5	(1♣)-1♥-2♠	74.3
(1♣)-1♥-2♥	74.2	1♣-1♥-2♠-3♣	64.2
1♣-(1♥)-2♥	89.8	1♣-1♥-2♠-3♦	31.4
1♣-1♥-2♥-P	14.2	1♣-1♥-2♠-3♥	31.4
(1♣)-1♥-2♥-(X)-XX	104.1	1♣-1♥-2♠-3♠	31.4, 67.2
(1♣)-1♥-2♥-(X)-3♥	104.1	1♣-1♥-2♠-3NT	31.4
(1♣)-1♥-2♥-(X)-4♥	104.1	1♣-1♥-2♠-4♥	31.4
1♣-1♥-2♥-2♠	155.1	1♣-1♥-2♠-4♠	31.4
(1♣)-1♥-2♥-(2♠)-X	104.1	1♣-1♥-2NT	15.3
(1♣)-1♥-2♥-(2♠)-3♣	104.1	(1♣)-(1♥)-2NT	206.2

(1♣)-1♥-2NT	75.6	1♣-1♥-3♥	14.1
1♣-(1♥)-2NT	89.5	(1♣)-1♥-3♥	74.2
1♣-1♥-2NT-3♣	29.8, 146.1	1♣-1♥-3♥-P	14.2
1♣-1♥-2NT-3♣-3♦	147.2	(1♣)-1♥-3♥-(4♣)-4♥	104.1
1♣-1♥-2NT-3♣-3♦-4♣	64.4	1♣-1♥-3♥-4♥	14.2
1♣-1♥-2NT-3♣-3♥	147.2	1♣-1♥-3♠	190.3
1♣-1♥-2NT-3♣-3♥-4♣	64.4	1♣-1♥-3NT	190.5
1♣-1♥-2NT-3♣-3♠	147.2	(1♣)-1♥-3NT	75.6
1♣-1♥-2NT-3♣-3♠-4♣	64.4	1♣-1♥-4♣	190.4
1♣-1♥-2NT-3♣-3NT	147.2	1♣-1♥-4♦	190.3
1♣-1♥-2NT-3♣-3NT-4♣	64.4, 147.3	1♣-1♥-4♥	14.1, 190.6
1♣-1♥-2NT-3♣-3NT-4♦	147.3	(1♣)-1♥-4♥	74.2, 74.3
1♣-1♥-2NT-3♣-3NT-4♥	147.3	1♣-1♠	8.1
1♣-1♥-2NT-3♣-3NT-4♠	147.3	(1♣)-1♠	73.1
1♣-1♥-2NT-3♦	29.8	1♣-(1♠)-P	88.1, 89.7
1♣-1♥-2NT-3♥	29.8	1♣-(1♠)-(P)-X	130.1
1♣-1♥-2NT-3NT	29.8	1♣-(1♠)-P-X	91.6
1♣-1♥-2NT-4♥	29.8	1♣-(1♠)-(P)-X-P	130.1
1♣-1♥-3♣	17.7	1♣-(1♠)-(P)-X-2♣	130.1
(1♣)-1♥-3♣	74.3	1♣-(1♠)-(P)-X-2♦	130.1
1♣-(1♥)-3♣	89.5, 152.4	1♣-(1♠)-(P)-X-2♥	130.1
(1♣)-1♥-(3♣)-X	101.1	1♣-(1♠)-(P)-1NT	130.1
1♣-1♥-3♣-3♦	31.5	1♣-(1♠)-(P)-2♣	130.1
(1♣)-1♥-(3♣)-3♦	101.8	1♣-(1♠)-(P)-2♦	130.1
1♣-1♥-3♣-3♥	31.5	1♣-(1♠)-(P)-2♥	130.1
(1♣)-1♥-(3♣)-3♥	101.7	1♣-(1♠)-(P)-3♣	130.1
1♣-1♥-3♣-3♠	31.5	(1♣)-(1♠)-X	86.2, 206.1, 206.2
(1♣)-1♥-(3♣)-3♠	101.8	1♣-(1♠)-X	89.3
1♣-1♥-3♣-3NT	31.5	(1♣)-1♠-(X)-XX	101.6
(1♣)-1♥-(3♣)-3NT	101.9	1♣-1♠-(X)-XX	100.5
1♣-1♥-3♣-4♣	64.6	(1♣)-1♠-(X)-2♣	101.6
(1♣)-1♥-3♣-(4♣)-4♥	104.1	(1♣)-1♠-(X)-2♥	101.6
1♣-1♥-3♣-4♥	31.5	(1♣)-1♠-(X)-2♠	101.6
(1♣)-1♥-3♦	74.3	1♣-(1♠)-X-(2♠)-P	91.4

1♣-(1♠)-X-(2♠)-X	91.1	1♣-1♠-1NT-2♣-2♥-3NT	143.3
1♣-(1♠)-X-(2♠)-3♥	91.2	1♣-1♠-1NT-2♣-2♥-4♠ .	143.3, 144.7
1♣-(1♠)-X-(2♠)-4♥	91.2	1♣-1♠-1NT-2♣-2♠	142.2
(1♣)-1♠-(X)-3♦	101.6	1♣-1♠-1NT-2♣-2♠-2NT	143.3
(1♣)-1♠-(X)-3♠	101.6	1♣-1♠-1NT-2♣-2♠-3♣	64.4
1♣-(1♠)-X-(3♠)-P	91.4	1♣-1♠-1NT-2♣-2♠-3♠	143.3
1♣-(1♠)-X-(3♠)-X	91.1	1♣-1♠-1NT-2♣-2♠-3NT	143.3
1♣-(1♠)-X-(3♠)-4♥	91.2	1♣-1♠-1NT-2♣-2♠-4♠ .	143.3, 144.7
(1♣)-1♠-(X)-4♠	101.6	1♣-1♠-1NT-2♣-2NT	142.2
1♣-1♠-1NT	15.3, 148.3	1♣-1♠-1NT-2♣-2NT-3♣	64.4
(1♣)-(1♠)-1NT	206.2	1♣-1♠-1NT-2♣-2NT-3NT	143.3
(1♣)-1♠-1NT	75.6	1♣-1♠-1NT-2♦	28.5, 143.4
1♣-(1♠)-1NT	89.6	(1♣)-1♠-(1NT)-2♦	102.4
1♣-(1♠)-1NT-(X)-XX	91.5	1♣-1♠-1NT-2♥	28.5, 143.4
(1♣)-1♠-(1NT)-X	102.5	(1♣)-1♠-(1NT)-2♥	102.4
1♣-1♠-1NT-2♣	28.5, 142.1	1♣-1♠-1NT-2♠	28.5
1♣-1♠-1NT-2♣-(X)-P	144.6	(1♣)-1♠-(1NT)-2♠	102.3
1♣-1♠-1NT-2♣-(X)-XX	144.6	1♣-(1♠)-1NT-(2♠)-P	91.4
1♣-1♠-1NT-2♣-(X)-2♦	144.6	1♣-(1♠)-1NT-(2♠)-X	91.1
1♣-1♠-1NT-2♣-(X)-2♥	144.6	1♣-(1♠)-1NT-(2♠)-2NT	91.3
1♣-1♠-1NT-2♣-2♦	142.2	1♣-(1♠)-1NT-(2♠)-3♣	91.3
1♣-1♠-1NT-2♣-(2♦)-P	144.6	1♣-(1♠)-1NT-(2♠)-3♦	91.3
1♣-1♠-1NT-2♣-(2♦)-XX	144.6	1♣-(1♠)-1NT-(2♠)-3♥	91.3
1♣-1♠-1NT-2♣-(2♦)-2♥	144.6	1♣-1♠-1NT-2NT	28.6, 143.4
1♣-1♠-1NT-2♣-(2♦)-2♠	144.6	1♣-1♠-1NT-2NT-3♣	143.4
1♣-1♠-1NT-2♣-2♦-2NT	143.3	1♣-1♠-1NT-3♣	28.6
1♣-1♠-1NT-2♣-2♦-3♣	64.4	1♣-1♠-1NT-3♦	28.6
1♣-1♠-1NT-2♣-2♦-3NT	143.3	1♣-1♠-1NT-3♥	28.6
1♣-1♠-1NT-2♣-2♥	142.2	1♣-1♠-1NT-3♠	28.6
1♣-1♠-1NT-2♣-(2♥)-P	144.6	(1♣)-1♠-(1NT)-3♠	102.3
1♣-1♠-1NT-2♣-(2♥)-XX	144.6	1♣-(1♠)-1NT-(3♠)-X	91.1
1♣-1♠-1NT-2♣-(2♥)-2♠	144.6	1♣-1♠-1NT-3NT	28.7
1♣-1♠-1NT-2♣-(2♥)-2NT	144.6	1♣-1♠-1NT-4♠	28.7
1♣-1♠-1NT-2♣-2♥-3♣	64.4	(1♣)-1♠-(1NT)-4♠	102.3

1♣-1♠-2♣	17.7	1♣-1♠-2♣-2♦-2♠-3♣	64.5, 141.3
(1♣)-(1♠)-2♣	207.5	1♣-1♠-2♣-2♦-2♠-3♥	141.3
(1♣)-1♠-2♣	74.3, 75.7	1♣-1♠-2♣-2♦-2♠-3♥-3♠	141.3
1♣-(1♠)-2♣	89.5, 152.4	1♣-1♠-2♣-2♦-2♠-3♥-3NT	141.3
(1♣)-1♠-(2♣)-X	101.1	1♣-1♠-2♣-2♦-2♠-3♥-4♥	141.3
(1♣)-1♠-2♣-(X)-XX	106.6	1♣-1♠-2♣-2♦-2♠-3♥-4♠	141.3
(1♣)-1♠-2♣-(X)-2♦	106.6	1♣-1♠-2♣-2♦-2♠-3♠	141.3
(1♣)-1♠-2♣-(X)-2♥	106.6	1♣-1♠-2♣-2♦-2♠-3NT	141.3
(1♣)-1♠-2♣-(X)-2NT	106.6	1♣-1♠-2♣-2♦-2♠-4♠	141.3
(1♣)-1♠-2♣-(X)-3♣	106.6	1♣-1♠-2♣-2♦-2NT	141.2
(1♣)-1♠-2♣-(X)-3NT	106.6	(1♣)-1♠-2♣-(2♦)-2NT	105.5
(1♣)-1♠-2♣-(X)-4♣	106.6	1♣-1♠-2♣-2♦-2NT-3♣	64.5
1♣-1♠-2♣-2♦	32.6, 140.1	1♣-1♠-2♣-2♦-2NT-3♥	141.3
(1♣)-1♠-(2♣)-2♦	101.8	1♣-1♠-2♣-2♦-2NT-3♥-3♠	141.3
(1♣)-1♠-2♣-(2♦)-X	105.5	1♣-1♠-2♣-2♦-2NT-3♥-3NT ..	141.3
1♣-1♠-2♣-2♦-(X)-P	142.4	1♣-1♠-2♣-2♦-2NT-3♥-4♥	141.3
1♣-1♠-2♣-2♦-(X)-XX	142.4	1♣-1♠-2♣-2♦-2NT-3♥-4♠	141.3
1♣-1♠-2♣-2♦-(X)-2♥	142.4	1♣-1♠-2♣-2♦-2NT-3NT	141.3
1♣-1♠-2♣-2♦-(X)-s♠	142.4	1♣-1♠-2♣-2♦-3♣	141.2
1♣-1♠-2♣-2♦-2♥	141.2	1♣-1♠-2♣-2♦-3♣-3♥	141.3
(1♣)-1♠-2♣-(2♦)-2♥	105.5	1♣-1♠-2♣-2♦-3♣-3♥-3♠	141.3
1♣-1♠-2♣-2♦-(2♥)-P	142.4	1♣-1♠-2♣-2♦-3♣-3♥-3NT	141.3
1♣-1♠-2♣-2♦-(2♥)-XX	142.4	1♣-1♠-2♣-2♦-3♣-3♥-4♥	141.3
1♣-1♠-2♣-2♦-(2♥)-2♠	142.4	1♣-1♠-2♣-2♦-3♣-3♥-4♠	141.3
1♣-1♠-2♣-2♦-2♥-2NT	141.3	1♣-1♠-2♣-2♦-3♣-3NT	141.3
1♣-1♠-2♣-2♦-(2♥)-2NT	142.4	1♣-1♠-2♣-2♦-3♣-4♣	64.5
1♣-1♠-2♣-2♦-2♥-3♣	64.5, 141.3	1♣-1♠-2♣-2♦-3♣-4♠	141.3
1♣-1♠-2♣-2♦-2♥-3♥	141.3	1♣-1♠-2♣-2♦-3♦-4♣	64.5
1♣-1♠-2♣-2♦-2♥-3♥-3♠	141.3	1♣-1♠-2♣-2♥	32.6
1♣-1♠-2♣-2♦-2♥-3♥-3NT	141.3	(1♣)-1♠-(2♣)-2♥	101.8
1♣-1♠-2♣-2♦-2♥-3NT-4♥	141.3	(1♣)-1♠-2♣-2♥	76.9
1♣-1♠-2♣-2♦-2♠	141.2	(1♣)-1♠-2♣-(2♥)-X	105.5
(1♣)-1♠-2♣-(2♦)-2♠	105.5	(1♣)-1♠-2♣-(2♥)-2♠	105.5
1♣-1♠-2♣-2♦-2♠-2NT	141.3	(1♣)-1♠-2♣-(2♥)-2NT	105.5

(1♣)-1♠-2♣-(2♥)-3♦	105.5	1♣-1♠-2♦-2♥-2♠	136.3
1♣-1♠-2♣-2♠	32.6	1♣-1♠-2♦-2♥-2NT	136.3
(1♣)-1♠-(2♣)-2♠	101.7	1♣-1♠-2♦-2♥-3♣	136.3
(1♣)-1♠-2♣-2♠	76.9	1♣-1♠-2♦-2♥-3♦	136.3
1♣-1♠-2♣-2NT	32.6	1♣-1♠-2♦-2♥-3♥	136.3, 191.7
(1♣)-1♠-(2♣)-2NT	101.9	1♣-1♠-2♦-2♥-3♥-3NT	136.3
(1♣)-1♠-2♣-2NT	76.9	1♣-1♠-2♦-2♥-3♠	136.3
1♣-1♠-2♣-3♣	32.6	1♣-1♠-2♦-2♥-3NT	136.3
(1♣)-1♠-(2♣)-3♣	101.2	1♣-1♠-2♦-2♠	30.3
(1♣)-1♠-2♣-3♣	76.9	(1♣)-1♠-(2♦)-2♠	101.1
(1♣)-1♠-2♣-(3♣)-X	105.3	1♣-1♠-(2♦)-2♠	99.2
(1♣)-1♠-2♣-(3♣)-3♦	105.3	1♣-(1♠)-2♦-(2♠)-P	91.4
(1♣)-1♠-2♣-(3♣)-3♥	105.3	1♣-(1♠)-2♦-(2♠)-X	91.1
(1♣)-1♠-2♣-(3♣)-3♠	105.3	1♣-(1♠)-2♦-(2♠)-2NT	91.3
(1♣)-1♠-2♣-(3♣)-3NT	105.3	1♣-(1♠)-2♦-(2♠)-3♣	91.3
1♣-1♠-2♣-3♦	32.6, 191.7	1♣-(1♠)-2♦-(2♠)-3♥	91.3
1♣-1♠-2♣-3♥	32.6, 191.7	1♣-(1♠)-2♦-(2♠)-3NT	91.3
1♣-1♠-2♣-3♠	32.6	1♣-1♠-2♦-2NT	30.3
(1♣)-1♠-(2♣)-3♠	101.7	1♣-1♠-(2♦)-2NT	99.3
(1♣)-1♠-2♣-3♠	76.9	1♣-1♠-2♦-3♣	30.3, 64.3
1♣-1♠-2♣-3NT	32.6	(1♣)-1♠-(2♦)-3♣	101.5
(1♣)-1♠-2♣-3NT	76.9	1♣-1♠-(2♦)-3♣	99.3
(1♣)-1♠-(2♣)-4♠	101.7	1♣-1♠-2♦-3♦	30.3, 67.3
1♣-1♠-2♦	16.6	1♣-1♠-2♦-3♥	137.4
(1♣)-(1♠)-2♦	86.2, 206.3	(1♣)-1♠-(2♦)-3♠	101.1
(1♣)-1♠-2♦	75.5	1♣-1♠-(2♦)-3♠	99.2
1♣-(1♠)-2♦	89.4	1♣-(1♠)-2♦-(3♠)-P	91.4
1♣-1♠-(2♦)-P	99.4	1♣-(1♠)-2♦-(3♠)-X	91.1
(1♣)-1♠-(2♦)-X	101.4	1♣-(1♠)-2♦-(3♠)-3NT	91.3
1♣-1♠-(2♦)-X	99.1	1♣-(1♠)-2♦-(3♠)-4♣	91.3
1♣-(1♠)-2♦-(X)-XX	91.5	1♣-1♠-2♦-3NT	30.3
1♣-1♠-2♦-2♥	30.3, 135.1	(1♣)-1♠-(2♦)-4♠	101.1
(1♣)-1♠-(2♦)-2♥	101.2	1♣-1♠-(2♦)-4♠	99.2
1♣-1♠-(2♦)-2♥	99.3	1♣-1♠-2♥	16.6

$(1\clubsuit)-(1\spadesuit)-2\heartsuit$	86.2 , 206.3	$1\clubsuit-(1\spadesuit)-2\heartsuit-(3\spadesuit)-P$	91.4
$(1\clubsuit)-1\spadesuit-2\heartsuit$	75.5	$1\clubsuit-(1\spadesuit)-2\heartsuit-(3\spadesuit)-X$	91.1
$1\clubsuit-(1\spadesuit)-2\heartsuit$	89.4	$1\clubsuit-(1\spadesuit)-2\heartsuit-(3\spadesuit)-3NT$	91.3
$1\clubsuit-1\spadesuit-(2\heartsuit)-P$	99.4	$1\clubsuit-(1\spadesuit)-2\heartsuit-(3\spadesuit)-4\clubsuit$	91.3
$(1\clubsuit)-1\spadesuit-(2\heartsuit)-X$	101.4	$1\clubsuit-(1\spadesuit)-2\heartsuit-(3\spadesuit)-4\heartsuit$	91.2
$1\clubsuit-1\spadesuit-(2\heartsuit)-X$	99.1	$1\clubsuit-1\spadesuit-2\heartsuit-3NT$	30.3
$1\clubsuit-(1\spadesuit)-2\heartsuit-(X)-XX$	91.5	$1\clubsuit-1\spadesuit-2\heartsuit-4\heartsuit$	30.3
$1\clubsuit-1\spadesuit-2\heartsuit-2\spadesuit$	30.3	$(1\clubsuit)-1\spadesuit-(2\heartsuit)-4\spadesuit$	101.1
$(1\clubsuit)-1\spadesuit-(2\heartsuit)-2\spadesuit$	101.1	$1\clubsuit-1\spadesuit-(2\heartsuit)-4\spadesuit$	99.2
$1\clubsuit-1\spadesuit-(2\heartsuit)-2\spadesuit$	99.2	$1\clubsuit-1\spadesuit-2\spadesuit$	14.1 , 148.3
$1\clubsuit-(1\spadesuit)-2\heartsuit-(2\spadesuit)-P$	91.4	$(1\clubsuit)-(1\spadesuit)-2\spadesuit$	86.3 , 207.5
$1\clubsuit-(1\spadesuit)-2\heartsuit-(2\spadesuit)-X$	91.1	$(1\clubsuit)-1\spadesuit-2\spadesuit$	74.2
$1\clubsuit-(1\spadesuit)-2\heartsuit-(2\spadesuit)-2NT$	91.3	$1\clubsuit-(1\spadesuit)-2\spadesuit$	89.8
$1\clubsuit-(1\spadesuit)-2\heartsuit-(2\spadesuit)-3\clubsuit$	91.3	$1\clubsuit-1\spadesuit-2\spadesuit-P$	14.2
$1\clubsuit-(1\spadesuit)-2\heartsuit-(2\spadesuit)-3\diamond$	91.3	$(1\clubsuit)-1\spadesuit-2\spadesuit-(X)-XX$	104.1
$1\clubsuit-(1\spadesuit)-2\heartsuit-(2\spadesuit)-3\heartsuit$	91.2	$(1\clubsuit)-1\spadesuit-2\spadesuit-(X)-3\spadesuit$	104.1
$1\clubsuit-(1\spadesuit)-2\heartsuit-(2\spadesuit)-3NT$	91.3	$(1\clubsuit)-1\spadesuit-2\spadesuit-(X)-4\spadesuit$	104.1
$1\clubsuit-(1\spadesuit)-2\heartsuit-(2\spadesuit)-4\heartsuit$	91.2	$1\clubsuit-1\spadesuit-2\spadesuit-2NT$	155.1
$1\clubsuit-1\spadesuit-2\heartsuit-2NT$	30.3	$1\clubsuit-1\spadesuit-2\spadesuit-2NT-3\spadesuit$	155.2
$1\clubsuit-1\spadesuit-(2\heartsuit)-2NT$	99.3	$1\clubsuit-1\spadesuit-2\spadesuit-2NT-4\spadesuit$	155.2
$1\clubsuit-1\spadesuit-2\heartsuit-3\clubsuit$	30.3 , 64.3	$1\clubsuit-1\spadesuit-2\spadesuit-3\clubsuit$	155.1
$(1\clubsuit)-1\spadesuit-(2\heartsuit)-3\clubsuit$	101.5	$(1\clubsuit)-1\spadesuit-2\spadesuit-(3\clubsuit)-3\diamond$	104.1
$1\clubsuit-1\spadesuit-(2\heartsuit)-3\clubsuit$	99.3	$(1\clubsuit)-1\spadesuit-2\spadesuit-(3\clubsuit)-3\diamond-3\spadesuit$	104.1
$1\clubsuit-1\spadesuit-2\heartsuit-3\diamond$	30.3 , 135.1	$(1\clubsuit)-1\spadesuit-2\spadesuit-(3\clubsuit)-3\diamond-4\spadesuit$	104.1
$(1\clubsuit)-1\spadesuit-(2\heartsuit)-3\diamond$	101.2	$1\clubsuit-1\spadesuit-2\spadesuit-3\clubsuit-3\spadesuit$	155.2
$1\clubsuit-1\spadesuit-(2\heartsuit)-3\diamond$	99.3	$(1\clubsuit)-1\spadesuit-2\spadesuit-(3\clubsuit)-3\spadesuit$	104.1
$1\clubsuit-1\spadesuit-2\heartsuit-3\diamond-3\heartsuit$	136.3	$1\clubsuit-1\spadesuit-2\spadesuit-3\clubsuit-4\spadesuit$	155.2
$1\clubsuit-1\spadesuit-2\heartsuit-3\diamond-3\spadesuit$	136.3	$(1\clubsuit)-1\spadesuit-2\spadesuit-(3\clubsuit)-4\spadesuit$	104.1
$1\clubsuit-1\spadesuit-2\heartsuit-3\diamond-3NT$	136.3	$1\clubsuit-1\spadesuit-2\spadesuit-3\diamond$	155.1
$1\clubsuit-1\spadesuit-2\heartsuit-3\diamond-4\diamond$	191.7	$1\clubsuit-1\spadesuit-2\spadesuit-3\diamond-3\spadesuit$	155.2
$1\clubsuit-1\spadesuit-2\heartsuit-3\diamond-4\spadesuit$	136.3	$1\clubsuit-1\spadesuit-2\spadesuit-3\diamond-4\spadesuit$	155.2
$1\clubsuit-1\spadesuit-2\heartsuit-3\heartsuit$	30.3 , 67.3	$1\clubsuit-1\spadesuit-2\spadesuit-3\heartsuit$	155.1
$(1\clubsuit)-1\spadesuit-(2\heartsuit)-3\spadesuit$	101.1	$1\clubsuit-1\spadesuit-2\spadesuit-3\heartsuit-3\spadesuit$	155.2
$1\clubsuit-1\spadesuit-(2\heartsuit)-3\spadesuit$	99.2	$1\clubsuit-1\spadesuit-2\spadesuit-3\heartsuit-4\spadesuit$	155.2

1♣-1♠-2♠-3♠	14.2, 156.4	(1♣)-1♠-(3♣)-3NT	101.9
1♣-1♠-2♠-4♠	14.2	1♣-1♠-3♣-4♣	64.6
1♣-1♠-2NT	15.3	(1♣)-1♠-3♣-(4♣)-4♠	104.1
(1♣)-(1♠)-2NT	206.2	1♣-1♠-3♣-4♠	31.5
(1♣)-1♠-2NT	75.6	(1♣)-1♠-3♦	74.3
1♣-(1♠)-2NT	89.5	(1♣)-1♠-3♥	74.3
1♣-1♠-2NT-3♣	29.8, 146.1	1♣-1♠-3♠	14.1
1♣-1♠-2NT-3♣-3♦	147.2	(1♣)-1♠-3♠	74.2
1♣-1♠-2NT-3♣-3♦-4♣	64.4	1♣-1♠-3♠-P	14.2
1♣-1♠-2NT-3♣-3♥	147.2	(1♣)-1♠-3♠-(4♣)-4♠	104.1
1♣-1♠-2NT-3♣-3♥-4♣	64.4	1♣-1♠-3♠-4♠	14.2
1♣-1♠-2NT-3♣-3♠	147.2	1♣-1♠-3NT	190.5
1♣-1♠-2NT-3♣-3♠-4♣	64.4	(1♣)-1♠-3NT	75.6
1♣-1♠-2NT-3♣-3NT	147.2	1♣-1♠-4♣	190.4
1♣-1♠-2NT-3♣-3NT-4♣	64.4, 147.3	1♣-1♠-4♦	190.3
1♣-1♠-2NT-3♣-3NT-4♦	147.3	1♣-1♠-4♥	190.3
1♣-1♠-2NT-3♣-3NT-4♥	147.3	1♣-1♠-4♠	14.1, 190.6
1♣-1♠-2NT-3♣-3NT-4♠	147.3	(1♣)-1♠-4♠	74.2, 74.3
1♣-1♠-2NT-3♦	29.8	1♣-1NT	8.1
1♣-1♠-2NT-3♥	29.8	(1♣)-1NT	80.1
1♣-1♠-2NT-3♠	29.8	1♣-(1NT)-X	202.1
1♣-1♠-2NT-3NT	29.8	(1♣)-(1NT)-(P)-X	132.2
1♣-1♠-2NT-4♠	29.8	1♣-(1NT)-(P)-X	130.2
1♣-1♠-3♣	17.7	1♣-(1NT)-(P)-2♣	130.2
(1♣)-1♠-3♣	74.3	(1♣)-(1NT)-(P)-2♦	132.2
1♣-(1♠)-3♣	89.5, 152.4	(1♣)-(1NT)-(P)-2♥	132.2
(1♣)-1♠-(3♣)-X	101.1	(1♣)-(1NT)-(P)-2♠	132.2
1♣-1♠-3♣-3♦	31.5	(1♣)-(1NT)-X	87.4
(1♣)-1♠-(3♣)-3♦	101.8	1♣-(1NT)-X	97.1
1♣-1♠-3♣-3♥	31.5	1♣-1NT-(X)-XX	100.5
(1♣)-1♠-(3♣)-3♥	101.8	1♣-1NT-2♣	22.3
1♣-1♠-3♣-3♠	31.5	(1♣)-(1NT)-2♣	207.6
(1♣)-1♠-(3♣)-3♠	101.7	(1♣)-1NT-2♣	80.2
1♣-1♠-3♣-3NT	31.5	1♣-(1NT)-2♣	98.2, 203.2

1♣-(1NT)-2♣-2♦	203.2	1♣-1NT-2♥-3NT	26.4
1♣-(1NT)-2♣-2♥	203.2	1♣-1NT-2♠	22.3
1♣-(1NT)-2♣-2♠	203.2	(1♣)-(1NT)-2♠	87.4
1♣-1NT-2♣-3♣	27.7	1♣-(1NT)-2♠	98.2, 203.3
1♣-1NT-2♦	22.3	1♣-1NT-(2♠)-P	99.4
(1♣)-(1NT)-2♦	87.4	1♣-1NT-(2♠)-X	99.1
(1♣)-1NT-2♦	80.2	1♣-1NT-2♠-2NT	26.4
1♣-(1NT)-2♦	98.2, 203.3	1♣-1NT-2♠-3♣	26.4
1♣-1NT-(2♦)-P	99.4	1♣-(1NT)-2♠-3♣	203.3
1♣-1NT-(2♦)-X	99.1	1♣-1NT-(2♠)-3♣	99.3
1♣-1NT-2♦-2♥	26.4	1♣-1NT-2♠-3♦	26.4
(1♣)-1NT-2♦-2♥	80.2	1♣-1NT-2♠-3♥	26.4
1♣-(1NT)-2♦-2♥	203.3	1♣-1NT-2♠-3NT	26.4
1♣-1NT-(2♦)-2♥	99.3	1♣-1NT-2NT	22.3
1♣-1NT-2♦-2♠	26.4	(1♣)-1NT-2NT	80.2
1♣-1NT-(2♦)-2♠	99.3	1♣-(1NT)-2NT	203.3
1♣-1NT-2♦-2NT	26.4	1♣-(1NT)-2NT-3♣	203.3
1♣-1NT-2♦-3♣	26.4	1♣-(1NT)-2NT-3♦	203.3
1♣-1NT-(2♦)-3♣	99.3	(1♣)-1NT-2NT-3NT	80.2
1♣-1NT-2♦-3NT	26.4	1♣-1NT-3♣	22.3
1♣-1NT-2♥	22.3	1♣-(1NT)-3♣	203.3
(1♣)-(1NT)-2♥	87.4	1♣-(1NT)-3♣-3♦	203.3
(1♣)-1NT-2♥	80.2	1♣-1NT-3♣-3NT	27.6
1♣-(1NT)-2♥	98.2, 203.3	1♣-1NT-3NT	22.3
1♣-1NT-(2♥)-P	99.4	(1♣)-1NT-3NT	80.2
1♣-1NT-(2♥)-X	99.1	1♣-2♣	8.1, 151.1
1♣-1NT-2♥-2♠	26.4	(1♣)-2♣	197.1
(1♣)-1NT-2♥-2♠	80.2	1♣-(2♣)-P	201.1
1♣-(1NT)-2♥-2♠	203.3	(1♣)-(2♣)-(P)-X	131.1
1♣-1NT-(2♥)-2♠	99.3	(1♣)-(2♣)-(P)-2♦	131.1
1♣-1NT-2♥-2NT	26.4	(1♣)-(2♣)-(P)-2♥	131.1
1♣-1NT-2♥-3♣	26.4	(1♣)-(2♣)-(P)-2♠	131.1
1♣-1NT-(2♥)-3♣	99.3	(1♣)-(2♣)-X	207.7
1♣-1NT-2♥-3♦	26.4	1♣-(2♣)-X	201.1

(1♣)-(2♣)-2♦	86.1	(1♣)-2♣-3♠	198.2
1♣-(2♣)-2♦	201.1	1♣-2♣-3NT	13.4, 152.3
1♣-2♣-2♥	13.5, 152.3	(1♣)-2♣-3NT	198.2
(1♣)-(2♣)-2♥	86.1	1♣-(2♣)-3NT	201.1
(1♣)-2♣-2♥	198.2	(1♣)-2♣-4♥	198.2
1♣-(2♣)-2♥	201.1	(1♣)-2♣-4♠	198.2
1♣-(2♣)-(2♥)-(P)-X	201.2	1♣-2♦	66.1
1♣-(2♣)-(2♥)-(P)-3♣	201.2	(1♣)-2♦	119.1, 199.6
1♣-2♣-2♥-2NT	13.5	1♣-(2♦)-X	122.3
1♣-2♣-2♥-3♣	13.5	1♣-(2♦)-2♥	122.3
1♣-2♣-2♥-3♥	152.3	1♣-(2♦)-2♠	122.3
1♣-2♣-2♥-3NT	13.5	1♣-(2♦)-2NT	122.3
1♣-2♣-2♥-4♣	13.5	1♣-(2♦)-3♣	122.3
1♣-2♣-2♠	13.5, 152.3	1♣-(2♦)-3♦	122.3
(1♣)-(2♣)-2♠	86.1	1♣-(2♦)-3NT	122.3
(1♣)-2♣-2♠	198.2	1♣-2♥	66.1
1♣-(2♣)-2♠	201.1	(1♣)-2♥	119.1
1♣-(2♣)-(2♠)-(P)-X	201.2	1♣-(2♥)-X	122.2
1♣-(2♣)-(2♠)-(P)-3♣	201.2	1♣-(2♥)-2♠	122.2
1♣-2♣-2♠-2NT	13.5	1♣-(2♥)-2NT	122.2
1♣-2♣-2♠-3♣	13.5	1♣-(2♥)-3♣	122.2
1♣-2♣-2♠-3♠	152.3	1♣-(2♥)-3♦	122.2
1♣-2♣-2♠-3NT	13.5	1♣-(2♥)-3♥	122.2
1♣-2♣-2♠-4♣	13.5	1♣-(2♥)-3NT	122.2
1♣-2♣-2NT	13.4, 152.3	1♣-2♠	66.1
(1♣)-(2♣)-2NT	207.7	(1♣)-2♠	119.1
1♣-(2♣)-2NT	201.1	1♣-(2♠)-X	122.2
1♣-2♣-2NT-3♣	13.4	1♣-(2♠)-2NT	122.2
1♣-2♣-3♣	152.3	1♣-(2♠)-3♣	122.2
(1♣)-2♣-3♣	198.2	1♣-(2♠)-3♦	122.2
1♣-(2♣)-3♣	201.1	1♣-(2♠)-3♥	122.2
(1♣)-2♣-3♣-3♥	198.2	1♣-(2♠)-3♠	122.2
(1♣)-2♣-3♣-4♥	198.2	1♣-(2♠)-3NT	122.2
(1♣)-2♣-3♥	198.2	1♣-2NT	8.1

(1♣)-2NT	198.4	(1♣)-(3♣)-3♠	86.1
1♣-(2NT)-P	201.1	1♣-3♣-3♠-3NT	13.6
1♣-(2NT)-X	201.1	1♣-3♣-3♠-4♣	13.6
1♣-(2NT)-3♣	201.1	1♣-3♣-3NT	13.6, 152.2
(1♣)-2NT-3♦	198.4	(1♣)-(3♣)-3NT	207.7
1♣-(2NT)-3♦	201.1	(1♣)-3♦	119.1
1♣-2NT-(3♦)-P	99.4	1♣-(3♦)-X	123.4
1♣-(2NT)-(3♦)-(P)-X	201.2	1♣-(3♦)-X-3♥	123.4
1♣-(2NT)-(3♦)-(P)-4♣	201.2	1♣-(3♦)-X-3♥-4♥	123.4
1♣-2NT-(3♦)-X	99.1	1♣-(3♦)-X-3♠	123.4
(1♣)-2NT-3♥	198.4	1♣-(3♦)-X-3♠-4♠	123.4
1♣-(2NT)-3♥	201.1	1♣-(3♦)-X-3NT	123.4
1♣-2NT-(3♥)-P	99.4	1♣-(3♦)-X-4♣	123.4
1♣-(2NT)-(3♥)-(P)-X	201.2	1♣-(3♦)-3♥	123.4
1♣-(2NT)-(3♥)-(P)-4♣	201.2	1♣-(3♦)-3♠	123.4
1♣-2NT-(3♥)-X	99.1	1♣-(3♦)-3NT	123.4
1♣-(2NT)-3♠	201.1	(1♣)-3♥	119.1
1♣-2NT-(3♠)-P	99.4	1♣-(3♥)-X	123.4
1♣-2NT-(3♠)-X	99.1	1♣-(3♥)-X-3♠	123.4
1♣-2NT-3NT	21.2	1♣-(3♥)-X-3♠-4♠	123.4
(1♣)-2NT-3NT	198.4	1♣-(3♥)-X-3NT	123.4
1♣-(2NT)-3NT	201.1	1♣-(3♥)-X-4♣	123.4
(1♣)-2NT-4♦	198.4	1♣-(3♥)-3♠	123.4
(1♣)-2NT-4♥	198.4	1♣-(3♥)-3NT	123.4
1♣-3♣	8.1, 151.1	(1♣)-3♠	119.1
1♣-3♣-P	13.6	1♣-(3♠)-X	123.4
(1♣)-(3♣)-X	207.7	1♣-(3♠)-X-3NT	123.4
1♣-3♣-3♦	152.2	1♣-(3♠)-X-4♣	123.4
(1♣)-(3♣)-3♦	86.1	1♣-(3♠)-3NT	123.4
1♣-3♣-3♥	13.6, 152.2	1♣-3NT	8.1
(1♣)-(3♣)-3♥	86.1	(1♣)-3NT	153.3
1♣-3♣-3♥-3NT	13.6	(1♣)-4♦	119.1
1♣-3♣-3♥-4♣	13.6	1♣-(4♦)-X	123.5
1♣-3♣-3♠	13.6, 152.2	1♣-(4♦)-X-4NT	123.5

(1♣)-4♥	119.1	(1♦)-(P)-1♥-(1♠)-X	129.9
1♣-(4♥)-X	123.5	(1♦)-(P)-1♥-(1♠)-1NT	129.9
1♣-(4♥)-X-4NT	123.5	(1♦)-(P)-1♥-(1♠)-2♥	129.9
(1♣)-4♠	119.1	(1♦)-(P)-1♥-(1♠)-2NT	129.9
1♣-(4♠)-X	123.5	(1♦)-(P)-1♥-1NT	128.8
1♣-(4♠)-X-4NT	123.5	(1♦)-(P)-1♥-2♣	128.8
(1♣)-5♦	119.1	(1♦)-(P)-1♥-(2♣)-X	129.9
1♣-(5♦)-X	123.5	(1♦)-(P)-1♥-(2♣)-2♥	129.9
1♦	3.1	(1♦)-(P)-1♥-(2♣)-2NT	129.9
(1♦)-P	73.1	(1♦)-(P)-1♥-(2♣)-3NT	129.9
1♦-P	9.2	(1♦)-(P)-1♥-(2♦)-2♥	129.9
(1♦)-(P)-X	125.1	(1♦)-(P)-1♥-2♥	128.8
(1♦)-(P)-X-P	126.2	(1♦)-(P)-1♥-2♠	128.8
(1♦)-(P)-X-1♥	126.2	(1♦)-(P)-1♥-2NT	128.8
(1♦)-(P)-X-(1♥)-1♠	126.2	(1♦)-(P)-1♥-3♣	128.8
(1♦)-(P)-X-(1♥)-2♣	126.2	(1♦)-(P)-1♥-3♥	128.8
(1♦)-(P)-X-1♠	126.2	(1♦)-(P)-1♠	127.5
(1♦)-(P)-X-(1♠)-2♣	126.2	(1♦)-(P)-1♠-1NT	128.8
(1♦)-(P)-X-(1♠)-2♥	126.2	(1♦)-(P)-1♠-2♣	128.8
(1♦)-(P)-X-1NT	126.2	(1♦)-(P)-1♠-(2♣)-X	129.9
(1♦)-(P)-X-2♣	126.2	(1♦)-(P)-1♠-(2♣)-2♠	129.9
(1♦)-(P)-X-(2♣)-2♥	126.2	(1♦)-(P)-1♠-(2♣)-2NT	129.9
(1♦)-(P)-X-(2♣)-2♠	126.2	(1♦)-(P)-1♠-(2♣)-3NT	129.9
(1♦)-(P)-X-2♦	126.2	(1♦)-(P)-1♠-(2♦)-2♠	129.9
(1♦)-(P)-X-(2♦)-2♥	126.2	(1♦)-(P)-1♠-2♥	128.8
(1♦)-(P)-X-(2♦)-2♠	126.2	(1♦)-(P)-1♠-(2♥)-X	129.9
(1♦)-(P)-X-(2♦)-3♣	126.2	(1♦)-(P)-1♠-(2♥)-2♠	129.9
(1♦)-(P)-X-2♥	126.2	(1♦)-(P)-1♠-(2♥)-2NT	129.9
(1♦)-(P)-X-2♠	126.2	(1♦)-(P)-1♠-(2♥)-3NT	129.9
(1♦)-(P)-X-2NT	126.2	(1♦)-(P)-1♠-2♠	128.8
(1♦)-(P)-X-3♣	126.2	(1♦)-(P)-1♠-2NT	128.8
(1♦)-(P)-X-3NT	126.2	(1♦)-(P)-1♠-3♣	128.8
(1♦)-(P)-1♥	127.5	(1♦)-(P)-1♠-3♥	128.8
(1♦)-(P)-1♥-1♠	128.8	(1♦)-(P)-1♠-3♠	128.8

(1♦)-(P)-1NT	127.3	(1♦)-X-(XX)-3♣	104.9
(1♦)-(P)-1NT-P-(X)-XX	127.4	(1♦)-X-(XX)-3NT	104.9
(1♦)-(P)-1NT-(X)-(P)-XX	127.4	(1♦)-X-1♥	81.3, 82.6
(1♦)-(P)-2♣	128.6	1♦-(X)-1♥	97.4
(1♦)-(P)-2♣-(2♦)-3♣	129.9	(1♦)-X-(1♥)-P	102.6
(1♦)-(P)-2♣-2♥	128.8	(1♦)-X-1♥-P	82.9
(1♦)-(P)-2♣-(2♥)-X	129.9	(1♦)-X-(1♥)-X	102.6
(1♦)-(P)-2♣-(2♥)-2NT	129.9	(1♦)-X-(1♥)-1♠	102.6
(1♦)-(P)-2♣-(2♥)-3♣	129.9	(1♦)-X-1♥-1♠	82.1, 82.6
(1♦)-(P)-2♣-(2♥)-3NT	129.9	(1♦)-X-1♥-1♠-2♥	82.4
(1♦)-(P)-2♣-2♠	128.8	(1♦)-X-(1♥)-1NT	102.6
(1♦)-(P)-2♣-(2♠)-X	129.9	(1♦)-X-1♥-1NT	82.3, 82.6
(1♦)-(P)-2♣-(2♠)-2NT	129.9	(1♦)-X-(1♥)-2♣	102.6
(1♦)-(P)-2♣-(2♠)-3♣	129.9	(1♦)-X-1♥-2♣	82.1
(1♦)-(P)-2♣-(2♠)-3NT	129.9	(1♦)-X-1♥-2♣-2♥	82.4
(1♦)-(P)-2♣-2NT	128.8	(1♦)-X-(1♥)-2♦	102.6
(1♦)-(P)-2♣-3♣	128.8	(1♦)-X-1♥-2♦	82.2
(1♦)-(P)-2♣-3NT	128.8	(1♦)-X-1♥-2♦-2♥	82.5, 82.6
(1♦)-(P)-2♦	129.1	(1♦)-X-(1♥)-2♥	102.6
(1♦)-(P)-2♥	128.7	(1♦)-X-1♥-2♥	82.9
(1♦)-(P)-2♠	128.7	(1♦)-X-(1♥)-2NT	102.6
(1♦)-(P)-2NT	127.3	(1♦)-X-1♥-3♥	82.9
(1♦)-(P)-3♣	128.7	(1♦)-X-(1♥)-3NT	102.6
(1♦)-X	80.1, 81.2	1♦-(X)-P	97.4
1♦-(X)-XX	96.2	(1♦)-X-1♠	81.3
(1♦)-X-(XX)-P	104.9	1♦-(X)-1♠	97.4
(1♦)-X-(XX)-1♥	104.9	(1♦)-X-(1♠)-P	102.6
(1♦)-X-(XX)-1♠	104.9	(1♦)-X-1♠-P	82.9
(1♦)-X-(XX)-1NT	104.9	(1♦)-X-(1♠)-X	102.6
(1♦)-X-(XX)-2♣	104.9	(1♦)-X-(1♠)-1NT	102.6
(1♦)-X-(XX)-2♦	104.9	(1♦)-X-1♠-1NT	82.3
(1♦)-X-(XX)-2♥	104.9	(1♦)-X-(1♠)-2♣	102.6
(1♦)-X-(XX)-2♠	104.9	(1♦)-X-1♠-2♣	82.1
(1♦)-X-(XX)-2NT	104.9	(1♦)-X-1♠-2♣-2♠	82.4

(1♦)-X-(1♠)-2♦ 102.6	(1♦)-X-2♣-2♠ 82.1
(1♦)-X-1♠-2♦ 82.2	(1♦)-X-2♣-2♠-3♣ 82.4
(1♦)-X-1♠-2♦-2♠ 82.5	(1♦)-X-(2♣)-2NT 102.6
(1♦)-X-(1♠)-2♥ 102.6	(1♦)-X-2♣-2NT 82.3
(1♦)-X-1♠-2♥ 82.1	(1♦)-X-(2♣)-3♣ 102.6
(1♦)-X-1♠-2♥-2♠ 82.4	(1♦)-X-2♣-3♣ 82.9
(1♦)-X-(1♠)-2♠ 102.6	(1♦)-X-(2♣)-3NT 102.6
(1♦)-X-1♠-2♠ 82.9	(1♦)-X-2♦ 81.4, 81.8
(1♦)-X-(1♠)-2NT 102.6	1♦-(X)-2♦ 96.3
(1♦)-X-1♠-3♠ 82.9	(1♦)-X-(2♦)-P 103.7
(1♦)-X-(1♠)-3NT 102.6	(1♦)-X-(2♦)-X 103.7
(1♦)-X-1NT 81.6	(1♦)-X-(2♦)-2♥ 103.7
1♦-(X)-1NT 97.4	(1♦)-X-(2♦)-2♠ 103.7
(1♦)-X-(1NT)-P 103.8	(1♦)-X-(2♦)-2NT 103.7
(1♦)-X-(1NT)-X 103.8	(1♦)-X-(2♦)-3♣ 103.7
(1♦)-X-(1NT)-2♣ 103.8	(1♦)-X-(2♦)-3♦ 103.7
(1♦)-X-(1NT)-2♦ 103.8	(1♦)-X-(2♦)-3♥ 103.7
(1♦)-X-(1NT)-2♥ 103.8	(1♦)-X-(2♦)-3♠ 103.7
(1♦)-X-(1NT)-2♠ 103.8	(1♦)-X-(2♦)-3NT 103.7
(1♦)-X-(1NT)-3♣ 103.8	(1♦)-X-2♥ 81.5
(1♦)-X-(1NT)-3♥ 103.8	1♦-(X)-2♥ 97.5
(1♦)-X-(1NT)-3♠ 103.8	(1♦)-X-2♠ 81.5
(1♦)-X-2♣ 81.3	1♦-(X)-2♠ 97.5
1♦-(X)-2♣ 97.4	(1♦)-X-2NT 81.6
(1♦)-X-(2♣)-P 102.6	1♦-(X)-2NT 96.3
(1♦)-X-2♣-P 82.9	(1♦)-X-(2NT)-P 103.8
(1♦)-X-(2♣)-X 102.6	(1♦)-X-(2NT)-X 103.8
(1♦)-X-(2♣)-2♦ 102.6	(1♦)-X-(2NT)-3♦ 103.8
(1♦)-X-2♣-2♦ 82.2	(1♦)-X-3♣ 81.5, 82.6
(1♦)-X-2♣-2♦-3♣ 82.5	1♦-(X)-3♣ 97.5
(1♦)-X-(2♣)-2♥ 102.6	(1♦)-X-3♣-3♠-4♠ 82.6
(1♦)-X-2♣-2♥ 82.1	(1♦)-X-3♣-3NT 82.6
(1♦)-X-2♣-2♥-3♣ 82.4	(1♦)-X-3♣-5♣ 82.6
(1♦)-X-(2♣)-2♠ 102.6	1♦-(X)-3♦ 96.3

(1♦)-X-(3♦)-P	103.7	1♦-(1♥)-X-(2♥)-P	91.4
(1♦)-X-(3♦)-X	103.7	1♦-(1♥)-X-(2♥)-X	91.1
(1♦)-X-(3♦)-3♥	103.7	1♦-(1♥)-X-(2♥)-2♠	91.2
(1♦)-X-(3♦)-3♠	103.7	1♦-(1♥)-X-(2♥)-3♠	91.2
(1♦)-X-(3♦)-3NT	103.7	1♦-(1♥)-X-(2♥)-4♠	91.2
(1♦)-X-3NT	81.6	(1♦)-1♥-(X)-2♠	101.6
(1♦)-X-(4♦)-P	103.7	(1♦)-1♥-(X)-3♥	101.6
(1♦)-X-(4♦)-X	103.7	1♦-(1♥)-X-(3♥)-P	91.4
(1♦)-X-(4♦)-4♥	103.7	1♦-(1♥)-X-(3♥)-X	91.1
(1♦)-X-(4♦)-4♠	103.7	1♦-(1♥)-X-(3♥)-3♠	91.2
(1♦)-X-4♥	81.7	1♦-(1♥)-X-(3♥)-4♠	91.2
(1♦)-X-4♠	81.7	(1♦)-1♥-(X)-4♥	101.6
1♦-1♥	9.2	1♦-1♥-1♠	16.5
(1♦)-1♥	73.1	(1♦)-(1♥)-1♠	86.2, 206.3
1♦-(1♥)-P	88.1, 89.7	(1♦)-1♥-1♠	75.4
1♦-(1♥)-(P)-X	130.1	1♦-(1♥)-1♠	89.2, 90.9
1♦-(1♥)-P-X	91.6	1♦-1♥-(1♠)-P	99.4
1♦-(1♥)-(P)-X-P	130.1	(1♦)-1♥-(1♠)-X	101.4
1♦-(1♥)-(P)-X-1♠	130.1	1♦-1♥-(1♠)-X	99.1
1♦-(1♥)-(P)-X-2♣	130.1	(1♦)-1♥-1♠-(X)-XX	106.6
1♦-(1♥)-(P)-X-2♦	130.1	1♦-(1♥)-1♠-(X)-XX	91.5
1♦-(1♥)-(P)-1♠	130.1	(1♦)-1♥-1♠-(X)-1NT	106.6
1♦-(1♥)-(P)-1NT	130.1	(1♦)-1♥-1♠-(X)-2♣	106.6
1♦-(1♥)-(P)-2♣	130.1	(1♦)-1♥-1♠-(X)-2♦	106.6
1♦-(1♥)-(P)-2♦	130.1	(1♦)-1♥-1♠-(X)-2♠	106.6
1♦-(1♥)-(P)-3♦	130.1	(1♦)-1♥-1♠-(X)-2NT	106.6
(1♦)-(1♥)-X	86.2, 206.1, 206.2	(1♦)-1♥-1♠-(X)-3♠	106.6
1♦-(1♥)-X	89.3	(1♦)-1♥-1♠-(X)-3NT	106.6
(1♦)-1♥-(X)-XX	101.6	(1♦)-1♥-1♠-(X)-4♠	106.6
1♦-1♥-(X)-XX	100.5	1♦-1♥-1♠-1NT	28.2
(1♦)-1♥-(X)-1NT	101.6	(1♦)-1♥-(1♠)-1NT	101.3
(1♦)-1♥-(X)-2♣	101.6	(1♦)-1♥-1♠-1NT	75.8, 76.1
(1♦)-1♥-(X)-2♦	101.6	1♦-1♥-(1♠)-1NT	99.3
(1♦)-1♥-(X)-2♥	101.6	1♦-1♥-1♠-2♣	28.1, 28.4, 135.1

(1♦)-1♥-(1♠)-2♣	101.2	(1♦)-1♥-1♠-(2♦)-2♥	105.2
(1♦)-1♥-1♠-2♣	75.8	(1♦)-1♥-1♠-(2♦)-2♠	105.2
1♦-1♥-(1♠)-2♣	99.3	(1♦)-1♥-1♠-(2♦)-3♣	105.2
(1♦)-1♥-1♠-(2♣)-X	105.4	(1♦)-1♥-1♠-(2♦)-3♠	105.2
1♦-1♥-1♠-2♣-2♦	136.3	(1♦)-1♥-1♠-(2♦)-4♠	105.2
(1♦)-1♥-1♠-(2♣)-2♦	105.4	1♦-1♥-1♠-2♥	28.2
1♦-1♥-1♠-2♣-2♦-2♠	66.1	(1♦)-1♥-(1♠)-2♥	101.1
1♦-1♥-1♠-2♣-2♦-3♣-3♦	137.5	(1♦)-1♥-1♠-2♥	75.8
1♦-1♥-1♠-2♣-2♦-3♣-3NT	137.5	1♦-1♥-(1♠)-2♥	99.2
1♦-1♥-1♠-2♣-2♥	136.3	1♦-(1♥)-1♠-(2♥)-P	91.4
(1♦)-1♥-1♠-(2♣)-2♥	105.4	1♦-(1♥)-1♠-(2♥)-X	91.1
1♦-1♥-1♠-2♣-2♥-2♠	66.1	1♦-(1♥)-1♠-(2♥)-2♠	91.2
1♦-1♥-1♠-2♣-2♠	136.3	1♦-(1♥)-1♠-(2♥)-2NT	91.3
(1♦)-1♥-1♠-(2♣)-2♠	105.4	1♦-(1♥)-1♠-(2♥)-3♣	91.3
1♦-1♥-1♠-2♣-2♠-3♠	66.1	1♦-(1♥)-1♠-(2♥)-3♦	91.3
1♦-1♥-1♠-2♣-2NT	136.3	1♦-(1♥)-1♠-(2♥)-3♠	91.2
(1♦)-1♥-1♠-(2♣)-2NT	105.4	1♦-(1♥)-1♠-(2♥)-3NT	91.3
1♦-1♥-1♠-2♣-2NT-3♠	66.1	1♦-(1♥)-1♠-(2♥)-4♠	91.2
1♦-1♥-1♠-2♣-3♣	136.3, 191.7	1♦-1♥-1♠-2♠	28.1
(1♦)-1♥-1♠-(2♣)-3♣	105.4	(1♦)-1♥-1♠-2♠	75.8
1♦-1♥-1♠-2♣-3♣-3♠	66.1	1♦-1♥-1♠-2NT	28.3
1♦-1♥-1♠-2♣-3♣-3NT	136.3	(1♦)-1♥-1♠-2NT	75.8
1♦-1♥-1♠-2♣-3♦	136.3	1♦-1♥-1♠-3♣	137.4
1♦-1♥-1♠-2♣-3♦-3♠	66.1	1♦-1♥-1♠-3♦	28.3
1♦-1♥-1♠-2♣-3♥	136.3	1♦-1♥-1♠-3♥	28.3
(1♦)-1♥-1♠-(2♣)-3♠	105.4	(1♦)-1♥-(1♠)-3♥	101.1
1♦-1♥-1♠-2♣-3NT	136.3	(1♦)-1♥-1♠-3♥	75.8
1♦-1♥-1♠-2♣-3NT-4♠	66.1	1♦-1♥-(1♠)-3♥	99.2
(1♦)-1♥-1♠-(2♣)-4♠	105.4	1♦-(1♥)-1♠-(3♥)-P	91.4
1♦-1♥-1♠-2♦	28.2	1♦-(1♥)-1♠-(3♥)-X	91.1
(1♦)-1♥-(1♠)-2♦	101.5	1♦-(1♥)-1♠-(3♥)-3♠	91.2
(1♦)-1♥-1♠-2♦	75.8	1♦-(1♥)-1♠-(3♥)-3NT	91.3
1♦-1♥-(1♠)-2♦	99.3	1♦-(1♥)-1♠-(3♥)-4♦	91.3
(1♦)-1♥-1♠-(2♦)-X	105.2	1♦-(1♥)-1♠-(3♥)-4♠	91.2

1♦-1♥-1♠-3♠	28.1	1♦-1♥-1NT-2♣-2♠-3NT	143.3
1♦-1♥-1♠-3NT	28.4	1♦-1♥-1NT-2♣-2♠-4♥ .	143.3, 144.7
(1♦)-1♥-1♠-3NT	75.8	1♦-1♥-1NT-2♣-2NT	142.2
(1♦)-1♥-(1♠)-4♥	101.1	1♦-1♥-1NT-2♣-2NT-3♦	64.4
1♦-1♥-(1♠)-4♥	99.2	1♦-1♥-1NT-2♣-2NT-3NT	143.3
1♦-1♥-1♠-4♠	28.1	1♦-1♥-1NT-2♦	28.5, 143.4
1♦-1♥-1NT	15.3	1♦-1♥-1NT-2♥	28.5
(1♦)-(1♥)-1NT	206.2	(1♦)-1♥-(1NT)-2♥	102.3
(1♦)-1♥-1NT	75.6	1♦-(1♥)-1NT-(2♥)-P	91.4
1♦-(1♥)-1NT	89.6	1♦-(1♥)-1NT-(2♥)-X	91.1
1♦-(1♥)-1NT-(X)-XX	91.5	1♦-(1♥)-1NT-(2♥)-2♠	91.3
(1♦)-1♥-(1NT)-X	102.5	1♦-(1♥)-1NT-(2♥)-2NT	91.3
1♦-1♥-1NT-2♣	28.5, 142.1	1♦-(1♥)-1NT-(2♥)-3♣	91.3
(1♦)-1♥-(1NT)-2♣	102.4	1♦-(1♥)-1NT-(2♥)-3♦	91.3
1♦-1♥-1NT-2♣-(X)-P	144.6	1♦-1♥-1NT-2♠	28.6
1♦-1♥-1NT-2♣-(X)-XX	144.6	(1♦)-1♥-(1NT)-2♠	102.4
1♦-1♥-1NT-2♣-(X)-2♦	144.6	1♦-1♥-1NT-2NT	28.6, 143.4
1♦-1♥-1NT-2♣-(X)-2♥	144.6	1♦-1♥-1NT-2NT-3♣	143.4
1♦-1♥-1NT-2♣-2♦	142.2	1♦-1♥-1NT-3♣	28.6
1♦-1♥-1NT-2♣-2♦-2NT	143.3	1♦-1♥-1NT-3♦	28.6
1♦-1♥-1NT-2♣-2♦-3♦	64.4	1♦-1♥-1NT-3♥	28.6
1♦-1♥-1NT-2♣-2♦-3NT	143.3	(1♦)-1♥-(1NT)-3♥	102.3
1♦-1♥-1NT-2♣-2♥	142.2	1♦-(1♥)-1NT-(3♥)-X	91.1
1♦-1♥-1NT-2♣-2♥-2NT	143.3	1♦-1♥-1NT-3NT	28.7
1♦-1♥-1NT-2♣-2♥-3♦	64.4	1♦-1♥-1NT-4♥	28.7
1♦-1♥-1NT-2♣-2♥-3♥ .	143.3, 144.7	(1♦)-1♥-(1NT)-4♥	102.3
1♦-1♥-1NT-2♣-2♥-3NT	143.3	1♦-1♥-2♣	16.5
1♦-1♥-1NT-2♣-2♥-4♥	143.3	(1♦)-(1♥)-2♣	86.2, 206.3
1♦-1♥-1NT-2♣-2♠	142.2	(1♦)-1♥-2♣	75.5
1♦-1♥-1NT-2♣-(2♠)-P	144.6	1♦-(1♥)-2♣	89.2
1♦-1♥-1NT-2♣-(2♠)-XX	144.6	1♦-1♥-(2♣)-P	99.4
1♦-1♥-1NT-2♣-(2♠)-2NT	144.6	1♦-1♥-2♣-P	29.9
1♦-1♥-1NT-2♣-(2♠)-3♣	144.6	(1♦)-1♥-(2♣)-X	101.4
1♦-1♥-1NT-2♣-2♠-3♦	64.4	1♦-1♥-(2♣)-X	99.1

1♦-(1♥)-2♣-(X)-XX	91.5	1♦-1♥-2♣-2♠-4♥	136.3
1♦-1♥-2♣-2♦	29.9	1♦-1♥-2♣-2NT	29.1
(1♦)-1♥-(2♣)-2♦	101.5	1♦-1♥-(2♣)-2NT	99.3
1♦-1♥-(2♣)-2♥	99.3	1♦-1♥-2♣-3♣	29.9
1♦-1♥-2♣-2♥	29.9	1♦-1♥-2♣-3♦	29.1
(1♦)-1♥-(2♣)-2♥	101.1	1♦-1♥-2♣-3♥	29.1
1♦-1♥-(2♣)-2♥	99.2	(1♦)-1♥-(2♣)-3♥	101.1
1♦-(1♥)-2♣-(2♥)-P	91.4	1♦-1♥-(2♣)-3♥	99.2
1♦-(1♥)-2♣-(2♥)-X	91.1	1♦-(1♥)-2♣-(3♥)-P	91.4
1♦-(1♥)-2♣-(2♥)-2♠	91.3	1♦-(1♥)-2♣-(3♥)-X	91.1
1♦-(1♥)-2♣-(2♥)-2NT	91.3	1♦-(1♥)-2♣-(3♥)-3♠	91.3
1♦-(1♥)-2♣-(2♥)-3♦	91.3	1♦-(1♥)-2♣-(3♥)-3NT	91.3
1♦-(1♥)-2♣-(2♥)-3NT	91.3	1♦-(1♥)-2♣-(3♥)-4♦	91.3
1♦-1♥-2♣-2♠	29.1, 135.1	1♦-1♥-2♣-3♠	137.4
(1♦)-1♥-(2♣)-2♠	101.2	1♦-1♥-2♣-3NT	29.2
1♦-1♥-(2♣)-2♠	99.3	(1♦)-1♥-(2♣)-4♥	101.1
1♦-1♥-2♣-2♠-2NT	136.3	1♦-1♥-(2♣)-4♥	99.2
1♦-1♥-2♣-2♠-2NT-3♣	66.1	1♦-1♥-2♦	17.7
1♦-1♥-2♣-2♠-2NT-3♦	64.1	(1♦)-(1♥)-2♦	207.5
1♦-1♥-2♣-2♠-3♣	136.3	(1♦)-1♥-2♦	74.3, 75.7
1♦-1♥-2♣-2♠-3♣-3♦	64.1	1♦-(1♥)-2♦	89.5, 152.4
1♦-1♥-2♣-2♠-3♣-4♣	66.1	(1♦)-1♥-(2♦)-X	101.1
1♦-1♥-2♣-2♠-3♦	136.3	(1♦)-1♥-2♦-(X)-XX	106.6
1♦-1♥-2♣-2♠-3♦-4♣	66.1	(1♦)-1♥-2♦-(X)-2♠	106.6
1♦-1♥-2♣-2♠-3♦-4♦	64.1	(1♦)-1♥-2♦-(X)-2NT	106.6
1♦-1♥-2♣-2♠-3♥	136.3	(1♦)-1♥-2♦-(X)-3♣	106.6
1♦-1♥-2♣-2♠-3♥-4♣	66.1	(1♦)-1♥-2♦-(X)-3♦	106.6
1♦-1♥-2♣-2♠-3♥-4♦	64.1	(1♦)-1♥-2♦-(X)-3NT	106.6
1♦-1♥-2♣-2♠-3♠	136.3, 191.7	(1♦)-1♥-2♦-(X)-4♦	106.6
1♦-1♥-2♣-2♠-3♠-3NT	136.3	1♦-1♥-2♦-2♥	32.6
1♦-1♥-2♣-2♠-3♠-4♣	66.1	(1♦)-1♥-(2♦)-2♥	101.7
1♦-1♥-2♣-2♠-3NT	136.3	(1♦)-1♥-2♦-2♥	76.9
1♦-1♥-2♣-2♠-3NT-4♣	66.1	1♦-1♥-2♦-2♠	32.6, 140.1
1♦-1♥-2♣-2♠-3NT-4♦	64.1	(1♦)-1♥-(2♦)-2♠	101.8

(1♦)-1♥-2♦-2♠	76.9	(1♦)-1♥-2♦-(3♣)-3♥	105.5
(1♦)-1♥-2♦-(2♠)-X	105.5	(1♦)-1♥-2♦-(3♣)-3♠	105.5
1♦-1♥-2♦-2♠-(X)-P	142.4	(1♦)-1♥-2♦-(3♣)-3NT	105.5
1♦-1♥-2♦-2♠-(X)-XX	142.4	1♦-1♥-2♦-3♦	32.6
1♦-1♥-2♦-2♠-(X)-2NT	142.4	(1♦)-1♥-(2♦)-3♦	101.2
1♦-1♥-2♦-2♠-(X)-3♣	142.4	(1♦)-1♥-2♦-3♦	76.9
1♦-1♥-2♦-2♠-2NT	141.2	(1♦)-1♥-2♦-(3♦)-X	105.3
(1♦)-1♥-2♦-(2♠)-2NT	105.5	(1♦)-1♥-2♦-(3♦)-3♥	105.3
1♦-1♥-2♦-2♠-2NT-2NT	141.3	(1♦)-1♥-2♦-(3♦)-3♠	105.3
1♦-1♥-2♦-2♠-2NT-3♦ ..	64.5, 141.3	(1♦)-1♥-2♦-(3♦)-3NT	105.3
1♦-1♥-2♦-2♠-2NT-3NT	141.3	1♦-1♥-2♦-3♥	32.6
1♦-1♥-2♦-2♠-3♣	141.2	(1♦)-1♥-(2♦)-3♥	101.7
(1♦)-1♥-2♦-(2♠)-3♣	105.5	(1♦)-1♥-2♦-3♥	76.9
1♦-1♥-2♦-2♠-3♣-3♦	64.5, 141.3	1♦-1♥-2♦-3♠	191.7
1♦-1♥-2♦-2♠-3♣-3♥	141.3	1♦-1♥-2♦-3NT	32.6
1♦-1♥-2♦-2♠-3♣-3NT	141.3	(1♦)-1♥-2♦-3NT	76.9
1♦-1♥-2♦-2♠-3♣-4♥	141.3	1♦-1♥-2♦-4♣	191.7
1♦-1♥-2♦-2♠-3♦	141.2	1♦-1♥-2♦-4♥	32.6
1♦-1♥-2♦-2♠-3♦-3NT	141.3	(1♦)-1♥-(2♦)-4♥	101.7
1♦-1♥-2♦-2♠-3♦-4♦	64.5	1♦-1♥-2♥	14.1
1♦-1♥-2♦-2♠-3♥	141.2	(1♦)-(1♥)-2♥	86.3, 207.5
(1♦)-1♥-2♦-(2♠)-3♥	105.5	(1♦)-1♥-2♥	74.2, 76.1
1♦-1♥-2♦-2♠-3♥-3NT	141.3	1♦-(1♥)-2♥	89.8
1♦-1♥-2♦-2♠-3♥-4♦	64.5	1♦-1♥-2♥-P	14.2
1♦-1♥-2♦-2♠-3♥-4♥	141.3	(1♦)-1♥-2♥-(X)-XX	104.1
1♦-1♥-2♦-2♠-3NT-4♦	64.5	(1♦)-1♥-2♥-(X)-3♥	104.1
1♦-1♥-2♦-2NT	32.6	(1♦)-1♥-2♥-(X)-4♥	104.1
(1♦)-1♥-(2♦)-2NT	101.9	1♦-1♥-2♥-2♠	155.1
(1♦)-1♥-2♦-2NT	76.9	1♦-1♥-2♥-2♠-3♥	155.2
(1♦)-1♥-2♦-2NT-3♥	76.1	1♦-1♥-2♥-2♠-4♥	155.2
(1♦)-1♥-2♦-2NT-3NT	76.1	1♦-1♥-2♥-2NT	155.1
1♦-1♥-2♦-3♣	32.6	1♦-1♥-2♥-2NT-3♥	155.2
(1♦)-1♥-(2♦)-3♣	101.8	1♦-1♥-2♥-2NT-4♥	155.2
(1♦)-1♥-2♦-(3♣)-X	105.5	1♦-1♥-2♥-3♣	155.1

(1♦)-1♥-2♥-(3♣)-X	104.1	1♦-1♥-2NT-3♣-3♥	147.2
(1♦)-1♥-2♥-(3♣)-3♦	104.1	1♦-1♥-2NT-3♣-3♠	147.2
(1♦)-1♥-2♥-(3♣)-3♦-3♥	104.1	1♦-1♥-2NT-3♣-3NT	147.2
(1♦)-1♥-2♥-(3♣)-3♦-4♥	104.1	1♦-1♥-2NT-3♣-3NT-4♣	147.3
1♦-1♥-2♥-3♣-3♥	155.2	1♦-1♥-2NT-3♣-3NT-4♦	147.3
(1♦)-1♥-2♥-(3♣)-3♥	104.1	1♦-1♥-2NT-3♣-3NT-4♥	147.3
1♦-1♥-2♥-3♣-4♥	155.2	1♦-1♥-2NT-3♣-3NT-4♠	147.3
(1♦)-1♥-2♥-(3♣)-4♥	104.1	1♦-1♥-2NT-3♦	29.8
1♦-1♥-2♥-3♦	155.1	1♦-1♥-2NT-3♥	29.8
(1♦)-1♥-2♥-(3♦)-X	104.1	1♦-1♥-2NT-3NT	29.8
(1♦)-1♥-2♥-(3♦)-X-3♥	104.1	1♦-1♥-2NT-4♥	29.8
(1♦)-1♥-2♥-(3♦)-X-4♥	104.1	(1♦)-1♥-3♣	74.3
1♦-1♥-2♥-3♦-3♥	155.2	1♦-1♥-3♣-3♦	64.2
(1♦)-1♥-2♥-(3♦)-3♥	104.1	1♦-1♥-3♣-3♥	31.4
1♦-1♥-2♥-3♦-4♥	155.2	1♦-1♥-3♣-3♠	31.4
(1♦)-1♥-2♥-(3♦)-4♥	104.1	1♦-1♥-3♣-3NT	31.4
1♦-1♥-2♥-3♥	14.2, 156.4	1♦-1♥-3♣-4♣	31.4, 67.2
1♦-1♥-2♥-4♥	14.2	1♦-1♥-3♣-4♥	31.4
1♦-1♥-2♠	16.4	(1♦)-1♥-3♣-4♥	76.1
(1♦)-1♥-2♠	74.3	1♦-1♥-3♦	17.7
1♦-1♥-2♠-3♣	31.4	(1♦)-1♥-3♦	74.3
1♦-1♥-2♠-3♦	64.2	1♦-(1♥)-3♦	89.5, 152.4
1♦-1♥-2♠-3♥	31.4	(1♦)-1♥-(3♦)-X	101.1
1♦-1♥-2♠-3♠	31.4, 67.2	1♦-1♥-3♦-3♥	31.5
1♦-1♥-2♠-3NT	31.4	(1♦)-1♥-(3♦)-3♥	101.7
1♦-1♥-2♠-4♥	31.4	1♦-1♥-3♦-3♠	31.5
1♦-1♥-2♠-4♠	31.4	(1♦)-1♥-(3♦)-3♠	101.8
1♦-1♥-2NT	15.3	1♦-1♥-3♦-3NT	31.5
(1♦)-(1♥)-2NT	206.2	(1♦)-1♥-(3♦)-3NT	101.9
(1♦)-1♥-2NT	75.6	(1♦)-1♥-(3♦)-4♣	101.8
1♦-(1♥)-2NT	89.5	1♦-1♥-3♦-4♦	64.6
1♦-1♥-2NT-3♣	29.8, 146.1	(1♦)-1♥-3♦-(4♦)-4♥	104.1
1♦-1♥-2NT-3♣-3♦	147.2	1♦-1♥-3♦-4♥	31.5
1♦-1♥-2NT-3♣-3♦-4♦	64.4	1♦-1♥-3♥	14.1

$1\Diamond-1\heartsuit-3\heartsuit$	74.2	$1\Diamond-(1\spadesuit)-X-(2\spadesuit)-3\heartsuit$	91.2
$1\Diamond-1\heartsuit-3\heartsuit-P$	14.2	$1\Diamond-(1\spadesuit)-X-(2\spadesuit)-4\heartsuit$	91.2
$(1\Diamond)-1\heartsuit-3\heartsuit-(4\Diamond)-4\heartsuit$	104.1	$(1\Diamond)-1\spadesuit-(X)-3\clubsuit$	101.6
$1\Diamond-1\heartsuit-3\heartsuit-4\heartsuit$	14.2	$(1\Diamond)-1\spadesuit-(X)-3\spadesuit$	101.6
$1\Diamond-1\heartsuit-3\spadesuit$	190.3	$1\Diamond-(1\spadesuit)-X-(3\spadesuit)-P$	91.4
$1\Diamond-1\heartsuit-3NT$	190.5	$1\Diamond-(1\spadesuit)-X-(3\spadesuit)-X$	91.1
$(1\Diamond)-1\heartsuit-3NT$	75.6	$1\Diamond-(1\spadesuit)-X-(3\spadesuit)-4\heartsuit$	91.2
$1\Diamond-1\heartsuit-4\clubsuit$	190.3	$(1\Diamond)-1\spadesuit-(X)-4\spadesuit$	101.6
$1\Diamond-1\heartsuit-4\Diamond$	190.4	$1\Diamond-1\spadesuit-1NT$	15.3
$1\Diamond-1\heartsuit-4\heartsuit$	14.1, 190.6	$(1\Diamond)-(1\spadesuit)-1NT$	206.2
$(1\Diamond)-1\heartsuit-4\heartsuit$	74.2, 74.3	$(1\Diamond)-1\spadesuit-1NT$	75.6
$1\Diamond-1\spadesuit$	9.2	$1\Diamond-(1\spadesuit)-1NT$	89.6
$(1\Diamond)-1\spadesuit$	73.1	$1\Diamond-(1\spadesuit)-1NT-(X)-XX$	91.5
$1\Diamond-(1\spadesuit)-P$	88.1, 89.7	$(1\Diamond)-1\spadesuit-(1NT)-X$	102.5
$1\Diamond-(1\spadesuit)-(P)-X$	130.1	$1\Diamond-1\spadesuit-1NT-2\clubsuit$	28.5, 142.1
$1\Diamond-(1\spadesuit)-P-X$	91.6	$(1\Diamond)-1\spadesuit-(1NT)-2\clubsuit$	102.4
$1\Diamond-(1\spadesuit)-(P)-X-P$	130.1	$1\Diamond-1\spadesuit-1NT-2\clubsuit-(X)-P$	144.6
$1\Diamond-(1\spadesuit)-(P)-X-2\clubsuit$	130.1	$1\Diamond-1\spadesuit-1NT-2\clubsuit-(X)-XX$	144.6
$1\Diamond-(1\spadesuit)-(P)-X-2\Diamond$	130.1	$1\Diamond-1\spadesuit-1NT-2\clubsuit-(X)-2\Diamond$	144.6
$1\Diamond-(1\spadesuit)-(P)-X-2\heartsuit$	130.1	$1\Diamond-1\spadesuit-1NT-2\clubsuit-(X)-2\heartsuit$	144.6
$1\Diamond-(1\spadesuit)-(P)-1NT$	130.1	$1\Diamond-1\spadesuit-1NT-2\clubsuit-2\Diamond$	142.2
$1\Diamond-(1\spadesuit)-(P)-2\clubsuit$	130.1	$1\Diamond-1\spadesuit-1NT-2\clubsuit-2\Diamond-2NT$	143.3
$1\Diamond-(1\spadesuit)-(P)-2\Diamond$	130.1	$1\Diamond-1\spadesuit-1NT-2\clubsuit-2\Diamond-3\Diamond$	64.4
$1\Diamond-(1\spadesuit)-(P)-2\heartsuit$	130.1	$1\Diamond-1\spadesuit-1NT-2\clubsuit-2\Diamond-3NT$	143.3, 144.7
$1\Diamond-(1\spadesuit)-(P)-3\Diamond$	130.1	$1\Diamond-1\spadesuit-1NT-2\clubsuit-2\heartsuit$	142.2
$(1\Diamond)-(1\spadesuit)-X$	86.2, 206.1, 206.2	$1\Diamond-1\spadesuit-1NT-2\clubsuit-(2\heartsuit)-P$	144.6
$1\Diamond-(1\spadesuit)-X$	89.3	$1\Diamond-1\spadesuit-1NT-2\clubsuit-(2\heartsuit)-XX$	144.6
$(1\Diamond)-1\spadesuit-(X)-XX$	101.6	$1\Diamond-1\spadesuit-1NT-2\clubsuit-(2\heartsuit)-2\spadesuit$	144.6
$1\Diamond-1\spadesuit-(X)-XX$	100.5	$1\Diamond-1\spadesuit-1NT-2\clubsuit-(2\heartsuit)-2NT$	144.6
$(1\Diamond)-1\spadesuit-(X)-2\Diamond$	101.6	$1\Diamond-1\spadesuit-1NT-2\clubsuit-2\heartsuit-3\Diamond$	64.4
$(1\Diamond)-1\spadesuit-(X)-2\heartsuit$	101.6	$1\Diamond-1\spadesuit-1NT-2\clubsuit-2\heartsuit-3NT$	143.3
$(1\Diamond)-1\spadesuit-(X)-2\spadesuit$	101.6	$1\Diamond-1\spadesuit-1NT-2\clubsuit-2\heartsuit-4\spadesuit$	143.3
$1\Diamond-(1\spadesuit)-X-(2\spadesuit)-P$	91.4	$1\Diamond-1\spadesuit-1NT-2\clubsuit-2\spadesuit$	142.2
$1\Diamond-(1\spadesuit)-X-(2\spadesuit)-X$	91.1	$1\Diamond-1\spadesuit-1NT-2\clubsuit-2\spadesuit-2NT$	143.3

1♦-1♠-1NT-2♣-2♠-3♦ 64.4	1♦-(1♠)-2♣ 89.2
1♦-1♠-1NT-2♣-2♠-3♠ 143.3	1♦-1♠-(2♣)-P 99.4
1♦-1♠-1NT-2♣-2♠-3NT 143.3	1♦-1♠-2♣-2♦ 29.9
1♦-1♠-1NT-2♣-2♠-4♠ 143.3	(1♦)-1♠-(2♣)-X 101.4
1♦-1♠-1NT-2♣-2NT 142.2	1♦-1♠-(2♣)-X 99.1
1♦-1♠-1NT-2♣-2NT-3♦ 64.4	1♦-(1♠)-2♣-(X)-XX 91.5
1♦-1♠-1NT-2♣-2NT-3NT ... 143.3,	1♦-1♠-2♣-2♦ 29.9
144.7	(1♦)-1♠-(2♣)-2♦ 101.5
1♦-1♠-1NT-2♦ 28.5, 143.4	1♦-1♠-(2♣)-2♦ 99.3
1♦-1♠-1NT-2♥ 28.5, 143.4	1♦-1♠-2♣-2♥ 29.1, 135.1
(1♦)-1♠-(1NT)-2♥ 102.4	(1♦)-1♠-(2♣)-2♥ 101.2
(1♦)-1♠-1NT-2♥-2♠ 76.1	1♦-1♠-(2♣)-2♥ 99.3
1♦-1♠-1NT-2♠ 28.5	1♦-1♠-2♣-2♥-2♠ 136.3
(1♦)-1♠-(1NT)-2♠ 102.3	1♦-1♠-2♣-2♥-2♠-3♦ 64.1
1♦-(1♠)-1NT-(2♠)-P 91.4	1♦-1♠-2♣-2♥-2NT 136.3
1♦-(1♠)-1NT-(2♠)-X 91.1	1♦-1♠-2♣-2♥-2NT-3♦ 64.1
1♦-(1♠)-1NT-(2♠)-2NT 91.3	1♦-1♠-2♣-2♥-3♣ 136.3
1♦-(1♠)-1NT-(2♠)-3♣ 91.3	1♦-1♠-2♣-2♥-3♣-3♦ 64.1
1♦-(1♠)-1NT-(2♠)-3♦ 91.3	1♦-1♠-2♣-2♥-3♦ 136.3
1♦-(1♠)-1NT-(2♠)-3♥ 91.3	1♦-1♠-2♣-2♥-3♦-4♦ 64.1
1♦-1♠-1NT-2NT 28.6, 143.4	1♦-1♠-2♣-2♥-3♥ 136.3, 191.7
1♦-1♠-1NT-2NT-3♣ 143.4	1♦-1♠-2♣-2♥-3♥-3NT 136.3
1♦-1♠-1NT-3♣ 28.6	1♦-1♠-2♣-2♥-3♠ 136.3
1♦-1♠-1NT-3♦ 28.6	1♦-1♠-2♣-2♥-3NT 136.3
1♦-1♠-1NT-3♥ 28.6	1♦-1♠-2♣-2♥-3NT-4♦ 64.1
1♦-1♠-1NT-3♠ 28.6	1♦-1♠-2♣-2♠ 29.9
(1♦)-1♠-(1NT)-3♠ 102.3	(1♦)-1♠-(2♣)-2♠ 101.1
1♦-(1♠)-1NT-(3♠)-X 91.1	1♦-1♠-(2♣)-2♠ 99.2
1♦-1♠-1NT-3NT 28.7	1♦-(1♠)-2♣-(2♠)-P 91.4
1♦-1♠-1NT-4♠ 28.7	1♦-(1♠)-2♣-(2♠)-X 91.1
(1♦)-1♠-(1NT)-4♠ 102.3	1♦-(1♠)-2♣-(2♠)-2NT 91.3
1♦-1♠-2♣ 16.5	1♦-(1♠)-2♣-(2♠)-3♦ 91.3
(1♦)-(1♠)-2♣ 86.2, 206.3	1♦-(1♠)-2♣-(2♠)-3♥ 91.3
(1♦)-1♠-2♣ 75.5, 76.1	1♦-(1♠)-2♣-(2♠)-3NT 91.3

1♦-1♠-2♣-2NT	29.1	1♦-1♠-2♦-2♥-(X)-2NT	142.4
1♦-1♠-(2♣)-2NT	99.3	1♦-1♠-2♦-2♥-2♠	141.2
1♦-1♠-2♣-3♣	29.9	(1♦)-1♠-2♦-(2♥)-2♠	105.5
1♦-1♠-2♣-3♦	29.1	1♦-1♠-2♦-2♥-2♠-2NT	141.3
1♦-1♠-2♣-3♥	137.4	1♦-1♠-2♦-2♥-2♠-3♦	64.5, 141.3
1♦-1♠-2♣-3♠	29.1	1♦-1♠-2♦-2♥-2♠-3♥	141.3
(1♦)-1♠-(2♣)-3♠	101.1	1♦-1♠-2♦-2♥-2♠-3♥-3♠	141.3
1♦-1♠-(2♣)-3♠	99.2	1♦-1♠-2♦-2♥-2♠-3♥-3NT	141.3
1♦-(1♠)-2♣-(3♠)-P	91.4	1♦-1♠-2♦-2♥-2♠-3♥-4♥	141.3
1♦-(1♠)-2♣-(3♠)-X	91.1	1♦-1♠-2♦-2♥-2♠-3NT	141.3
1♦-(1♠)-2♣-(3♠)-3NT	91.3	1♦-1♠-2♦-2♥-2NT	141.2
1♦-(1♠)-2♣-(3♠)-4♦	91.3	(1♦)-1♠-2♦-(2♥)-2NT	105.5
1♦-1♠-2♣-3NT	29.2	1♦-1♠-2♦-2♥-2NT-3♦	64.5
(1♦)-1♠-(2♣)-4♠	101.1	1♦-1♠-2♦-2♥-2NT-3♥	141.3
1♦-1♠-(2♣)-4♠	99.2	1♦-1♠-2♦-2♥-2NT-3♥-3♠	141.3
1♦-1♠-2♦	17.7	1♦-1♠-2♦-2♥-2NT-3♥-3NT ..	141.3
(1♦)-(1♠)-2♦	207.5	1♦-1♠-2♦-2♥-2NT-3♥-4♥	141.3
(1♦)-1♠-2♦	74.3, 75.7	1♦-1♠-2♦-2♥-2NT-3♥-4♠	141.3
1♦-(1♠)-2♦	89.5, 152.4	1♦-1♠-2♦-2♥-2NT-3♠	141.3
(1♦)-1♠-(2♦)-X	101.1	1♦-1♠-2♦-2♥-2NT-3NT	141.3
(1♦)-1♠-2♦-(X)-XX	106.6	1♦-1♠-2♦-2♥-2NT-4♠	141.3
(1♦)-1♠-2♦-(X)-2♥	106.6	1♦-1♠-2♦-2♥-3♣	141.2
(1♦)-1♠-2♦-(X)-2NT	106.6	(1♦)-1♠-2♦-(2♥)-3♣	105.5
(1♦)-1♠-2♦-(X)-3♣	106.6	1♦-1♠-2♦-2♥-3♣-3♦	64.5
(1♦)-1♠-2♦-(X)-3♦	106.6	1♦-1♠-2♦-2♥-3♣-3♥	141.3
(1♦)-1♠-2♦-(X)-3NT	106.6	1♦-1♠-2♦-2♥-3♣-3♥-3♠	141.3
(1♦)-1♠-2♦-(X)-4♦	106.6	1♦-1♠-2♦-2♥-3♣-3♥-3NT	141.3
1♦-1♠-2♦-2♥	32.6, 140.1	1♦-1♠-2♦-2♥-3♣-3♥-4♥	141.3
(1♦)-1♠-(2♦)-2♥	101.8	1♦-1♠-2♦-2♥-3♣-3♥-4♠	141.3
(1♦)-1♠-2♦-2♥	76.9	1♦-1♠-2♦-2♥-3♣-3NT	141.3
(1♦)-1♠-2♦-(2♥)-X	105.5	(1♦)-1♠-2♦-2♥-3♣-4♣-5♣	76.1
1♦-1♠-2♦-2♥-(X)-P	142.4	1♦-1♠-2♦-2♥-3♦	141.2
1♦-1♠-2♦-2♥-(X)-XX	142.4	1♦-1♠-2♦-2♥-3♦-3♥	141.3
1♦-1♠-2♦-2♥-(X)-2♠	142.4	1♦-1♠-2♦-2♥-3♦-3♥-3♠	141.3

1♦-1♠-2♦-2♥-3♦-3♥-3NT	141.3	(1♦)-1♠-(2♦)-4♠	101.7
1♦-1♠-2♦-2♥-3♦-3♥-4♥	141.3	1♦-1♠-2♥	16.6
1♦-1♠-2♦-2♥-3♦-3♥-4♠	141.3	(1♦)-(1♠)-2♥	86.2, 206.3
1♦-1♠-2♦-2♥-3♦-3NT	141.3	(1♦)-1♠-2♥	75.5
1♦-1♠-2♦-2♥-3♦-4♦	64.5	1♦-(1♠)-2♥	89.4
1♦-1♠-2♦-2♥-3♦-4♠	141.3	1♦-1♠-(2♥)-P	99.4
1♦-1♠-2♦-2♥-3NT-4♦	64.5	(1♦)-1♠-(2♥)-X	101.4
1♦-1♠-2♦-2♠	32.6	1♦-1♠-(2♥)-X	99.1
(1♦)-1♠-(2♦)-2♠	101.7	1♦-(1♠)-2♥-(X)-XX	91.5
(1♦)-1♠-2♦-2♠	76.9	1♦-1♠-2♥-2♠	30.3
1♦-1♠-2♦-2NT	32.6	(1♦)-1♠-(2♥)-2♠	101.1
(1♦)-1♠-(2♦)-2NT	101.9	1♦-1♠-(2♥)-2♠	99.2
(1♦)-1♠-2♦-2NT	76.9	1♦-(1♠)-2♥-(2♠)-P	91.4
1♦-1♠-2♦-3♣	32.6	1♦-(1♠)-2♥-(2♠)-X	91.1
(1♦)-1♠-(2♦)-3♣	101.8	1♦-(1♠)-2♥-(2♠)-2NT	91.3
(1♦)-1♠-2♦-(3♣)-X	105.5	1♦-(1♠)-2♥-(2♠)-3♣	91.3
(1♦)-1♠-2♦-(3♣)-3♥	105.5	1♦-(1♠)-2♥-(2♠)-3♦	91.3
(1♦)-1♠-2♦-(3♣)-3♠	105.5	1♦-(1♠)-2♥-(2♠)-3♥	91.2
(1♦)-1♠-2♦-(3♣)-3NT	105.5	1♦-(1♠)-2♥-(2♠)-3NT	91.3
1♦-1♠-2♦-3♦	32.6	1♦-(1♠)-2♥-(2♠)-4♥	91.2
(1♦)-1♠-(2♦)-3♦	101.2	1♦-1♠-2♥-2NT	30.3
(1♦)-1♠-2♦-3♦	76.9	1♦-1♠-(2♥)-2NT	99.3
(1♦)-1♠-2♦-(3♦)-X	105.3	1♦-1♠-2♥-3♣	30.3, 135.1
(1♦)-1♠-2♦-(3♦)-3♥	105.3	(1♦)-1♠-(2♥)-3♣	101.2
(1♦)-1♠-2♦-(3♦)-3♠	105.3	1♦-1♠-(2♥)-3♣	99.3
(1♦)-1♠-2♦-(3♦)-3NT	105.3	1♦-1♠-2♥-3♣-3♦	136.3
1♦-1♠-2♦-3♥	32.6, 191.7	1♦-1♠-2♥-3♣-3♥	136.3
1♦-1♠-2♦-3♠	32.6	1♦-1♠-2♥-3♣-3♠	136.3
(1♦)-1♠-(2♦)-3♠	101.7	1♦-1♠-2♥-3♣-3NT	136.3
(1♦)-1♠-2♦-3♠	76.9	1♦-1♠-2♥-3♣-4♣	191.7
1♦-1♠-2♦-3NT	32.6	1♦-1♠-2♥-3♣-4♠	136.3
(1♦)-1♠-2♦-3NT	76.9	1♦-1♠-2♥-3♦	30.3, 64.3
1♦-1♠-2♦-4♣	191.7	(1♦)-1♠-(2♥)-3♦	101.5
1♦-1♠-2♦-4♠	32.6	1♦-1♠-(2♥)-3♦	99.3

1♦-1♠-2♥-3♥	30.3	(1♦)-1♠-2♠-(3♦)-3♥-3♠	104.1
(1♦)-1♠-(2♥)-3♠	101.1	(1♦)-1♠-2♠-(3♦)-3♥-4♠	104.1
1♦-1♠-(2♥)-3♠	99.2	1♦-1♠-2♠-3♦-3♠	155.2
1♦-(1♠)-2♥-(3♠)-P	91.4	(1♦)-1♠-2♠-(3♦)-3♠	104.1
1♦-(1♠)-2♥-(3♠)-X	91.1	1♦-1♠-2♠-3♦-4♠	155.2
1♦-(1♠)-2♥-(3♠)-3NT	91.3	(1♦)-1♠-2♠-(3♦)-4♠	104.1
1♦-(1♠)-2♥-(3♠)-4♦	91.3	1♦-1♠-2♠-3♥	155.1
1♦-(1♠)-2♥-(3♠)-4♥	91.2	1♦-1♠-2♠-3♥-3♠	155.2
1♦-1♠-2♥-3NT	30.3	1♦-1♠-2♠-3♥-4♠	155.2
1♦-1♠-2♥-4♥	30.3	1♦-1♠-2♠-3♠	14.2, 156.4
(1♦)-1♠-(2♥)-4♠	101.1	1♦-1♠-2♠-4♠	14.2
1♦-1♠-(2♥)-4♠	99.2	1♦-1♠-2NT	15.3
1♦-1♠-2♠	14.1	(1♦)-(1♠)-2NT	206.2
(1♦)-(1♠)-2♠	86.3, 207.5	(1♦)-1♠-2NT	75.6
(1♦)-1♠-2♠	74.2	1♦-(1♠)-2NT	89.5
1♦-(1♠)-2♠	89.8	1♦-1♠-2NT-3♣	29.8, 146.1
1♦-1♠-2♠-P	14.2	1♦-1♠-2NT-3♣-3♦	147.2
(1♦)-1♠-2♠-(X)-XX	104.1	1♦-1♠-2NT-3♣-3♦-4♦	64.4
(1♦)-1♠-2♠-(X)-3♠	104.1	1♦-1♠-2NT-3♣-3♥	147.2
(1♦)-1♠-2♠-(X)-4♠	104.1	1♦-1♠-2NT-3♣-3♥-4♦	64.4
1♦-1♠-2♠-2NT	155.1	1♦-1♠-2NT-3♣-3♠	147.2
1♦-1♠-2♠-2NT-3♠	155.2	1♦-1♠-2NT-3♣-3♠-4♦	64.4
1♦-1♠-2♠-2NT-4♠	155.2	1♦-1♠-2NT-3♣-3NT	147.2
1♦-1♠-2♠-3♣	155.1	1♦-1♠-2NT-3♣-3NT-4♣	147.3
(1♦)-1♠-2♠-(3♣)-3♦	104.1	1♦-1♠-2NT-3♣-3NT-4♦	64.4, 147.3
(1♦)-1♠-2♠-(3♣)-3♦-3♠	104.1	1♦-1♠-2NT-3♣-3NT-4♥	147.3
(1♦)-1♠-2♠-(3♣)-3♦-4♠	104.1	1♦-1♠-2NT-3♣-3NT-4♠	147.3
1♦-1♠-2♠-3♣-3♠	155.2	1♦-1♠-2NT-3♦	29.8
(1♦)-1♠-2♠-(3♣)-3♠	104.1	1♦-1♠-2NT-3♥	29.8
1♦-1♠-2♠-3♣-4♠	155.2	1♦-1♠-2NT-3♠	29.8
(1♦)-1♠-2♠-(3♣)-4♠	104.1	1♦-1♠-2NT-3NT	29.8
1♦-1♠-2♠-3♦	155.1	1♦-1♠-2NT-4♠	29.8
(1♦)-1♠-2♠-(3♦)-X	104.1	1♦-1♠-3♣	16.4
(1♦)-1♠-2♠-(3♦)-3♥	104.1	(1♦)-1♠-3♣	74.3

1♦-1♠-3♣-3♦	64.2	1♦-(1NT)-X	202.1
1♦-1♠-3♣-3♥	31.4	(1♦)-(1NT)-(P)-X	132.2
1♦-1♠-3♣-3♠	31.4	1♦-(1NT)-(P)-X	130.2
1♦-1♠-3♣-3NT	31.4	(1♦)-(1NT)-(P)-2♣	132.2
1♦-1♠-3♣-4♣	31.4	1♦-(1NT)-(P)-2♣	130.2
1♦-1♠-3♣-4♠	31.4	(1♦)-(1NT)-(P)-2♦	132.2
1♦-1♠-3♦	17.7	1♦-(1NT)-(P)-2♦	130.2
(1♦)-1♠-3♦	74.3	(1♦)-(1NT)-(P)-2♥	132.2
1♦-(1♠)-3♦	89.5, 152.4	(1♦)-(1NT)-X	87.4
(1♦)-1♠-(3♦)-X	101.1	1♦-(1NT)-X	97.1
1♦-1♠-3♦-3♥	31.5	1♦-1NT-(X)-XX	100.5
(1♦)-1♠-(3♦)-3♥	101.8	1♦-1NT-2♣	22.3
1♦-1♠-3♦-3♠	31.5	(1♦)-(1NT)-2♣	87.4
(1♦)-1♠-(3♦)-3♠	101.7	(1♦)-1NT-2♣	80.2
1♦-1♠-3♦-3NT	31.5	1♦-(1NT)-2♣	98.2, 203.2
(1♦)-1♠-(3♦)-3NT	101.9	1♦-1NT-(2♣)-P	99.4
(1♦)-1♠-(3♦)-4♣	101.8	1♦-1NT-2♣-P	25.3
1♦-1♠-3♦-4♦	64.6	1♦-1NT-(2♣)-X	99.1
1♦-1♠-3♦-4♠	31.5	1♦-1NT-2♣-2♦	25.3
(1♦)-1♠-3♦-4♠	76.1	1♦-(1NT)-2♣-2♦	203.2
(1♦)-1♠-3♥	74.3	1♦-1NT-(2♣)-2♦	99.3
1♦-1♠-3♠	14.1	1♦-(1NT)-2♣-2♥	203.2
(1♦)-1♠-3♠	74.2	1♦-1NT-(2♣)-2♥	99.3
1♦-1♠-3♠-P	14.2	1♦-(1NT)-2♣-2♠	203.2
1♦-1♠-3♠-4♠	14.2	1♦-1NT-(2♣)-2♠	99.3
1♦-1♠-3NT	190.5	1♦-1NT-2♣-3♣	25.3
(1♦)-1♠-3NT	75.6	1♦-1NT-2♦	22.3
1♦-1♠-4♣	190.3	(1♦)-(1NT)-2♦	207.6
1♦-1♠-4♦	190.4	(1♦)-1NT-2♦	80.2
1♦-1♠-4♥	190.3	1♦-(1NT)-2♦	98.2, 203.3
1♦-1♠-4♠	14.1, 190.6	(1♦)-1NT-2♦-2♥	80.2
(1♦)-1♠-4♠	74.2, 74.3, 76.1	1♦-(1NT)-2♦-2♥	203.3
1♦-1NT	9.2	1♦-1NT-2♦-3♣	27.7
(1♦)-1NT	80.1	1♦-1NT-2♦-3♦	27.7

1♦-1NT-2♥	22.3	(1♦)-1NT-2NT-3NT	80.2
(1♦)-(1NT)-2♥	87.4	1♦-1NT-3♣	22.3
(1♦)-1NT-2♥	80.2	1♦-(1NT)-3♣	203.3
1♦-(1NT)-2♥	98.2, 203.3	1♦-1NT-3♣-3♦	26.5
1♦-1NT-(2♥)-P	99.4	1♦-(1NT)-3♣-3♦	203.3
1♦-1NT-(2♥)-X	99.1	1♦-1NT-3♣-3♥	26.5
1♦-1NT-2♥-2♠	26.4	1♦-1NT-3♣-3♠	26.5
(1♦)-1NT-2♥-2♠	80.2	1♦-1NT-3♣-3NT	26.5
1♦-(1NT)-2♥-2♠	203.3	1♦-1NT-3♦	22.3
1♦-1NT-(2♥)-2♠	99.3	1♦-1NT-3♦-3NT	27.6
1♦-1NT-2♥-2NT	26.4	1♦-1NT-3NT	22.3
1♦-1NT-2♥-3♣	26.4	(1♦)-1NT-3NT	80.2
1♦-1NT-(2♥)-3♣	99.3	1♦-1NT-3NT-4♣	24.1
1♦-1NT-2♥-3♦	26.4	1♦-1NT-3NT-4♣-5♣	24.1
1♦-1NT-(2♥)-3♦	99.3	1♦-2♣	9.2
1♦-1NT-2♥-3NT	26.4	(1♦)-2♣	73.1
1♦-1NT-2♠	22.3	1♦-(2♣)-P	88.1, 89.7
(1♦)-(1NT)-2♠	87.4	1♦-(2♣)-(P)-X	130.1
1♦-(1NT)-2♠	98.2, 203.3	1♦-(2♣)-P-X	91.6
1♦-1NT-(2♠)-P	99.4	1♦-(2♣)-(P)-X-P	130.1
1♦-1NT-(2♠)-X	99.1	1♦-(2♣)-(P)-X-2♦	130.1
1♦-1NT-2♠-2NT	26.4	1♦-(2♣)-(P)-X-2♥	130.1
1♦-1NT-2♠-3♣	26.4	1♦-(2♣)-(P)-X-2♠	130.1
1♦-(1NT)-2♠-3♣	203.3	1♦-(2♣)-(P)-2♦	130.1
1♦-1NT-2♠-3♦	26.4	1♦-(2♣)-(P)-2♥	130.1
1♦-1NT-2♠-3♥	26.4	1♦-(2♣)-(P)-2♠	130.1
1♦-1NT-2♠-3NT	26.4	1♦-(2♣)-(P)-3♦	130.1
1♦-1NT-2NT	22.3	(1♦)-(2♣)-X	86.2, 206.1, 206.4
(1♦)-1NT-2NT	80.2	1♦-(2♣)-X	89.3, 90.9
1♦-(1NT)-2NT	203.3	(1♦)-2♣-(X)-XX	101.6
1♦-1NT-2NT-3♣	25.2	1♦-2♣-(X)-XX	100.5
1♦-(1NT)-2NT-3♣	203.3	(1♦)-2♣-(X)-2♦	101.6
1♦-1NT-2NT-3♣-5♣	25.2	(1♦)-2♣-(X)-2♠	101.6
1♦-(1NT)-2NT-3♦	203.3	(1♦)-2♣-(X)-3♣	101.6

(1♦)-2♣-(X)-3♥	101.6	1♦-2♣-2♦-2NT	33.2
(1♦)-2♣-(X)-4♣	101.6	(1♦)-2♣-(2♦)-2NT	101.9
1♦-2♣-2♦	21.3	(1♦)-2♣-2♦-2NT	76.9
(1♦)-(2♣)-2♦	206.4	1♦-2♣-2♦-3♣	33.2
(1♦)-2♣-2♦	74.3, 75.7	(1♦)-2♣-(2♦)-3♣	101.7
1♦-(2♣)-2♦	89.5, 152.4	(1♦)-2♣-2♦-3♣	76.9
(1♦)-2♣-(2♦)-X	101.1	1♦-2♣-2♦-3♦	33.3
(1♦)-2♣-2♦-(X)-XX	106.6	(1♦)-2♣-(2♦)-3♦	101.2
(1♦)-2♣-2♦-(X)-2♥	106.6	(1♦)-2♣-2♦-3♦	76.9
(1♦)-2♣-2♦-(X)-2♠	106.6	(1♦)-2♣-2♦-(3♦)-X	105.3
(1♦)-2♣-2♦-(X)-2NT	106.6	(1♦)-2♣-2♦-(3♦)-3♥	105.3
(1♦)-2♣-2♦-(X)-3♦	106.6	(1♦)-2♣-2♦-(3♦)-3♠	105.3
(1♦)-2♣-2♦-(X)-3NT	106.6	(1♦)-2♣-2♦-(3♦)-3NT	105.3
(1♦)-2♣-2♦-(X)-4♦	106.6	1♦-2♣-2♦-3NT	33.3
1♦-2♣-2♦-2♥	33.3	(1♦)-2♣-2♦-3NT	76.9
(1♦)-2♣-(2♦)-2♥	101.8	(1♦)-2♣-(2♦)-4♣	101.7
(1♦)-2♣-2♦-2♥	76.9	(1♦)-2♣-2♦-4♣	76.9
(1♦)-2♣-2♦-(2♥)-X	105.5	1♦-2♣-2♦-4♦	65.8
(1♦)-2♣-2♦-(2♥)-2♠	105.5	1♦-2♣-2♥	21.3
1♦-2♣-2♦-2♥-2♠-4♦	64.7	(1♦)-(2♣)-2♥	86.2, 206.4
(1♦)-2♣-2♦-(2♥)-2NT	105.5	(1♦)-2♣-2♥	75.4
1♦-2♣-2♦-2♥-2NT-4♦	64.7	1♦-(2♣)-2♥	89.4
(1♦)-2♣-2♦-(2♥)-3♣	105.5	1♦-2♣-(2♥)-P	99.4
1♦-2♣-2♦-2♥-3♣-4♦	64.7	(1♦)-2♣-(2♥)-X	101.4
1♦-2♣-2♦-2♥-3♦-4♦	64.7	1♦-2♣-(2♥)-X	99.1
1♦-2♣-2♦-2♥-3♥-4♦	64.7	(1♦)-2♣-2♥-(X)-XX	106.6
1♦-2♣-2♦-2♥-3NT-4♦	64.7	1♦-(2♣)-2♥-(X)-XX	91.5
1♦-2♣-2♦-2♠	33.3	(1♦)-2♣-2♥-(X)-2♠	106.6
(1♦)-2♣-(2♦)-2♠	101.8	(1♦)-2♣-2♥-(X)-2NT	106.6
(1♦)-2♣-2♦-2♠	76.9	(1♦)-2♣-2♥-(X)-3♦	106.6
(1♦)-2♣-2♦-(2♠)-X	105.5	(1♦)-2♣-2♥-(X)-3♥	106.6
(1♦)-2♣-2♦-(2♠)-2NT	105.5	(1♦)-2♣-2♥-(X)-3NT	106.6
(1♦)-2♣-2♦-(2♠)-3♣	105.5	(1♦)-2♣-2♥-(X)-4♥	106.6
(1♦)-2♣-2♦-(2♠)-3♥	105.5	1♦-2♣-2♥-2♠	34.6, 135.1

(1♦)-2♣-(2♥)-2♠	101.2	(1♦)-2♣-2♥-(3♦)-X	105.2
(1♦)-2♣-2♥-2♠	75.8	(1♦)-2♣-2♥-(3♦)-3♥	105.2
1♦-2♣-(2♥)-2♠	99.3	(1♦)-2♣-2♥-(3♦)-4♣	105.2
(1♦)-2♣-2♥-(2♠)-X	105.4	(1♦)-2♣-2♥-(3♦)-4♥	105.2
1♦-2♣-2♥-2♠-2NT	136.3	1♦-2♣-2♥-3♥	34.6
(1♦)-2♣-2♥-(2♠)-2NT	105.4	(1♦)-2♣-2♥-3♥	75.8
1♦-2♣-2♥-2♠-3♣	136.3	1♦-2♣-2♥-3♠	137.4
(1♦)-2♣-2♥-(2♠)-3♣	105.4	1♦-2♣-2♥-3NT	34.6
1♦-2♣-2♥-2♠-3♦	136.3	(1♦)-2♣-2♥-3NT	75.8
(1♦)-2♣-2♥-(2♠)-3♦	105.4	(1♦)-2♣-(2♥)-4♣	101.1
1♦-2♣-2♥-2♠-3♥	136.3	1♦-(2♣)-2♥-(4♣)-P	91.4
(1♦)-2♣-2♥-(2♠)-3♥	105.4	1♦-(2♣)-2♥-(4♣)-X	91.1
1♦-2♣-2♥-2♠-3♠	136.3	1♦-(2♣)-2♥-(4♣)-4♥	91.2
(1♦)-2♣-2♥-(2♠)-3♠	105.4	1♦-2♣-2♠	21.3
1♦-2♣-2♥-2♠-3♠-3NT	136.3	(1♦)-(2♣)-2♠	86.2, 206.4
1♦-2♣-2♥-2♠-3NT	136.3	(1♦)-2♣-2♠	75.4
(1♦)-2♣-2♥-(2♠)-4♥	105.4	1♦-(2♣)-2♠	89.4
1♦-2♣-2♥-2NT	34.6	1♦-2♣-(2♠)-P	99.4
(1♦)-2♣-2♥-2NT	75.8	(1♦)-2♣-(2♠)-X	101.4
1♦-2♣-(2♥)-2NT	99.3	1♦-2♣-(2♠)-X	99.1
1♦-2♣-2♥-3♣	34.6	(1♦)-2♣-2♠-(X)-XX	106.6
(1♦)-2♣-(2♥)-3♣	101.1	1♦-(2♣)-2♠-(X)-XX	91.5
(1♦)-2♣-2♥-3♣	75.8	(1♦)-2♣-2♠-(X)-2NT	106.6
1♦-(2♣)-2♥-(3♣)-P	91.4	(1♦)-2♣-2♠-(X)-3♦	106.6
1♦-(2♣)-2♥-(3♣)-X	91.1	(1♦)-2♣-2♠-(X)-3♥	106.6
1♦-(2♣)-2♥-(3♣)-3♦	91.3	(1♦)-2♣-2♠-(X)-3♠	106.6
1♦-(2♣)-2♥-(3♣)-3♥	91.2	(1♦)-2♣-2♠-(X)-3NT	106.6
1♦-(2♣)-2♥-(3♣)-3♠	91.3	(1♦)-2♣-2♠-(X)-4♠	106.6
1♦-(2♣)-2♥-(3♣)-3NT	91.3	1♦-2♣-2♠-2NT	34.6
1♦-(2♣)-2♥-(3♣)-4♥	91.2	(1♦)-2♣-2♠-2NT	75.8
1♦-2♣-2♥-3♦	34.6	1♦-2♣-(2♠)-2NT	99.3
(1♦)-2♣-(2♥)-3♦	101.5	1♦-2♣-2♠-3♣	34.6
(1♦)-2♣-2♥-3♦	75.8	(1♦)-2♣-(2♠)-3♣	101.1
1♦-2♣-(2♥)-3♦	99.3	(1♦)-2♣-2♠-3♣	75.8

1♦-(2♣)-2♠-(3♣)-P	91.4	1♦-(2♣)-2NT	89.5
1♦-(2♣)-2♠-(3♣)-X	91.1	1♦-2♣-2NT-3♣	36.1
1♦-(2♣)-2♠-(3♣)-3♥	91.3	1♦-2♣-2NT-3♥	36.1
1♦-(2♣)-2♠-(3♣)-3♠	91.2	1♦-2♣-2NT-3♠	36.1
1♦-(2♣)-2♠-(3♣)-3NT	91.3	1♦-2♣-2NT-3NT	36.1
1♦-(2♣)-2♠-(3♣)-4♠	91.2	1♦-2♣-3♣	21.3
1♦-2♣-2♠-3♦	34.6	(1♦)-(2♣)-3♣	86.3, 207.5
(1♦)-2♣-(2♠)-3♦	101.5	(1♦)-2♣-3♣	74.2
(1♦)-2♣-2♠-3♦	75.8	1♦-(2♣)-3♣	89.8
1♦-2♣-(2♠)-3♦	99.3	1♦-2♣-3♣-3♦	34.4
(1♦)-2♣-2♠-(3♦)-X	105.2	1♦-2♣-3♣-3NT	34.5
(1♦)-2♣-2♠-(3♦)-3♠	105.2	1♦-2♣-3♦	21.3
(1♦)-2♣-2♠-(3♦)-4♣	105.2	(1♦)-2♣-3♦	74.3
(1♦)-2♣-2♠-(3♦)-4♠	105.2	1♦-(2♣)-3♦	89.5, 152.4
1♦-2♣-2♠-3♥	34.6, 135.1	(1♦)-2♣-(3♦)-X	101.1
(1♦)-2♣-(2♠)-3♥	101.2	1♦-2♣-3♦-3♥	32.1
1♦-2♣-(2♠)-3♥	99.3	(1♦)-2♣-(3♦)-3♥	101.8
(1♦)-2♣-2♠-(3♥)-X	105.4	1♦-2♣-3♦-3♠	32.1
1♦-2♣-2♠-3♥-3♠	136.3	(1♦)-2♣-(3♦)-3♠	101.8
(1♦)-2♣-2♠-(3♥)-3♠	105.4	1♦-2♣-3♦-3NT	32.1
1♦-2♣-2♠-3♥-3NT	136.3	(1♦)-2♣-(3♦)-3NT	101.9
(1♦)-2♣-2♠-(3♥)-3NT	105.4	1♦-2♣-3♦-4♣	32.1
(1♦)-2♣-2♠-(3♥)-4♠	105.4	(1♦)-2♣-(3♦)-4♣	101.7
1♦-2♣-2♠-3♠	34.6	1♦-2♣-3♦-4♦	64.7
(1♦)-2♣-2♠-3♠	75.8	(1♦)-2♣-3♥	74.3
1♦-2♣-2♠-3NT	34.6	(1♦)-2♣-3♠	74.3
(1♦)-2♣-2♠-3NT	75.8	1♦-2♣-3NT	21.3
(1♦)-2♣-(2♠)-4♣	101.1	(1♦)-2♣-3NT	75.6
1♦-(2♣)-2♠-(4♣)-P	91.4	1♦-2♣-3NT-4♣	37.2
1♦-(2♣)-2♠-(4♣)-X	91.1	1♦-2♣-3NT-4♥	37.2
1♦-(2♣)-2♠-(4♣)-4♠	91.2	1♦-2♣-3NT-4♠	37.2
1♦-2♣-2NT	21.3	(1♦)-2♣-4♣	74.2
(1♦)-(2♣)-2NT	206.4	1♦-2♦	9.2, 151.1
(1♦)-2♣-2NT	75.6	(1♦)-2♦	197.1

1♦-(2♦)-P	201.1	1♦-(2♦)-3♣	201.1
(1♦)-(2♦)-(P)-X	131.1	1♦-2♦-3♦	152.3
(1♦)-(2♦)-(P)-2♦	131.1	(1♦)-2♦-3♦	198.2
(1♦)-(2♦)-(P)-2♥	131.1	1♦-(2♦)-3♦	201.1
(1♦)-(2♦)-(P)-3♣	131.1	(1♦)-2♦-3♦-3♥	198.2
(1♦)-(2♦)-X	207.7	(1♦)-2♦-3♦-4♥	198.2
1♦-(2♦)-X	201.1	(1♦)-2♦-3♥	198.2
1♦-2♦-2♥	13.5, 152.3	(1♦)-2♦-3♠	198.2
(1♦)-(2♦)-2♥	86.1	1♦-2♦-3NT	13.4, 152.3
(1♦)-2♦-2♥	198.2	(1♦)-2♦-3NT	198.2
1♦-(2♦)-2♥	201.1	1♦-(2♦)-3NT	201.1
1♦-(2♦)-(2♥)-(P)-X	201.2	(1♦)-2♦-4♥	198.2
1♦-(2♦)-(2♥)-(P)-3♦	201.2	(1♦)-2♦-4♠	198.2
1♦-2♦-2♥-2NT	13.5	1♦-2♥	66.1
1♦-2♦-2♥-3♦	13.5	(1♦)-2♥	119.1
1♦-2♦-2♥-3♥	152.3	1♦-(2♥)-X	122.2
1♦-2♦-2♥-3NT	13.5	1♦-(2♥)-2♠	122.2
1♦-2♦-2♥-4♦	13.5	1♦-(2♥)-2NT	122.2
1♦-2♦-2♠	13.5, 152.3	1♦-(2♥)-3♣	122.2
(1♦)-(2♦)-2♠	86.1	1♦-(2♥)-3♦	122.2
(1♦)-2♦-2♠	198.2	1♦-(2♥)-3♥	122.2
1♦-(2♦)-2♠	201.1	1♦-(2♥)-3NT	122.2
1♦-(2♦)-(2♠)-(P)-X	201.2	1♦-2♠	66.1
1♦-(2♦)-(2♠)-(P)-3♦	201.2	(1♦)-2♠	119.1
1♦-2♦-2♠-2NT	13.5	1♦-(2♠)-X	122.2
1♦-2♦-2♠-3♦	13.5	1♦-(2♠)-2NT	122.2
1♦-2♦-2♠-3♠	152.3	1♦-(2♠)-3♣	122.2
1♦-2♦-2♠-3NT	13.5	1♦-(2♠)-3♦	122.2
1♦-2♦-2♠-4♦	13.5	1♦-(2♠)-3♥	122.2
1♦-2♦-2NT	13.4, 152.3	1♦-(2♠)-3♠	122.2
(1♦)-(2♦)-2NT	207.7	1♦-(2♠)-3NT	122.2
1♦-(2♦)-2NT	201.1	1♦-2NT	9.2
1♦-2♦-2NT-3♦	13.4	(1♦)-2NT	198.4
(1♦)-(2♦)-3♣	86.1	1♦-(2NT)-P	201.1

1♦-(2NT)-X	201.1	1♦-(3♣)-3♦	123.4
(1♦)-2NT-3♣	198.4	1♦-(3♣)-3♥	123.4
1♦-(2NT)-3♣	201.1	1♦-(3♣)-3♠	123.4
1♦-2NT-(3♣)-P	99.4	1♦-(3♣)-3NT	123.4
1♦-2NT-(3♣)-X	99.1	1♦-3♦	9.2, 151.1
1♦-2NT-(3♣)-3♦	99.3	1♦-3♦-P	13.6
1♦-2NT-(3♣)-3♥	99.3	(1♦)-(3♦)-X	207.7
1♦-2NT-(3♣)-3♠	99.3	1♦-3♦-3♥	13.6, 152.2
1♦-(2NT)-3♦	201.1	(1♦)-(3♦)-3♥	86.1
(1♦)-2NT-3♥	198.4	1♦-3♦-3♥-3NT	13.6
1♦-(2NT)-3♥	201.1	1♦-3♦-3♥-4♦	13.6
1♦-2NT-(3♥)-P	99.4	1♦-3♦-3♠	13.6, 152.2
1♦-(2NT)-(3♥)-(P)-X	201.2	(1♦)-(3♦)-3♠	86.1
1♦-(2NT)-(3♥)-(P)-4♦	201.2	1♦-3♦-3♠-3NT	13.6
1♦-2NT-(3♥)-X	99.1	1♦-3♦-3♠-4♦	13.6
1♦-(2NT)-3♠	201.1	1♦-3♦-3NT	13.6, 152.2
1♦-2NT-(3♠)-P	99.4	(1♦)-(3♦)-3NT	207.7
1♦-(2NT)-(3♠)-(P)-X	201.2	(1♦)-(3♦)-4♣	86.1
1♦-(2NT)-(3♠)-(P)-4♦	201.2	(1♦)-3♥	119.1
1♦-2NT-(3♠)-X	99.1	1♦-(3♥)-X	123.4
1♦-2NT-3NT	21.2	1♦-(3♥)-X-3♠	123.4
(1♦)-2NT-3NT	198.4	1♦-(3♥)-X-3♠-4♠	123.4
1♦-(2NT)-3NT	201.1	1♦-(3♥)-X-3NT	123.4
(1♦)-2NT-4♣	198.4	1♦-(3♥)-X-4♦	123.4
(1♦)-2NT-4♥	198.4	1♦-(3♥)-3♠	123.4
1♦-3♣	66.1	1♦-(3♥)-3NT	123.4
(1♦)-3♣	119.1	(1♦)-3♠	119.1
1♦-(3♣)-X	123.4	1♦-(3♠)-X	123.4
1♦-(3♣)-X-3♦	123.4	1♦-(3♠)-X-3NT	123.4
1♦-(3♣)-X-3♥	123.4	1♦-(3♠)-X-4♦	123.4
1♦-(3♣)-X-3♥-4♥	123.4	1♦-(3♠)-3NT	123.4
1♦-(3♣)-X-3♠	123.4	1♦-3NT	9.2
1♦-(3♣)-X-3♠-4♠	123.4	(1♦)-3NT	153.3
1♦-(3♣)-X-3NT	123.4	(1♦)-4♣	119.1

1♦-(4♣)-X	123.5	(1♥)-(P)-1♠	127.5
1♦-(4♣)-X-4NT	123.5	(1♥)-(P)-1♠-1NT	128.8
(1♦)-4♥	119.1	(1♥)-(P)-1♠-2♣	128.8
1♦-(4♥)-X	123.5	(1♥)-(P)-1♠-(2♣)-X	129.9
1♦-(4♥)-X-4NT	123.5	(1♥)-(P)-1♠-(2♣)-2♠	129.9
(1♦)-4♠	119.1	(1♥)-(P)-1♠-(2♣)-2NT	129.9
1♦-(4♠)-X	123.5	(1♥)-(P)-1♠-(2♣)-3NT	129.9
1♦-(4♠)-X-4NT	123.5	(1♥)-(P)-1♠-2♦	128.8
(1♦)-5♣	119.1	(1♥)-(P)-1♠-(2♦)-X	129.9
1♦-(5♣)-X	123.5	(1♥)-(P)-1♠-(2♦)-2♠	129.9
1♥	3.1	(1♥)-(P)-1♠-(2♦)-2NT	129.9
(1♥)-P	73.1	(1♥)-(P)-1♠-(2♦)-3NT	129.9
1♥-P	7.1	(1♥)-(P)-1♠-(2♥)-2♠	129.9
(1♥)-(P)-X	125.1	(1♥)-(P)-1♠-2♠	128.8
(1♥)-(P)-X-P	126.2	(1♥)-(P)-1♠-2NT	128.8
(1♥)-(P)-X-1♠	126.2	(1♥)-(P)-1♠-3♣	128.8
(1♥)-(P)-X-(1♠)-2♣	126.2	(1♥)-(P)-1♠-3♦	128.8
(1♥)-(P)-X-(1♠)-2♦	126.2	(1♥)-(P)-1♠-3♠	128.8
(1♥)-(P)-X-1NT	126.2	(1♥)-(P)-1NT	127.3
(1♥)-(P)-X-2♣	126.2	(1♥)-(P)-1NT-P-(X)-XX	127.4
(1♥)-(P)-X-(2♣)-2♦	126.2	(1♥)-(P)-1NT-(X)-(P)-XX	127.4
(1♥)-(P)-X-(2♣)-2♠	126.2	(1♥)-(P)-2♣	128.6
(1♥)-(P)-X-2♦	126.2	(1♥)-(P)-2♣-2♦	128.8
(1♥)-(P)-X-(2♦)-2♠	126.2	(1♥)-(P)-2♣-(2♦)-X	129.9
(1♥)-(P)-X-(2♦)-3♣	126.2	(1♥)-(P)-2♣-(2♦)-2NT	129.9
(1♥)-(P)-X-2♥	126.2	(1♥)-(P)-2♣-(2♦)-3♣	129.9
(1♥)-(P)-X-(2♥)-2♠	126.2	(1♥)-(P)-2♣-(2♦)-3NT	129.9
(1♥)-(P)-X-(2♥)-3♣	126.2	(1♥)-(P)-2♣-(2♥)-3♣	129.9
(1♥)-(P)-X-(2♥)-3♦	126.2	(1♥)-(P)-2♣-2♠	128.8
(1♥)-(P)-X-2♠	126.2	(1♥)-(P)-2♣-(2♠)-X	129.9
(1♥)-(P)-X-2NT	126.2	(1♥)-(P)-2♣-(2♠)-2NT	129.9
(1♥)-(P)-X-3♣	126.2	(1♥)-(P)-2♣-(2♠)-3♣	129.9
(1♥)-(P)-X-3♦	126.2	(1♥)-(P)-2♣-(2♠)-3NT	129.9
(1♥)-(P)-X-3NT	126.2	(1♥)-(P)-2♣-2NT	128.8

(1♥)-(P)-2♣-3♣	128.8	1♥-(X)-P	97.4
(1♥)-(P)-2♣-3NT	128.8	(1♥)-X-1♠	81.3
(1♥)-(P)-2♦	128.6	1♥-(X)-1♠	97.4
(1♥)-(P)-2♦-(2♥)-3♦	129.9	(1♥)-X-(1♠)-P	102.6
(1♥)-(P)-2♦-2♠	128.8	(1♥)-X-1♠-P	82.9
(1♥)-(P)-2♦-(2♠)-X	129.9	(1♥)-X-(1♠)-X	102.6
(1♥)-(P)-2♦-(2♠)-2NT	129.9	(1♥)-X-(1♠)-1NT	102.6
(1♥)-(P)-2♦-(2♠)-3♦	129.9	(1♥)-X-1♠-1NT	82.3
(1♥)-(P)-2♦-(2♠)-3NT	129.9	(1♥)-X-(1♠)-2♣	102.6
(1♥)-(P)-2♦-2NT	128.8	(1♥)-X-1♠-2♣	82.1
(1♥)-(P)-2♦-3♣	128.8	(1♥)-X-1♠-2♣-2♠	82.4
(1♥)-(P)-2♦-(3♣)-X	129.9	(1♥)-X-(1♠)-2♦	102.6
(1♥)-(P)-2♦-(3♣)-3♦	129.9	(1♥)-X-1♠-2♦	82.1
(1♥)-(P)-2♦-(3♣)-3NT	129.9	(1♥)-X-1♠-2♦-2♠	82.4
(1♥)-(P)-2♦-3♦	128.8	(1♥)-X-(1♠)-2♥	102.6
(1♥)-(P)-2♦-3NT	128.8	(1♥)-X-1♠-2♥	82.2
(1♥)-(P)-2♥	129.1	(1♥)-X-1♠-2♥-2♠	82.5
(1♥)-(P)-2♠	128.7	(1♥)-X-(1♠)-2♠	102.6
(1♥)-(P)-2NT	127.3	(1♥)-X-1♠-2♠	82.9
(1♥)-(P)-3♣	128.7	(1♥)-X-(1♠)-2NT	102.6
(1♥)-(P)-3♦	128.7	(1♥)-X-1♠-3♠	82.9
(1♥)-X	80.1, 81.2	(1♥)-X-(1♠)-3NT	102.6
1♥-(X)-XX	96.2	(1♥)-X-1NT	81.6
(1♥)-X-(XX)-P	104.9	1♥-(X)-1NT	97.4
(1♥)-X-(XX)-1♠	104.9	(1♥)-X-(1NT)-P	103.8
(1♥)-X-(XX)-1NT	104.9	(1♥)-X-(1NT)-X	103.8
(1♥)-X-(XX)-2♣	104.9	(1♥)-X-(1NT)-2♣	103.8
(1♥)-X-(XX)-2♦	104.9	(1♥)-X-(1NT)-2♦	103.8
(1♥)-X-(XX)-2♥	104.9	(1♥)-X-(1NT)-2♥	103.8
(1♥)-X-(XX)-2♠	104.9	(1♥)-X-(1NT)-2♠	103.8
(1♥)-X-(XX)-2NT	104.9	(1♥)-X-(1NT)-3♣	103.8
(1♥)-X-(XX)-3♣	104.9	(1♥)-X-(1NT)-3♦	103.8
(1♥)-X-(XX)-3♦	104.9	(1♥)-X-(1NT)-3♠	103.8
(1♥)-X-(XX)-3NT	104.9	(1♥)-X-2♣	81.3

1♥-(X)-2♣	97.4	(1♥)-X-(2♦)-3♦	102.6
(1♥)-X-(2♣)-P	102.6	(1♥)-X-2♦-3♦	82.9
(1♥)-X-2♣-P	82.9	(1♥)-X-(2♦)-3NT	102.6
(1♥)-X-(2♣)-X	102.6	(1♥)-X-2♥	81.4, 81.8
(1♥)-X-(2♣)-2♦	102.6	1♥-(X)-2♥	96.1, 164.4
(1♥)-X-2♣-2♦	82.1	(1♥)-X-(2♥)-P	103.7
(1♥)-X-2♣-2♦-3♣	82.4	(1♥)-X-(2♥)-X	103.7
(1♥)-X-(2♣)-2♥	102.6	(1♥)-X-(2♥)-2♠	103.7
(1♥)-X-2♣-2♥	82.2	(1♥)-X-(2♥)-2NT	103.7
(1♥)-X-2♣-2♥-3♣	82.5	(1♥)-X-(2♥)-3♣	103.7
(1♥)-X-(2♣)-2♠	102.6	(1♥)-X-(2♥)-3♦	103.7
(1♥)-X-2♣-2♠	82.1	(1♥)-X-(2♥)-3♥	103.7
(1♥)-X-2♣-2♠-3♣	82.4	(1♥)-X-(2♥)-3♠	103.7
(1♥)-X-(2♣)-2NT	102.6	(1♥)-X-(2♥)-3NT	103.7
(1♥)-X-2♣-2NT	82.3	(1♥)-X-2♠	81.5
(1♥)-X-(2♣)-3♣	102.6	1♥-(X)-2♠	97.5
(1♥)-X-2♣-3♣	82.9	(1♥)-X-2NT	81.6
(1♥)-X-(2♣)-3NT	102.6	1♥-(X)-2NT	96.1, 164.4
(1♥)-X-2♦	81.3	(1♥)-X-(2NT)-P	103.8
1♥-(X)-2♦	97.4	(1♥)-X-(2NT)-X	103.8
(1♥)-X-(2♦)-P	102.6	(1♥)-X-(2NT)-3♥	103.8
(1♥)-X-2♦-P	82.9	(1♥)-X-3♣	81.5
(1♥)-X-(2♦)-X	102.6	1♥-(X)-3♣	97.5, 164.4
(1♥)-X-(2♦)-2♥	102.6	(1♥)-X-3♦	81.5
(1♥)-X-2♦-2♥	82.2	1♥-(X)-3♦	97.5, 164.4
(1♥)-X-2♦-2♥-3♦	82.5	1♥-(X)-3♥	96.1, 164.4
(1♥)-X-(2♦)-2♠	102.6	(1♥)-X-(3♥)-P	103.7
(1♥)-X-2♦-2♠	82.1	(1♥)-X-(3♥)-X	103.7
(1♥)-X-2♦-2♠-3♦	82.4	(1♥)-X-(3♥)-3♠	103.7
(1♥)-X-(2♦)-2NT	102.6	(1♥)-X-(3♥)-3NT	103.7
(1♥)-X-2♦-2NT	82.3	(1♥)-X-3NT	81.6
(1♥)-X-(2♦)-3♣	102.6	(1♥)-X-(4♥)-P	103.7
(1♥)-X-2♦-3♣	82.1	(1♥)-X-(4♥)-X	103.7
(1♥)-X-2♦-3♣-3♦	82.4	(1♥)-X-(4♥)-4♠	103.7

(1♥)-X-4♠	81.7	1♥-(1♠)-1NT-(X)-XX	91.5
(1♥)-(1NT)-(P)-2♠	132.2	(1♥)-1♠-(1NT)-X	102.5
1♥-1♠	7.3	1♥-1♠-1NT-2♣	28.5, 142.1
(1♥)-1♠	73.1	(1♥)-1♠-(1NT)-2♣	102.4
1♥-(1♠)-P	88.1, 89.7	1♥-1♠-1NT-2♣-(X)-P	144.6
1♥-(1♠)-(P)-X	130.1	1♥-1♠-1NT-2♣-(X)-XX	144.6
1♥-(1♠)-P-X	91.6	1♥-1♠-1NT-2♣-(X)-2♦	144.6
1♥-(1♠)-(P)-X-P	130.1	1♥-1♠-1NT-2♣-(X)-2♥	144.6
1♥-(1♠)-(P)-X-2♣	130.1	1♥-1♠-1NT-2♣-2♦	142.2
1♥-(1♠)-(P)-X-2♦	130.1	1♥-1♠-1NT-2♣-(2♦)-P	144.6
1♥-(1♠)-(P)-X-2♥	130.1	1♥-1♠-1NT-2♣-(2♦)-XX	144.6
1♥-(1♠)-(P)-1NT	130.1	1♥-1♠-1NT-2♣-(2♦)-2♥	144.6
1♥-(1♠)-(P)-2♣	130.1	1♥-1♠-1NT-2♣-(2♦)-2♠	144.6
1♥-(1♠)-(P)-2♦	130.1	1♥-1♠-1NT-2♣-2♦-2NT	143.3
1♥-(1♠)-(P)-2♥	130.1	1♥-1♠-1NT-2♣-2♦-3NT	143.3
1♥-(1♠)-(P)-3♥	130.1	1♥-1♠-1NT-2♣-2♥	142.2
(1♥)-(1♠)-X	86.2, 206.1, 206.2	1♥-1♠-1NT-2♣-2♥-3NT	143.3
1♥-(1♠)-X	89.3	1♥-1♠-1NT-2♣-2♥-4♠	143.3
(1♥)-1♠-(X)-XX	101.6	1♥-1♠-1NT-2♣-2♠	142.2
1♥-1♠-(X)-XX	100.5	1♥-1♠-1NT-2♣-2♠-2NT	143.3
(1♥)-1♠-(X)-2♦	101.6	1♥-1♠-1NT-2♣-2♠-3♠	143.3
(1♥)-1♠-(X)-2♥	101.6	1♥-1♠-1NT-2♣-2♠-3NT	143.3
(1♥)-1♠-(X)-2♠	101.6	1♥-1♠-1NT-2♣-2♠-4♠	143.3
1♥-(1♠)-X-(2♠)-P	91.4	1♥-1♠-1NT-2♣-2NT	142.2
1♥-(1♠)-X-(2♠)-X	91.1	1♥-1♠-1NT-2♣-2NT-3NT	143.3
(1♥)-1♠-(X)-3♣	101.6	1♥-1♠-1NT-2♦	28.5, 143.4
(1♥)-1♠-(X)-3♠	101.6	(1♥)-1♠-(1NT)-2♦	102.4
1♥-(1♠)-X-(3♠)-P	91.4	1♥-1♠-1NT-2♠	28.5
1♥-(1♠)-X-(3♠)-X	91.1	(1♥)-1♠-(1NT)-2♠	102.3
(1♥)-1♠-(X)-4♠	101.6	1♥-(1♠)-1NT-(2♠)-P	91.4
1♥-1♠-1NT	18.9	1♥-(1♠)-1NT-(2♠)-X	91.1
(1♥)-(1♠)-1NT	206.2	1♥-(1♠)-1NT-(2♠)-2NT	91.3
(1♥)-1♠-1NT	75.6	1♥-(1♠)-1NT-(2♠)-3♣	91.3
1♥-(1♠)-1NT	89.6	1♥-(1♠)-1NT-(2♠)-3♦	91.3

1♥-(1♠)-1NT-(2♠)-3♥	91.3	1♥-1♠-2♣-2♦-3♣-4♣	66.1
1♥-1♠-1NT-2NT	28.6, 143.4	1♥-1♠-2♣-2♦-3♦	136.3, 191.7
1♥-1♠-1NT-2NT-3♣	143.4	1♥-1♠-2♣-2♦-3♦-3NT	136.3
1♥-1♠-1NT-3♣	28.6	1♥-1♠-2♣-2♦-3♦-4♣	66.1
1♥-1♠-1NT-3♦	28.6	1♥-1♠-2♣-2♦-3♥	136.3
1♥-1♠-1NT-3♥	28.6, 161.9	1♥-1♠-2♣-2♦-3♥-4♣	66.1
1♥-1♠-1NT-3♠	28.6	1♥-1♠-2♣-2♦-3♠	136.3
(1♥)-1♠-(1NT)-3♠	102.3	1♥-1♠-2♣-2♦-3NT	136.3
1♥-(1♠)-1NT-(3♠)-X	91.1	1♥-1♠-2♣-2♦-3NT-4♣	66.1
1♥-1♠-1NT-3NT	28.7	1♥-1♠-2♣-2♥	29.9
1♥-1♠-1NT-4♥	28.7, 188.2	(1♥)-1♠-(2♣)-2♥	101.5
1♥-1♠-1NT-4♠	28.7	1♥-1♠-(2♣)-2♥	99.3
(1♥)-1♠-(1NT)-4♠	102.3	1♥-1♠-2♣-2♠	29.9
1♥-1♠-2♣	18.9	(1♥)-1♠-(2♣)-2♠	101.1
(1♥)-(1♠)-2♣	86.2, 206.3	1♥-1♠-(2♣)-2♠	99.2
(1♥)-1♠-2♣	75.5	1♥-(1♠)-2♣-(2♠)-P	91.4
1♥-(1♠)-2♣	89.2	1♥-(1♠)-2♣-(2♠)-X	91.1
1♥-1♠-(2♣)-P	99.4	1♥-(1♠)-2♣-(2♠)-2NT	91.3
1♥-1♠-2♣-P	29.9	1♥-(1♠)-2♣-(2♠)-3♦	91.3
(1♥)-1♠-(2♣)-X	101.4	1♥-(1♠)-2♣-(2♠)-3♥	91.3
1♥-1♠-(2♣)-X	99.1	1♥-(1♠)-2♣-(2♠)-3NT	91.3
1♥-(1♠)-2♣-(X)-XX	91.5	1♥-1♠-2♣-2NT	29.1
1♥-1♠-2♣-2♦	29.1, 135.1	1♥-1♠-(2♣)-2NT	99.3
(1♥)-1♠-(2♣)-2♦	101.2	1♥-1♠-2♣-3♣	29.9
1♥-1♠-(2♣)-2♦	99.3	1♥-1♠-2♣-3♦	137.4
1♥-1♠-2♣-2♦-2♥	136.3	1♥-1♠-2♣-3♥	29.1, 161.9
1♥-1♠-2♣-2♦-2♥-3♣	66.1	1♥-1♠-2♣-3♠	29.1
1♥-1♠-2♣-2♦-2♥-3♦-3♥	137.5	(1♥)-1♠-(2♣)-3♠	101.1
1♥-1♠-2♣-2♦-2♥-3♦-3NT	137.5	1♥-1♠-(2♣)-3♠	99.2
1♥-1♠-2♣-2♦-2♠	136.3	1♥-(1♠)-2♣-(3♠)-P	91.4
1♥-1♠-2♣-2♦-2♠-3♣	66.1	1♥-(1♠)-2♣-(3♠)-X	91.1
1♥-1♠-2♣-2♦-2NT	136.3	1♥-(1♠)-2♣-(3♠)-3NT	91.3
1♥-1♠-2♣-2♦-2NT-3♣	66.1	1♥-(1♠)-2♣-(3♠)-4♥	91.3
1♥-1♠-2♣-2♦-3♣	136.3	1♥-1♠-2♣-3NT	29.2

1♥-1♠-2♣-4♥	29.2, 188.2	1♥-1♠-2♦-3♣-3♥-4♦	66.1
(1♥)-1♠-(2♣)-4♠	101.1	1♥-1♠-2♦-3♣-3♥-4♥	137.6
1♥-1♠-(2♣)-4♠	99.2	1♥-1♠-2♦-3♣-3♠	136.3
1♥-1♠-2♦	18.9	1♥-1♠-2♦-3♣-3♠-4♦	66.1
(1♥)-(1♠)-2♦	86.2, 206.3	1♥-1♠-2♦-3♣-3♠-4♠	137.6
(1♥)-1♠-2♦	75.5	1♥-1♠-2♦-3♣-3NT	136.3, 137.6
1♥-(1♠)-2♦	89.2	1♥-1♠-2♦-3♣-3NT-4♦	66.1
1♥-1♠-(2♦)-P	99.4	1♥-1♠-2♦-3♣-4♣	191.7
1♥-1♠-2♦-P	29.9	1♥-1♠-2♦-3♣-4♠	136.3, 137.6
(1♥)-1♠-(2♦)-X	101.4	1♥-1♠-2♦-3♣-5♦	137.6
1♥-1♠-(2♦)-X	99.1	1♥-1♠-2♦-3♦	29.9
1♥-(1♠)-2♦-(X)-XX	91.5	1♥-1♠-2♦-3♥	29.1, 161.9
1♥-1♠-2♦-2♥	29.9	1♥-1♠-2♦-3♠	29.1
(1♥)-1♠-(2♦)-2♥	101.5	(1♥)-1♠-(2♦)-3♠	101.1
1♥-1♠-(2♦)-2♥	99.3	1♥-1♠-(2♦)-3♠	99.2
1♥-1♠-2♦-2♠	29.9	1♥-(1♠)-2♦-(3♠)-P	91.4
(1♥)-1♠-(2♦)-2♠	101.1	1♥-(1♠)-2♦-(3♠)-X	91.1
1♥-1♠-(2♦)-2♠	99.2	1♥-(1♠)-2♦-(3♠)-3NT	91.3
1♥-(1♠)-2♦-(2♠)-P	91.4	1♥-(1♠)-2♦-(3♠)-4♥	91.3
1♥-(1♠)-2♦-(2♠)-X	91.1	1♥-1♠-2♦-3NT	29.2
1♥-(1♠)-2♦-(2♠)-2NT	91.3	1♥-1♠-2♦-4♥	29.2, 188.2
1♥-(1♠)-2♦-(2♠)-3♣	91.3	(1♥)-1♠-(2♦)-4♠	101.1
1♥-(1♠)-2♦-(2♠)-3♥	91.3	1♥-1♠-(2♦)-4♠	99.2
1♥-(1♠)-2♦-(2♠)-3NT	91.3	1♥-1♠-2♥	18.9
1♥-1♠-2♦-2NT	29.1	(1♥)-1♠-2♥	74.3, 75.7
1♥-1♠-(2♦)-2NT	99.3	1♥-(1♠)-2♥	89.5, 164.4
1♥-1♠-2♦-3♣	29.1, 135.1	(1♥)-1♠-(2♥)-X	101.1
(1♥)-1♠-(2♦)-3♣	101.2	(1♥)-1♠-2♥-(X)-XX	106.6
1♥-1♠-(2♦)-3♣	99.3	(1♥)-1♠-2♥-(X)-2NT	106.6
1♥-1♠-2♦-3♣-3♦	136.3	(1♥)-1♠-2♥-(X)-3♣	106.6
1♥-1♠-2♦-3♣-3♦-3NT	137.6	(1♥)-1♠-2♥-(X)-3♦	106.6
1♥-1♠-2♦-3♣-3♦-4♦	66.1	(1♥)-1♠-2♥-(X)-3♥	106.6
1♥-1♠-2♦-3♣-3♥	136.3	(1♥)-1♠-2♥-(X)-3NT	106.6
1♥-1♠-2♦-3♣-3♥-3NT	137.6	(1♥)-1♠-2♥-(X)-4♥	106.6

1♥-1♠-2♥-2♠	32.6	(1♥)-1♠-2♥-3♠	76.9
(1♥)-1♠-(2♥)-2♠	101.7	1♥-1♠-2♥-3NT	32.6
(1♥)-1♠-2♥-2♠	76.9	(1♥)-1♠-2♥-3NT	76.9
1♥-1♠-2♥-2NT	32.6	1♥-1♠-2♥-4♣	191.7
(1♥)-1♠-(2♥)-2NT	101.9	1♥-1♠-2♥-4♦	191.7
(1♥)-1♠-2♥-2NT	76.9	1♥-1♠-2♥-4♥	32.6 , 188.2
1♥-1♠-2♥-3♣	32.6 , 140.1	1♥-1♠-2♥-4♠	32.6
(1♥)-1♠-(2♥)-3♣	101.8	(1♥)-1♠-(2♥)-4♠	101.7
(1♥)-1♠-2♥-3♣	76.9	1♥-1♠-2♠	18.9
(1♥)-1♠-2♥-(3♣)-X	105.5	(1♥)-(1♠)-2♠	86.3 , 207.5
1♥-1♠-2♥-3♣-3♦	141.2	(1♥)-1♠-2♠	74.2
(1♥)-1♠-2♥-(3♣)-3♦	105.5	1♥-(1♠)-2♠	89.8
1♥-1♠-2♥-3♣-3♦-3NT	141.3	(1♥)-1♠-2♠-(X)-XX	104.1
1♥-1♠-2♥-3♣-3♥	141.2	(1♥)-1♠-2♠-(X)-3♠	104.1
1♥-1♠-2♥-3♣-3♥-3NT	141.3	(1♥)-1♠-2♠-(X)-4♠	104.1
1♥-1♠-2♥-3♣-3♥-4♠	141.3	1♥-1♠-2♠-2NT	155.1
1♥-1♠-2♥-3♣-3♠	141.2	1♥-1♠-2♠-2NT-3♠	155.2
(1♥)-1♠-2♥-(3♣)-3♠	105.5	1♥-1♠-2♠-2NT-4♠	155.2
1♥-1♠-2♥-3♣-3♠-3NT	141.3	1♥-1♠-2♠-3♣	155.1
1♥-1♠-2♥-3♣-3NT	141.2	1♥-1♠-2♠-3♣-3♠	155.2
(1♥)-1♠-2♥-(3♣)-3NT	105.5	1♥-1♠-2♠-3♣-4♠	155.2
1♥-1♠-2♥-3♣-3NT-3NT	141.3	1♥-1♠-2♠-3♦	155.1
1♥-1♠-2♥-3♣-3NT-4♠	141.3	1♥-1♠-2♠-3♦-3♠	155.2
1♥-1♠-2♥-3♦	32.6	1♥-1♠-2♠-3♦-4♠	155.2
(1♥)-1♠-(2♥)-3♦	101.8	1♥-1♠-2♠-3♥	155.1, 161.9, 211.3
(1♥)-1♠-2♥-(3♦)-3NT	105.5	(1♥)-1♠-2♠-(3♥)-X	104.1
1♥-1♠-2♥-3♥	32.6 , 161.9	(1♥)-1♠-2♠-(3♥)-X-3♠	104.1
(1♥)-1♠-(2♥)-3♥	101.2	(1♥)-1♠-2♠-(3♥)-X-4♠	104.1
(1♥)-1♠-2♥-3♥	76.9	1♥-1♠-2♠-3♥-3♠	155.2
(1♥)-1♠-2♥-(3♥)-X	105.3	(1♥)-1♠-2♠-(3♥)-3♠	104.1
(1♥)-1♠-2♥-(3♥)-3♠	105.3	1♥-1♠-2♠-3♥-4♠	155.2
(1♥)-1♠-2♥-(3♥)-3NT	105.3	(1♥)-1♠-2♠-(3♥)-4♠	104.1
1♥-1♠-2♥-3♠	32.6	1♥-1♠-2♠-3♠	18.9 , 156.4
(1♥)-1♠-(2♥)-3♠	101.7	1♥-1♠-2♠-3♠-4♠	18.9

1♥-1♠-2♠-4♠	18.9	(1♥)-1♠-(3♥)-X	101.1
1♥-1♠-2NT	18.9	1♥-1♠-3♥-3♠	31.5
(1♥)-(1♠)-2NT	206.2	(1♥)-1♠-(3♥)-3♠	101.7
(1♥)-1♠-2NT	75.6	1♥-1♠-3♥-3NT	31.5
1♥-(1♠)-2NT	89.5, 164.4	(1♥)-1♠-(3♥)-3NT	101.9
1♥-1♠-2NT-3♣	29.8	(1♥)-1♠-(3♥)-4♣	101.8
1♥-1♠-2NT-3♦	29.8	(1♥)-1♠-(3♥)-4♦	101.8
1♥-1♠-2NT-3♥	29.8, 60.1	(1♥)-1♠-3♥-(4♥)-4♠	104.1
1♥-1♠-2NT-3♠	29.8	1♥-1♠-3♥-4♠	31.5
1♥-1♠-2NT-3NT	29.8	1♥-1♠-3♠	18.9
1♥-1♠-2NT-4♥	29.8	(1♥)-1♠-3♠	74.2
1♥-1♠-2NT-4♠	29.8	(1♥)-1♠-3♠-(4♥)-4♠	104.1
1♥-1♠-3♣	18.9	1♥-1♠-3♠-4♠	18.9
(1♥)-1♠-3♣	74.3	(1♥)-1♠-3NT	75.6
1♥-(1♠)-3♣	164.4	1♥-(1♠)-4♥	89.5
1♥-1♠-3♣-3♦	31.4	(1♥)-1♠-(4♥)-X	101.1
1♥-1♠-3♣-3♥	31.4, 60.1	(1♥)-1♠-(4♥)-4♠	101.7
1♥-1♠-3♣-3♠	31.4	(1♥)-1♠-(4♥)-5♣	101.8
1♥-1♠-3♣-3NT	31.4	(1♥)-1♠-(4♥)-5♦	101.8
1♥-1♠-3♣-4♣	31.4, 67.2	1♥-1♠-4♠	18.9
1♥-1♠-3♣-4♥	31.4	(1♥)-1♠-4♠	74.2, 74.3
1♥-1♠-3♣-4♠	31.4	1♥-1NT	7.3, 160.3
1♥-1♠-3♦	18.9	(1♥)-1NT	80.1
(1♥)-1♠-3♦	74.3	1♥-(1NT)-X	202.1
1♥-(1♠)-3♦	164.4	(1♥)-(1NT)-(P)-X	132.2
1♥-1♠-3♦-3♥	31.4, 60.1	1♥-(1NT)-(P)-X	130.2
1♥-1♠-3♦-3♠	31.4	(1♥)-(1NT)-(P)-2♣	132.2
1♥-1♠-3♦-3NT	31.4	1♥-(1NT)-(P)-2♣	130.2
1♥-1♠-3♦-4♦	31.4, 67.2	(1♥)-(1NT)-(P)-2♦	132.2
1♥-1♠-3♦-4♥	31.4	1♥-(1NT)-(P)-2♦	130.2
1♥-1♠-3♦-4♠	31.4	1♥-(1NT)-(P)-2♥	130.2
1♥-1♠-3♥	18.9	(1♥)-(1NT)-X	87.4
(1♥)-1♠-3♥	74.3	1♥-(1NT)-X	97.1
1♥-(1♠)-3♥	89.5, 164.4	1♥-1NT-(X)-XX	100.5

1♥-1NT-2♣	22.3 , 160.4	1♥-(1NT)-2♥	98.2 , 203.4
(1♥)-(1NT)-2♣	87.4	1♥-1NT-2♥-2♠	161.9
(1♥)-1NT-2♣	80.2	(1♥)-1NT-2♥-2♠	80.2
1♥-(1NT)-2♣	98.2 , 203.4	1♥-(1NT)-2♥-2♠	203.4
1♥-1NT-(2♣)-P	99.4	1♥-1NT-2♥-2NT	27.7 , 160.5
1♥-1NT-2♣-P	25.3	1♥-1NT-2♥-3♣	27.7
1♥-1NT-(2♣)-X	99.1	1♥-1NT-2♥-3♦	27.7
1♥-1NT-2♣-2♦	25.3	1♥-1NT-2♥-3♥	27.7 , 160.6
1♥-(1NT)-2♣-2♦	203.4	1♥-1NT-2♠	22.3
1♥-1NT-(2♣)-2♦	99.3	(1♥)-(1NT)-2♠	87.4
1♥-1NT-2♣-2♥	25.3 , 160.5	1♥-(1NT)-2♠	98.2 , 203.4
1♥-1NT-(2♣)-2♥	99.3	1♥-1NT-(2♠)-P	99.4
1♥-1NT-2♣-2♠	161.9	1♥-1NT-(2♠)-X	99.1
1♥-1NT-(2♣)-2♠	99.3	1♥-1NT-2♠-2NT	26.4
1♥-1NT-2♣-2NT	160.5	1♥-1NT-2♠-3♣	26.4
1♥-1NT-2♣-3♣	25.3 , 160.5	1♥-(1NT)-2♠-3♣	203.4
1♥-1NT-2♣-3♥	160.6	1♥-1NT-(2♠)-3♣	99.3
1♥-1NT-2♦	22.3 , 160.4	1♥-1NT-2♠-3♦	26.4
(1♥)-(1NT)-2♦	87.4	1♥-1NT-(2♠)-3♦	99.3
1♥-(1NT)-2♦	98.2 , 203.4	1♥-1NT-(2♠)-3♥	99.3
1♥-1NT-(2♦)-P	99.4	1♥-1NT-2♠-3NT	26.4
1♥-1NT-2♦-P	25.3	1♥-1NT-2NT	22.3
1♥-1NT-(2♦)-X	99.1	(1♥)-1NT-2NT	80.2
1♥-1NT-2♦-2♥	25.3 , 160.5	1♥-1NT-2NT-3♣	25.2
1♥-(1NT)-2♦-2♥	203.4	1♥-1NT-2NT-3♣-5♣	25.2
1♥-1NT-(2♦)-2♥	99.3	1♥-1NT-2NT-3♦	25.2
1♥-1NT-2♦-2♠	161.9	1♥-1NT-2NT-3♦-5♦	25.2
1♥-1NT-(2♦)-2♠	99.3	(1♥)-1NT-2NT-3NT	80.2
1♥-1NT-2♦-2NT	160.5	1♥-1NT-3♣	22.3
1♥-1NT-(2♦)-3♣	99.3	1♥-1NT-3♣-3♦	26.5
1♥-1NT-2♦-3♦	25.3 , 160.5	1♥-1NT-3♣-3♥	26.5
1♥-1NT-2♦-3♥	160.6	1♥-1NT-3♣-3♠	26.5
1♥-1NT-2♥	22.3 , 160.4	1♥-1NT-3♣-3NT	26.5
(1♥)-1NT-2♥	80.2	1♥-1NT-3♦	22.3

1♥-1NT-3♦-3♥	26.5	(1♥)-2♣-(X)-XX	101.6
1♥-1NT-3♦-3♠	26.5	1♥-2♣-(X)-XX	100.5
1♥-1NT-3♦-3NT	26.5	(1♥)-2♣-(X)-2♥	101.6
1♥-1NT-3♥	22.3	1♥-(2♣)-X-2♥-3♣-3♠-4♠	92.7
1♥-1NT-3♥-3NT	27.6	(1♥)-2♣-(X)-2♠	101.6
1♥-1NT-3♥-4♥	27.6	(1♥)-2♣-(X)-3♣	101.6
1♥-1NT-3NT	22.3	1♥-(2♣)-X-(3♣)-3♠	91.2
(1♥)-1NT-3NT	80.2	1♥-(2♣)-X-(3♣)-4♠	91.2
1♥-1NT-3NT-4♣	24.1	(1♥)-2♣-(X)-3♦	101.6
1♥-1NT-3NT-4♣-5♣	24.1	1♥-(2♣)-X-3♠-3NT	92.7
1♥-1NT-3NT-4♦	24.1	(1♥)-2♣-(X)-4♣	101.6
1♥-1NT-3NT-4♦-5♦	24.1	1♥-(2♣)-X-(4♣)-4♠	91.2
1♥-2♣	7.3, 159.1	1♥-2♣-2♦	19.1, 159.2
(1♥)-2♣	73.1	(1♥)-(2♣)-2♦	86.2, 206.4
1♥-(2♣)-X-(3♣)-P	91.4	(1♥)-2♣-2♦	75.4
1♥-(2♣)-X-(3♣)-X	91.1	1♥-(2♣)-2♦	89.2
1♥-(2♣)-X-(4♣)-P	91.4	1♥-2♣-(2♦)-P	99.4
1♥-(2♣)-X-(4♣)-X	91.1	(1♥)-2♣-(2♦)-X	101.4
1♥-(2♣)-P	88.1, 89.7	1♥-2♣-(2♦)-X	99.1
1♥-(2♣)-(P)-X	130.1	(1♥)-2♣-2♦-(X)-XX	106.6
1♥-(2♣)-P-X	91.6	1♥-(2♣)-2♦-(X)-XX	91.5
1♥-(2♣)-(P)-X-P	130.1	(1♥)-2♣-2♦-(X)-2♥	106.6
1♥-(2♣)-P-X-P	92.7	(1♥)-2♣-2♦-(X)-2♠	106.6
1♥-(2♣)-(P)-X-2♦	130.1	(1♥)-2♣-2♦-(X)-2NT	106.6
1♥-(2♣)-P-X-2♦	92.7	(1♥)-2♣-2♦-(X)-3♦	106.6
1♥-(2♣)-P-X-2♦-2♠	92.7	(1♥)-2♣-2♦-(X)-3NT	106.6
1♥-(2♣)-(P)-X-2♥	130.1	(1♥)-2♣-2♦-(X)-4♦	106.6
1♥-(2♣)-(P)-X-2♠	130.1	1♥-2♣-2♦-2♥	35.9
1♥-(2♣)-(P)-2♦	130.1	(1♥)-2♣-(2♦)-2♥	101.5
1♥-(2♣)-(P)-2♥	130.1	(1♥)-2♣-2♦-2♥	75.8
1♥-(2♣)-(P)-2♠	130.1	1♥-2♣-(2♦)-2♥	99.3
1♥-(2♣)-(P)-3♥	130.1	(1♥)-2♣-2♦-(2♥)-X	105.2
(1♥)-(2♣)-X	86.2, 206.1, 206.4	(1♥)-2♣-2♦-(2♥)-3♣	105.2
1♥-(2♣)-X	89.3	(1♥)-2♣-2♦-(2♥)-3♦	105.2

(1♥)-2♣-2♦-(2♥)-4♦	105.2	1♥-(2♣)-2♦-(3♣)-3♠	91.3
1♥-2♣-2♦-2♠	35.9, 135.1	1♥-(2♣)-2♦-(3♣)-3NT	91.3
(1♥)-2♣-(2♦)-2♠	101.2	1♥-2♣-2♦-3♦	35.9
(1♥)-2♣-2♦-2♠	75.8	(1♥)-2♣-2♦-3♦	75.8
1♥-2♣-(2♦)-2♠	99.3	1♥-2♣-2♦-3♥	35.8, 60.1, 61.2
(1♥)-2♣-2♦-(2♠)-X	105.4	1♥-2♣-2♦-3♠	137.4
1♥-2♣-2♦-2♠-2NT	136.3	1♥-2♣-2♦-3NT	35.9
(1♥)-2♣-2♦-(2♠)-2NT	105.4	(1♥)-2♣-2♦-3NT	75.8
1♥-2♣-2♦-2♠-2NT-3♦	66.1	1♥-2♣-2♦-4♣	161.8
1♥-2♣-2♦-2♠-3♣	136.3	(1♥)-2♣-(2♦)-4♣	101.1
(1♥)-2♣-2♦-(2♠)-3♣	105.4	1♥-(2♣)-2♦-(4♣)-P	91.4
1♥-2♣-2♦-2♠-3♣-3♦	66.1	1♥-(2♣)-2♦-(4♣)-X	91.1
1♥-2♣-2♦-2♠-3♦	136.3	1♥-2♣-2♦-4♥	35.8, 188.2
(1♥)-2♣-2♦-(2♠)-3♦	105.4	1♥-2♣-2♥	19.1, 159.2
1♥-2♣-2♦-2♠-3♦-4♦	66.1	(1♥)-(2♣)-2♥	206.4
1♥-2♣-2♦-2♠-3♥	136.3	(1♥)-2♣-2♥	74.3, 75.7
(1♥)-2♣-2♦-(2♠)-3♥	105.4	1♥-(2♣)-2♥	89.5
1♥-2♣-2♦-2♠-3♥-4♦	66.1	(1♥)-2♣-(2♥)-X	101.1
1♥-2♣-2♦-2♠-3♠	136.3	(1♥)-2♣-2♥-(X)-XX	106.6
(1♥)-2♣-2♦-(2♠)-3♠	105.4	(1♥)-2♣-2♥-(X)-2NT	106.6
1♥-2♣-2♦-2♠-3♠-3NT	136.3	(1♥)-2♣-2♥-(X)-3♦	106.6
1♥-2♣-2♦-2♠-3♠-4♦	66.1	(1♥)-2♣-2♥-(X)-3♥	106.6
1♥-2♣-2♦-2♠-3NT	136.3	(1♥)-2♣-2♥-(X)-3♠	106.6
1♥-2♣-2♦-2♠-3NT-4♦	66.1	(1♥)-2♣-2♥-(X)-3NT	106.6
(1♥)-2♣-2♦-(2♠)-4♦	105.4	(1♥)-2♣-2♥-(X)-4♥	106.6
1♥-2♣-2♦-2NT	35.9	1♥-2♣-2♥-2♠	33.3
(1♥)-2♣-2♦-2NT	75.8	(1♥)-2♣-(2♥)-2♠	101.8
1♥-2♣-(2♦)-2NT	99.3	(1♥)-2♣-2♥-2♠	76.9
1♥-2♣-2♦-3♣	35.9	(1♥)-2♣-2♥-(2♠)-X	105.5
(1♥)-2♣-(2♦)-3♣	101.1	(1♥)-2♣-2♥-(2♠)-2NT	105.5
(1♥)-2♣-2♦-3♣	75.8	(1♥)-2♣-2♥-(2♠)-3♣	105.5
1♥-(2♣)-2♦-(3♣)-P	91.4	(1♥)-2♣-2♥-(2♠)-3♦	105.5
1♥-(2♣)-2♦-(3♣)-X	91.1	1♥-2♣-2♥-2NT	33.2
1♥-(2♣)-2♦-(3♣)-3♥	91.3	(1♥)-2♣-(2♥)-2NT	101.9

(1♥)-2♣-2♥-2NT	76.9	(1♥)-2♣-(2♠)-3♣	101.1
1♥-2♣-2♥-3♣	33.2	(1♥)-2♣-2♠-3♣	75.8
(1♥)-2♣-(2♥)-3♣	101.7	1♥-(2♣)-2♠-(3♣)-P	91.4
(1♥)-2♣-2♥-3♣	76.9	1♥-(2♣)-2♠-(3♣)-X	91.1
1♥-2♣-2♥-3♦	33.3	1♥-(2♣)-2♠-(3♣)-3♦	91.3
(1♥)-2♣-(2♥)-3♦	101.8	1♥-(2♣)-2♠-(3♣)-3♥	91.3
(1♥)-2♣-2♥-(3♦)-X	105.5	1♥-(2♣)-2♠-(3♣)-3♠	91.2
(1♥)-2♣-2♥-(3♦)-3♠	105.5	1♥-(2♣)-2♠-(3♣)-3NT	91.3
(1♥)-2♣-2♥-(3♦)-3NT	105.5	1♥-(2♣)-2♠-(3♣)-4♠	91.2
(1♥)-2♣-2♥-(3♦)-4♣	105.5	1♥-2♣-2♠-3♦	34.6, 135.1
1♥-2♣-2♥-3♥	33.3, 60.1	(1♥)-2♣-(2♠)-3♦	101.2
(1♥)-2♣-(2♥)-3♥	101.2	1♥-2♣-(2♠)-3♦	99.3
(1♥)-2♣-2♥-3♥	76.9	(1♥)-2♣-2♠-(3♦)-X	105.4
(1♥)-2♣-2♥-(3♥)-X	105.3	1♥-2♣-2♠-3♦-3♥	136.3
(1♥)-2♣-2♥-(3♥)-3♠	105.3	(1♥)-2♣-2♠-(3♦)-3♥	105.4
(1♥)-2♣-2♥-(3♥)-3NT	105.3	1♥-2♣-2♠-3♦-3♠	136.3
1♥-2♣-2♥-3NT	33.3	(1♥)-2♣-2♠-(3♦)-3♠	105.4
(1♥)-2♣-2♥-3NT	76.9	1♥-2♣-2♠-3♦-3NT	136.3
1♥-2♣-2♥-4♣	161.8	(1♥)-2♣-2♠-(3♦)-3NT	105.4
(1♥)-2♣-(2♥)-4♣	101.7	(1♥)-2♣-2♠-(3♦)-4♠	105.4
(1♥)-2♣-2♥-4♣	76.9	1♥-2♣-2♠-3♥	34.6
1♥-2♣-2♥-4♥	33.3, 188.2	(1♥)-2♣-(2♠)-3♥	101.5
1♥-2♣-2♠	19.1, 159.2	(1♥)-2♣-2♠-3♥	75.8
(1♥)-(2♣)-2♠	86.2, 206.4	1♥-2♣-(2♠)-3♥	99.3
(1♥)-2♣-2♠	75.4	(1♥)-2♣-2♠-(3♥)-X	105.2
1♥-(2♣)-2♠	89.4	(1♥)-2♣-2♠-(3♥)-3♠	105.2
1♥-2♣-(2♠)-P	99.4	(1♥)-2♣-2♠-(3♥)-4♣	105.2
(1♥)-2♣-(2♠)-X	101.4	(1♥)-2♣-2♠-(3♥)-4♠	105.2
1♥-2♣-(2♠)-X	99.1	1♥-2♣-2♠-3♠	34.6, 67.3
1♥-(2♣)-2♠-(X)-XX	91.5	(1♥)-2♣-2♠-3♠	75.8
1♥-2♣-2♠-2NT	34.6	1♥-(2♣)-2♠-3♠	92.7
(1♥)-2♣-2♠-2NT	75.8	1♥-2♣-2♠-3NT	34.6
1♥-2♣-(2♠)-2NT	99.3	(1♥)-2♣-2♠-3NT	75.8
1♥-2♣-2♠-3♣	34.6	1♥-2♣-2♠-4♣	161.8

(1♥)-2♣-(2♠)-4♣	101.1	(1♥)-2♣-(3♥)-3NT	101.9
1♥-(2♣)-2♠-(4♣)-P	91.4	1♥-2♣-3♥-4♣	32.1
1♥-(2♣)-2♠-(4♣)-X	91.1	(1♥)-2♣-(3♥)-4♣	101.7
1♥-(2♣)-2♠-(4♣)-4♠	91.2	1♥-2♣-3♥-4♦	32.1
1♥-(2♣)-2♠-4♠	92.7	(1♥)-2♣-(3♥)-4♦	101.8
1♥-2♣-2NT	19.1, 159.2	1♥-2♣-3♥-4♥	32.1
(1♥)-(2♣)-2NT	206.4	(1♥)-2♣-3♠	74.3
(1♥)-2♣-2NT	75.6	1♥-2♣-3NT	19.1, 159.2
1♥-(2♣)-2NT	89.5	(1♥)-2♣-3NT	75.6
1♥-2♣-2NT-3♣	36.1	1♥-2♣-3NT-4♣	37.2, 161.8
1♥-2♣-2NT-3♦	36.1	1♥-2♣-3NT-4♦	37.2
1♥-2♣-2NT-3♥	36.1, 60.1	1♥-2♣-3NT-4♥	37.2
1♥-2♣-2NT-3♠	36.1	1♥-2♣-3NT-4♠	37.2
1♥-2♣-2NT-3NT	36.1	(1♥)-2♣-4♣	74.2
1♥-2♣-2NT-4♣	161.8	1♥-(2♣)-4♥	89.5
1♥-2♣-2NT-4♥	36.1	1♥-2♦	7.3, 159.1
1♥-(2♣)-2NT-4♥	92.7	(1♥)-2♦	73.1
1♥-2♣-3♣	19.1	1♥-(2♦)-X-(3♦)-P	91.4
(1♥)-(2♣)-3♣	86.3, 207.5	1♥-(2♦)-X-(3♦)-X	91.1
(1♥)-2♣-3♣	74.2	1♥-(2♦)-X-(4♦)-P	91.4
1♥-(2♣)-3♣	89.8	1♥-(2♦)-X-(4♦)-X	91.1
1♥-2♣-3♣-3♥	34.4	1♥-(2♦)-P	88.1, 89.7
1♥-2♣-3♣-3NT	34.5	1♥-(2♦)-(P)-X	130.1
1♥-2♣-3♣-4♥	34.4	1♥-(2♦)-P-X	91.6
1♥-2♣-3♦	19.1	1♥-(2♦)-(P)-X-P	130.1
(1♥)-2♣-3♦	74.3	1♥-(2♦)-(P)-X-2♥	130.1
1♥-2♣-3♦-4♦	67.2	1♥-(2♦)-(P)-X-2♠	130.1
1♥-2♣-3♥	19.1	1♥-(2♦)-(P)-X-3♣	130.1
(1♥)-2♣-3♥	74.3	1♥-(2♦)-(P)-2♥	130.1
1♥-(2♣)-3♥	89.5	1♥-(2♦)-(P)-2♠	130.1
(1♥)-2♣-(3♥)-X	101.1	1♥-(2♦)-(P)-3♣	130.1
1♥-2♣-3♥-3♠	32.1	1♥-(2♦)-(P)-3♥	130.1
(1♥)-2♣-(3♥)-3♠	101.8	(1♥)-(2♦)-X	86.2, 206.1, 206.4
1♥-2♣-3♥-3NT	32.1	1♥-(2♦)-X	89.3

1♥-2♦-(X)-XX	100.5	(1♥)-2♦-2♥-(3♥)-3NT	105.3
1♥-(2♦)-X-(3♦)-3♠	91.2	1♥-2♦-2♥-3NT	33.3
1♥-(2♦)-X-(3♦)-4♠	91.2	(1♥)-2♦-2♥-3NT	76.9
1♥-(2♦)-X-(4♦)-4♠	91.2	1♥-2♦-2♥-4♦	161.8
1♥-2♦-2♥	19.1, 159.2	(1♥)-2♦-2♥-4♦	76.9
(1♥)-(2♦)-2♥	206.4	1♥-2♦-2♥-4♥	33.3, 61.2, 188.2
(1♥)-2♦-2♥	74.3, 75.7	1♥-2♦-2♠	19.1, 159.2
1♥-(2♦)-2♥	89.5	(1♥)-(2♦)-2♠	86.2, 206.4
(1♥)-2♦-2♥-(X)-XX	106.6	(1♥)-2♦-2♠	75.4
(1♥)-2♦-2♥-(X)-2♠	106.6	1♥-(2♦)-2♠	89.4
(1♥)-2♦-2♥-(X)-2NT	106.6	1♥-2♦-(2♠)-P	99.4
(1♥)-2♦-2♥-(X)-3♣	106.6	1♥-2♦-(2♠)-X	99.1
(1♥)-2♦-2♥-(X)-3♥	106.6	1♥-(2♦)-2♠-(X)-XX	91.5
(1♥)-2♦-2♥-(X)-3NT	106.6	1♥-2♦-2♠-2NT	34.6
(1♥)-2♦-2♥-(X)-4♥	106.6	(1♥)-2♦-2♠-2NT	75.8
1♥-2♦-2♥-2♠	33.3	1♥-2♦-(2♠)-2NT	99.3
(1♥)-2♦-2♥-2♠	76.9	1♥-2♦-2♠-3♣	34.6, 135.1
(1♥)-2♦-2♥-(2♠)-X	105.5	(1♥)-2♦-2♠-3♣	75.8
(1♥)-2♦-2♥-(2♠)-2NT	105.5	1♥-2♦-(2♠)-3♣	99.3
(1♥)-2♦-2♥-(2♠)-3♣	105.5	(1♥)-2♦-2♠-(3♣)-X	105.4
(1♥)-2♦-2♥-(2♠)-3♦	105.5	1♥-2♦-2♠-3♣-3♦	136.3
1♥-2♦-2♥-2NT	33.2	(1♥)-2♦-2♠-(3♣)-3♦	105.4
(1♥)-2♦-2♥-2NT	76.9	1♥-2♦-2♠-3♣-3♥	136.3
1♥-2♦-2♥-3♣	33.3	(1♥)-2♦-2♠-(3♣)-3♥	105.4
(1♥)-2♦-2♥-(3♣)-X	105.5	1♥-2♦-2♠-3♣-3♠	136.3
(1♥)-2♦-2♥-(3♣)-3♦	105.5	(1♥)-2♦-2♠-(3♣)-3♠	105.4
(1♥)-2♦-2♥-(3♣)-3♠	105.5	1♥-2♦-2♠-3♣-3NT	136.3
(1♥)-2♦-2♥-(3♣)-3NT	105.5	(1♥)-2♦-2♠-(3♣)-3NT	105.4
1♥-2♦-2♥-3♦	33.2	(1♥)-2♦-2♠-(3♣)-4♠	105.4
(1♥)-2♦-2♥-3♦	76.9	1♥-2♦-2♠-3♦	34.6
1♥-2♦-2♥-3♥	33.3, 60.1	(1♥)-2♦-2♠-3♦	75.8
(1♥)-2♦-2♥-3♥	76.9	1♥-(2♦)-2♠-(3♦)-P	91.4
(1♥)-2♦-2♥-(3♥)-X	105.3	1♥-(2♦)-2♠-(3♦)-X	91.1
(1♥)-2♦-2♥-(3♥)-3♠	105.3	1♥-(2♦)-2♠-(3♦)-3♥	91.3

1♥-(2♦)-2♠-(3♦)-3♠	91.2	1♥-2♦-(3♣)-X	99.1
1♥-(2♦)-2♠-(3♦)-3NT	91.3	1♥-(2♦)-3♣-(X)-XX	91.5
1♥-(2♦)-2♠-(3♦)-4♠	91.2	1♥-2♦-3♣-3♦	35.7
1♥-2♦-2♠-3♥	34.6	1♥-(2♦)-3♣-(3♦)-P	91.4
(1♥)-2♦-2♠-3♥	75.8	1♥-(2♦)-3♣-(3♦)-X	91.1
1♥-2♦-(2♠)-3♥	99.3	1♥-(2♦)-3♣-(3♦)-3♥	91.3
(1♥)-2♦-2♠-(3♥)-X	105.2	1♥-(2♦)-3♣-(3♦)-3♠	91.3
(1♥)-2♦-2♠-(3♥)-3♠	105.2	1♥-(2♦)-3♣-(3♦)-3NT	91.3
(1♥)-2♦-2♠-(3♥)-4♦	105.2	1♥-2♦-3♣-3♥	35.7, 60.1
(1♥)-2♦-2♠-(3♥)-4♠	105.2	1♥-2♦-(3♣)-3♥	99.3
1♥-2♦-2♠-3♠	34.6, 67.3	1♥-2♦-3♣-3♠	35.7, 135.1
(1♥)-2♦-2♠-3♠	75.8	1♥-2♦-(3♣)-3♠	99.3
1♥-2♦-2♠-3NT	34.6	1♥-2♦-3♣-3♠-3NT	136.3
(1♥)-2♦-2♠-3NT	75.8	1♥-2♦-3♣-3♠-4♣	136.3
1♥-2♦-2♠-4♦	161.8	1♥-2♦-3♣-3NT	35.7
1♥-(2♦)-2♠-(4♦)-P	91.4	1♥-2♦-(3♣)-3NT	99.3
1♥-(2♦)-2♠-(4♦)-X	91.1	1♥-2♦-3♣-4♣	35.7, 67.3
1♥-(2♦)-2♠-(4♦)-4♠	91.2	1♥-2♦-3♣-4♦	161.8
1♥-2♦-2NT	19.1, 159.2	1♥-(2♦)-3♣-(4♦)-P	91.4
(1♥)-(2♦)-2NT	206.4	1♥-(2♦)-3♣-(4♦)-X	91.1
(1♥)-2♦-2NT	75.6	1♥-2♦-3♣-4♥	35.7
1♥-(2♦)-2NT	89.5	1♥-2♦-3♦	19.1
1♥-2♦-2NT-3♣	36.1	(1♥)-(2♦)-3♦	86.3, 207.5
1♥-2♦-2NT-3♦	36.1	(1♥)-2♦-3♦	74.2
1♥-2♦-2NT-3♥	36.1, 60.1	1♥-(2♦)-3♦	89.8
1♥-2♦-2NT-3♠	36.1	1♥-2♦-3♦-3♥	34.4
1♥-2♦-2NT-3NT	36.1	1♥-2♦-3♦-3NT	34.5
1♥-2♦-2NT-4♦	161.8	1♥-2♦-3♦-4♥	34.4, 61.2
1♥-2♦-2NT-4♥	36.1	1♥-2♦-3♥	19.1
1♥-2♦-3♣	19.1, 159.2	(1♥)-2♦-3♥	74.3
(1♥)-(2♦)-3♣	86.2, 206.4	1♥-(2♦)-3♥	89.5
(1♥)-2♦-3♣	75.5	1♥-2♦-3♥-3♠	32.1
1♥-(2♦)-3♣	89.4	1♥-2♦-3♥-3NT	32.1
1♥-2♦-(3♣)-P	99.4	1♥-2♦-3♥-4♣	32.1

1♥-2♦-3♥-4♦	32.1	1♥-2♥-2♠-3♠-4♠	12.2
1♥-2♦-3♥-4♥	32.1	1♥-2♥-2♠-4♥	12.2 , 155.2
(1♥)-2♦-3♠	74.3	1♥-2♥-2♠-4♠	12.2 , 155.3
1♥-2♦-3♠-4♥	211.2	1♥-2♥-2NT	155.1
1♥-2♦-3♠-4♠	211.2	(1♥)-(2♥)-2NT	207.7
1♥-2♦-3NT	19.1 , 159.2	1♥-(2♥)-2NT	201.1
(1♥)-2♦-3NT	75.6	(1♥)-2♥-2NT-3♣	198.3
1♥-2♦-3NT-4♣	37.2	(1♥)-2♥-2NT-3♦	198.3
1♥-2♦-3NT-4♦	37.2 , 161.8	1♥-2♥-2NT-3♥	155.2
1♥-2♦-3NT-4♥	37.2	1♥-2♥-2NT-4♥	155.2
1♥-2♦-3NT-4♠	37.2	1♥-2♥-3♣	155.1
1♥-2♦-4♣-4♥	211.2	(1♥)-(2♥)-3♣	86.1
1♥-2♦-4♣-4♠	211.2	(1♥)-2♥-3♣	199.5
(1♥)-2♦-4♦	74.2	1♥-(2♥)-3♣	201.1
1♥-(2♦)-4♥	89.5	1♥-(2♥)-(3♣)-(P)-X	201.2
1♥-2♥	7.2 , 163.1	1♥-(2♥)-(3♣)-(P)-3♥	201.2
(1♥)-2♥	197.1	1♥-2♥-3♣-3♥	155.2
1♥-(2♥)-P	201.1	1♥-2♥-3♣-4♥	155.2
1♥-2♥-P	11.1	1♥-2♥-3♦	155.1
(1♥)-(2♥)-(P)-X	131.1	(1♥)-(2♥)-3♦	86.1
(1♥)-(2♥)-(P)-2♠	131.1	1♥-(2♥)-3♦	201.1
(1♥)-(2♥)-(P)-3♣	131.1	1♥-(2♥)-(3♦)-(P)-X	201.2
(1♥)-(2♥)-(P)-3♦	131.1	1♥-(2♥)-(3♦)-(P)-3♥	201.2
(1♥)-(2♥)-X	207.7	1♥-2♥-(3♦)-X	110.1
1♥-(2♥)-X	201.1	1♥-2♥-3♦-3♥	155.2
1♥-2♥-2♠	12.2 , 155.1	1♥-2♥-3♦-4♥	155.2
(1♥)-(2♥)-2♠	86.1	1♥-2♥-3♥	11.1 , 156.4
(1♥)-2♥-2♠	198.2	(1♥)-2♥-3♥	198.2
1♥-(2♥)-2♠	201.1	1♥-(2♥)-3♥	201.1
1♥-(2♥)-(2♠)-(P)-X	201.2	(1♥)-2♥-3♥-3♠	198.2
1♥-(2♥)-(2♠)-(P)-3♥	201.2	1♥-2♥-3♥-4♥	11.1
1♥-2♥-2♠-3♥	12.2 , 155.2	(1♥)-2♥-3♥-4♠	198.2
1♥-2♥-2♠-3♥-4♥	12.2	(1♥)-2♥-3♠	198.2
1♥-2♥-2♠-3♠	12.2 , 155.3	(1♥)-2♥-3NT	198.2

1♥-2♥-4♥	11.1	1♥-(2NT)-3♠	201.1
(1♥)-2♥-4♠	198.2	1♥-2NT-(3♠)-P	99.4
1♥-2♠	66.1	1♥-2NT-(3♠)-X	99.1
(1♥)-2♠	119.1	1♥-2NT-3NT	21.2
1♥-(2♠)-X	121.1	(1♥)-2NT-3NT	198.4
1♥-(2♠)-2NT	121.1	1♥-(2NT)-3NT	201.1
1♥-(2♠)-3♥	121.1	(1♥)-2NT-4♣	198.4
1♥-(2♠)-3♠	121.1	(1♥)-2NT-4♦	198.4
1♥-(2♠)-3NT	121.1	1♥-2NT-4♥	21.2
1♥-(2♠)-4♥	121.1	1♥-3♣	66.1, 163.1
1♥-2NT	7.3, 161.7, 163.1, 164.3	(1♥)-3♣	119.1, 199.5
(1♥)-2NT	198.4	1♥-(3♣)-X	123.4
1♥-(2NT)-P	201.1	1♥-(3♣)-X-3♦	123.4
1♥-(2NT)-X	201.1	1♥-(3♣)-X-3♥	123.4
(1♥)-2NT-3♣	198.4	1♥-(3♣)-X-3♠	123.4
1♥-(2NT)-3♣	201.1	1♥-(3♣)-X-3♠-4♠	123.4
1♥-2NT-(3♣)-P	99.4	1♥-(3♣)-X-3NT	123.4
1♥-(2NT)-(3♣)-(P)-X	201.2	1♥-3♣-3♦	164.2
1♥-(2NT)-(3♣)-(P)-3♥	201.2	(1♥)-3♣-3♦	199.5
1♥-2NT-(3♣)-X	99.1	1♥-(3♣)-3♦	123.4
1♥-2NT-(3♣)-3♦	99.3	1♥-3♣-3♦-3♥	164.2
1♥-2NT-(3♣)-3♥	99.3	1♥-3♣-3♦-4♥	164.2
1♥-2NT-(3♣)-3♠	99.3	1♥-(3♣)-3♥	123.4
(1♥)-2NT-3♦	198.4	(1♥)-3♣-3♠	199.5
1♥-(2NT)-3♦	201.1	1♥-(3♣)-3♠	123.4
1♥-2NT-(3♦)-P	99.4	(1♥)-3♣-3NT	199.5
1♥-(2NT)-(3♦)-(P)-X	201.2	1♥-(3♣)-3NT	123.4
1♥-(2NT)-(3♦)-(P)-3♥	201.2	(1♥)-3♣-4♦	199.5
1♥-2NT-(3♦)-X	99.1	1♥-(3♣)-4♥	123.4
1♥-2NT-(3♦)-3♥	99.3	(1♥)-3♣-4♠	199.5
1♥-2NT-(3♦)-3♠	99.3	1♥-3♦	66.1, 163.1
1♥-2NT-3♥	21.2	(1♥)-3♦	119.1
1♥-(2NT)-3♥	201.1	1♥-(3♦)-X	123.4
1♥-2NT-3♥-4♥	21.2	1♥-(3♦)-X-3♥	123.4

1♥-(3♦)-X-3♠	123.4	(1♥)-4♠	119.1
1♥-(3♦)-X-3♠-4♠	123.4	1♥-(4♠)-X	123.5
1♥-(3♦)-X-3NT	123.4	1♥-(4♠)-X-4NT	123.5
1♥-(3♦)-3♥	123.4	(1♥)-5♣	119.1
1♥-(3♦)-3♠	123.4	1♥-(5♣)-X	123.5
1♥-(3♦)-3NT	123.4	(1♥)-5♦	119.1
1♥-(3♦)-4♥	123.4	1♥-(5♦)-X	123.5
1♥-3♥	7.2, 160.6, 163.1	1♠	3.1
1♥-3♥-P	12.3	(1♠)-P	73.1
(1♥)-(3♥)-X	207.7	1♠-P	7.1
(1♥)-(3♥)-3♠	86.1	(1♠)-(P)-X	125.1
(1♥)-(3♥)-3NT	207.7	(1♠)-(P)-X-P	126.2
(1♥)-(3♥)-4♣	86.1	(1♠)-(P)-X-1NT	126.2
(1♥)-(3♥)-4♦	86.1	(1♠)-(P)-X-2♣	126.2
1♥-3♥-4♥	12.3	(1♠)-(P)-X-(2♣)-2♦	126.2
1♥-3♠	187.1	(1♠)-(P)-X-(2♣)-2♥	126.2
(1♥)-3♠	119.1	(1♠)-(P)-X-2♦	126.2
1♥-(3♠)-X	123.4	(1♠)-(P)-X-(2♦)-2♥	126.2
1♥-(3♠)-X-3NT	123.4	(1♠)-(P)-X-(2♦)-3♣	126.2
1♥-(3♠)-X-4♥	123.4	(1♠)-(P)-X-2♥	126.2
1♥-(3♠)-3NT	123.4	(1♠)-(P)-X-(2♥)-3♣	126.2
1♥-(3♠)-4♥	123.4	(1♠)-(P)-X-(2♥)-3♦	126.2
1♥-3NT	7.3	(1♠)-(P)-X-2♠	126.2
(1♥)-3NT	153.3	(1♠)-(P)-X-(2♠)-3♣	126.2
1♥-3NT-4♥	21.1	(1♠)-(P)-X-(2♠)-3♦	126.2
1♥-4♣	187.1	(1♠)-(P)-X-(2♠)-3♥	126.2
(1♥)-4♣	119.1	(1♠)-(P)-X-2NT	126.2
1♥-(4♣)-X	123.5	(1♠)-(P)-X-3♣	126.2
1♥-(4♣)-X-4NT	123.5	(1♠)-(P)-X-3♦	126.2
1♥-4♦	187.1	(1♠)-(P)-X-3♥	126.2
(1♥)-4♦	119.1	(1♠)-(P)-X-3NT	126.2
1♥-(4♦)-X	123.5	(1♠)-(P)-1NT	127.3
1♥-(4♦)-X-4NT	123.5	(1♠)-(P)-1NT-P-(X)-XX	127.4
1♥-4♥	120.1	(1♠)-(P)-1NT-(X)-(P)-XX	127.4

(1♠)-(P)-2♣	128.6	(1♠)-(P)-2♥-(3♣)-3♥	129.9
(1♠)-(P)-2♣-2♦	128.8	(1♠)-(P)-2♥-(3♣)-3NT	129.9
(1♠)-(P)-2♣-(2♦)-X	129.9	(1♠)-(P)-2♥-3♦	128.8
(1♠)-(P)-2♣-(2♦)-2NT	129.9	(1♠)-(P)-2♥-(3♦)-X	129.9
(1♠)-(P)-2♣-(2♦)-3♣	129.9	(1♠)-(P)-2♥-(3♦)-3♥	129.9
(1♠)-(P)-2♣-(2♦)-3NT	129.9	(1♠)-(P)-2♥-(3♦)-3NT	129.9
(1♠)-(P)-2♣-2♥	128.8	(1♠)-(P)-2♥-3♥	128.8
(1♠)-(P)-2♣-(2♥)-X	129.9	(1♠)-(P)-2♥-3NT	128.8
(1♠)-(P)-2♣-(2♥)-2NT	129.9	(1♠)-(P)-2♥-4♥	128.8
(1♠)-(P)-2♣-(2♥)-3♣	129.9	(1♠)-(P)-2♠	129.1
(1♠)-(P)-2♣-(2♥)-3NT	129.9	(1♠)-(P)-2NT	127.3
(1♠)-(P)-2♣-(2♠)-3♣	129.9	(1♠)-(P)-3♣	128.7
(1♠)-(P)-2♣-2NT	128.8	(1♠)-(P)-3♦	128.7
(1♠)-(P)-2♣-3♣	128.8	(1♠)-(P)-3♥	128.7
(1♠)-(P)-2♣-3NT	128.8	(1♠)-X	80.1, 81.2
(1♠)-(P)-2♦	128.6	1♠-(X)-XX	96.2
(1♠)-(P)-2♦-2♥	128.8	(1♠)-X-(XX)-P	104.9
(1♠)-(P)-2♦-(2♥)-X	129.9	(1♠)-X-(XX)-1NT	104.9
(1♠)-(P)-2♦-(2♥)-2NT	129.9	(1♠)-X-(XX)-2♣	104.9
(1♠)-(P)-2♦-(2♥)-3♦	129.9	(1♠)-X-(XX)-2♦	104.9
(1♠)-(P)-2♦-(2♥)-3NT	129.9	(1♠)-X-(XX)-2♥	104.9
(1♠)-(P)-2♦-(2♠)-3♦	129.9	(1♠)-X-(XX)-2♠	104.9
(1♠)-(P)-2♦-2NT	128.8	(1♠)-X-(XX)-2NT	104.9
(1♠)-(P)-2♦-3♣	128.8	(1♠)-X-(XX)-3♣	104.9
(1♠)-(P)-2♦-(3♣)-X	129.9	(1♠)-X-(XX)-3♦	104.9
(1♠)-(P)-2♦-(3♣)-3♦	129.9	(1♠)-X-(XX)-3♥	104.9
(1♠)-(P)-2♦-(3♣)-3NT	129.9	(1♠)-X-(XX)-3NT	104.9
(1♠)-(P)-2♦-3♦	128.8	1♠-(X)-P	97.4
(1♠)-(P)-2♦-3NT	128.8	(1♠)-X-1NT	81.6
(1♠)-(P)-2♥	128.6	1♠-(X)-1NT	97.4
(1♠)-(P)-2♥-(2♠)-3♥	129.9	(1♠)-X-(1NT)-P	103.8
(1♠)-(P)-2♥-2NT	128.8	(1♠)-X-(1NT)-X	103.8
(1♠)-(P)-2♥-3♣	128.8	(1♠)-X-(1NT)-2♣	103.8
(1♠)-(P)-2♥-(3♣)-X	129.9	(1♠)-X-(1NT)-2♦	103.8

(1♠)-X-(1NT)-2♥	103.8	(1♠)-X-2♦-2♠-3♦	82.5
(1♠)-X-(1NT)-2♠	103.8	(1♠)-X-(2♦)-2NT	102.6
(1♠)-X-(1NT)-3♣	103.8	(1♠)-X-2♦-2NT	82.3
(1♠)-X-(1NT)-3♦	103.8	(1♠)-X-(2♦)-3♣	102.6
(1♠)-X-(1NT)-3♥	103.8	(1♠)-X-2♦-3♣	82.1
(1♠)-X-2♣	81.3	(1♠)-X-2♦-3♣-3♦	82.4
1♠-(X)-2♣	97.4	(1♠)-X-(2♦)-3♦	102.6
(1♠)-X-(2♣)-P	102.6	(1♠)-X-2♦-3♦	82.9
(1♠)-X-2♣-P	82.9	(1♠)-X-(2♦)-3NT	102.6
(1♠)-X-(2♣)-X	102.6	(1♠)-X-2♥	81.3
(1♠)-X-(2♣)-2♦	102.6	1♠-(X)-2♥	97.4
(1♠)-X-2♣-2♦	82.1	(1♠)-X-(2♥)-P	102.6
(1♠)-X-2♣-2♦-3♣	82.4	(1♠)-X-2♥-P	82.9
(1♠)-X-(2♣)-2♥	102.6	(1♠)-X-(2♥)-X	102.6
(1♠)-X-2♣-2♥	82.1	(1♠)-X-(2♥)-2♠	102.6
(1♠)-X-2♣-2♥-3♣	82.4	(1♠)-X-2♥-2♠	82.2
(1♠)-X-(2♣)-2♠	102.6	(1♠)-X-2♥-2♠-3♥	82.5
(1♠)-X-2♣-2♠	82.2	(1♠)-X-(2♥)-2NT	102.6
(1♠)-X-2♣-2♠-3♣	82.5	(1♠)-X-2♥-2NT	82.3
(1♠)-X-(2♣)-2NT	102.6	(1♠)-X-(2♥)-3♣	102.6
(1♠)-X-2♣-2NT	82.3	(1♠)-X-2♥-3♣	82.1
(1♠)-X-(2♣)-3♣	102.6	(1♠)-X-2♥-3♣-3♥	82.4
(1♠)-X-2♣-3♣	82.9	(1♠)-X-(2♥)-3♦	102.6
(1♠)-X-(2♣)-3NT	102.6	(1♠)-X-2♥-3♦	82.1
(1♠)-X-2♦	81.3	(1♠)-X-2♥-3♦-3♥	82.4
1♠-(X)-2♦	97.4	(1♠)-X-(2♥)-3♥	102.6
(1♠)-X-(2♦)-P	102.6	(1♠)-X-2♥-3♥	82.9
(1♠)-X-2♦-P	82.9	(1♠)-X-(2♥)-3NT	102.6
(1♠)-X-(2♦)-X	102.6	(1♠)-X-2♠	81.4, 81.8
(1♠)-X-(2♦)-2♥	102.6	1♠-(X)-2♠	96.1, 164.4
(1♠)-X-2♦-2♥	82.1	(1♠)-X-(2♠)-P	103.7
(1♠)-X-2♦-2♥-3♦	82.4	(1♠)-X-(2♠)-X	103.7
(1♠)-X-(2♦)-2♠	102.6	(1♠)-X-(2♠)-2NT	103.7
(1♠)-X-2♦-2♠	82.2	(1♠)-X-(2♠)-3♣	103.7

(1♠)-X-(2♠)-3♦	103.7	1♠-(1NT)-(P)-2♣	130.2
(1♠)-X-(2♠)-3♥	103.7	(1♠)-(1NT)-(P)-2♦	132.2
(1♠)-X-(2♠)-3♠	103.7	1♠-(1NT)-(P)-2♦	130.2
(1♠)-X-(2♠)-3NT	103.7	(1♠)-(1NT)-(P)-2♥	132.2
(1♠)-X-(2♠)-4♥	103.7	1♠-(1NT)-(P)-2♥	130.2
(1♠)-X-2NT	81.6	1♠-(1NT)-(P)-2♠	130.2
1♠-(X)-2NT	96.1, 164.4	(1♠)-(1NT)-X	87.4
(1♠)-X-(2NT)-P	103.8	1♠-(1NT)-X	97.1
(1♠)-X-(2NT)-X	103.8	1♠-1NT-(X)-XX	100.5
(1♠)-X-(2NT)-3♠	103.8	1♠-1NT-2♣	22.3, 160.4
(1♠)-X-3♣	81.5	(1♠)-(1NT)-2♣	87.4
1♠-(X)-3♣	97.5, 164.4	(1♠)-1NT-2♣	80.2
(1♠)-X-3♦	81.5	1♠-(1NT)-2♣	98.2, 203.4
1♠-(X)-3♦	97.5, 164.4	1♠-1NT-(2♣)-P	99.4
(1♠)-X-3♥	81.5	1♠-1NT-2♣-P	25.3
1♠-(X)-3♥	97.5	1♠-1NT-(2♣)-X	99.1
1♠-(X)-3♠	96.1, 164.4	1♠-1NT-2♣-2♦	25.3, 160.5
(1♠)-X-(3♠)-P	103.7	1♠-(1NT)-2♣-2♦	203.4
(1♠)-X-(3♠)-X	103.7	1♠-1NT-(2♣)-2♦	99.3
(1♠)-X-(3♠)-3NT	103.7	1♠-1NT-2♣-2♥	25.3, 160.5
(1♠)-X-(3♠)-4♥	103.7	1♠-1NT-(2♣)-2♥	99.3
(1♠)-X-3NT	81.6	1♠-1NT-2♣-2♠	25.3, 160.5
(1♠)-X-4♥	81.7	1♠-1NT-(2♣)-2♠	99.3
(1♠)-X-(4♠)-P	103.7	1♠-1NT-2♣-2NT	160.5
(1♠)-X-(4♠)-X	103.7	1♠-1NT-2♣-3♣	25.3, 160.5
(1♠)-X-(4♠)-5♣	103.7	1♠-1NT-2♣-3♦	160.5
(1♠)-X-(4♠)-5♦	103.7	1♠-1NT-2♣-3♥	160.5
(1♠)-X-(4♠)-5♥	103.7	1♠-1NT-2♣-3♠	160.6
1♠-1NT	8.5, 160.3	1♠-1NT-2♦	22.3, 160.4
(1♠)-1NT	80.1	(1♠)-(1NT)-2♦	87.4
1♠-(1NT)-X	202.1	(1♠)-1NT-2♦	80.2
(1♠)-(1NT)-(P)-X	132.2	1♠-(1NT)-2♦	98.2, 203.4
1♠-(1NT)-(P)-X	130.2	1♠-1NT-(2♦)-P	99.4
(1♠)-(1NT)-(P)-2♣	132.2	1♠-1NT-2♦-P	25.3

1♠-1NT-(2♦)-X	99.1	1♠-1NT-2NT	22.3
1♠-1NT-2♦-2♥	25.3, 160.5	(1♠)-1NT-2NT	80.2
(1♠)-1NT-2♦-2♥	80.2	1♠-1NT-2NT-3♣	25.2
1♠-(1NT)-2♦-2♥	203.4	1♠-1NT-2NT-3♣-5♣	25.2
1♠-1NT-(2♦)-2♥	99.3	1♠-1NT-2NT-3♦	25.2
1♠-1NT-2♦-2♠	25.3, 160.5	1♠-1NT-2NT-3♦-5♦	25.2
1♠-1NT-(2♦)-2♠	99.3	1♠-1NT-2NT-3♥	25.2
1♠-1NT-2♦-2NT	160.5	1♠-1NT-2NT-3♥-4♥	25.2
1♠-1NT-(2♦)-3♣	99.3	(1♠)-1NT-2NT-3NT	80.2
1♠-1NT-2♦-3♦	25.3, 160.5	1♠-1NT-2NT-4♥	25.2
1♠-1NT-2♦-3♥	160.5	1♠-1NT-3♣	22.3
1♠-1NT-2♦-3♠	160.6	1♠-1NT-3♣-3♦	26.5
1♠-1NT-2♥	22.3, 160.4	1♠-1NT-3♣-3♥	26.5
(1♠)-(1NT)-2♥	87.4	1♠-1NT-3♣-3♠	26.5
1♠-(1NT)-2♥	98.2, 203.4	1♠-1NT-3♣-3NT	26.5
1♠-1NT-(2♥)-P	99.4	1♠-1NT-3♦	22.3
1♠-1NT-2♥-P	25.3	1♠-1NT-3♦-3♥	26.5
1♠-1NT-(2♥)-X	99.1	1♠-1NT-3♦-3♠	26.5
1♠-1NT-2♥-2♠	25.3, 160.5	1♠-1NT-3♦-3NT	26.5
1♠-(1NT)-2♥-2♠	203.4	1♠-1NT-3♥	22.3
1♠-1NT-(2♥)-2♠	99.3	1♠-1NT-3♥-3♠	26.5
1♠-1NT-2♥-2NT	25.3, 160.5	1♠-1NT-3♥-3NT	26.5
1♠-1NT-(2♥)-3♣	99.3	1♠-1NT-3♠	22.3
1♠-1NT-(2♥)-3♦	99.3	1♠-1NT-3♠-3NT	27.6
1♠-1NT-2♥-3♥	25.3, 160.5	1♠-1NT-3♠-4♠	27.6
1♠-1NT-2♥-3♠	160.6	1♠-1NT-3NT	22.3
1♠-1NT-2♠	22.3, 160.4	(1♠)-1NT-3NT	80.2
1♠-(1NT)-2♠	98.2, 203.4	1♠-1NT-3NT-4♣	24.1
1♠-1NT-2♠-2NT	27.7, 160.5	1♠-1NT-3NT-4♣-5♣	24.1
1♠-1NT-2♠-3♣	27.7	1♠-1NT-3NT-4♦	24.1
1♠-(1NT)-2♠-3♣	203.4	1♠-1NT-3NT-4♦-5♦	24.1
1♠-1NT-2♠-3♦	27.7	1♠-1NT-3NT-4♥	24.1
1♠-1NT-2♠-3♥	27.7	1♠-2♣	8.5, 159.1
1♠-1NT-2♠-3♠	27.7	(1♠)-2♣	73.1

1♠-(2♣)-X-(3♣)-P	91.4	(1♠)-2♣-2♦-(X)-XX	106.6
1♠-(2♣)-X-(3♣)-X	91.1	1♠-(2♣)-2♦-(X)-XX	91.5
1♠-(2♣)-X-(4♣)-P	91.4	(1♠)-2♣-2♦-(X)-2♥	106.6
1♠-(2♣)-X-(4♣)-X	91.1	(1♠)-2♣-2♦-(X)-2♠	106.6
1♠-(2♣)-P	88.1, 89.7	(1♠)-2♣-2♦-(X)-2NT	106.6
1♠-(2♣)-(P)-X	130.1	(1♠)-2♣-2♦-(X)-3♦	106.6
1♠-(2♣)-P-X	91.6	(1♠)-2♣-2♦-(X)-3NT	106.6
1♠-(2♣)-(P)-X-P	130.1	(1♠)-2♣-2♦-(X)-4♦	106.6
1♠-(2♣)-(P)-X-2♦	130.1	1♠-2♣-2♦-2♥	35.8, 35.9, 135.1
1♠-(2♣)-(P)-X-2♥	130.1	(1♠)-2♣-(2♦)-2♥	101.2
1♠-(2♣)-(P)-X-2♠	130.1	(1♠)-2♣-2♦-2♥	75.8
1♠-(2♣)-(P)-2♦	130.1	1♠-2♣-(2♦)-2♥	99.3
1♠-(2♣)-(P)-2♥	130.1	(1♠)-2♣-2♦-(2♥)-X	105.4
1♠-(2♣)-(P)-2♠	130.1	1♠-2♣-2♦-2♥-2♠	136.3
1♠-(2♣)-(P)-3♠	130.1	(1♠)-2♣-2♦-(2♥)-2♠	105.4
(1♠)-(2♣)-X	86.2, 206.1, 206.4	1♠-2♣-2♦-2♥-2♠-3♦	66.1
1♠-(2♣)-X	89.3	1♠-2♣-2♦-2♥-2♠-3♦-3♠	137.5
(1♠)-2♣-(X)-XX	101.6	1♠-2♣-2♦-2♥-2♠-3♦-3NT	137.5
1♠-2♣-(X)-XX	100.5	1♠-2♣-2♦-2♥-2NT	136.3
(1♠)-2♣-(X)-2♥	101.6	(1♠)-2♣-2♦-(2♥)-2NT	105.4
(1♠)-2♣-(X)-2♠	101.6	1♠-2♣-2♦-2♥-2NT-3♦	66.1
(1♠)-2♣-(X)-3♣	101.6	1♠-2♣-2♦-2♥-3♣	136.3
1♠-(2♣)-X-(3♣)-3♥	91.2	(1♠)-2♣-2♦-(2♥)-3♣	105.4
1♠-(2♣)-X-(3♣)-4♥	91.2	1♠-2♣-2♦-2♥-3♣-3♦	66.1
(1♠)-2♣-(X)-3♦	101.6	1♠-2♣-2♦-2♥-3♦	136.3
(1♠)-2♣-(X)-4♣	101.6	(1♠)-2♣-2♦-(2♥)-3♦	105.4
1♠-(2♣)-X-(4♣)-4♥	91.2	1♠-2♣-2♦-2♥-3♦-4♦	66.1
1♠-2♣-2♦	19.1, 159.2	1♠-2♣-2♦-2♥-3♥	136.3
(1♠)-(2♣)-2♦	86.2, 206.4	(1♠)-2♣-2♦-(2♥)-3♥	105.4
(1♠)-2♣-2♦	75.4	1♠-2♣-2♦-2♥-3♥-3NT	136.3
1♠-(2♣)-2♦	89.2	1♠-2♣-2♦-2♥-3♥-4♦	66.1
1♠-2♣-(2♦)-P	99.4	1♠-2♣-2♦-2♥-3♠	136.3
(1♠)-2♣-(2♦)-X	101.4	1♠-2♣-2♦-2♥-3♠-4♦	66.1
1♠-2♣-(2♦)-X	99.1	1♠-2♣-2♦-2♥-3NT	136.3

1♠-2♣-2♦-2♥-3NT-4♦	66.1	(1♠)-2♣-2♥	75.4
(1♠)-2♣-2♦-(2♥)-4♦	105.4	1♠-(2♣)-2♥	89.2
1♠-2♣-2♦-2♠	35.9	1♠-2♣-(2♥)-P	99.4
(1♠)-2♣-(2♦)-2♠	101.5	(1♠)-2♣-(2♥)-X	101.4
(1♠)-2♣-2♦-2♠	75.8	1♠-2♣-(2♥)-X	99.1
1♠-2♣-(2♦)-2♠	99.3	(1♠)-2♣-2♥-(X)-XX	106.6
(1♠)-2♣-2♦-(2♠)-X	105.2	1♠-(2♣)-2♥-(X)-XX	91.5
(1♠)-2♣-2♦-(2♠)-3♣	105.2	(1♠)-2♣-2♥-(X)-2♠	106.6
(1♠)-2♣-2♦-(2♠)-3♦	105.2	(1♠)-2♣-2♥-(X)-2NT	106.6
(1♠)-2♣-2♦-(2♠)-4♦	105.2	(1♠)-2♣-2♥-(X)-3♦	106.6
1♠-2♣-2♦-2NT	35.9	(1♠)-2♣-2♥-(X)-3♥	106.6
(1♠)-2♣-2♦-2NT	75.8	(1♠)-2♣-2♥-(X)-3NT	106.6
1♠-2♣-(2♦)-2NT	99.3	(1♠)-2♣-2♥-(X)-4♥	106.6
1♠-2♣-2♦-3♣	35.9	1♠-2♣-2♥-2♠	35.9
(1♠)-2♣-(2♦)-3♣	101.1	(1♠)-2♣-(2♥)-2♠	101.5
(1♠)-2♣-2♦-3♣	75.8	(1♠)-2♣-2♥-2♠	75.8
1♠-(2♣)-2♦-(3♣)-P	91.4	1♠-2♣-(2♥)-2♠	99.3
1♠-(2♣)-2♦-(3♣)-X	91.1	(1♠)-2♣-2♥-(2♠)-X	105.2
1♠-(2♣)-2♦-(3♣)-3♥	91.3	(1♠)-2♣-2♥-(2♠)-3♣	105.2
1♠-(2♣)-2♦-(3♣)-3♠	91.3	(1♠)-2♣-2♥-(2♠)-3♥	105.2
1♠-(2♣)-2♦-(3♣)-3NT	91.3	(1♠)-2♣-2♥-(2♠)-4♥	105.2
1♠-2♣-2♦-3♦	35.9	1♠-2♣-2♥-2NT	35.9
(1♠)-2♣-2♦-3♦	75.8	(1♠)-2♣-2♥-2NT	75.8
1♠-2♣-2♦-3♥	137.4	1♠-2♣-(2♥)-2NT	99.3
1♠-2♣-2♦-3♠	35.8, 60.1	1♠-2♣-2♥-3♣	35.9
1♠-2♣-2♦-3NT	35.9	(1♠)-2♣-(2♥)-3♣	101.1
(1♠)-2♣-2♦-3NT	75.8	(1♠)-2♣-2♥-3♣	75.8
1♠-2♣-2♦-4♣	161.8	1♠-(2♣)-2♥-(3♣)-P	91.4
(1♠)-2♣-(2♦)-4♣	101.1	1♠-(2♣)-2♥-(3♣)-X	91.1
1♠-(2♣)-2♦-(4♣)-P	91.4	1♠-(2♣)-2♥-(3♣)-3♦	91.3
1♠-(2♣)-2♦-(4♣)-X	91.1	1♠-(2♣)-2♥-(3♣)-3♥	91.2
1♠-2♣-2♦-4♠	35.8, 188.2	1♠-(2♣)-2♥-(3♣)-3♠	91.3
1♠-2♣-2♥	19.1, 159.2	1♠-(2♣)-2♥-(3♣)-3NT	91.3
(1♠)-(2♣)-2♥	86.2, 206.4	1♠-(2♣)-2♥-(3♣)-4♥	91.2

1♠-2♣-2♥-3♦	35.9, 135.1	(1♠)-2♣-2♠-(X)-3♥	106.6
(1♠)-2♣-(2♥)-3♦	101.2	(1♠)-2♣-2♠-(X)-3♠	106.6
1♠-2♣-(2♥)-3♦	99.3	(1♠)-2♣-2♠-(X)-3NT	106.6
(1♠)-2♣-2♥-(3♦)-X	105.4	(1♠)-2♣-2♠-(X)-4♠	106.6
1♠-2♣-2♥-3♦-3♥	136.3	1♠-2♣-2♠-2NT	33.2
(1♠)-2♣-2♥-(3♦)-3♥	105.4	(1♠)-2♣-(2♠)-2NT	101.9
1♠-2♣-2♥-3♦-3♥-4♥	66.1	(1♠)-2♣-2♠-2NT	76.9
1♠-2♣-2♥-3♦-3♠	136.3	1♠-2♣-2♠-3♣	33.2
(1♠)-2♣-2♥-(3♦)-3♠	105.4	(1♠)-2♣-(2♠)-3♣	101.7
1♠-2♣-2♥-3♦-3♠-4♥	66.1	(1♠)-2♣-2♠-3♣	76.9
1♠-2♣-2♥-3♦-3NT	136.3	1♠-2♣-2♠-3♦	33.3
(1♠)-2♣-2♥-(3♦)-3NT	105.4	(1♠)-2♣-(2♠)-3♦	101.8
1♠-2♣-2♥-3♦-3NT-4♥	66.1	(1♠)-2♣-2♠-(3♦)-X	105.5
(1♠)-2♣-2♥-(3♦)-4♥	105.4	(1♠)-2♣-2♠-(3♦)-3♥	105.5
1♠-2♣-2♥-3♥	35.9	(1♠)-2♣-2♠-(3♦)-3NT	105.5
(1♠)-2♣-2♥-3♥	75.8	(1♠)-2♣-2♠-(3♦)-4♣	105.5
1♠-2♣-2♥-3♠	35.8, 60.1	1♠-2♣-2♠-3♥	33.3
1♠-2♣-2♥-3NT	35.9	(1♠)-2♣-(2♠)-3♥	101.8
(1♠)-2♣-2♥-3NT	75.8	(1♠)-2♣-2♠-3♥	76.9
1♠-2♣-2♥-4♣	161.8	(1♠)-2♣-2♠-(3♥)-3NT	105.5
(1♠)-2♣-(2♥)-4♣	101.1	1♠-2♣-2♠-3♠	33.3, 60.1
1♠-(2♣)-2♥-(4♣)-P	91.4	(1♠)-2♣-(2♠)-3♠	101.2
1♠-(2♣)-2♥-(4♣)-X	91.1	(1♠)-2♣-2♠-3♠	76.9
1♠-(2♣)-2♥-(4♣)-4♥	91.2	(1♠)-2♣-2♠-(3♠)-X	105.3
1♠-2♣-2♥-4♥	35.9	(1♠)-2♣-2♠-(3♠)-3NT	105.3
1♠-2♣-2♥-4♠	35.8, 188.2	1♠-2♣-2♠-3NT	33.3
1♠-2♣-2♠	19.1, 159.2	(1♠)-2♣-2♠-3NT	76.9
(1♠)-(2♣)-2♠	206.4	1♠-2♣-2♠-4♣	161.8
(1♠)-2♣-2♠	74.3, 75.7	(1♠)-2♣-(2♠)-4♣	101.7
1♠-(2♣)-2♠	89.5	(1♠)-2♣-2♠-4♣	76.9
(1♠)-2♣-(2♠)-X	101.1	1♠-2♣-2♠-4♠	33.3, 188.2
(1♠)-2♣-2♠-(X)-XX	106.6	1♠-2♣-2NT	19.1, 159.2
(1♠)-2♣-2♠-(X)-2NT	106.6	(1♠)-(2♣)-2NT	206.4
(1♠)-2♣-2♠-(X)-3♦	106.6	(1♠)-2♣-2NT	75.6

1♠-(2♣)-2NT	89.5	1♠-2♣-3NT	19.1, 159.2
1♠-2♣-2NT-3♣	36.1	(1♠)-2♣-3NT	75.6
1♠-2♣-2NT-3♦	36.1	1♠-2♣-3NT-4♣	37.2, 161.8
1♠-2♣-2NT-3♥	36.1	1♠-2♣-3NT-4♦	37.2
1♠-2♣-2NT-3♠	36.1, 60.1	1♠-2♣-3NT-4♥	37.2
1♠-2♣-2NT-3NT	36.1	1♠-2♣-3NT-4♠	37.2
1♠-2♣-2NT-4♣	161.8	1♠-2♣-3NT-4NT	37.2
1♠-2♣-2NT-4♠	36.1	(1♠)-2♣-4♣	74.2
1♠-2♣-3♣	19.1	1♠-(2♣)-4♠	89.5
(1♠)-(2♣)-3♣	86.3, 207.5	1♠-2♦	8.5, 159.1
(1♠)-2♣-3♣	74.2	(1♠)-2♦	73.1
1♠-(2♣)-3♣	89.8	1♠-(2♦)-X-(3♦)-P	91.4
1♠-2♣-3♣-3♠	34.4	1♠-(2♦)-X-(3♦)-X	91.1
1♠-2♣-3♣-3NT	34.5	1♠-(2♦)-X-(4♦)-P	91.4
1♠-2♣-3♣-4♠	34.4	1♠-(2♦)-X-(4♦)-X	91.1
1♠-2♣-3♦	19.1	1♠-(2♦)-P	88.1, 89.7
(1♠)-2♣-3♦	74.3	1♠-(2♦)-(P)-X	130.1
1♠-2♣-3♦-4♦	67.2	1♠-(2♦)-P-X	91.6
1♠-2♣-3♥	19.1	1♠-(2♦)-(P)-X-P	130.1
(1♠)-2♣-3♥	74.3	1♠-(2♦)-(P)-X-2♥	130.1
1♠-2♣-3♥-4♦	67.2	1♠-(2♦)-(P)-X-2♠	130.1
1♠-2♣-3♠	19.1	1♠-(2♦)-(P)-X-3♣	130.1
(1♠)-2♣-3♠	74.3	1♠-(2♦)-(P)-2♥	130.1
1♠-(2♣)-3♠	89.5	1♠-(2♦)-(P)-2♠	130.1
(1♠)-2♣-(3♠)-X	101.1	1♠-(2♦)-(P)-3♣	130.1
1♠-2♣-3♠-3NT	32.1	1♠-(2♦)-(P)-3♠	130.1
(1♠)-2♣-(3♠)-3NT	101.9	(1♠)-(2♦)-X	86.2, 206.1, 206.4
1♠-2♣-3♠-4♣	32.1	1♠-(2♦)-X	89.3
(1♠)-2♣-(3♠)-4♣	101.7	(1♠)-2♦-(X)-XX	101.6
1♠-2♣-3♠-4♦	32.1	1♠-2♦-(X)-XX	100.5
(1♠)-2♣-(3♠)-4♦	101.8	(1♠)-2♦-(X)-2♠	101.6
1♠-2♣-3♠-4♥	32.1	(1♠)-2♦-(X)-3♣	101.6
(1♠)-2♣-(3♠)-4♥	101.8	(1♠)-2♦-(X)-3♦	101.6
1♠-2♣-3♠-4♠	32.1	1♠-(2♦)-X-(3♦)-3♥	91.2

1♠-(2♦)-X-(3♦)-4♥	91.2	(1♠)-2♦-2♥-(3♣)-X	105.4
(1♠)-2♦-(X)-3♥	101.6	1♠-2♦-2♥-3♣-3♦	136.3
(1♠)-2♦-(X)-4♦	101.6	(1♠)-2♦-2♥-(3♣)-3♦	105.4
1♠-(2♦)-X-(4♦)-4♥	91.2	1♠-2♦-2♥-3♣-3♦-3♥	66.1
1♠-2♦-2♥	19.1, 159.2	1♠-2♦-2♥-3♣-3♥	136.3
(1♠)-(2♦)-2♥	86.2, 206.4	(1♠)-2♦-2♥-(3♣)-3♥	105.4
(1♠)-2♦-2♥	75.4	1♠-2♦-2♥-3♣-3♥-4♥	66.1
1♠-(2♦)-2♥	89.2	1♠-2♦-2♥-3♣-3♠	136.3
1♠-2♦-(2♥)-P	99.4	(1♠)-2♦-2♥-(3♣)-3♠	105.4
(1♠)-2♦-(2♥)-X	101.4	1♠-2♦-2♥-3♣-3♠-4♥	66.1
1♠-2♦-(2♥)-X	99.1	1♠-2♦-2♥-3♣-3NT	136.3
(1♠)-2♦-2♥-(X)-XX	106.6	(1♠)-2♦-2♥-(3♣)-3NT	105.4
1♠-(2♦)-2♥-(X)-XX	91.5	1♠-2♦-2♥-3♣-3NT-4♥	66.1
(1♠)-2♦-2♥-(X)-2♠	106.6	(1♠)-2♦-2♥-(3♣)-4♥	105.4
(1♠)-2♦-2♥-(X)-2NT	106.6	1♠-2♦-2♥-3♦	35.9
(1♠)-2♦-2♥-(X)-3♣	106.6	(1♠)-2♦-(2♥)-3♦	101.1
(1♠)-2♦-2♥-(X)-3♥	106.6	(1♠)-2♦-2♥-3♦	75.8
(1♠)-2♦-2♥-(X)-3NT	106.6	1♠-(2♦)-2♥-(3♦)-P	91.4
(1♠)-2♦-2♥-(X)-4♥	106.6	1♠-(2♦)-2♥-(3♦)-X	91.1
1♠-2♦-2♥-2♠	35.9	1♠-(2♦)-2♥-(3♦)-3♥	91.2
(1♠)-2♦-(2♥)-2♠	101.5	1♠-(2♦)-2♥-(3♦)-3♠	91.3
(1♠)-2♦-2♥-2♠	75.8	1♠-(2♦)-2♥-(3♦)-3NT	91.3
1♠-2♦-(2♥)-2♠	99.3	1♠-(2♦)-2♥-(3♦)-4♥	91.2
(1♠)-2♦-2♥-(2♠)-X	105.2	1♠-2♦-2♥-3♥	35.9
(1♠)-2♦-2♥-(2♠)-3♦	105.2	(1♠)-2♦-2♥-3♥	75.8
(1♠)-2♦-2♥-(2♠)-3♥	105.2	1♠-2♦-2♥-3♠	35.8, 60.1
(1♠)-2♦-2♥-(2♠)-4♥	105.2	1♠-2♦-2♥-3NT	35.9
1♠-2♦-2♥-2NT	35.9	(1♠)-2♦-2♥-3NT	75.8
(1♠)-2♦-2♥-2NT	75.8	1♠-2♦-2♥-4♦	161.8
1♠-2♦-(2♥)-2NT	99.3	(1♠)-2♦-(2♥)-4♦	101.1
1♠-2♦-2♥-3♣	35.9, 135.1	1♠-(2♦)-2♥-(4♦)-P	91.4
(1♠)-2♦-(2♥)-3♣	101.2	1♠-(2♦)-2♥-(4♦)-X	91.1
(1♠)-2♦-2♥-3♣	75.8	1♠-(2♦)-2♥-(4♦)-4♥	91.2
1♠-2♦-(2♥)-3♣	99.3	1♠-2♦-2♥-4♥	35.9

1♠-2♦-2♥-4♠	35.8, 188.2	1♠-2♦-2♠-3NT	33.3
1♠-2♦-2♠	19.1, 159.2	(1♠)-2♦-2♠-3NT	76.9
(1♠)-(2♦)-2♠	206.4	1♠-2♦-2♠-4♦	161.8
(1♠)-2♦-2♠	74.3, 75.7	(1♠)-2♦-(2♠)-4♦	101.7
1♠-(2♦)-2♠	89.5	(1♠)-2♦-2♠-4♦	76.9
(1♠)-2♦-(2♠)-X	101.1	1♠-2♦-2♠-4♠	33.3, 188.2
(1♠)-2♦-2♠-(X)-XX	106.6	1♠-2♦-2NT	19.1, 159.2
(1♠)-2♦-2♠-(X)-2NT	106.6	(1♠)-(2♦)-2NT	206.4
(1♠)-2♦-2♠-(X)-3♣	106.6	(1♠)-2♦-2NT	75.6
(1♠)-2♦-2♠-(X)-3♥	106.6	1♠-(2♦)-2NT	89.5
(1♠)-2♦-2♠-(X)-3♠	106.6	1♠-2♦-2NT-3♣	36.1
(1♠)-2♦-2♠-(X)-3NT	106.6	1♠-2♦-2NT-3♦	36.1
(1♠)-2♦-2♠-(X)-4♠	106.6	1♠-2♦-2NT-3♥	36.1
1♠-2♦-2♠-2NT	33.2	1♠-2♦-2NT-3♠	36.1, 60.1
(1♠)-2♦-(2♠)-2NT	101.9	1♠-2♦-2NT-3NT	36.1
(1♠)-2♦-2♠-2NT	76.9	1♠-2♦-2NT-4♦	161.8
1♠-2♦-2♠-3♣	33.3	1♠-2♦-2NT-4♠	36.1
(1♠)-2♦-(2♠)-3♣	101.8	1♠-2♦-3♣	19.1, 159.2
(1♠)-2♦-2♠-3♣	76.9	(1♠)-(2♦)-3♣	86.2, 206.4
(1♠)-2♦-2♠-(3♣)-X	105.5	(1♠)-2♦-3♣	75.5
(1♠)-2♦-2♠-(3♣)-3♦	105.5	1♠-(2♦)-3♣	89.4
(1♠)-2♦-2♠-(3♣)-3♥	105.5	1♠-2♦-(3♣)-P	99.4
(1♠)-2♦-2♠-(3♣)-3NT	105.5	(1♠)-2♦-(3♣)-X	101.4
1♠-2♦-2♠-3♦	33.2	1♠-2♦-(3♣)-X	99.1
(1♠)-2♦-(2♠)-3♦	101.7	1♠-(2♦)-3♣-(X)-XX	91.5
(1♠)-2♦-2♠-3♦	76.9	1♠-2♦-3♣-3♦	35.7
1♠-2♦-2♠-3♥	33.3	(1♠)-2♦-(3♣)-3♦	101.1
(1♠)-2♦-(2♠)-3♥	101.8	1♠-(2♦)-3♣-(3♦)-P	91.4
(1♠)-2♦-2♠-(3♥)-3NT	105.5	1♠-(2♦)-3♣-(3♦)-X	91.1
1♠-2♦-2♠-3♠	33.3, 60.1	1♠-(2♦)-3♣-(3♦)-3♥	91.3
(1♠)-2♦-(2♠)-3♠	101.2	1♠-(2♦)-3♣-(3♦)-3♠	91.3
(1♠)-2♦-2♠-3♠	76.9	1♠-(2♦)-3♣-(3♦)-3NT	91.3
(1♠)-2♦-2♠-(3♠)-X	105.3	1♠-2♦-3♣-3♥	35.7, 135.1
(1♠)-2♦-2♠-(3♠)-3NT	105.3	(1♠)-2♦-(3♣)-3♥	101.2

1♠-2♦-(3♣)-3♥	99.3	(1♠)-2♦-(3♠)-4♦	101.7
1♠-2♦-3♣-3♥-3♠	136.3	1♠-2♦-3♠-4♥	32.1
1♠-2♦-3♣-3♥-3NT	136.3	(1♠)-2♦-(3♠)-4♥	101.8
1♠-2♦-3♣-3♥-4♣	136.3	1♠-2♦-3♠-4♠	32.1
1♠-2♦-3♣-3♠	35.7, 60.1	1♠-2♦-3NT	19.1, 159.2
(1♠)-2♦-(3♣)-3♠	101.5	(1♠)-2♦-3NT	75.6
1♠-2♦-(3♣)-3♠	99.3	1♠-2♦-3NT-4♣	37.2
1♠-2♦-3♣-3NT	35.7	1♠-2♦-3NT-4♦	37.2, 161.8
1♠-2♦-(3♣)-3NT	99.3	1♠-2♦-3NT-4♥	37.2
1♠-2♦-3♣-4♣	35.7, 67.3	1♠-2♦-3NT-4♠	37.2
1♠-2♦-3♣-4♦	161.8	1♠-2♦-3NT-4NT	37.2
(1♠)-2♦-(3♣)-4♦	101.1	(1♠)-2♦-4♦	74.2
1♠-(2♦)-3♣-(4♦)-P	91.4	1♠-(2♦)-4♠	89.5
1♠-(2♦)-3♣-(4♦)-X	91.1	1♠-2♥	8.5, 159.1
1♠-2♦-3♣-4♠	35.7	(1♠)-2♥	73.1
1♠-2♦-3♦	19.1	1♠-(2♥)-X-(3♥)-P	91.4
(1♠)-(2♦)-3♦	86.3, 207.5	1♠-(2♥)-X-(3♥)-X	91.1
(1♠)-2♦-3♦	74.2	1♠-(2♥)-X-(4♥)-P	91.4
1♠-(2♦)-3♦	89.8	1♠-(2♥)-X-(4♥)-X	91.1
1♠-2♦-3♦-3♠	34.4	1♠-(2♥)-P	88.1, 89.7
1♠-2♦-3♦-3NT	34.5	1♠-(2♥)-(P)-X	130.1
1♠-2♦-3♦-4♠	34.4	1♠-(2♥)-P-X	91.6
1♠-2♦-3♥	19.1	1♠-(2♥)-(P)-X-P	130.1
(1♠)-2♦-3♥	74.3	1♠-(2♥)-(P)-X-2♠	130.1
1♠-2♦-3♥-4♣	67.2	1♠-(2♥)-(P)-X-3♣	130.1
1♠-2♦-3♠	19.1	1♠-(2♥)-(P)-X-3♦	130.1
(1♠)-2♦-3♠	74.3	1♠-(2♥)-(P)-2♠	130.1
1♠-(2♦)-3♠	89.5	1♠-(2♥)-(P)-3♣	130.1
(1♠)-2♦-(3♠)-X	101.1	1♠-(2♥)-(P)-3♦	130.1
1♠-2♦-3♠-3NT	32.1	1♠-(2♥)-(P)-3♠	130.1
(1♠)-2♦-(3♠)-3NT	101.9	(1♠)-(2♥)-X	86.2, 206.1, 206.4
1♠-2♦-3♠-4♣	32.1	1♠-(2♥)-X	89.3
(1♠)-2♦-(3♠)-4♣	101.8	(1♠)-2♥-(X)-XX	101.6
1♠-2♦-3♠-4♦	32.1	1♠-2♥-(X)-XX	100.5

(1♠)-2♥-(X)-2♠	101.6	(1♠)-2♥-2♠-3♥	76.9
(1♠)-2♥-(X)-3♦	101.6	1♠-2♥-2♠-3♠	33.3, 60.1
(1♠)-2♥-(X)-3♥	101.6	(1♠)-2♥-(2♠)-3♠	101.2
(1♠)-2♥-(X)-4♣	101.6	(1♠)-2♥-2♠-3♠	76.9
(1♠)-2♥-(X)-4♥	101.6	(1♠)-2♥-2♠-(3♠)-X	105.3
1♠-2♥-2♠	20.2, 159.2	(1♠)-2♥-2♠-(3♠)-3NT	105.3
(1♠)-(2♥)-2♠	206.4	1♠-2♥-2♠-3NT	33.3
(1♠)-2♥-2♠	74.3, 75.7	(1♠)-2♥-2♠-3NT	76.9
1♠-(2♥)-2♠	89.5	(1♠)-2♥-(2♠)-4♥	101.7
(1♠)-2♥-(2♠)-X	101.1	(1♠)-2♥-2♠-4♥	76.9
(1♠)-2♥-2♠-(X)-XX	106.6	1♠-2♥-2♠-4♠	33.3, 188.2
(1♠)-2♥-2♠-(X)-2NT	106.6	1♠-2♥-2NT	20.2, 159.2
(1♠)-2♥-2♠-(X)-3♣	106.6	(1♠)-(2♥)-2NT	206.4
(1♠)-2♥-2♠-(X)-3♦	106.6	(1♠)-2♥-2NT	75.6
(1♠)-2♥-2♠-(X)-3♠	106.6	1♠-(2♥)-2NT	89.5
(1♠)-2♥-2♠-(X)-3NT	106.6	1♠-2♥-2NT-3♥	36.1
(1♠)-2♥-2♠-(X)-4♠	106.6	1♠-2♥-2NT-3♠	36.1, 60.1
1♠-2♥-2♠-2NT	33.2	1♠-2♥-2NT-3NT	36.1
(1♠)-2♥-(2♠)-2NT	101.9	1♠-2♥-2NT-4♠	36.1
(1♠)-2♥-2♠-2NT	76.9	1♠-2♥-3♣	20.2, 159.2
1♠-2♥-2♠-2NT-3♥	20.2	(1♠)-(2♥)-3♣	86.2, 206.4
1♠-2♥-2♠-3♣	33.3	(1♠)-2♥-3♣	75.5
(1♠)-2♥-(2♠)-3♣	101.8	1♠-(2♥)-3♣	89.4
(1♠)-2♥-2♠-3♣	76.9	1♠-(2♥)-3♣-(2♥)-P	91.4
(1♠)-2♥-2♠-(3♣)-X	105.5	1♠-(2♥)-3♣-(2♥)-X	91.1
(1♠)-2♥-2♠-(3♣)-3♦	105.5	1♠-(2♥)-3♣-(2♥)-2NT	91.3
(1♠)-2♥-2♠-(3♣)-3♥	105.5	1♠-(2♥)-3♣-(2♥)-3♦	91.3
(1♠)-2♥-2♠-(3♣)-3NT	105.5	1♠-(2♥)-3♣-(2♥)-3♠	91.3
1♠-2♥-2♠-3♦	33.3	1♠-(2♥)-3♣-(2♥)-3NT	91.3
(1♠)-2♥-(2♠)-3♦	101.8	1♠-2♥-(3♣)-P	99.4
(1♠)-2♥-2♠-3♦	76.9	(1♠)-2♥-(3♣)-X	101.4
(1♠)-2♥-2♠-(3♦)-3NT	105.5	1♠-2♥-(3♣)-X	99.1
1♠-2♥-2♠-3♥	33.2	1♠-(2♥)-3♣-(X)-XX	91.5
(1♠)-2♥-(2♠)-3♥	101.7	1♠-2♥-3♣-3♦	35.7, 135.1

(1♠)-2♥-(3♣)-3♦	101.2	(1♠)-2♥-(3♦)-X	101.4
1♠-2♥-(3♣)-3♦	99.3	1♠-2♥-(3♦)-X	99.1
1♠-2♥-3♣-3♦-3♥	136.3	1♠-(2♥)-3♦-(X)-XX	91.5
1♠-2♥-3♣-3♦-3♠	136.3	1♠-2♥-3♦-3♥	35.7
1♠-2♥-3♣-3♦-3NT	136.3	(1♠)-2♥-(3♦)-3♥	101.1
1♠-2♥-3♣-3♦-4♦	191.7	1♠-(2♥)-3♦-(3♥)-P	91.4
1♠-2♥-3♣-3♦-4♥	136.3	1♠-(2♥)-3♦-(3♥)-X	91.1
1♠-2♥-3♣-3♥	35.7	1♠-(2♥)-3♦-(3♥)-3♠	91.3
(1♠)-2♥-(3♣)-3♥	101.1	1♠-(2♥)-3♦-(3♥)-3NT	91.3
1♠-2♥-(3♣)-3♥	99.2	1♠-2♥-3♦-3♠	35.7, 60.1
1♠-(2♥)-3♣-(3♥)-P	91.4	(1♠)-2♥-(3♦)-3♠	101.5
1♠-(2♥)-3♣-(3♥)-X	91.1	1♠-2♥-(3♦)-3♠	99.3
1♠-(2♥)-3♣-(3♥)-3♠	91.3	1♠-2♥-3♦-3NT	35.7
1♠-(2♥)-3♣-(3♥)-3NT	91.3	1♠-2♥-(3♦)-3NT	99.3
1♠-2♥-3♣-3♠	35.7, 60.1	1♠-2♥-(3♦)-4♣	99.3
(1♠)-2♥-(3♣)-3♠	101.5	1♠-2♥-3♦-4♦	35.7, 67.3
1♠-2♥-(3♣)-3♠	99.3	(1♠)-2♥-(3♦)-4♥	101.1
1♠-2♥-3♣-3NT	35.7	1♠-2♥-(3♦)-4♥	99.2
1♠-2♥-(3♣)-3NT	99.3	1♠-2♥-3♦-4♠	35.7
1♠-2♥-3♣-4♣	35.7, 67.3	1♠-2♥-3♥	20.2
(1♠)-2♥-(3♣)-4♥	101.1	(1♠)-(2♥)-3♥	207.5
1♠-2♥-(3♣)-4♥	99.2	(1♠)-2♥-3♥	74.2
1♠-2♥-3♣-4♠	35.7	1♠-(2♥)-3♥	89.8
1♠-2♥-3♦	20.2, 159.2	(1♠)-2♥-3♥-(X)-XX	104.1
(1♠)-(2♥)-3♦	86.2, 206.4	1♠-2♥-3♥-3♠	34.4
(1♠)-2♥-3♦	75.5	(1♠)-2♥-3♥-(3♠)-4♥	104.1
1♠-(2♥)-3♦	89.4	1♠-2♥-3♥-3NT	34.5
1♠-(2♥)-3♦-(2♥)-P	91.4	1♠-2♥-3♥-4♥	34.5
1♠-(2♥)-3♦-(2♥)-X	91.1	1♠-2♥-3♥-4♠	34.4
1♠-(2♥)-3♦-(2♥)-2♠	91.3	1♠-2♥-3♠	20.2
1♠-(2♥)-3♦-(2♥)-2NT	91.3	(1♠)-2♥-3♠	74.3
1♠-(2♥)-3♦-(2♥)-3♣	91.3	1♠-(2♥)-3♠	89.5
1♠-(2♥)-3♦-(2♥)-3NT	91.3	(1♠)-2♥-(3♠)-X	101.1
1♠-2♥-(3♦)-P	99.4	1♠-2♥-3♠-3NT	32.1

(1♠)-2♥-(3♠)-3NT	101.9	(1♠)-2♠-2NT-3♦	198.3
1♠-2♥-3♠-4♣	32.1	1♠-2♠-2NT-3♠	155.2
(1♠)-2♥-(3♠)-4♣	101.8	1♠-2♠-2NT-4♠	155.2
1♠-2♥-3♠-4♦	32.1	1♠-2♠-3♣	155.1
(1♠)-2♥-(3♠)-4♦	101.8	(1♠)-(2♠)-3♣	86.1
1♠-2♥-3♠-4♥	32.1	(1♠)-2♠-3♣	199.5
(1♠)-2♥-(3♠)-4♥	101.7	1♠-(2♠)-3♣	201.1
1♠-2♥-3♠-4♠	32.1	1♠-(2♠)-(3♣)-(P)-X	201.2
1♠-2♥-3NT	20.2, 159.2	1♠-(2♠)-(3♣)-(P)-3♠	201.2
(1♠)-2♥-3NT	75.6	1♠-2♠-3♣-3♠	155.2
1♠-2♥-3NT-4♥	37.2	1♠-2♠-3♣-4♠	155.2
1♠-2♥-3NT-4♠	37.2	1♠-2♠-3♦	155.1
1♠-2♥-3NT-4NT	37.2	(1♠)-(2♠)-3♦	86.1
1♠-2♥-4♣-4♠	211.2	1♠-(2♠)-3♦	201.1
1♠-2♥-4♣-4NT	211.2	1♠-(2♠)-(3♦)-(P)-X	201.2
1♠-2♥-4♦-4♠	211.2	1♠-(2♠)-(3♦)-(P)-3♠	201.2
1♠-2♥-4♦-4NT	211.2	1♠-2♠-3♦-3♠	155.2
1♠-2♥-4♥	20.2	1♠-2♠-3♦-4♠	155.2
(1♠)-2♥-4♥	74.2, 74.3	1♠-2♠-3♥	12.2, 155.1, 155.3
1♠-(2♥)-4♠	89.5	(1♠)-(2♠)-3♥	86.1
1♠-2♠	7.4, 163.1	(1♠)-2♠-3♥	198.2
(1♠)-2♠	197.1, 198.2	1♠-(2♠)-3♥	201.1
1♠-(2♠)-P	201.1	1♠-(2♠)-(3♥)-(P)-X	201.2
1♠-2♠-P	11.1	1♠-(2♠)-(3♥)-(P)-3♠	201.2
(1♠)-(2♠)-(P)-X	131.1	1♠-2♠-(3♥)-X	110.1
(1♠)-(2♠)-(P)-3♣	131.1	1♠-2♠-3♥-3♠	12.2, 155.2
(1♠)-(2♠)-(P)-3♦	131.1	1♠-2♠-3♥-3♠-4♠	12.2
(1♠)-(2♠)-(P)-3♥	131.1	1♠-2♠-3♥-4♥	12.2, 155.3
(1♠)-(2♠)-X	207.7	1♠-2♠-3♥-4♠	12.2, 155.2
1♠-(2♠)-X	201.1	1♠-2♠-3♠	11.1, 156.4
1♠-2♠-2NT	155.1	1♠-(2♠)-3♠	201.1
(1♠)-(2♠)-2NT	207.7	1♠-2♠-3♠-4♠	11.1
1♠-(2♠)-2NT	201.1	(1♠)-2♠-3NT	198.2
(1♠)-2♠-2NT-3♣	198.3	(1♠)-2♠-4♥	198.2

1♠-2♠-4♠	11.1	1♠-2NT-4♠	21.2
1♠-2NT	8.5, 161.7, 163.1, 164.3	1♠-3♣	66.1, 163.1
(1♠)-2NT	198.4	(1♠)-3♣	119.1, 199.5
1♠-(2NT)-P	201.1	1♠-(3♣)-X	123.4
1♠-(2NT)-X	201.1	1♠-(3♣)-X-3♦	123.4
(1♠)-2NT-3♣	198.4	1♠-(3♣)-X-3♥	123.4
1♠-(2NT)-3♣	201.1	1♠-(3♣)-X-3♥-4♥	123.4
1♠-2NT-(3♣)-P	99.4	1♠-(3♣)-X-3♠	123.4
1♠-(2NT)-(3♣)-(P)-X	201.2	1♠-(3♣)-X-3NT	123.4
1♠-(2NT)-(3♣)-(P)-3♠	201.2	1♠-3♣-3♦	164.2
1♠-2NT-(3♣)-X	99.1	(1♠)-3♣-3♦	199.5
1♠-2NT-(3♣)-3♦	99.3	1♠-(3♣)-3♦	123.4
1♠-2NT-(3♣)-3♥	99.3	1♠-3♣-3♦-3♠	164.2
1♠-2NT-(3♣)-3♠	99.3	1♠-3♣-3♦-4♠	164.2
(1♠)-2NT-3♦	198.4	(1♠)-3♣-3♥	199.5
1♠-(2NT)-3♦	201.1	1♠-(3♣)-3♥	123.4
1♠-2NT-(3♦)-P	99.4	1♠-(3♣)-3♠	123.4
1♠-(2NT)-(3♦)-(P)-X	201.2	(1♠)-3♣-3NT	199.5
1♠-(2NT)-(3♦)-(P)-3♠	201.2	1♠-(3♣)-3NT	123.4
1♠-2NT-(3♦)-X	99.1	(1♠)-3♣-4♦	199.5
1♠-2NT-(3♦)-3♥	99.3	(1♠)-3♣-4♥	199.5
1♠-2NT-(3♦)-3♠	99.3	1♠-(3♣)-4♠	123.4
1♠-(2NT)-3♥	201.1	1♠-3♦	66.1, 163.1
1♠-2NT-(3♥)-P	99.4	(1♠)-3♦	119.1
1♠-2NT-(3♥)-X	99.1	1♠-(3♦)-X	123.4
1♠-2NT-(3♥)-3♠	99.3	1♠-(3♦)-X-3♥	123.4
1♠-2NT-3♠	21.2	1♠-(3♦)-X-3♥-4♥	123.4
1♠-(2NT)-3♠	201.1	1♠-(3♦)-X-3♠	123.4
1♠-2NT-3♠-4♠	21.2	1♠-(3♦)-X-3NT	123.4
1♠-2NT-3NT	21.2	1♠-(3♦)-3♥	123.4
(1♠)-2NT-3NT	198.4	1♠-(3♦)-3♠	123.4
1♠-(2NT)-3NT	201.1	1♠-(3♦)-3NT	123.4
(1♠)-2NT-4♣	198.4	1♠-(3♦)-4♠	123.4
(1♠)-2NT-4♦	198.4	1♠-3♥	66.1

(1♠)-3♥	119.1	1♠-(5♦)-X	123.5
1♠-(3♥)-X	123.4	1NT	39.3
1♠-(3♥)-X-3♠	123.4	1NT-P	42.1
1♠-(3♥)-X-3NT	123.4	(1NT)-(P)-X	129.2
1♠-(3♥)-3♠	123.4	1NT-P-(X)-(P)-P	176.5
1♠-(3♥)-3NT	123.4	1NT-P-(X)-(P)-XX	176.5
1♠-(3♥)-4♠	123.4	1NT-P-(X)-(P)-2♣	176.5
1♠-3♠	7.4, 160.6, 163.1	1NT-P-(X)-(P)-2♦	176.5
1♠-3♠-P	12.3	1NT-P-(X)-(P)-2♥	176.5
(1♠)-(3♠)-X	207.7	(1NT)-(P)-2♣	129.2, 200.3
(1♠)-(3♠)-3NT	207.7	(1NT)-(P)-2♣-2♦	200.3
(1♠)-(3♠)-4♣	86.1	(1NT)-(P)-2♣-2♦-2♥	200.3
(1♠)-(3♠)-4♦	86.1	(1NT)-(P)-2♣-2♦-2♠	200.3
(1♠)-(3♠)-4♥	86.1	(1NT)-(P)-2♣-2♥	200.3
1♠-3♠-4♠	12.3	(1NT)-(P)-2♣-2♠	200.3
1♠-3NT	8.5	(1NT)-(P)-2♦	129.2
(1♠)-3NT	153.3	(1NT)-(P)-2♥	129.2
1♠-3NT-4♠	21.1	(1NT)-(P)-2♠	129.2
1♠-4♣	187.1	(1NT)-X	85.1
(1♠)-4♣	119.1	(1NT)-X-P	85.1
1♠-(4♣)-X	123.5	1NT-(X)-P	175.1
1♠-(4♣)-X-4NT	123.5	1NT-(X)-P-XX	176.3
1♠-4♦	187.1	1NT-(X)-P-XX-P	176.3
(1♠)-4♦	119.1	1NT-(X)-P-XX-2♣	176.3
1♠-(4♦)-X	123.5	1NT-(X)-P-XX-2♣-2♥	176.3
1♠-(4♦)-X-4NT	123.5	1NT-(X)-P-XX-2♦	176.3
1♠-4♥	187.1	1NT-(X)-P-XX-2♦-2♠	176.3
(1♠)-4♥	119.1	1NT-(X)-XX	98.1, 175.1
1♠-(4♥)-X	123.5	1NT-(X)-XX-2♣	98.1, 176.4
1♠-(4♥)-X-4NT	123.5	1NT-(X)-XX-2♦	98.1
1♠-4♠	120.1	1NT-(X)-XX-2♥	98.1
(1♠)-5♣	119.1	1NT-(X)-XX-2♠	98.1
1♠-(5♣)-X	123.5	(1NT)-X-2♣	85.1
(1♠)-5♦	119.1	1NT-(X)-2♣	98.1, 175.1

1NT-(X)-2♣-2♦	176.2	1NT-2♣-(X)-2NT	107.1
(1NT)-X-2♦	85.1	1NT-(2♣)-X-3NT	171.9
1NT-(X)-2♦	98.1, 175.1	1NT-2♣-2♦	39.1, 173.1, 174.1
1NT-(X)-2♦-2♥	176.2	(1NT)-(2♣)-2♦	87.1
(1NT)-X-2♥	85.1	(1NT)-2♣-2♦	200.2
1NT-(X)-2♥	98.1, 175.1	1NT-(2♣)-2♦	169.1
1NT-(X)-2♥-2♠	176.2	1NT-2♣-2♦-P	174.4
(1NT)-X-2♠	85.1	1NT-2♣-2♦-2♥	44.1, 175.4
1NT-(X)-2♠	98.1	(1NT)-2♣-2♦-2♥	200.2
1NT-2♣	39.1, 174.1	1NT-2♣-2♦-2♥	174.4
(1NT)-2♣	85.1, 199.1	1NT-2♣-2♦-2♥-2NT ...	44.1, 45.5, 175.4
1NT-(2♣)-P	171.1	1NT-2♣-2♦-2♥-2NT-3NT	175.4
1NT-(2♣)-P-P	171.1	1NT-2♣-2♦-2♥-3♥	44.1
1NT-(2♣)-P-X	171.1	1NT-2♣-2♦-2♥-3♠	175.4
1NT-(2♣)-P-X-P	171.2	1NT-2♣-2♦-2♥-3♠-4♠	175.4
1NT-(2♣)-P-X-2♦	171.2	1NT-2♣-2♦-2♥-3NT	44.1, 175.4
1NT-(2♣)-P-X-2♥	171.2	1NT-2♣-2♦-2♥-4♥	44.1, 45.5
1NT-(2♣)-P-X-2♠	171.2	1NT-2♣-2♦-2♥-4♠	175.4
(1NT)-(2♣)-X	87.1	1NT-2♣-2♦-2♠	44.1, 175.4
1NT-(2♣)-X	171.9	(1NT)-2♣-2♦-2♠	200.2
1NT-(2♣)-X-P	171.9	1NT-2♣-2♦-2♠	174.4
1NT-2♣-(X)-P	107.1	1NT-2♣-2♦-2♠-2NT	44.1, 175.4
1NT-2♣-(X)-P-XX	107.3	1NT-2♣-2♦-2♠-2NT-3NT	175.4
1NT-2♣-(X)-P-2♦	107.3	1NT-2♣-2♦-2♠-3♥	175.4
1NT-2♣-(X)-P-2♥	107.3	1NT-2♣-2♦-2♠-3♥-4♥	175.4
1NT-2♣-(X)-P-2♠	107.3	1NT-2♣-2♦-2♠-3♠	44.1
1NT-2♣-(X)-P-2NT	107.3	1NT-2♣-2♦-2♠-3NT	44.1, 175.4
1NT-2♣-(X)-P-3NT	107.3	1NT-2♣-2♦-2♠-4♥	175.4
1NT-2♣-(X)-XX	107.1	1NT-2♣-2♦-2♠-4♠	44.1
1NT-2♣-(X)-XX-2♥	107.2	1NT-2♣-2♦-2NT .	42.4, 173.3, 175.3
1NT-2♣-(X)-XX-2♠	107.2	1NT-2♣-2♦-2NT-3NT	42.4
1NT-2♣-(X)-2♦	107.1	1NT-2♣-2♦-3♣	69.4
1NT-2♣-(X)-2♥	107.1	1NT-(2♣)-2♦-(3♣)-X	171.7
1NT-2♣-(X)-2♠	107.1		

1NT-(2♣)-2♦-(3♣)-3♦	171.7	1NT-2♣-2♥-3♣-3NT-4♣	70.7
1NT-2♣-2♦-3♣-3NT	69.4	1NT-2♣-2♥-3♣-3NT-4♦	70.7
1NT-2♣-2♦-3♣-3NT-4♣	69.4	1NT-2♣-2♥-3♣-4♣	70.7
1NT-2♣-2♦-3♣-4♣	69.4	1NT-2♣-2♥-3♦	70.7
1NT-2♣-2♦-3♦	69.4	1NT-2♣-2♥-3♦-3NT	70.7
1NT-2♣-2♦-3♦-3NT	69.4	1NT-2♣-2♥-3♦-3NT-4♣	70.7
1NT-2♣-2♦-3♦-3NT-4♦	69.4	1NT-2♣-2♥-3♦-3NT-4♦	70.7
1NT-2♣-2♦-3♦-4♦	69.4	1NT-2♣-2♥-3♦-4♦	70.7
1NT-2♣-2♦-3♥ ...	44.2, 69.5, 166.1	1NT-2♣-2♥-3♥	42.4, 174.2
1NT-2♣-2♦-3♥-3NT ...	44.2, 69.5	1NT-2♣-2♥-3♥-4♥	42.4
1NT-2♣-2♦-3♥-4♥	44.2	1NT-2♣-2♥-3♠	191.7
1NT-2♣-2♦-3♥-4♠	166.1	1NT-2♣-2♥-3NT	41.4
1NT-2♣-2♦-3♠ ...	44.2, 69.5, 166.1	1NT-2♣-2♥-4♣	191.7
1NT-2♣-2♦-3♠-3NT ...	44.2, 45.5, 69.5	1NT-2♣-2♥-4♦	191.7
1NT-2♣-2♦-3♠-4♥	166.1	1NT-2♣-2♥-4♥	41.4, 174.2
1NT-2♣-2♦-3♠-4♠	44.2, 45.5	1NT-2♣-2♠	39.1, 173.1, 174.1
1NT-2♣-2♦-3NT	41.4, 175.3	(1NT)-(2♣)-2♠	87.1
1NT-2♣-2♥	39.1, 173.1, 174.1	(1NT)-2♣-2♠	200.2
(1NT)-(2♣)-2♥	87.1	1NT-(2♣)-2♠	169.1
(1NT)-2♣-2♥	200.2	1NT-2♣-2♠-P	174.4
1NT-(2♣)-2♥	169.1	1NT-2♣-2♠-2NT ..	42.4, 173.3, 174.2
1NT-2♣-2♥-P	174.4	1NT-2♣-2♠-2NT-3NT	42.4
1NT-2♣-2♥-2♠	69.6, 173.2	1NT-2♣-2♠-3♣	70.7
1NT-2♣-2♥-2♠-2NT	173.2	1NT-(2♣)-2♠-(3♣)-X	171.7
1NT-2♣-2♥-2♠-3♠	173.2	1NT-(2♣)-2♠-(3♣)-3♠	171.7
1NT-2♣-2♥-2♠-3NT	173.2	1NT-2♣-2♠-3♣-3NT	70.7
1NT-2♣-2♥-2♠-4♠	173.2	1NT-2♣-2♠-3♣-3NT-4♣	70.7
1NT-2♣-2♥-2NT	42.4, 173.3	1NT-2♣-2♠-3♣-3NT-4♦	70.7
1NT-2♣-2♥-2NT-3NT ..	42.2, 42.4	1NT-2♣-2♠-3♣-4♣	70.7
1NT-2♣-2♥-3♣	70.7	1NT-2♣-2♠-3♦	70.7
1NT-(2♣)-2♥-(3♣)-X	171.7	1NT-2♣-2♠-3♦-3NT	70.7
1NT-(2♣)-2♥-(3♣)-3♥	171.7	1NT-2♣-2♠-3♦-3NT-4♣	70.7
1NT-2♣-2♥-3♣-3NT	70.7	1NT-2♣-2♠-3♦-3NT-4♦	70.7

1NT-2♣-2♠-3♥	69.6	1NT-(2♣)-3♣-3♦-3♥-3NT	170.5
1NT-2♣-2♠-3♠	42.4, 174.2	1NT-(2♣)-3♣-3♦-3♥-4♥	170.5
1NT-2♣-2♠-3♠-4♠	42.4	1NT-(2♣)-3♣-3♦-3♥-5♦	170.5
1NT-2♣-2♠-3NT	41.4, 174.2	1NT-(2♣)-3♣-3♦-3♠	170.5
1NT-2♣-2♠-4♣	191.7	1NT-(2♣)-3♣-3♦-3♠-3NT	170.5
1NT-2♣-2♠-4♦	191.7	1NT-(2♣)-3♣-3♦-3♠-4♠	170.5
1NT-2♣-2♠-4♥	191.7	1NT-(2♣)-3♣-3♦-3♠-5♦	170.5
1NT-2♣-2♠-4♠ ...	41.4, 42.2, 174.2	1NT-(2♣)-3♣-3♦-3NT	170.5
1NT-2♣-2NT	39.1	1NT-(2♣)-3♣-3♦-3NT-P	170.5
1NT-(2♣)-2NT	170.6	1NT-(2♣)-3♣-3♦-3NT-5♦	170.5
1NT-2♣-2NT-3♣	70.8	1NT-(2♣)-3♦	169.2
1NT-(2♣)-2NT-(3♣)-X	171.7	1NT-(2♣)-3♦-3♥	170.3
1NT-2♣-2NT-3♣-3NT	70.8	1NT-(2♣)-3♦-3♥-3♠	170.4
1NT-2♣-2NT-3♣-3NT-4♦	70.8	1NT-(2♣)-3♦-3♥-3♠-4♠	170.4
1NT-2♣-2NT-3♣-4♣	70.8	1NT-(2♣)-3♦-3♥-3NT	170.4
1NT-2♣-2NT-3♦	70.8	1NT-(2♣)-3♦-3♥-4♦	170.4
1NT-(2♣)-2NT-3♦	170.6	1NT-(2♣)-3♦-3♥-4♦-5♦	170.4
1NT-2♣-2NT-3♦-3NT	70.8	1NT-(2♣)-3♦-3NT	170.3
1NT-2♣-2NT-3♦-3NT-4♣	70.8	1NT-(2♣)-3♦-4♥	170.3
1NT-2♣-2NT-3♦-4♦	70.8	1NT-(2♣)-3♥	169.2
1NT-2♣-2NT-3♥	42.4	1NT-(2♣)-3♥-3♠	170.3
1NT-(2♣)-2NT-3♥	170.6	1NT-(2♣)-3♥-3♠-3NT	170.4
1NT-2♣-2NT-3♥-4♥	42.4	1NT-(2♣)-3♥-3♠-4♦	170.4
1NT-2♣-2NT-3♠	42.4	1NT-(2♣)-3♥-3♠-4♦-4♥	170.4
1NT-(2♣)-2NT-3♠	170.6	1NT-(2♣)-3♥-3♠-4♥	170.4
1NT-2♣-2NT-3♠-4♠	42.4	1NT-(2♣)-3♥-3NT	170.3
1NT-(2♣)-2NT-3NT	170.6	1NT-(2♣)-3♥-4♠	170.3
1NT-2♣-2NT-4♣	70.9	1NT-(2♣)-3♠	171.8
1NT-2♣-2NT-4♦	70.9	1NT-(2♣)-3NT	169.2
1NT-2♣-2NT-4♥	41.4, 191.7	1NT-2♦	40.1
1NT-2♣-2NT-4♠	41.4	(1NT)-2♦	85.1
1NT-(2♣)-3♣	169.2	1NT-(2♦)-P	171.1
1NT-(2♣)-3♣-3♦	170.5	1NT-(2♦)-P-P	171.1
1NT-(2♣)-3♣-3♦-3♥	170.5	1NT-(2♦)-P-X	171.1

1NT-(2♦)-P-X-P	171.2	1NT-2♦-2♥-2NT	41.3
1NT-(2♦)-P-X-2♥	171.2	1NT-2♦-2♥-2NT-3♥	41.3
1NT-(2♦)-P-X-2♠	171.2	1NT-2♦-2♥-2NT-3♥-4♥	41.3
1NT-(2♦)-P-X-3♣	171.2	1NT-2♦-2♥-2NT-3NT ..	41.3, 42.2
(1NT)-(2♦)-X	87.1	1NT-2♦-2♥-2NT-4♥	41.3, 42.2
1NT-(2♦)-X	171.9	1NT-2♦-2♥-3♣	68.2
1NT-(2♦)-X-P	171.9	1NT-2♦-2♥-3♣-3♥	68.2
1NT-2♦-(X)-XX	107.4	1NT-2♦-2♥-3♣-3NT	68.2
1NT-2♦-(X)-XX-2♥	107.5	1NT-2♦-2♥-3♣-3NT-4♣	68.2
1NT-2♦-(X)-XX-3♥	107.5	1NT-2♦-2♥-3♣-4♣	68.2
1NT-2♦-(X)-XX-4♥	107.5	1NT-2♦-2♥-3♦	68.2
1NT-2♦-(X)-2♥	107.4	1NT-(2♦)-2♥-(3♦)-X	171.7
1NT-2♦-(X)-2♥-3♥	107.5	1NT-2♦-2♥-3♦-3♥	68.2
1NT-2♦-(X)-2♥-4♥	107.5	1NT-(2♦)-2♥-(3♦)-3♥	171.7
1NT-2♦-(X)-P	107.4	1NT-2♦-2♥-3♦-3NT	68.2
1NT-2♦-(X)-P-2♥	107.6	1NT-2♦-2♥-3♦-3NT-4♦	68.2
1NT-2♦-(X)-P-2♠	107.6	1NT-2♦-2♥-3♦-4♦	68.2
1NT-2♦-(X)-P-2NT	107.6	1NT-2♦-2♥-3♥	41.2
1NT-2♦-(X)-P-3♥	107.6	1NT-2♦-2♥-3♥-4♥	41.2
1NT-2♦-(X)-P-3NT	107.6	1NT-2♦-2♥-3♠	68.3, 191.7
1NT-2♦-(X)-P-4♥	107.6	1NT-2♦-2♥-3♠-3NT	68.3
1NT-2♦-(X)-3♦	107.4	1NT-2♦-2♥-3NT	41.3
1NT-2♦-(X)-3♦-3♥	107.5	1NT-2♦-2♥-3NT-4♥	41.3
1NT-2♦-(X)-3♦-4♥	107.5	1NT-2♦-2♥-4♣	191.7
1NT-2♦-(X)-3♥	107.4	1NT-2♦-2♥-4♦	191.7
1NT-2♦-(X)-3♥-4♥	107.5	1NT-2♦-2♥-4♥	41.2
1NT-(2♦)-X-3NT	171.9	(1NT)-(2♦)-2♠	87.1
1NT-2♦-2♥	42.1, 44.3	1NT-(2♦)-2♠	169.1
1NT-(2♦)-2♥	169.1	1NT-(2♦)-2♠-(3♦)-X	171.7
1NT-2♦-2♥-2♠	45.4	1NT-(2♦)-2♠-(3♦)-3♠	171.7
1NT-2♦-2♥-2♠-3♥	45.4	1NT-(2♦)-2NT	169.2
1NT-2♦-2♥-2♠-3♠	45.5	1NT-(2♦)-2NT-3♣	170.5
1NT-2♦-2♥-2♠-4♥	45.4, 45.5	1NT-(2♦)-2NT-3♣-3♥	170.5
1NT-2♦-2♥-2♠-4♠	45.4	1NT-(2♦)-2NT-3♣-3♥-3NT ..	170.5

1NT-(2♦)-2NT-3♣-3♥-4♥	170.5	1NT-(2♦)-3♠	171.8
1NT-(2♦)-2NT-3♣-3♥-5♣	170.5	1NT-(2♦)-3NT	169.2
1NT-(2♦)-2NT-3♣-3♠	170.5	1NT-2♥	40.1
1NT-(2♦)-2NT-3♣-3♠-3NT ..	170.5	(1NT)-2♥	85.1
1NT-(2♦)-2NT-3♣-3♠-4♠	170.5	1NT-(2♥)-P	171.1
1NT-(2♦)-2NT-3♣-3♠-5♣	170.5	1NT-(2♥)-P-P	171.1
1NT-(2♦)-2NT-3♣-3NT	170.5	1NT-(2♥)-P-X	171.1
1NT-(2♦)-2NT-3♣-3NT-P	170.5	1NT-(2♥)-P-X-P	171.2
1NT-(2♦)-2NT-3♣-3NT-5♣ ..	170.5	1NT-(2♥)-P-X-2♠	171.2
1NT-(2♦)-2NT-(3♦)-X	171.7	1NT-(2♥)-P-X-3♣	171.2
(1NT)-(2♦)-3♣	87.1	1NT-(2♥)-P-X-3♦	171.2
1NT-(2♦)-3♣	170.6	(1NT)-(2♥)-X	87.1
1NT-(2♦)-3♣-3♦	170.6	1NT-(2♥)-X	171.9
1NT-(2♦)-3♣-(3♦)-X	171.7	1NT-(2♥)-X-P	171.9
1NT-(2♦)-3♣-3♥	170.6	1NT-2♥-(X)-XX	107.4
1NT-(2♦)-3♣-3♠	170.6	1NT-2♥-(X)-XX-2♠	107.5
1NT-(2♦)-3♣-3NT	170.6	1NT-2♥-(X)-XX-3♠	107.5
1NT-(2♦)-3♦	169.2	1NT-2♥-(X)-XX-4♠	107.5
1NT-(2♦)-3♦-3♥	170.3	1NT-2♥-(X)-P	107.4
1NT-(2♦)-3♦-3♥-3♠	170.4	1NT-2♥-(X)-P-2♠	107.6
1NT-(2♦)-3♦-3♥-3♠-4♠	170.4	1NT-2♥-(X)-P-2NT	107.6
1NT-(2♦)-3♦-3♥-3NT	170.4	1NT-2♥-(X)-P-3♠	107.6
1NT-(2♦)-3♦-3♥-4♣	170.4	1NT-2♥-(X)-P-3NT	107.6
1NT-(2♦)-3♦-3♥-4♣-5♣	170.4	1NT-2♥-(X)-P-4♠	107.6
1NT-(2♦)-3♦-3NT	170.3	1NT-2♥-(X)-2♠	107.4
1NT-(2♦)-3♦-4♥	170.3	1NT-2♥-(X)-2♠-3♠	107.5
1NT-(2♦)-3♥	169.2	1NT-2♥-(X)-2♠-4♠	107.5
1NT-(2♦)-3♥-3♠	170.3	1NT-2♥-(X)-3♥	107.4
1NT-(2♦)-3♥-3♠-3NT	170.4	1NT-2♥-(X)-3♥-3♠	107.5
1NT-(2♦)-3♥-3♠-4♣	170.4	1NT-2♥-(X)-3♥-4♠	107.5
1NT-(2♦)-3♥-3♠-4♣-5♣	170.4	1NT-2♥-(X)-3♠	107.4
1NT-(2♦)-3♥-3♠-4♥	170.4	1NT-2♥-(X)-3♠-4♠	107.5
1NT-(2♦)-3♥-3NT	170.3	1NT-(2♥)-X-3NT	171.9
1NT-(2♦)-3♥-4♠	170.3	1NT-2♥-2♠	42.1, 44.3

1NT-(2♥)-2♠	169.1	1NT-(2♥)-2NT-3♣-3♦-5♣	170.5
1NT-2♥-2♠-2NT	41.3	1NT-(2♥)-2NT-3♣-3♦-5♦	170.5
1NT-2♥-2♠-2NT-3♠	41.3	1NT-(2♥)-2NT-3♣-3♠	170.5
1NT-2♥-2♠-2NT-3♠-4♠	41.3	1NT-(2♥)-2NT-3♣-3♠-3NT ..	170.5
1NT-2♥-2♠-2NT-3NT	41.3	1NT-(2♥)-2NT-3♣-3♠-4♠	170.5
1NT-2♥-2♠-2NT-4♠	41.3	1NT-(2♥)-2NT-3♣-3♠-5♣	170.5
1NT-2♥-2♠-3♣	68.2	1NT-(2♥)-2NT-3♣-3NT	170.5
1NT-2♥-2♠-3♣-3♠	68.2	1NT-(2♥)-2NT-3♣-3NT-P	170.5
1NT-2♥-2♠-3♣-3NT	68.2	1NT-(2♥)-2NT-3♣-3NT-5♣ ..	170.5
1NT-2♥-2♠-3♣-3NT-4♣	68.2	1NT-(2♥)-2NT-(3♥)-X	171.7
1NT-2♥-2♠-3♣-4♣	68.2	(1NT)-(2♥)-3♣	87.1
1NT-2♥-2♠-3♦	68.2	1NT-(2♥)-3♣	169.2
1NT-2♥-2♠-3♦-3♠	68.2	1NT-(2♥)-3♣-3♦	170.5
1NT-2♥-2♠-3♦-3NT	68.2	1NT-(2♥)-3♣-3♦-3♠	170.5
1NT-2♥-2♠-3♦-3NT-4♦	68.2	1NT-(2♥)-3♣-3♦-3♠-3NT	170.5
1NT-2♥-2♠-3♦-4♦	68.2	1NT-(2♥)-3♣-3♦-3♠-4♠	170.5
1NT-2♥-2♠-3♥	68.3	1NT-(2♥)-3♣-3♦-3♠-5♦	170.5
1NT-(2♥)-2♠-(3♥)-X	171.7	1NT-(2♥)-3♣-3♦-3NT	170.5
1NT-(2♥)-2♠-(3♥)-3♠	171.7	1NT-(2♥)-3♣-3♦-3NT-P	170.5
1NT-2♥-2♠-3♥-3♠-4♠	45.5	1NT-(2♥)-3♣-3♦-3NT-5♦	170.5
1NT-2♥-2♠-3♥-3NT	68.3	1NT-(2♥)-3♣-(3♥)-X	171.7
1NT-2♥-2♠-3♥-4♥	45.4, 45.5	(1NT)-(2♥)-3♦	87.1
1NT-2♥-2♠-3♥-4♠	45.4	1NT-(2♥)-3♦	170.6
1NT-2♥-2♠-3♠	41.2	1NT-(2♥)-3♦-3♥	170.6
1NT-2♥-2♠-3♠-4♠	41.2	1NT-(2♥)-3♦-(3♥)-X	171.7
1NT-2♥-2♠-3NT	41.3	1NT-(2♥)-3♦-3♥-3♠	170.6
1NT-2♥-2♠-3NT-4♠	41.3	1NT-(2♥)-3♦-3♥-3NT	170.6
1NT-2♥-2♠-4♣	191.7	1NT-(2♥)-3♦-3♥-4♣	170.6
1NT-2♥-2♠-4♦	191.7	1NT-(2♥)-3♦-3♥-4♦	170.6
1NT-2♥-2♠-4♠	41.2	1NT-(2♥)-3♦-3NT	170.6
1NT-(2♥)-2NT	169.2	1NT-(2♥)-3♦-4♠	170.6
1NT-(2♥)-2NT-3♣	170.5	1NT-(2♥)-3♥	169.2
1NT-(2♥)-2NT-3♣-3♦	170.5	1NT-(2♥)-3♥-3♠	170.3
1NT-(2♥)-2NT-3♣-3♦-3NT ..	170.5	1NT-(2♥)-3♥-3♠-3NT	170.4

1NT-(2♥)-3♥-3♠-4♣	170.4	1NT-(2♠)-2NT-3♣-3NT-P	170.5
1NT-(2♥)-3♥-3♠-4♣-5♣	170.4	1NT-(2♠)-2NT-3♣-3NT-5♣ ..	170.5
1NT-(2♥)-3♥-3♠-4♦	170.4	1NT-2♠-2NT-3♣-4♣	166.3
1NT-(2♥)-3♥-3♠-4♦-5♦	170.4	1NT-2♠-2NT-3♦	166.3
1NT-(2♥)-3♥-3NT	170.3	1NT-2♠-2NT-3♦-3NT	167.4
1NT-(2♥)-3♥-4♠	170.3	1NT-2♠-2NT-3♦-4♦	166.3
1NT-(2♥)-3♠	171.8	1NT-(2♠)-2NT-(3♠)-X	171.7
1NT-(2♥)-3NT	169.2	1NT-2♠-2NT-3NT	173.3
1NT-2♠	40.2, 166.1, 173.3	1NT-2♠-3♣ 40.2, 42.1, 166.1, 173.3	
(1NT)-2♠	85.1	1NT-(2♠)-3♣	169.2
1NT-(2♠)-P	171.1	1NT-2♠-3♣-3♦ ... 40.2, 42.1, 166.3	
1NT-(2♠)-P-P	171.1	1NT-(2♠)-3♣-3♦	170.5
1NT-(2♠)-P-X	171.1	1NT-(2♠)-3♣-3♦-3♥	170.5
1NT-(2♠)-P-X-P	171.2	1NT-(2♠)-3♣-3♦-3♥-3NT	170.5
1NT-(2♠)-P-X-3♣	171.2	1NT-(2♠)-3♣-3♦-3♥-4♥	170.5
1NT-(2♠)-P-X-3♦	171.2	1NT-(2♠)-3♣-3♦-3♥-5♦	170.5
1NT-(2♠)-P-X-3♥	171.2	1NT-(2♠)-3♣-3♦-3NT	170.5
1NT-(2♠)-X	171.9	1NT-(2♠)-3♣-3♦-3NT-P	170.5
1NT-(2♠)-X-P	171.9	1NT-(2♠)-3♣-3♦-3NT-5♦	170.5
1NT-(2♠)-X-3NT	171.9	1NT-2♠-3♣-3♦-4♦	166.3
1NT-2♠-2NT	166.1, 167.4, 173.3	1NT-(2♠)-3♣-(3♠)-X	171.7
1NT-(2♠)-2NT	169.2	1NT-2♠-3♣-3NT	166.2
1NT-2♠-2NT-P	166.2	1NT-2♠-3♦	166.1
1NT-2♠-2NT-3♣	166.3, 173.3	1NT-(2♠)-3♦	169.2
1NT-(2♠)-2NT-3♣	170.5	1NT-2♠-3♦-3♥	166.3
1NT-(2♠)-2NT-3♣-3♦	170.5	1NT-(2♠)-3♦-3♥	170.3
1NT-(2♠)-2NT-3♣-3♦-3NT ..	170.5	1NT-(2♠)-3♦-3♥-3NT	170.4
1NT-(2♠)-2NT-3♣-3♦-5♣	170.5	1NT-2♠-3♦-3♥-3NT-4♦-4♥-4NT	167.4
1NT-(2♠)-2NT-3♣-3♦-5♦	170.5	1NT-(2♠)-3♦-3♥-4♣	170.4
1NT-(2♠)-2NT-3♣-3♥	170.5	1NT-(2♠)-3♦-3♥-4♣-5♣	170.4
1NT-(2♠)-2NT-3♣-3♥-3NT ..	170.5	1NT-(2♠)-3♦-3♥-4♦	170.4
1NT-(2♠)-2NT-3♣-3♥-4♥	170.5	1NT-(2♠)-3♦-3♥-4♦-5♦	170.4
1NT-(2♠)-2NT-3♣-3♥-5♣	170.5	1NT-2♠-3♦-3♠	166.3
1NT-(2♠)-2NT-3♣-3NT	170.5	1NT-(2♠)-3♦-(3♠)-X	171.7

1NT-2♠-3♦-3NT	166.2, 167.4	1NT-4NT-5♦-6♦	182.1
1NT-(2♠)-3♦-3NT	170.3	1NT-4NT-5♥	182.1
1NT-(2♠)-3♦-4♥	170.3	1NT-4NT-5♥-6♥	182.1
1NT-2♠-3♥	166.1	1NT-4NT-5♠	182.1
1NT-(2♠)-3♥	170.6	1NT-4NT-5♠-6♠	182.1
1NT-(2♠)-3♥-3♠	170.6	1NT-4NT-6♣	182.1
1NT-(2♠)-3♥-(3♠)-X	171.7	1NT-4NT-6♣-6NT	182.1
1NT-(2♠)-3♥-3♠-3NT	170.6	1NT-4NT-6♦	182.1
1NT-(2♠)-3♥-3♠-4♣	170.6	1NT-4NT-6♦-6NT	182.1
1NT-(2♠)-3♥-3♠-4♦	170.6	1NT-4NT-6♥	182.1
1NT-2♠-3♥-3NT	166.2	1NT-4NT-6♥-6NT	182.1
1NT-(2♠)-3♥-3NT	170.6	1NT-4NT-6♠	182.1
1NT-(2♠)-3♥-4♥	170.6	1NT-4NT-6♠-6NT	182.1
1NT-2♠-3♠	166.1	2♣	48.1
1NT-(2♠)-3♠	171.8	(2♣)-X	203.1
1NT-2♠-3♠-3NT	166.2	2♣-2♦	49.2
1NT-(2♠)-3NT	169.2	(2♣)-2♦	203.1
1NT-2NT .. 41.1, 42.2, 166.1, 173.3		(2♣)-(2♦)-X	204.2
1NT-2NT-3♣	173.3	2♣-2♦-2♥	49.3, 196.6
1NT-2NT-3♣-3♦	173.3	2♣-2♦-2♥-2♠-3♠-4♠	50.5
1NT-2NT-3♣-3NT	173.3	2♣-2♦-2♥-2NT	196.6
1NT-2NT-3♦	173.3	2♣-2♦-2♥-2NT-3♣	196.6
1NT-2NT-3NT	41.1, 42.2	2♣-2♦-2♥-2NT-3♦	196.6
(1NT)-(2NT)-(3NT)-X	112.2	2♣-2♦-2♥-2NT-3♥	196.6
1NT-3♣	68.1	2♣-2♦-2♥-3♥	71.1
1NT-3♦	68.1	2♣-2♦-2♥-4♥	50.5
1NT-3♥	68.1	2♣-2♦-2♠	49.3, 196.6
1NT-3♠	68.1	2♣-2♦-2♠-2NT	196.6
1NT-3NT	41.1	2♣-2♦-2♠-2NT-3♣	196.6
(1NT)-(3NT)-X	112.2	2♣-2♦-2♠-2NT-3♦	196.6
1NT-4NT	182.1	2♣-2♦-2♠-2NT-3♥	196.6
1NT-4NT-5♣	182.1	2♣-2♦-2♠-2NT-3♠	196.6
1NT-4NT-5♣-6♣	182.1	2♣-2♦-2♠-3♠	71.1
1NT-4NT-5♦	182.1	2♣-2♦-2NT	53.7, 196.7

$(2\clubsuit)-(2\Diamond)-2NT$	204.2	$2\clubsuit-2\Diamond-3\Diamond-3\heartsuit$	195.2
$2\clubsuit-2\Diamond-2NT-3\clubsuit$	<i>see</i> $2NT-3\clubsuit$	$2\clubsuit-2\Diamond-3\Diamond-3\spadesuit$	195.3
$2\clubsuit-2\Diamond-2NT-3\clubsuit-3\heartsuit-3NT$	53.8	$2\clubsuit-2\Diamond-3\Diamond-3\spadesuit-3NT$	195.4
$2\clubsuit-2\Diamond-2NT-3\clubsuit-3\heartsuit-4\heartsuit$	53.8	$2\clubsuit-2\Diamond-3\Diamond-3\spadesuit-4\clubsuit$	195.4
$2\clubsuit-2\Diamond-2NT-3\Diamond$	<i>see</i> $2NT-3\Diamond$	$2\clubsuit-2\Diamond-3\Diamond-3\spadesuit-4\Diamond$	195.4
$2\clubsuit-2\Diamond-2NT-3\Diamond-3\heartsuit-4\heartsuit$	53.8	$2\clubsuit-2\Diamond-3\Diamond-3\spadesuit-4\heartsuit$	195.4
$2\clubsuit-2\Diamond-2NT-3\heartsuit$	<i>see</i> $2NT-3\heartsuit$	$2\clubsuit-2\Diamond-3\Diamond-4\Diamond$	71.1
$2\clubsuit-2\Diamond-2NT-3\spadesuit$	<i>see</i> $2NT-3\spadesuit$	$2\clubsuit-2\Diamond-3\Diamond-4\heartsuit$	195.2
$2\clubsuit-2\Diamond-2NT-3NT$	53.7, 53.8	$2\clubsuit-2\Diamond-3\Diamond-5\Diamond$	195.2
$2\clubsuit-2\Diamond-2NT-4\Diamond$	<i>see</i> $2NT-4\Diamond$	$2\clubsuit-2\Diamond-3\heartsuit$	49.4, 71.1, 195.1
$2\clubsuit-2\Diamond-2NT-4\heartsuit$	<i>see</i> $2NT-4\heartsuit$	$2\clubsuit-2\Diamond-3\heartsuit-3\spadesuit$	195.2
$2\clubsuit-2\Diamond-2NT-4\spadesuit$	<i>see</i> $2NT-4\spadesuit$	$2\clubsuit-2\Diamond-3\heartsuit-3NT$	195.3
$2\clubsuit-2\Diamond-2NT-4NT$	<i>see</i> $1NT-4NT$	$2\clubsuit-2\Diamond-3\heartsuit-3NT-4\clubsuit$	195.4
$2\clubsuit-2\Diamond-3\clubsuit$	195.1	$2\clubsuit-2\Diamond-3\heartsuit-3NT-4\Diamond$	195.4
$2\clubsuit-2\Diamond-3\clubsuit-3\Diamond$	195.1	$2\clubsuit-2\Diamond-3\heartsuit-3NT-4\heartsuit$	195.4
$2\clubsuit-2\Diamond-3\clubsuit-3\Diamond-3\heartsuit$	195.1	$2\clubsuit-2\Diamond-3\heartsuit-3NT-4\spadesuit$	195.4
$2\clubsuit-2\Diamond-3\clubsuit-3\Diamond-3\heartsuit-3\spadesuit$	195.3	$2\clubsuit-2\Diamond-3\heartsuit-4\heartsuit$	50.5, 195.2
$2\clubsuit-2\Diamond-3\clubsuit-3\Diamond-3\heartsuit-3\spadesuit-3NT$	195.4	$2\clubsuit-2\Diamond-3\heartsuit-4\spadesuit$	195.2
$2\clubsuit-2\Diamond-3\clubsuit-3\Diamond-3\heartsuit-3\spadesuit-4\clubsuit$	195.4	$2\clubsuit-2\Diamond-3\spadesuit$	49.4, 71.1, 195.1
$2\clubsuit-2\Diamond-3\clubsuit-3\Diamond-3\heartsuit-3\spadesuit-4\Diamond$	195.4	$2\clubsuit-2\Diamond-3\spadesuit-3NT$	195.3
$2\clubsuit-2\Diamond-3\clubsuit-3\Diamond-3\heartsuit-3\spadesuit-4\heartsuit$	195.4	$2\clubsuit-2\Diamond-3\spadesuit-3NT-4\clubsuit$	195.4
$2\clubsuit-2\Diamond-3\clubsuit-3\Diamond-3\heartsuit-4\heartsuit$	195.2	$2\clubsuit-2\Diamond-3\spadesuit-3NT-4\Diamond$	195.4
$2\clubsuit-2\Diamond-3\clubsuit-3\Diamond-3\heartsuit-5\clubsuit$	195.2	$2\clubsuit-2\Diamond-3\spadesuit-3NT-4\heartsuit$	195.4
$2\clubsuit-2\Diamond-3\clubsuit-3\Diamond-3\spadesuit$	195.1	$2\clubsuit-2\Diamond-3\spadesuit-3NT-4\spadesuit$	195.4
$2\clubsuit-2\Diamond-3\clubsuit-3\Diamond-3\spadesuit-3NT$	195.3	$2\clubsuit-2\Diamond-3\spadesuit-4\Diamond$	195.2
$2\clubsuit-2\Diamond-3\clubsuit-3\Diamond-3\spadesuit-3NT-4\clubsuit$	195.4	$2\clubsuit-2\Diamond-3\spadesuit-4\spadesuit$	195.2
$2\clubsuit-2\Diamond-3\clubsuit-3\Diamond-3\spadesuit-3NT-4\Diamond$	195.4	$2\clubsuit-2\Diamond-3\spadesuit-5\Diamond$	195.2
$2\clubsuit-2\Diamond-3\clubsuit-3\Diamond-3\spadesuit-3NT-4\heartsuit$	195.4	$2\clubsuit-2\Diamond-3NT$	53.7, 195.1
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$2\clubsuit-2\Diamond-3\clubsuit-3\Diamond-3\spadesuit-4\spadesuit$	195.2	$2\clubsuit-2\Diamond-3NT-4\Diamond$	195.2
$2\clubsuit-2\Diamond-3\clubsuit-3\Diamond-3\spadesuit-5\clubsuit$	195.2	$2\clubsuit-2\Diamond-3NT-4\heartsuit$	195.3
$2\clubsuit-2\Diamond-3\clubsuit-4\clubsuit$	71.1	$2\clubsuit-2\Diamond-3NT-4\heartsuit-4\spadesuit$	195.4
$2\clubsuit-2\Diamond-3\clubsuit-5\clubsuit$	195.2	$2\clubsuit-2\Diamond-3NT-4\heartsuit-4NT$	195.4
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2♣-2♦-4♣	196.5	2♦-2♥-2NT-3♦-3♥-4NT	53.8
2♣-2♦-4♣-4♥	196.5	2♦-2♥-2NT-3♥	see 2NT-3♥
2♣-2♦-4♣-4♠	196.5	2♦-2♥-2NT-3♠	see 2NT-3♠
2♣-2♦-4♦	196.5	2♦-2♥-2NT-3NT	53.7
2♣-2♦-4♦-4♥	196.5	2♦-2♥-2NT-4♦	see 2NT-4♦
2♣-2♦-4♦-4♠	196.5	2♦-2♥-2NT-4♥	see 2NT-4♥
2♣-2♥	72.2	2♦-2♥-2NT-4♠	see 2NT-4♠
(2♣)-(2♥)-X	204.2	2♦-2♥-2NT-4NT	see 1NT-4NT
(2♣)-(2♥)-2NT	204.2	2♦-2♥-3NT	53.7
2♣-2♠	72.2	2♦-2♠	51.1
(2♣)-(2♠)-X	204.2	2♦-(2♠)-P	108.7
(2♣)-(2♠)-2NT	204.2	(2♦)-(2♠)-X	204.2
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2♣-3♦	72.2	(2♦)-(2♠)-2NT	204.2
2♦	51.1	2♦-(2♠)-2NT	108.7
(2♦)-X	203.1	2♦-2♠-2NT-3♣	see 2NT-3♣
2♦-(X)-P	108.7	2♦-2♠-2NT-3♦	see 2NT-3♦
2♦-(X)-XX	108.7	2♦-2♠-2NT-3♥	see 2NT-3♥
2♦-(X)-2♥	108.7	2♦-2♠-2NT-3♠	see 2NT-3♠
2♦-(X)-2♠	108.7	2♦-2♠-2NT-3NT	53.7
2♦-2♥	51.1	2♦-2♠-2NT-4♦	see 2NT-4♦
(2♦)-2♥	203.1	2♦-2♠-2NT-4♥	see 2NT-4♥
2♦-(2♥)-P	108.7	2♦-2♠-2NT-4♠	see 2NT-4♠
(2♦)-(2♥)-X	204.2	2♦-2♠-2NT-4NT	see 1NT-4NT
2♦-(2♥)-XX	108.7	2♦-(2♠)-3♣	108.7
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2♦-(2♥)-2NT	108.7	2♦-(2NT)-P	108.7
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2♦-(2NT)-3♦	108.7	2♥-2NT-3♣-3♥	117.6
2♦-3♣	51.1	2♥-2NT-3♣-3♠	117.6
2♦-(3♣)-P	108.7	2♥-2NT-3♣-3NT	117.6
2♦-(3♣)-XX	108.7	2♥-2NT-3♣-4♣	117.6
2♦-(3♣)-3♦	108.7	2♥-2NT-3♣-4♥	117.6
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2♦-(3♦)-3♥	108.7	2♥-2NT-(3♦)-X	117.5
2♦-(3♦)-3♠	108.7	2♥-2NT-3♦-3♥	117.6
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2♥-2♠	117.7	2♥-2NT-3♦-3NT	117.6
2♥-2♠-2NT	117.7	2♥-2NT-3♦-4♣	117.6
2♥-2♠-3♣	117.7	2♥-2NT-3♦-4♦	117.6
2♥-2♠-3♣-3♥	117.8	2♥-2NT-3♦-4NT	117.6
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2♥-2♠-3♣-4♥	117.8	2♥-2NT-3♥-3NT	117.6
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2♥-2♠-3♦	117.7	2♥-2NT-3♥-4♦	117.6
2♥-2♠-3♦-3♥	117.8	2♥-2NT-3♥-4♥	117.6
2♥-2♠-3♦-3NT	117.8	2♥-2NT-3♥-4NT	117.6
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2♥-2♠-3♦-4♥	117.8	2♥-2NT-(3♠)-P	117.5
2♥-2♠-3♦-5♦	117.8	2♥-2NT-(3♠)-X	117.5
2♥-2♠-3♥	117.7	2♥-2NT-3♠-3NT	117.6
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2♥-2NT-(X)-P	117.5	2♥-2NT-3♠-4♥	117.6
2♥-2NT-(X)-XX	117.5	2♥-2NT-3♠-4NT	117.6
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2♥-2NT-(3♣)-P	117.5	2♥-2NT-3NT-4♣	117.6
2♥-2NT-(3♣)-X	117.5	2♥-2NT-3NT-4♦	117.6

2♥-2NT-3NT-4♥	117.6	2♠-2NT-3♣-3♠	117.6
2♥-2NT-3NT-4NT	117.6	2♠-2NT-3♣-3NT	117.6
2♥-2NT-4♣	116.4	2♠-2NT-3♣-4♣	117.6
2♥-2NT-4♣-4♦	117.6	2♠-2NT-3♣-4♠	117.6
2♥-2NT-4♣-4♥	117.6	2♠-2NT-3♣-4NT	117.6
2♥-2NT-4♦	116.4	2♠-2NT-3♦	116.3, 116.4
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2♥-3♣	117.7	2♠-2NT-3♦-3♥	117.6
2♥-3♣-3♦	117.7	2♠-2NT-3♦-3♠	117.6
2♥-3♣-3♦-3♥	117.8	2♠-2NT-3♦-3NT	117.6
2♥-3♣-3♦-3NT	117.8	2♠-2NT-3♦-4♣	117.6
2♥-3♣-3♦-4♦	117.8	2♠-2NT-3♦-4♦	117.6
2♥-3♣-3♦-4♥	117.8	2♠-2NT-3♦-4♠	117.6
2♥-3♣-3♦-5♦	117.8	2♠-2NT-3♦-4NT	117.6
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2♥-3♣-4♣	117.7	2♠-2NT-3♥-3NT	117.6
2♥-3♦	117.7	2♠-2NT-3♥-4♣	117.6
2♥-3♦-3♥	117.7	2♠-2NT-3♥-4♦	117.6
2♥-3♦-3NT	117.7	2♠-2NT-3♥-4♥	117.6
2♥-3♦-4♦	117.7	2♠-2NT-3♥-4♠	117.6
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2♠-2NT-4♦	116.4	2NT-3♣-3♦-3♠-3NT	53.5, 175.4
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2♠-3♣-3♠	117.7	2NT-3♣-3♠-4♦	70.1
2♠-3♣-3NT	117.7	2NT-3♣-3♠-4♥	70.1
2♠-3♣-4♣	117.7	2NT-3♣-3♠-4♠	52.2, 174.2
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2NT-3♦-3♥-3NT-4♥	53.3	3♣-4♣	118.9
2NT-3♦-3♥-4♣	71.2	3♣-5♣	118.9
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2NT-3♥-3♠-4♦	71.2	3♥	118.9
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Variations

Name:

Partner's Name:

Date:

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[Fourth seat overcalls, cue-bid of open is : natural / two-suiter]	206
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 [Defence against weak NT : same as for strong NT / other]	208
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[Defence against multi 2♦]	210
 [Signalling, opening lead vs suit : 3-5 / 4 / other]	217, 218
[Signalling, opening lead vs NT : 3-5 / 4 / other]	217, 218
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[Signalling, first discard : count / Laventhal / Italian / Revolving]	220
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Name:

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Date:

Basic System: Majeure 5ième, 15-17 1NT as given in the Basics.

[2-over-1 : 1♦-2♣ 11+ / GF]	161
[2-over-1 : impossible 2♠ bid 4:3:3:3 11-12 / strong and club fit]	161
[1NT open : denies / not denies a 5 carded major]	39
[Stayman : 3 / 4 / Puppet responses]	172, 39, 174
[Stayman 4 responses after 2NT answer : natural / transfer]	42
[Stayman Puppet responses after : 1NT / 2NT]	174
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[1NT-2♠ : tranfer to either minor / transfer to clubs / Baron]	40, 173, 166
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[Blackwood : (30-41) / Roman Key Card / Kickback / Relay Kings]	58,177,183,184
[Control Bidding : standard / relay]	59,181
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[Fourth seat overcalls, cue-bid of open is : natural / two-suiter]	206
[Fourth seat overcalls, cue-bid of response is : natural / two-suiter]	87,207
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1♥-2♦-3♣-3♠-4♦	136.3
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1♠-(2♣)-2♦-(4♣)-4♥	91.3
(1♠)-2♣-2♥-(2♠)-3♦ too high.....	105.2
(1♠)-2♣-2♥-3♦ reverse.....	75.8
1♠-2♣-2♥-3♦-4♣	136.3
(1♠)-2♣-2♥-4♣	75.8
1♠-(2♣)-2♥-(4♣)-4♦	91.3
(1♠)-2♣-(4♠)-5♣	101.7
(1♠)-2♦-2♥-(2♠)-3♣ too high.....	105.2
1♠-(2♦)-2♥-(3♦)-4♣	91.3
(1♠)-2♦-2♥-4♦	75.8
1♠-(2♦)-2♥-(4♦)-5♣	91.3
1♠-2♦-3♣-3♥-4♦	136.3
1♠-(2♦)-3♣-(4♦)-4♥	91.3
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(1♠)-2♥-4♣	74.3
(1♠)-2♥-4♦	74.3
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1♠-2NT-(3♥)-4♣	99.3
1♠-2NT-(3♥)-4♦	99.3
1NT-2♣-2♥-3♠	173.2
1NT-2♣-2♥-3NT	173.2
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(1NT)-(2♦)-2♥	87.1
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