

Relay Structure

General Notes

Relayer will normally make the next highest bid ("Step 1") to ask responder to continue describing the hand. The exception to this is 3NT, which is **never** a relay. Other non-relay bids by Relayer below game are natural and may be invitational or forcing in context. 2NT is almost never a contract after a second relay.

Responder's Hand Valuation after a 1 Club Opening

After a first- or second-seat 1♣ opening, responder normally gives a positive response with a hand with 17+OP, unless that hand has substantially fewer than the number of controls normally held by a hand of that shape. Relayer will eventually be able to ask for controls with A=2 & K=1 or A=3, K=2 & Q=1, of which there are at most 12 and 24 in a deck of cards with 40 HCP. The ratio of AK and AKQ points to HCP is 0.3 and 0.6 respectively. When responder's shape is known, relayer will know the lengths of responder's two longest suits and can find responder's minimum HCP from the definition of OP. Responder's minimum number of AK or AKQ controls (Responder's "base") can be deduced by multiplying the minimum HCP by the appropriate ratio (0.3 or 0.6) and **always** rounding down to the nearest integer. With a hand on or near the HCP minimum with a large amount of the HCP contributed by Queens and Jacks, responder may have fewer than the putative base number of controls. In such cases responder may exercise his judgment, however it would be exceptionally rare to describe a hand with a positive response that was two AKQ controls below base.

Some examples of lower-range positive responses are in order:

Spades	Hearts	Diamonds	Clubs	
KJ65	J43	QJ76	K7	11HCP + 8 = 19 OP. 9 is minimum HCP, so the bases are 2 and 5.
K53	Q943	Q107	K96	10HCP + 7 = 17 OP. 10 is minimum HCP, so the bases are 3 and 6.
64	A108753	QJ3	J8	8HCP + 9 = 17 OP. 8 is minimum HCP, so the bases are 2 and 4.
954	KJ985		QJ1064	7HCP + 10 = 17 OP. 7 is minimum HCP, so the bases are 2 and 4.

With a hand of 14-16 OP, or too few controls in a stronger hand, responder describes a **semi-positive** hand. With a weaker hand yet, responder describes a full negative hand. Note that again, a hand that meets the semi-positive criteria but has too few controls can be described as a full negative hand. The agreements in auctions after a negative response may be found at: **Negative Response Structure**.

After a third- or fourth-seat 1 Club opener, a positive response is made with 15-17 OP (exceptionally 18 with a balanced hand with no Major suit) and an appropriate number of controls, since responder is known to have been unable to open the bidding, and relayer is stronger for the 1 Club opening in this position. A semi-positive hand usually has 12-14 OP in this position, and fewer is a full negative hand.

Positive Responses to 1 Club

The responding scheme with a positive hand is almost up-the-line; responder makes the lowest bid that describes the hand held:

- 1 unbalanced, 4+Spades.
- 1 unbalanced, 4+Hearts, 0-3Spades.
- 1NT unbalanced, 4+Diamonds, 0-3Spades, 0-3Hearts.
- 2♣ balanced, including a four- or five-card Major.
- 2 balanced, 2-3Hearts, 2-3Spades.
- 2 three-suited with a Major shortage.
- 2 6+Clubs, 0-2Diamonds (Low shortage).
- 2NT 6+Clubs, 0-1Hearts (Middle shortage).
- 3♣ 2236 (Even shortage).
- 3 1336 (High shortage)
- 3 1327
- 3 1237
- 3NT 0337

The only exception to the up-the-line rule is the 2 Hearts response, which takes priority over the 1 Heart and 1 Spades responses. The simplest aide-memoire in subsequent bidding is that **responder usually makes the lowest bids possible to describe hands that have more cards in higher-ranking suits**. Some memorisation of structure is inescapable, but this principle is sufficient to resolve most of the fine detail.

In a level-adjusted (see below) relay auction where the structure has been shifted up exactly one step, the two and three card suits are no longer resolved. Thus 3 Spades shows 7321 or 7231 (depending on the suit and the short suit) and 3NT shows 7330 as normal.

Balanced Hands

With a balanced hand, responder selects whichever of 2 Clubs or 2 Diamonds is appropriate.

After 1♣-2♣-2 :

The subsequent relay structures avoid responder bidding a four-card Major that they hold and are symmetric in the 5-card Major holdings.

- 2 Any 4432 with 4 Spades (continuations below).
- 2 Any 4432 with 4 Hearts and not 4 Spades continuations 3♣=3442, 3 =2443, 3 =3424, 3 =2434 (with zoom).
- 2NT Any 5332 with 5 Spades continuations 3 =5332, 3 =5323, 3 =5233 (with zoom).
- 3♣ 4333 or 3433 continuations 3 =4333, 3 =3433 (with zoom).
- 3 3532
- 3 3523
- 3 2533 (with zoom).

After 1♣-2♣-2 -2 -2 :

- 2NT 4432 or 4423 continuations 3 =4432, 3 =4423 (with zoom).
- 3♣ 4342

- 3 4243
- 3 4324
- 3 4234 (with zoom).

After 1♣-2 -2 :

- 2 Any 5332 with 5 continuations 3♣=3352, 3 =3253, 3 =2353 (with zoom).
- 2NT Any 5332 with 5♣ continuations 3 =3325, 3 =3235, 3 =2335 (with zoom).
- 3♣ 3244
- 3 2344
- 3 3343
- 3 3334 (with zoom).

One-Suited Hands

With a one-suited hand of at least **six** cards, responder shows that suit and then rebids at 2 Spades or higher to describe the residual short suits. The mnemonic of bidding as low as possible with more cards in higher-ranking suits is valid, and those with experience of other symmetric relay structures will recognise the low-middle-even-high motif:

- 2 0-2 in the lowest-ranking other suit.
- 2NT 0-1 in the middle-ranking other suit.
- 3♣ A 6322 hand with the tripleton in the lowest-ranking suit.
- 3 6133 with high-ranking shortage.
- 3 7132 with high-ranking shortage.
- 3 7123 with high-ranking shortage.
- 3NT 7033 with high-ranking shortage.

The structure is symmetric - for example, all hands of 6331 pattern include a 3 bid, possibly after 2 or 2NT to specify the suit of the singleton. Other patterns are similar, however the hands with "even shortage" (6322 and 7222) are treated by first showing the low-ranking doubleton (if held, else 3♣ as above) and then continuing 3♣ to show even shortage. Thereafter:

- 3 6322
- 3 6232
- 3NT 7222

Two-Suited Hands

With a two-suited hand, responder shows his first suit up-the-line as listed in the positive responses. Responder then shows the second suit and resolves their relative length. A bid of 2 always shows at least four cards in the higher-ranking suit and at least five cards in the lower-ranking suit (always Clubs, in fact). However a bid of 2 shows precisely four cards in the lower-ranking suit and at least five in the higher-ranking suit. Hands with two suits of at least five cards always start with two bids at or below 2, and then a bid of 2.

With both majors, responder continues with 1NT over the 1 relay. With a Major and Diamonds, responder continues with 2♣ (transferring to Diamonds!). With any suit and clubs, responder shows the first suit and then bids according to the above scheme - 2 with at least five Clubs, 2

with exactly four Clubs.

After showing a second suit with 1NT, 2♣, 2♦ or 2♥, the structure is:

- 2 Three-suited with both Majors. See below.
- 2 5+ in the higher-ranking suit, 4 in the lower-ranking suit.
- 2 5+5+ in the two suits.
- 2NT 0-1 in the lower-ranking other suit.
- 3♣ A 5422 pattern.
- 3 5431 with higher-ranking shortage.
- 3 6421 with higher-ranking shortage.
- 3 6430 with higher-ranking shortage.
- 3NT 7420 with higher-ranking shortage.
- 4♣ 7411

After showing a hand with 5+5+ in two suits, the structure is:

- 3♣ 0-1 in the lower-ranking other suit.
- 3 A (65)11 pattern (even shortage).
- 3 5521 with higher-ranking shortage.
- 3 5530 with higher-ranking shortage.
- 3NT (65)20 with higher-ranking shortage.

Note that the relative length of the 65 suits in the 6511 or 6520 patterns is not resolved.

Three-Suited Hands

With a three-suited hand with a minor shortage, responder simply shows both Major suits and then uses the "empty" 2♣ bid to describe his holdings. With a Major shortage, responder simply responds 2♦.

After 1♣-1♦ -1♥ -1NT-2♣-2♦ -2♥ or After 1♣-2♦ -2♥ :

- Step 1 Low shortage (0-1).
- Step 2 4441 (high shortage).
- Step 3 5440 (high shortage).
- Step 4 4540 (high shortage).
- Step 5 4450 (high shortage).

After showing a low-ranking shortage, responder shows his exact shape by using the step responses as above, beginning at 4441.

Strength-Showing

Control Asking Relays

After the shape is shown, the next relay asks for controls. Relayer has a choice of three asks: Step 1 asks for AKQ controls, Step 2 asks for AK controls and Step 3 asks for Aces (Gerber!) subject to the usual stricture that 3NT is never a relay ask. Additionally, game bids that are not Step 1 are also never relay asks. As described in the section above on hand valuation, both players can

deduce responder's minimum HCP holding and thus the control base. Step 1 by responder then shows a number of controls that is at most equal to the base. Step 2, 3, 4, etc. show one, two, three, etc. extra control(s) over that required for the base. The onus clearly lies on relayer to ask only when there are no replies that are reasonably likely to be awkward, since his next Step 1 is also a relay. Of course an Ace ask begins at zero always! Note that a singleton Ace or King is counted in the hand's controls, but a singleton Queen is not.

Zooming

When responder holds the shape that is the highest call defined in the response structure it is efficient that that response follow on to the number of controls held without requiring relayer to waste two steps in making a subsequent ask. If that final shape is resolved at or below 3NT then the steps **up** and **down** from 3NT show the following number of AKQ controls:

3NT Base AKQ controls
3 Base + 1 AKQ controls
3 Base + 2 AKQ controls
Etc.
4 \square Base + 4 AKQ controls
4 Base + 5 AKQ controls
Etc.

The 4 \square response always shows base + 4 controls, so the lowest available step at or below 3NT may be nebulous. If the highest shape would have been shown at 3 (e.g. a 2353) then 3NT is base AKQ controls, 3 is base + 1 AKQ controls, 3H is base + 2-3 AKQ controls and 4 \square is base + 4 AKQ controls, etc. Note that zooming never allows anything but AKQ controls to be shown. Should a level-adjusted relay auction occur where (for example) 3 \square is available to show a number of controls, then it shows Base + 4 AKQ controls and 4 \square shows Base + 5 AKQ controls, and any more radically level-adjusted auction works similarly.

In some of these "inversion" cases a response is made that shows a specific range of controls. When relayer bids Step 1, responder zooms to Denial Cue Bidding (see below) when holding the highest number of controls. Relayer should be prepared for this zoom by a maximum responder. This principle holds in other situations where a range of controls is known, including where a maximum can be inferred from a known HCP maximum. Obviously such a maximum is realised when holding the maximum number of Aces with the remaining HCP contributed by as many Kings as possible, etc.

There is one case in non-level-adjusted relay auctions where shape is shown above 3NT. This occurs when a 7411 pattern is shown with 4 \square . In this case, bids at or above 4 show the shape that was shown with 3NT (7420) with at least base+4 AKQ controls in the normal manner described above.

Zooming in Level-adjusted Relays

In a variety of situations the relay structure can be shifted up a number of steps such that shape is shown with bids above 3NT (see Relay Interference below). A balanced responder may never show shape past 3NT if the ask was at most 3 \square . An ask of 3 or higher requests normal responses. If truncation occurs, relayer may relay with 4 \square to complete the shape description, with a zoom with base+4 for the highest-ranking shape. An unbalanced responder does show shape

above 3NT. In these cases, a 3NT bid shows the shape that would be shown at 3NT with at most base+3 AKQ controls. Higher bids show the appropriate shape, however the bid above the highest-ranking shape shows the shape that would have been described by a 3NT bid, but with at least base+4 AKQ controls. This agreement eliminates the problem of relayer having to pass 3NT because 4NT might fail, when all along responder might have enough strength for a grand slam.

Denial Cue Bidding

(Also known as "spiral scan".)

After controls (AKQ, AK or A) have been shown, the next relay starts denial cue bidding. The suits are assigned an order of priority - firstly by order of length, but if two lengths are equal, then the higher-ranking suit is scanned first. On the first ask ("scan"), the responder is asked to look for an Ace or King in the suit of highest priority. If neither of these is held then responder bids Step 1 to show this. Otherwise, responder then scans the suit of second priority, also for either the Ace or the King, bidding Step 2 to deny a top honour. This process continues through all the suits, and eventually may return to the suit of highest priority (i.e. "spiralling"). When this occurs, responder is expected to look for a second top honour in the suit (if one was previously shown) or the Queen (if the Ace and King were previously denied). This process continues. In principle, Jacks could be investigated, but such auctions are usually too high for such an ask to be useful. A suit of a given length can only be scanned that given number of times - a singleton may only be scanned once, a doubleton twice, etc. The highest possible relay ask is always 6 \square , **a change from previous agreements**. If a response is made at 6 \square or higher, then relayer must be prepared to place the final contract. There is now an agreement that no relay response higher than 7 \square may be given. The onus is clearly on the relayer not to make an ask when there is reasonable chance of unfortunate consequences. It is occasionally necessary to finesse a card during the bidding! (Don't tell your teammates, it spoils your image.)

Exceptions in Denial Cue Bidding

When scanning a suit for the last card held (e.g. the first or second respectively for a singleton and doubleton), responder stops (i.e. bids the appropriate step) when holding the relevant honour, and spirals if the honour is **not** held. This is much superior to the normal approach. It suffers only a 1 step loss relative to a DCB style that never scans a singleton, losing 2 steps only where information is transferred, whereas scanning a singleton normally loses 2 steps most of the time. A case can be made for not scanning singletons at all when responder has shown AK controls.

When holding the AKQ of a suit, that suit is **denied** on the first scan. The 3 or 5 control discrepancy that is flagged by this denial is almost always apparent to relayer and recognisable. Experience suggests that by the time this suit is scanned again no ambiguity remains, and both hands know that AKQ has been shown. Thus on a second scan of this suit when holding at least four cards in the suit, the Jack is investigated. Additionally, the previous exception applies to a holding of exactly four cards to the AKQ; on the second round responder stops with AKQJ and spirals with AKQx. If a three-card suit contains AKQ then there is only one scan made of this suit.

When responder is known **by both hands** to have shown all possible Aces, Kings and Queens, then the DCB skips directly to Jacks in the first suit in the scan. This has been known to create amusing encrypted auctions when responder has 6 AKQ controls and a holding of AKQ in a suit is possible and relayer is missing at least 11 AKQ controls. Now after responder denies the suit in

which AKQ might be held, relayer must ask until responder shows a card in one version of the auction that relayer actually holds, since the assumption that the control discrepancy will be recognisable is no longer as valid.

After a 2♣-2♥-2♠ sequence where 2♣ shows 6+♣ with four bad Diamonds possible, opener is showing a Diamond suit no better than Jxxx. Such a suit is never scanned in DCB since the honour absence is already known.

Ending relay auctions

Relayer may end a relay auction at any time by passing a response (where appropriate!) or by bidding Step 2 or higher when that bid is at least at game level. The only exception to this is that 3NT is never a relay - even if the previous response was 3♣. Relayer must bid 4♣ to relay in this case. This structure does not use the "end signal" method (a 4♣ bid to puppet to 4♥ in preparation for a signoff) found in other relay styles. Responder is not required to respect that signoff with a hand that is significantly better than that promised by the auction to this stage. Usually this would occur when holding extra controls, or an extreme shape that can only be approximately shown in the above relay structure (e.g. 8-card suits, 7-5 shapes). In the latter case, responder must use their judgment based on what they know partner knew for their signoff decision.

More commonly, responder resolves or partially resolves their shape and relayer may have to choose a contract without establishing that responder has greater than minimum strength. This would often occur when the chosen contract is 3NT, or where shape is resolved at 3♥ or higher. The system permits an **unlimited** responder to bid on (known as "kicking") when holding (usually) base + 4 AKQ controls. When their shape is known, they use step responses to resolve the AKQ controls held, else they bid naturally.

It is not mandatory to kick with a hand that meets the requirements - any of the following may indicate to responder that kicking is undesirable without substantial extra values: an early signoff before shape resolution, responder's poor shape, poor intermediates and the state of the match/event. Relayer should be careful to sign off in tempo, particularly when slam requires substantial extras with responder, to avoid the transmission of unauthorised information.

In many cases, relayer attempts to sign off after resolving shape only. After making their final shape-showing response, responder will plan their reply to an AKQ control ask. If the relayer attempts to sign off, the responder will know that the relayer has judged that it would not be safe to play in this denomination one level higher if responder had the number of controls that would have been shown by a response one step below the attempted signoff. Usually, this "damage level" will be base + 3 or lower. Rarely, relayer may attempt to sign off when the damage level was base + 4 or higher. In this case, responder must have at least one more AKQ control than the damage level in order to bid on.

Fast Relay Breaks

The light 1♣ and positive response style make it advisable to allow relayer to show **minimum** hands without known fit after the positive response. Responder can normally then place the contract. In competition, the same general principles apply. The structures vary with the response that has been made:

Response	Bid	Meaning
1	1	Game-forcing relay.
	1NT	0-2 either balanced or three-suited or 5431 with short spades (See: Relay Continuations below).
	2♣ / /	6+ suit.
	2	3 balanced or semi-balanced.
	2NT	Any splinter raise with at least four-card support that is seeking a slam . Responder bids 3♣ to inquire and relayer bids the suit naturally (spades for Clubs).
1	3♣, 3, 3	Fit-showing jumps, invitational, non-forcing showing 6+ in the bid suit and three-card support.
	3NT	To play.
	1NT	Game-forcing relay.
	2♣	0-1 either three-suited or 5431 with short hearts (See: Relay Continuations below).
	2 /2 /3♣	6+ suit.
1NT	2	2-3 balanced or semi-balanced.
	2NT	Splinter raise with at least four-card support with shortage in spades or clubs that is seeking a slam . Responder bids 3♣ to inquire and relayer bids 3 with short Spades and 3 with short Clubs.
	3	5+Spades 5+Diamonds game-forcing.
	3	5+Spades 5+Clubs game-forcing.
	3NT	To play.
	2♣	Game-forcing relay.
	2	0-1 either three-suited or 5431 with short Diamonds (See: Relay Continuations below).
	2 /2 /3♣	6+ suit.
	2NT	Both Majors balanced or semi-balanced (misfitting).
	3	Natural.
3 /3 /4♣	Splinter, at least four-card support and 0-1 cards in the suit bid, seeking a slam.	
2♣	3NT	To play.
	2	Game-forcing relay.
	2	Three-suited short Spades (See: Relay Continuations below).
	2	Three-suited short Hearts (natural continuations).
	2NT	Natural, might hold Major suit.
	3♣	Three-suited short Diamonds (See: Relay Continuations below).
	3	Three-suited short Clubs (natural continuations).
	3NT	To play.
2	2	Game-forcing relay.
	2	Three-suited short Hearts (natural continuations).
	2NT	Balanced or semi-balanced.
	3♣	Three-suited short Diamonds (natural continuations).
	3	Three-suited short Clubs (natural continuations).
	3	Three-suited short Spades (natural continuations).
	3NT	To play.

After 1♣-1 -1NT-2♣

Response	Relay	Response	Meaning
2			2 balanced.
	2	2	2 with 4-5 hearts, then 3 \heartsuit =2533, 3 \spadesuit =2443, 3 \clubsuit =2434 (with zoom).
		2NT	2353
		3 \heartsuit	2335
		3	2344 (with zoom).
2 +			0-1 three-suited or 5431 with short spades (See: Relay Continuations immediately below).

Three-Suited or 5431 with Known Shortage

- Step 1 4441 or 5440, continuations 4441, 5440, 4540, 4450 (with zoom). 4441 or 5440, continuations 4441, 5440, 4540, 4450 (with zoom).
- Step 2 5 cards in the highest-ranking suit, or 4 cards in that suit and 5 cards in the next-highest-ranking suit, continuations 5431,5341,4531 (with zoom).
- Step 3 4351
- Step 4 3541
- Step 5 3451 (with zoom).

Three-Suited with Known Shortage

- Step 1 4441
- Step 2 5440
- Step 3 4550
- Step 4 4450

Reverse Relay

Reverse Relay (**RR**) is the name used to describe some early relay-breaks by relayer when holding minimum three-suited hand types. There are two motivations for using Reverse Relay:

1. To identify when there is no stopper opposite the singleton in 3NT so that another contract can be chosen.
2. To identify when there is no wastage opposite the singleton for slam purposes.

The former can be best achieved by agreeing to use a bid above Step 1 to show a singleton in the suit RR showed when holding a fairly minimum hand. RR can resume relays in opposite roles if appropriate. The latter can be achieved by using other bids above Step 1 to show some degree of fit for RR's suit and a side shortage in a fairly minimum hand. RR can resume relays in opposite roles if appropriate, however there is not the same urgency to show shapes below 3NT where there is a probable Major fit.

There are a number of structure-specific concerns when using RR:

1. After 1 \heartsuit -1 \spadesuit when responder holds Spade shortage the odds of a Heart fit are quite good and it makes sense to have RR take over relay captaincy since they will declare a heart contract.
2. After 1 \heartsuit -1 \clubsuit any shortage showing is useful, but RR may be left wondering about a Spade

- stopper when opener has Heart shortage (opener should tend to relay when holding a Spade stopper).
3. After 1♣-1NT there is an excellent chance that the contract choice will be 3NT or 5m with a three-suited opener. If 3NT is right it has been right-sided, and the RR will be best placed to choose the strain.
 4. After 1♣-2♣ then a Major fit is known so long as opener only shows genuine three-suiters. With a fairly weak hand a splinter auction is most useful.
 5. After 1♣-2 Major fits are usually nonexistent and only genuine three-suited hands need to be shown to facilitate 3NT-or-5m decisions.

The lowest available non-relay step shows a shortage in Reverse Relayer's known suit (if any), and higher steps show other shortages in the normal low, medium, (medium,) high order. Two structures are used depending on the level of the first response and the level of the shortage-showing bid, the 10-shape structure and the 4-shape structure:

10-Shape Reverse Relay Structure

- Step 1 4441 or 5440, continuations 4441, 5440, 4540, 4450.
- Step 2 5 cards in the highest-ranking suit, continuations 5431, 5341.
- Step 3 4531
- Step 4 4351
- Step 5 3541
- Step 6 3451

4-Shape Reverse Relay Structure

- Step 1 4440
- Step 2 5440
- Step 3 4540
- Step 4 4450

Reverse Relay Bids

(optional)

10-shape Reverse Relay is used only when no opposing bidding has occurred after the responses 1♣, 1♦ and 1NT where the 1♣ opener's bid would be at most 2♣. 4-shape Reverse Relay is used in all other cases. The 1♣ opener is only allowed to use Reverse Relay with at most base+2 AKQ controls (8-12 AKQ controls depending on the seat and shape of the 1♣ opener) and with at most a Queen in the singleton suit. Thus in a subsequent DCB auction, a singleton is **never** scanned since neither the A or K can be held. Opener may not show controls with his first Reverse Relay bid, but if Reverse Relayer makes a relay then normal agreements apply.

Response	Bid	Meaning
1	1	Relay, not 3-suited unless extras.
	1NT	10-shape RR with Spade shortage (RR's known suit).
	2♣	10-shape RR with Club shortage (L).
	2	10-shape RR with Diamond shortage (M).
	2	zoom into 10-shape RR with Heart shortage (H).
1	1NT	Relay, not 3-suited unless extras.

	2	10-shape RR with Heart shortage (RR's known suit).
	2	10-shape RR with Club shortage (L).
	2	10-shape RR with Diamond shortage (M).
	2	zoom into 10-shape RR with Spade shortage (H).
1NT	2	Relay, not 3-suited unless extras.
	2	10-shape RR with Diamond shortage (RR's known suit).
	2	10-shape RR with Club shortage (L).
	2	4-shape RR with Heart shortage (M).
	2NT	zoom into 4-shape RR with Spade shortage (H).
2	2	Relay, not 3-suited unless extras.
	2	4-shape RR with Club shortage (L).
	2	4-shape RR with Diamond shortage (M).
	2NT	4-shape RR with Heart shortage (M).
	3	zoom into 4-shape RR with Spade shortage (H).
2	2	Relay, not 3-suited unless extras.
	2	4-shape RR with Club shortage (L).
	2NT	4-shape RR with Diamond shortage (M).
	3	4-shape RR with Heart shortage (M).
	3	Spade shortage 4441 (H).
	3	Spade shortage 0544 (H).
	3	Spade shortage 0454 (H).
	3NT	Spade shortage 0445 (H).

The sequence 1-2 -3-3 -4 (0445 opposite balanced with no Major suit) is the only one that bypasses 3NT and it seems unlikely to cost. It isn't strictly necessary that the 1-1NT-2NT zoom be only 4-shape RR since 10-shape will fit, but the above is a concession to memory burden.

Dealing with Interference

Interference after 1 Club at the One-Level - Style One

This interference is insufficient to raise the level of the relays damagingly, so pass is full negative, double is semi-positive and bids are full positive. The full positive bids are level-adjusted up or down using the identical step pattern used without interference. Game-forcing relays then continue as normal. After the semi-positive double, responder may then game-force relay with Step 1 if the direct-seat opponent passes or redoubles (i.e. the next suit or pass, respectively, is for relay). If the opponent in the direct seat after a semi-positive double makes a bid, then relays are unavailable, but are not considered broken since they never began. In auctions where the bidding is at the one-level and relays have not begun and are not available, then natural bidding applies.

Interference after 1 Club at the One-Level - Style Two (advanced)

The style is similar to the above, but we use pass as a full positive, double as a full negative, and bids as semi-positive. This allows us to extract full mileage from psychotic interference, while getting in one descriptive bid early when the deal is only a partscore. The semi-positive bids are level-adjusted up or down using the identical step pattern used without interference. A further relay by responder establishes a game-force and suggests a non-minimum 1 opener.

After the positive pass, in any auction, double by the hand under the presumed length is "action"

1♣	1	P	P	X						Action (including most hands with 4+H). Relay. 4+S 0-3H (note heart step omitted). 4+D 0-3S 0-3H, etc.
				1						
				1NT						
				2♣						TWERB (D or Majors). Takeout/Waiting Majors.
1♣	X				P					Takeout/Waiting.
		P	1	P						Penalty.
						1				Relay.
										4+H 0-3S.
										4+D 0-3S 0-3H, etc.
										Action (including most hands with 4+D). Majors.
										Takeout/Waiting
										Penalty.
										Relay.
										4+H 0-3S.
										4+D 0-3S 0-3H, etc.
										Action (including most hands with 4+D). Majors.
										Takeout/Waiting
										Penalty.
										Relay.
										4+S.
										4+H 0-3S.
										4+D 0-3S 0-3H, etc.
										Relay.
										4+S.
										1NT
										1
										4+S 0-3D.
										4+H 03-S 0-3D.
										Balanced with 4-5 card Major, etc.
1♣	1NT	P								Unsuitable for penalty, activates action doubles.
										Penalty interest, activates action doubles.
										No penalty interest, 4+S, etc.

Interference after 1 Club at the Two-Level

Double by responder and RR are takeout-oriented. Bids by either hand at the two level are natural and limited. Bids at 2NT or higher either directly or after a takeout double are **Rubensohl** (see below). There are many kinds of auctions beginning with 1♣ that will leave the auction at the two level with relays not having begun and neither hand having shown shape. In all such auctions, direct Rubensohl and Rubensohl after partner's takeout double applies to both hands. When the auction is at the two level after relays have begun, see below.

Interference after 1 Club above the Two-Level

Double is takeout up to 4, bids are natural. After 4, double is penalty-oriented and 4NT is takeout (2- or 3-suited).

Interference in Relay Auctions

Relays have begun any time the unlimited hand makes a call that is for relay, or when a positive response is made to a 1♣ opening or when a semi-positive response is made to a 1♣-1 -1 sequence. Once relays have begun, Responder's double and redouble in both direct and pass-out

seats is for penalty. If the interference (by either opponent) is such that RR may bid steps that are at most three steps above normal, then level-adjusted relays are used. Note that RR will have a double (or redouble) or both a double and a pass (or a redouble and a pass) available as a relay step, depending on the position and type of the interference. If the interference raises the steps more than three steps, then both responder and RR may double for penalty. If the relay-breaking interference occurs at the two-level then both hands have Rubensohl available, both directly and after a penalty double by partner. If the relay-breaking interference was at 2NT or higher, then both hands bid naturally in the context of the preceding auction.

Rubensohl

Rubensohl is a convention similar to Lebensohl that utilises **all** the bids from 2NT through 3 in a transfer sense in order to give great flexibility to hand description in contested auctions. When Rubensohl is available, two level bids are natural and limited. Other bids are:

2NT	Transfer to Clubs.
3♠	Transfer to Diamonds.
3	Transfer to Hearts.
3	Transfer to Spades.
3NT	No Major suit, appropriate stopper, game values.
4X	Natural.

The following principles apply:

1. The bid that would transfer into the opponents' suit is not needed naturally, and is used artificially to show a hand with at least game values and at least one four-card major. Such a hand may also have a stopper for notrump, and natural bidding continues to seek the best game contract.
2. Bids above the transfer into the opponents' suit and below 3 are still transfers, but show a hand that has at least five cards in the suit shown and have at least invitational values, since that suit can also be shown in a non-invitational sense at the two-level. Natural bidding continues, with the other hand required to break the transfer with a hand that accepts the invitation.
3. Other transfers are natural but a simple acceptance of the transfer can be passed in appropriate contexts.
4. After a Major suit is shown (but not necessarily agreed), suit bids are cuebids (except when the other Major is still a possible contract) and notrump bids are to play, RKCB 03/14, Grand Slam Force or choice of contract.
5. After a Minor suit is shown (but not necessarily agreed), suit bids are natural except where a natural bid cannot be useful.
6. Unless defined, all bids are natural. Where an undefined bid cannot be natural, it is a cuebid agreeing the last bid suit.

Other interference

SWINE is used when the opponents double a natural 1NT rebid by the 1♠ opener. Its structure is:

Call	Meaning
Pass	Forces XX, intending to play 1NTXX or to bid the lower of two touching suits with a non-invitational hand.

- XX Forces a 2 \heartsuit puppet, showing some weak single-suited hand.
- 2 \heartsuit Shows Clubs and a Major suit, nonforcing.
- 2 Shows Diamonds and Spades, nonforcing.
- 2 At least a five-card suit, and strong enough to encourage a raise in competition, or stronger.
- 2 At least a five-card suit, and strong enough to encourage a raise in competition, or stronger.
- 2NT Some game-forcing two-suiter.
- 3X Game-forcing one-suiter.