## Transcribed by Eugene Hung

Definitions
| -- OR
: -- LHO of opener passes
:: -- RHO of opener passes
[] -- convention name
gf -- game forcing
M -- Major
m -- minor
oM -- other Major
om -- other Minor
X -- any suit not already defined
Y -- any suit not already defined
(xxxx) -- suits are interchangeable
HCP -- High Card Points
top honor -- A, K, or Q
to play -- requests partner to pass
sign-off -- demands partner pass (barring a psyche)
solid suit -- AKQJ sixth or AKQ seventh +
semi-solid suit -- AKJ, AQJ, or KQJ sixth +
cover card -- covers a loser (ruffing values included)
splinter -- shows 4-card support and a stiff, forcing
followup -- if not specified, step 1 after an asking bid
step -- step 1 is always $X$ or $X X$ if available step 2 is pass if available (not available if opp passes) step 3 is the cheapest denomination (includes NT) and so on.

## Asking bids

All asks are forcing.
[suit-control-ask] -- step 1: no first or 2nd round control step 2: singleton or king
step 3: void or ace

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[X-control-ask :
    step 1:X controls
    step 2: X + 1 controls
    step 3:X + 2 controls
    etc.]
[A1-control-ask :
    step 1 : 1 control or 1 ace
    step 2 : 2 controls (not 1 ace)
    step X : X controls]
[trump-ask :
    step 1: 5-6, no top honor (AKQ)
    step 2: 5 to a top honor
    step 3: 6 to a top honor
    step 4: 5 to 2 top honors
    step 5: 6 to 2 top honors
    step 6: 5-6 to all 3 top honors
        followup : new suit : [suit-ask]]
// when trump length is known
[trump-strength-ask :
    step 1: no top heart honors
    step 2 : 1 top heart honor w/o JH
    step 3:1 top heart honor + JH
    step 4:2 top heart honors w/o JH
    step 5:2 top heart honors + JH
    step 6 : 3 top heart honors
        followup : [A1-control-ask] unless
            if controls known >= X, then [X-control-ask]
                if controls already known, then [suit-asks]]
[suit-ask :
    {step 1:3 or 4 small
    step 2: third round control (xx, Qx, Qxx, Qxxx)
    step 3: singleton or void
    step 4: Kxx, Axx, Kxxx, Axxx}
        rebid of suit: length-ask
                                    step 1:3 cards or singleton
                                    step 2:4 cards or void
    step 5: Kx, Ax, K, A
    step 6 : two top honors]
[side-suit ask (over 1N/1C):
    rebid of major suit : (4333), 3/top 4
    new suit : 4
        raise : [trump-strength-ask]
    cheapest NT : (4333), at most 2/top 4]
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## [support-ask :

step 1:: 0-3 controls, less than queen-third support 3N : sign-off
step 2:: 4+ controls, less than queen-third support 3N : sign-off
step 3:: 0-3 controls, queen-third+ 3N: 0-3 control-ask

4C :: 0 controls, 1 K , or 1 A
4D :: 2 kings
4H :: 3 controls
4S :: 3 controls, 4 trump, stiff or void
4 N : stiff ask (can't go beyond 5 suit)
step 4:: 4+ controls, queen-third+ 3N : [4-control-ask]
step 5:: 4+ controls, four-card support, no top honor 3N : [4-control-ask]]
[4x1-X-control-ask
Ignore stiff K.
step 1: X controls
step 2 : $X+1$ controls
step 3 : $\mathrm{X}+2$ controls
etc.
Followup of the stiff is the [ $4 \times 1$-queen-ask], unless responder showed 5 controls, in which case cheapest NT is the [4x1-queenask]]
[4×1-queen-ask: grand slam try, responder has a $4 \times 1$ hand, ignore stiff queen.

Queens:
0 : cheapest NT
1-2 : suit of cheapest queen
(followup of stiff or cheapest NT ask for more queens.)
3 : bid your stiff]
[minor(20)-control-ask
step 1: 0-2 controls
step 2 : 3 controls, etc.]
[minor-suit-followups :
followup after a minor-suit-distribution-ask:
bid of responder's primary suit below game is a [trump-strength-ask] bid of responder's second suit below game is a [trump-strength-ask] cheapest bid of one of the other suits is a [minor(20)-control-ask]
or [trump-strength-ask] in responder's primary suit when controls known
expensive bid of one of the other suits is also a [trump-strength-ask] in responder's second suit (when cheapest bid is a game bid)
3 N and game bids in responder's suit(s) are always to play.]
[Blackwood interference :
5-level: DOPI
6-level: DEPO
Note that Blackwood never happens after cue-bidding : 4 N is a general slam
try.]

Opening bid algorithm and a translation table
if HCP >= good 16
opening bid:
open 1 N if $16-17$ balanced
open 2D if (4441) 16-24 or 26-27 balanced
open 2 N if $24-25$ balanced
else 1 C
else (11-16)
if 45 xx or 4414 or 4405 open 2 H
else if $x 5 x x$ open 1 H
else if $5 x x x$ open 15
else if $x x x 6$ open 2 C
else if (12-16) open 1D
4 N -> Acol 4N
$4 \mathrm{~S}->4 \mathrm{D} \mid 4 \mathrm{~S}$
$4 \mathrm{H}->4 \mathrm{C} \mid 4 \mathrm{H}$
$4 \mathrm{D}->3 \mathrm{~N}$
$4 \mathrm{C}->3 \mathrm{~N}$
3 N -> 3C
3 S -> 3 S (no AKQ)
3H -> 3H (no AKQ)
3D -> 3D (no AKQ)
3C -> nothing
2 N -> 1C
$2 \mathrm{~S}->2 \mathrm{~S}$
$2 \mathrm{H}->2 \mathrm{D}$
2D -> nothing
$2 \mathrm{C}->1 \mathrm{C}|2 \mathrm{D}| 2 \mathrm{~N}$
$1 \mathrm{~N}->1 \mathrm{~N}$
1S -> 1C| 1 S
$1 \mathrm{H}->1 \mathrm{C}|1 \mathrm{H}| 2 \mathrm{H}$

```
1D -> 1C | 1D | 2D
1C -> 1C| 1D | 2C | 2H
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1 CLUB

1C : balanced, 18-23 HCP OR 24+ with 6+ AKs
OR 4441 25+ HCP
OR unbalanced 16+ HCP

1D :: 0-8 HCP
1M :: 5+, 9+ HCP, gf
$1 \mathrm{~N}::$ balanced, 9-14 HCP, gf
2C :: 5+, clubs longest, 9+ HCP, gf
2D :: 5+, diamonds longest(could have equal \# of clubs), 9+ HCP, gf
2H :: 1444, 1+ controls, 9+ HCP, gf
2S :: 4441, 1+ controls, 9+ HCP, gf
$2 \mathrm{~N}::(4333)$ or (4432), 15+ HCP, gf
3C :: 4414, 1+ controls, 9+ HCP, gf
3D :: 4144, $1+$ controls, $9+$ HCP, gf
3H :: AKQJ sixth anywhere, 10+ HCP, gf
$3 S$ :: AKQ seventh anywhere, no outside A or K, gf
3N :: AKQ seventh anywhere, at least one outside control, gf
4C :: AKQ eighth anywhere, gf

1D RESPONSE TO 1C
1C: 1D :: 0-8 HCP(or 9 HCP with 0 controls)
:: 1H : (1) 5+ hearts OR
(2) balanced, 20-23 HCP, forcing

15 :: artifical and forcing (bid 95\% of the time)
1 N : balanced, 20-21 HCP
(see 1 N open for followup)
" 2 H : strong two hearts, no 5 card suit ( $21+\mathrm{HCP}$ ), gf
2S :: 5+, at most 2 hearts, 5-8 points
2N: 5332
3H: 6+ 3X: 4
2N :: balanced, 2 hearts, 7-8 HCP
3C :: double negative, 0-5 HCP (still gf)
3D :: 5, at most 2 hearts, 3+ D HCP, 5-8 HCP

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3H :: 3+, 5-8 HCP
new suits : could be new suit or an ace
```

3 S :: splinter, 5-8 HCP
3N :: undefined
4m :: splinter, 5-8 HCP
4H :: 4+, a doubleton, no controls or singletons"
2 N : balanced, gf, 6+ AKs.
2X : 4+, 5+ hearts
$3 \mathrm{~m}: 5(?)+, 5+$ hearts, forcing
"3H : 6 hearts, no 4 card side suit (16-23)"
$3 S$ : reverse(4+ spades), forcing
$1 \mathrm{~N}:$ : balanced, 7-8 HCP
2X :: 6-7, no side 4 hcp, 0-3 HCP, 0 controls
3X :: KQJ sixth/seventh,
1S : usually 5, 16-19 HCP
P :: at most 2 spades, 0-4 HCP
$1 \mathrm{~N}::$ at most 2 spades, 5-8 HCP
2X :: at most 2 spades, 5+, 3-8 HCP
2S :: 3+, 4-7 points
2N :: 3(433), good 7-8 HCP
3C :: 3 spades, stiff somewhere, 7-8 HCP
3D :: 6+ (mini-splinter with 3m?)
3H :: 3 spades, 5+, 7-8 HCP
3S :: 4, 7-9 points
3 N :: balanced, 4-5 spades, 8-9 points, forcing
4S : to play
4X : slam try
4S :: 4+, sign-off, 0-6 points
4X :: splinter, 9-11 points
1 N : balanced, may have $5 \mathrm{cM}, 18-19 \mathrm{HCP}$
[see 1N open for followup]
2C : unbalanced, clubs longest, 16-21 HCP
P :: 0-5 HCP, no suit
2D :: artificial and forcing, 6-8 HCP
2M :: 5-6, 5-8 HCP
2N :: balanced, no 4cM, 6-bad 8 HCP
3C :: 3+, no 5cM, 5-8 HCP (points?)
3X :: KJT sixth+, 4-8 HCP, forcing to 4C
3N :: balanced, 2 stoppers outside, good 8 HCP
4C :: 4+, 8-10 points (no stiff outside?)
4X :: splinter, 8-10 points
2D : unbalanced, diamonds longest, 16-21 HCP
P :: 0-5 HCP, no suit
2M :: 5-6, 4-8 HCP
2N :: balanced, no 5cM, 6-7 HCP, asks for 4cM
3C :: 5-6, 5-8 HCP
3D :: 3+, no 5cM, 5-8 points
3M :: KJT sixth+, 4-8 HCP, forcing to 4D

```
    3N :: balanced, 2 stoppers outside, 8 HCP
    4D :: 4+, 8-10 points (no stiff outside?)
    4X :: splinter, 8-10 points
"2H : xx(54)+, 19+ HCP (19-21 balanced)
    2S :: waiting, 6-8 HCP
        {2N : 22(54), 19-20 HCP
        3C : (31)45, 19-20 HCP
        3D : xx5(4-5), 19-20 HCP
        3H : 3, 19+ HCP
        3S : 3, 19+ HCP
        3N : 22(54), 20-21 HCP}
        4m :: invitational to game in m
    2N :: 6-8 HCP with most strength in majors
    3m :: to play
    3M :: 5-6, forcing
    4m :: invitational to game, not many high cards
    4H :: slam try in clubs
    4S :: slam try in diamonds"
2S : strong two spades, almost gf (see 3C rebid)
    2N :: balanced, 2 spades, 7-8 HCP
    3C :: double negative, 0-5 HCP (can pass 3S rebid with 0-3
HCP)
    3D :: 5, at most 2 spades, 3+ HCP in diamonds, 5-8 HCP
    3S :: 3+, 5-8 HCP
        new suits : could be new suit or an ace
    3H :: 5+, at most 2 spades, 5-8 HCP
    3N :: undefined
    4S :: 4+, doubleton on side, no controls or singletons
    4X :: splinter, 5-8 HCP
2N : balanced, 22-23 HCP, no 5cM
    3C :: [stayman], 3-8 HCP
        3D : no 4cM
            3M : 4, 5 card other major
            3N : sign-off
            4m : 5+, 4cM, forcing
        3H : 4 hearts
            3S : artificial slam try in hearts
            3N : 4 spades, to play
            4m : 5+, 4cM, forcing
        3S : 4 spades (does not deny 4 hearts)
            3N : 4 hearts, to play
            4m : 5+, 4cM, forcing
            4H: artificial slam try in spades
    3D :: [ace-showing jacoby transfer] 5+ hearts, 0-8 HCP
        3H : less than 4 hearts
        3S : 4 hearts, ace of spades, many controls
        3N : undefined (3433, 23 HCP?)
        4m : 4 hearts, ace, many controls
```

3H :: [ace-showing jacoby transfer] 5+ spades, 0-8 HCP
35 : less than 4 spades
3 N : undefined (3433, 23 HCP )
4X : 4 spades, ace, many controls
3S :: [minor suit stayman]
3N : to play
4m :: strong suit
4M :: 0-1
4m:3+, slam try
3N :: sign-off
4C :: minor-suit slam try, 6-7 card minor, 6-8 HCP
4D : no interest
4 H : slam try if responder has clubs
4S: slam try if responder has diamonds
4N : slam try in either minor
4D :: [modified roman redwood] (RKC?) (NOT texas)
4H:0/3 aces
4S: 1/4 aces
4N : 2 aces
4M :: 6+, slam interest, not forcing (NOT texas)
4 N :: balanced slam try, 10 HCP
3C : strong two clubs, forcing
3D :: double negative, at most 2 clubs, 0-4 HCPa
OR 3334--aiming for 3N.
$3 \mathrm{H}:: 5+$, could have 3 clubs, $5-8 \mathrm{HCP}$
$3 \mathrm{~S}:: 5+$, could have 3 clubs, $5-8 \mathrm{HCP}$
3N :: balanced, 5-8 HCP
4M:4
4C :: 3+, 5-8 points
4X : : splinter, 4-8 HCP
opener now bids 1st-round controls
4N :: undefined
5C :: 4-5, a doubleton, no controls or singletons
3D : strong two diamonds, forcing
$3 \mathrm{H}:$ : double negative, at most 2 diamonds, 0-4 HCP
OR 3343--aiming for 3 N .
3 S :: 5+, could have 3 diamonds, 5-8 HCP
3N :: balanced, 6-8 HCP
4M : 4
4C :: 5-6, 5-8 HCP
4D :: 3+, 5-8 points
4H :: 5-6, 5-8 HCP
4 S :: splinter, 5-8 HCP
$4 \mathrm{~N}::$ splinter in hearts, 5-8 HCP
5C :: splinter, 5-8 HCP
5D :: 4-5, a doubleton, no controls or singletons
3M : 9 tricks in hearts
P :: no cover card

```
        4M :: 1 cover card
        new suit :: cue-bid with slam interest
        jump shift :: splinter, 3+ hearts, 2+ controls(6-8 HCP)
    3N}\mathrm{ : semi-balanced, solid 6-7 minor, 18-21 HCP, two stoppers
[acol]
    4m : undefined (6-5 in minors? 4M is an ace;
        4N two top minor honors)
    4M : 7+, 16-19 HCP
    P :: less than 2 aces
    any bid :: 2 aces exactly
    4N : balanced, exactly 31 HCP
        5N :: Q or QJ
    6N :: two queens or a control, less than 6 HCP
    7N :: 6+ HCP
1 MAJOR RESPONSE TO 1 CLUB
1C : 1M :: 5+, 9+ HCP, gf
    1N : control-asking bid
            2C :: 0-2 controls
                2D : re-ask
                        2H :: 0 or 1 king
                2S :: 1 ace
                2N :: (5332), 2 kings
                3C :: 4+, 2 kings
                3D :: 4+, 2 kings
                3M :: 6+, 2 kings
                3oM :: 4+, 2 kings
            2D :: }3\mathrm{ controls
            2H :: 4 controls
            2S :: 5 controls
            2N :: 6+ controls
                3C : [6-control ask]
            3C :: 5+, 2/top 3 in M and C
                3D : [2-control ask]
            3D :: 5+, 2/top 3 in M and D
            3oM : [2-control ask]
            3H :: if M = H: 6-7, 2 of top 3 and jack
                    3S : [2-control ask]
            if M = S: strong 55xx hand
                                    3S : [trump-ask]
                                    4C : [2-control ask]
    3S :: if M = H: 56xx hand
```

if $M=S: 6-7,2$ of top 3 and jack 4C : [2-control ask]
after controls are found:
"raising" the suit is a [trump-ask]:
cheapest NT is distribution-ask
responses: new suit : 4+ rebid of major : 6+ cheapest NT : 5332 next NT : 5332 with extra quacks
after dist. ask and a NT response, new suit is queen-ask responses: other suit : no queen in ask suit, queen in suit bid jump shift : queen in ask suit, queen in suit bid raise : queen in ask suit, no other queens NT : no queens
(note all 4 N are natural after 1 N rebid since controls are known)
new suit : 4+ (most likely 5), [support-ask]
jump shift :: strong 55
jump rebid :: semi-solid suit
jump shift : unbalanced, solid suit (sets trump)
all responses cue-bids, not shape-showing
double-jump shift : splinter, no 5-card headed by $2 / 3$ top honors 16-18 HCP

3M : splinter, no 5-card headed by 2/3 top honors, 19-21 HCP step 1 :: asks for singleton (forced)

3 N : spade singleton
4X: singleton
2M : [trump-ask] (reprinted for convenience)
step 1 : 5 or 6 with 0 top honors
3M : re-ask
step 1 :: ten-fifth or worse
step 2 :: jack-fifth
step 3 :: ten-sixth or worse
step 4 :: jack-sixth
\{step 2:5 with 1 top honor
step $3: 6$ with 1 top honor\}
3M : re-ask
step 1 :: jack
step 1 : top honor-ask

```
step 1 :: queen
step 2:: king
step 3 :: ace
    step 2 :: queen, no jack
    step 3 :: king, no jack
    step 4 :: ace, no jack
step 4:5 with 2 top honors
    3M : re-ask
        step 1 :: jack
        step 1 : top honor-ask
                step 1 :: KQ
                step 2:: AQ
                step 3 :: AK
    step 2 :: KQ, no jack
    step }3\mathrm{ :: AQ, no jack
    step 4 :: AK, no jack
    step 5: 6 with 2 top honors
    3N : re-ask (NOT 3M, no space!)
        step 1 :: jack
            step 1 : top honor-ask
                step 1 :: KQ
                step 2 :: AQ
                step }3\mathrm{ :: AK
            step 2 :: KQ, no jack
            step }3\mathrm{ :: AQ, no jack
            step 4 :: AK, no jack
```

1 NT RESPONSE TO 1 C
1C : 1N :: balanced, no 5cM, no 5cm with 2 HCP, 9-14 HCP, gf
2C : balanced(except 4333 18-20 or minimum with 5cM); general
ask
2D :: 4 hearts, 9-bad 12 HCP
$2 \mathrm{H}:: 4$ spades, at most 3 hearts, 9 -bad 12 HCP
2S :: no 4 card major, 9-bad 12 HCP (forces 2N?)
2N :: (4333), good 12-14 HCP
3C : : (432)4, good 12-14 HCP
3D :: 3442 or 2443, good 12-14 HCP
3H :: 44(32), good 12-14 HCP
3 : : 4342 or 4243 , good 12-14 HCP
3N :: (5332), good 12-14 HCP
$2 X: 5+$, if $X=M$ then could be balanced $16-18 \mathrm{HCP}$ else
unbalanced,
[support-ask]
other followups besides 3 N are natural

3X : solid 6-7(X is trump), stiff/void on side 3 N :: no aces and honors in all unbid suits new suit :: control-showing bid new suit : control-showing bid, etc.
3N : (4333), 18-20 HCP
1C : 1N :: 2C : 2D :: 4 hearts, 9-bad 12 HCP
2 H : [trump-strength-ask]
(response)
2N : [side-suit-ask]
2S:5(332), 19+ HCP
2N :: 2 spades, $9-10$ HCP
3S::3+
3N :: 2 spades, 11-12 HCP
3X :: two of top three honors in this suit
4S :: good trumps
4X :: undefined (all three top honors?)
2N : [side-suit-ask]
$1 \mathrm{C}: 1 \mathrm{~N}:: 2 \mathrm{C}: 2 \mathrm{H}:: 4$ spades, at most 3 hearts, 9 -bad 12 HCP
2S : [trump-strength-ask]
2 N : [side-suit-ask]
3H: (3)5(32), 19+ HCP
3 S :: two top honors
$3 \mathrm{~N}:: 2$ hearts
4H :: 3 hearts
4 m :: honor-third of hearts, $1+$ QT in m
1C : $1 \mathrm{~N}:: 2 \mathrm{C}: 2 \mathrm{~S}::$ no 4 card major, 9 -bad 12 HCP , (forces 2 N ?)
2 N : distribution-ask (after this, OPENER NTs: sign-off)
3C :: xx44, 9-11 HCP
3D : [trump-strength-ask]
3H: major-suit-ask
35 :: 3 spades
$3 \mathrm{~N}:: 3$ hearts
4m : [trump-strength-ask]
3S: [A1-control-ask]
4C : [trump-strength-ask]
3D :: 33(43)
3H:minor-suit-ask
3 S :: 4 clubs
4C : [trump-strength-ask]
4D : [A1-control-ask]
3 N :: 4 diamonds
4C : [A1-control-ask]
4D : [trump-strength-ask]
3H :: 2344, two small spades, 11-12 HCP
3S : [A1-control-ask]

```
3N : sign-off
    4m : [trump-strength-ask]
    4H: sign-off
    3S :: 3244, two small hearts, 11-12 HCP
    3N : sign-off
    4m : [trump-strength-ask]
    4H : [A1-control-ask]
    4S:sign-off
    3N :: (5332)
    4C : 5-card-minor-ask
        4D :: 5 clubs
            4H : [A1-control-ask]
        4H :: 5 diamonds
        4S : [A1-control-ask]
1C : 1N :: 2C : 2N :: (4333), good 12-14 HCP (forces 3C?)
    3C : distribution-ask
    3D :: 4 diamonds
    3H :: 4 hearts
    3S :: 4 spades
    3N :: 4 clubs
    followup : [A1-control-ask]
    step 2 followup : [trump-strength-ask
                in responder's suit]
1C : 1N :: 2C : 3C :: (432)4, good 12-14 HCP
    3D : second-suit-ask
    3H :: 4 hearts
        3S : [A1-control-ask]
        4C : [trump-strength-ask] (in clubs)
        4D : [trump-strength-ask] (in hearts)
            4H : sign-off
        3S :: 4 spades
            4C : [trump-strength-ask] (in clubs)
            4D : [A1-control-ask]
            4H : [trump-strength-ask] (in spades)
            4S : sign-off
            3N :: 4 diamonds
            4C : [trump-strength-ask] (in clubs)
            4D : [trump-strength-ask] (in diamonds)
            4H : [A1-control-ask]
    4C : [trump-strength-ask]
1C : 1N :: 2C : 3D :: 3442 or 2443, good 12-14 HCP
    3H : [trump-strength-ask]
    3S : [A1-control-ask]
    4D : [trump-strength-ask]
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```
1C : 1N :: 2C : 3H :: 44(32), good 12-14 HCP
    (if opener wants to ask in both, start with 3S)
    3S : [trump-strength-ask]
        followup : [A1-control-ask]
            cheapest minor : [trump-strength-ask] in H
    4C : [A1-control-ask]
        followup of 4M is sign-off (can't ask)
    4D : [trump-strength-ask] (in hearts)
1C : 1N :: 2C : 3S :: 4342 or 4243, good 12-14 HCP
    4C : [A1-control-ask]
        followup : 4S : sign-off
        4N : sign-off
        5C : [trump-strength-ask] (in diamonds)
        5D : sign-off
        5H : [trump-strength-ask] (in spades)
    4D : [trump-strength-ask]
        non-pointed followup : [A1-control-ask]
                non-pointed followup :
                    [trump-strength-ask in spades]
    4H : [trump-strength-ask] (in spades)
    non-pointed followup : [A1-control-ask]
1C : 1N :: 2C : 3N :: (5332), good 12-14 HCP
    4C : minor-suit-ask
        4D :: 5 diamonds
            4H :: [A1-control-ask]
    4H :: 5 clubs
            4S :: [A1-control-ask]
        2 MINOR RESPONSE TO 1 C
    1C : 2C :: 5+, clubs are longest suit, 9+ HCP, gf
        2D : asks clarification
            2H :: 4+ hearts, 5+ clubs
            2S :: 4+ spades, denies 4 hearts, 5+ clubs
            2N :: 4+ diamonds, 5+ clubs
            3C :: 6-7, no other 4 card suit
            3D :: 4 diamonds and 6-7 clubs
            3H :: (332)5, 0-2 controls
            3S :: (332)5, 3 controls and 9-12 HCP
            3N :: (332)5, 4-6 controls and 9-12 HCP
            4C :: (332)5, 3 controls and 13+ HCP
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4D :: (332)5, 4 controls and 13+ HCP
4H :: (332)5, 5 controls and 13+ HCP
$4 \mathrm{~S}::(332) 5,6$ controls and 13+ HCP
4N :: (332)5, 7 controls and 15+ HCP
2H:5+,
[support-ask] plus
3 S :: 5xx6, with strong blacks (2 top honors in each)
4C :: semi-solid suit, 4+ controls
4D :: xx56, with strong minors (2 top honors in each) followup with clubs is a [trump-ask] in clubs any other followup besides 3 N is natural
2S:5+
[support-ask] plus
4C :: semi-solid suit, 4+ controls
4D :: xx56, with strong minors (2 top honors in each)
$4 \mathrm{H}:: \times 5 \times 6$, with strong rounds (2 top honors in each)
followup with clubs is a [trump-ask] in clubs any other followup besides 3 N is natural
2N : 5+ diamonds
[support-ask] in diamonds plus
4C :: semi-solid suit, 4+ controls
4H :: x5x6, with strong rounds (2 top honors in each)
$4 \mathrm{~S}:: 5 \times x 6$, with strong blacks (2 top honors in each) followup with clubs is a [trump-ask] in clubs any other followup besides 3 N is natural
3C : [trump-ask]
1C : 2C :: 2D : 2H :: 4+ hearts, 5+ clubs
2S : distribution-ask
\{
2N :: 4405
3C :: $\times 4 \times 6$ or $\times 4 \times 7$
3D :: 1435 (three diamonds)
3H :: 2425, 9-bad 12 HCP
3S :: 3415 (three spades)
3N : : 2425, good 12+ HCP
4C :: x5x6
4D :: 0445\}
followups : [minor-suit-followups]
2 N : undefined
3C : [trump-ask]
3D : [minor(20)-control-ask]
3H: [trump-strength-ask] in hearts (assume 4)
1C : 2C :: 2D : 2S :: 4+ spades, denies 4 hearts, 5+ clubs 2N : distribution-ask
\{3C :: 4xx6 or 4xx7
3D :: 4135

```
    3H :: 4315
    3S :: 4225, 9-bad 12 HCP
    3N :: 4225, good 12+ HCP
    4C :: 5xx6
    4D :: 4045}
        followups : [minor-suit-followups]
    3C : [trump-ask]
    3D : [minor(20)-control-ask]
    3H : [trump-strength-ask] in spades (assume 4)
1C : 2C :: 2D : 2N :: 4+ diamonds, 5+ clubs
    3C : distribution-ask
        {3D :: 2245, 9-12 HCP
        3H :: 1345
        3S :: 3145
        3N :: 2245, 13+ HCP
        4C :: xx56}
            followups: [minor-suit-followups]
    3D : [trump-strength-ask] (assume 4)
    3H : [minor(20)-control-ask]
    3N : to play
    4C : [trump-ask]
    1C : 2C :: 2D : 3C :: 6-7 clubs, no other four card suit
    3D : [minor(20)-control-ask]
        followup : 4C : [trump-strength-ask]
        else cheapest bid : [trump-strength-ask]
    3H:4-5
        3S: top honor in spades
        3N}\mathrm{ : stoppers in pointed suits
        4H:queen-third+
        4C : default
    3S:4-5
        3N : stoppers in reds
        4S : queen-third+
        4C : default
    3N : sign-off
    4C : [trump-strength-ask]
1C : 2C :: 2D : 3D :: 6-7 clubs and 4 diamonds
    3H : [minor(20)-control-ask]
    followup : 4m : [trump-strength-ask]
        else
        step 1: [trump-strength-ask] in clubs
        step 2: [trump-strength-ask] in diamonds
    3S : spade stopper, no heart stopper
    3N : sign-off
    4C : [trump-strength-ask]
```

```
    4D : [trump-strength-ask]
1C : 2C :: 2D : 3H :: (332)5, 0-2 controls
    3S : control-ask
        3N :: 0-1 control
            4C : [trump-strength-ask]
            4C :: 2 controls
                4D : [trump-strength-ask] in clubs
    3N : sign-off
    4C :[trump-strength-ask]
1C : 2C :: 2D : 3S :: (332)5, 3 controls, 9-12 HCP
    3N : sign-off
    4C :[trump-strength-ask]
1C : 2C :: 2D : 3N :: (332)5, 4-6 controls, 9-12 HCP
    P : sign-off
    4C : [trump-strength-ask]
    4D : [4-control-ask]
{1C : 2C :: 2D : 4C :: (332)5, 3 controls, 13+ HCP
1C : 2C :: 2D : 4D :: (332)5,4 controls, 13+ HCP
1C : 2C :: 2D : 4H :: (332)5, 5 controls, 13+ HCP
1C : 2C :: 2D : 4S :: (332)5, 6 controls, 13+ HCP}
    step 1 : [trump-strength-ask] in clubs
1C : 2C :: 2D : 4N :: (332)5, 7+ controls, 13+ HCP
    5C : [trump-strength-ask] in clubs
        followup : new suit : ask for 3rd-round control
                        6C/6N : at best Jxx
                        7C : Q or xx
    5H : re-ask
        5S :7 controls
        5N : 8 controls
1C : 2D :: 5+, diamonds are longest suit(clubs may be same), 9+ HCP, gf
    2H:asks clarification
        2S :: 4+ spades, 5+ diamonds
        2N :: 4+ hearts, 5+ diamonds
        3C :: 4+ clubs,5+ diamonds
        3D :: 6-7, no other 4 card suit
        3H :: 4 hearts, 6-7 diamonds
        3S :: (332)5, 0-3 controls and 9-12 HCP
        3N :: (332)5, 4-6 controls and 9-12 HCP
        4C :: (332)5,3 controls and 13+ HCP
        4D :: (332)5,4 controls and 13+ HCP
        4H :: (332)5,5 controls and 13+ HCP
```

```
    4S :: (332)5,6 controls and 13+ HCP
    4N :: (332)5,7 controls and 15+ HCP
    2S : 5+ spades
    [support-ask] plus
    4C :: xx65, with strong minors (2 top honors in each)
    4D :: semi-solid suit, 4+ controls
    4H :: x56x, with strong reds (2 top honors in each)
        followup with diamonds is a [trump-ask] in diamonds
        any other followup besides 3N is natural
    2N : 5+ hearts,
                            [support-ask] in hearts plus
    4C :: xx65, with strong minors (2 top honors in each)
    4D :: semi-solid suit, 4+ controls
    4H :: 5x6x, with strong pointeds (2 top honors in each)
        followup with diamonds is a [trump-ask] in diamonds
        any other followup besides 3N}\mathrm{ is natural
    3C : 5+,
    [support-ask] plus
    4D :: semi-solid suit, 4+ controls
    4H :: x56x, with strong reds (2 top honors in each)
    4S :: 5x6x, with strong pointeds (2 top honors in each)
        followup with diamonds is a [trump-ask] in diamonds
        any other followup besides 3N}\mathrm{ is natural
    3D : [trump-ask]
1C : 2D :: 2H : 2S :: 4+ spades, 5+ diamonds
        2N : distribution-ask
            {3C ::4153
        3D :: 4x6x or 4x7x
        3H :: 4351, 9-bad 12 HCP
        3S ::4252
        3N :: 4252, good 12+ HCP
        4C :: 4054
        4D :: 5x6x
        4H :: 4450}
            followups : [minor-suit-followups]
        3D : [trump-ask]
        3C : [minor(20)-control-ask]
        3S : [trump-strength-ask] (assume 4)
        3N : to play
1C : 2D :: 2H : 2N :: 4+ hearts, 5+ diamonds
    3C : distribution-ask
        {3D :: 1453
        3H :: 2452, 9-bad 12 HCP
        3S :: 3451
        3N :: 2452, good 12+ HCP
        4C :: 0454
```

```
    4D :: x56x}
        followups:[minor-suit-followups]
                but if no room for d-ask,
                    more expensive free bid is d-ask
    3D : [trump-ask]
    3H : [trump-strength-ask] (assume 4)
    3S : [minor(20)-control-ask]
    3N : to play
1C : 2D :: 2H : 3C :: 4+ clubs, 5+ diamonds
    3D : distribution-ask
        {3H :: }135
        3S :: }315
        3N :: 2254, 9-bad 12 HCP
        4C :: xx55
        4D :: xx64}
            followups: [minor-suit followups]
            (note: no d-ask after 4D)
        {
    4H :: 2254, }3\mathrm{ controls, 13+ HCP
    4S :: 2254, 4 controls, 13+ HCP
    4N :: 2254, 5+ controls, 13+ HCP
    }
        followups: [minor-suit followups]
                        but note cheap free suit is d-ask
        {
    5C :: xx65, 0-10 minor HCP
    5D :: xx65, 11+ minor HCP
    }
        followups:5H : [trump-strength-ask] in C
                            5S : [trump-strength-ask] in D
    3H : [minor(20)-control-ask]
    followups:[minor-suit followups]
    3S : spade stopper, no heart stopper
    3N : to play
    4m : [trump-strength-ask]
1C : 2D :: 2H:3D :: 6-7 diamonds, no other four card suit
    3H : [minor(20)-control-ask]
        followups:[minor-suit followups]
    3S : spade stopper, no heart stopper
    3N : to play
    4D : [trump-strength-ask]
1C : 2D :: 2H : 3H :: 4 hearts, 6-7 diamonds
    3S : [minor(20)-control-ask]
        followups:[minor-suit followups]
    3N : to play
```

```
    4C : [trump-strength-ask] in hearts (assume 4)
    4D : [trump-strength-ask] in diamonds
1C:2D:: 2H:3S::(33)5(2), 0-3 controls, 9-12 HCP
    4C : [A1-control-ask]
        followups:[minor-suit followups]
    4D : [trump-strength-ask] in diamonds
        followups : [minor-suit followups]
1C : 2D :: 2H : 3N :: (33)5(2), 4-6 controls, 9-12 HCP
    4C : [4-control-ask]
        followups:[minor-suit followups]
    4D : [trump-strength-ask] in diamonds
        followups : [minor-suit followups]
1C : 2D :: 2H : 4C :: (33)5(2), 3 controls, 13+ HCP
1C : 2D :: 2H : 4D :: (33)5(2), 4 controls, 13+ HCP
1C : 2D :: 2H : 4H :: (33)5(2), 5 controls, 13+ HCP
1C : 2D :: 2H : 4S :: (33)5(2), }6\mathrm{ controls, 13+ HCP
    step 1:[trump-strength-ask] in diamonds
1C : 2D :: 2H : 4N :: (33)5(2), 7+ controls, 13+ HCP
    5C : [trump-strength-ask] in diamonds
        followup : new suit : ask for 3rd-round control
        6C/6N : at best Jxx
        7C : Q or xx
    5H : re-ask
        5S : 7 controls
        5N : 8 controls
    OTHER RESPONSES TO 1 C
    1C : 2H :: 1444, 9+ HCP, 1+ controls, gf
        2S : [4x1-control-ask]
        (2N : no fit, 18-19 HCP)
        (3S : solid spades, ask for cue-bids?)
        (3N : no fit, 20-21 HCP)
        (4N : no fit, 22-23 HCP)
    1C : 2S :: 4441, 9+ HCP, 1+ controls, gf
        3C : [4x1-control-ask]
```

1C : 2 N :: balanced, no 5 card suit, $15+\mathrm{HCP}$, forcing to 5 of a suit/ 5 N 3C : asks responder to bid up-the-line any raise sets trump cheapest step after a raise is a [3-control-ask] (so dummy shows controls, not declarer) skip to 4 N after a raise is blackwood (RKC?)

3D : 5-6, [support-ask]
3H:5-6, [support-ask]
3S : 5-6, [support-ask]
3N : (4333), 18-19 HCP
4C : : asks opener to bid 4 card suit
4C : 5-6, [support-ask]
4N : (4333), 20-21 HCP
5C :: asks opener to bid 4 card suit
7N : balanced, 22-23 HCP
1C : 3C : : 4414, 9+ HCP, 1+ controls, gf
3D : [4x1-control-ask]
1C : 3D :: 4144, 9+ HCP, 1+ controls, gf
3H: [4×1-control-ask]
1C : 3H :: AKQJ sixth anywhere, 10+ HCP, gf
3 N : to play
4C : solid suit known to opener, ask for control
(response) :: 4N : describe the control
5C :: king
5D :: ace
4D : asks responder to bid his solid suit
4M : to play
1C : 3S :: AKQ seventh anywhere, no outside A or K, gf
3 N : to play
4C : solid suit known to opener, ask for shortness
(response) :: 4N : describe the shortness
5C :: singleton
5D :: void
new suit : [suit-control-ask]
4D : asks responder to bid his solid suit
4M : to play
1C : 3N :: AKQ seventh anywhere, at least one outside control, gf
4C : solid suit known to opener, ask for control
(response) :: 4N : describe the control
5C :: king
5D :: ace
4D : asks responder to bid his solid suit

4M : to play
1C : 4C :: AKQ eighth anywhere, gf
4C : solid suit known to opener, ask for control (response) :: 4N : describe the control

$$
5 C:: \text { king }
$$

5D : : ace
4 H : asks responder to bid his solid suit
4M : to play

## INTERFERENCE OVER 1C

1C (X) - showing strength/takeout
P :: 0-5 HCP
XX :: 9+ HCP, gf
1X :: 5+, 5-8 HCP
$1 \mathrm{~N}::$ balanced, 6-8 HCP
2C :: 5+, 5-8 HCP
2X :: 5+, 9+ HCP, gf
3X :: semi-solid suit
4X : : solid suit
$1 \mathrm{C}(\mathrm{X})$ - showing clubs
XX :: 1 top honor in clubs, 4+ clubs
2C :: singleton or void club, gf
1C (1X|2X) - natural
P :: 0-5 HCP or penalty double
X :: 6+ HCP, can be passed new suit : natural, forcing
new suit :: 5+, 9+ HCP, gf
cue-bid :: 9+ HCP, looking for 3 N , gf
new suit :: 5+, 5-8 HCP
$1 \mathrm{~N}:$ : balanced, 6-8 HCP cue-bid :: (1444) or (0445) where short in X, 9+ HCP, gf 2N :: balanced, two stoppers, 9+ HCP, gf jump shift :: 6-7, 9+ HCP, gf double jump shift :: excellent 6-7, 9+ HCP, gf

1C (2S|3X) - natural
$P$ :: 0-6 HCP or penalty double
X :: 7+ HCP, can be passed new suit : natural, forcing
new suit :: 5+, 9+ HCP, gf

```
                                    cue-bid :: 9+ HCP, looking for 3N, gf
new suit :: 6+, gf
3N :: to play, 10-12 HCP
jump shift :: excellent 6-7, gf
2N :: balanced, two stoppers, 7-8 HCP
```

1C (1X/X) - specific two-suiter (showing $A$ and $B ; E$ and $F$ are the other two)

```
        P :: 0-5 HCP
```

    X/XX :: penalty oriented (a la unusual vs. unusual)
    cheapest cue :: 6-9 HCP, length in C and D, promises another bid
    expensive cue :: 9+ HCP, length in \(C\) and \(D\), gf
    \(1 \mathrm{~N}::\) balanced, 6-8 HCP
    1E/1F :: 5+, 5-8 HCP
    2 N :: balanced, 9+ HCP, gf
    jump shift :: 6-7, 9+ HCP, gf
    double jump shift :: excellent 6-7, 9+ HCP, gf
    1C (1X) - exclusion (shortness in suit $X$ )
$X$ :: 4 cards in suit $X, 9+$ HCP
$1 \mathrm{~N}:: 4-5$ cards in suit $\mathrm{X}, 6-8 \mathrm{HCP}$
$2 X:: 5+$ in suit $X, 9+H C P$, forcing
new suit :: 5+, 5-8 HCP
P :: 0-8 HCP
followup :: X :: 6-8 HCP (with no suit)
1C (1X) - transfer to suit above suit $X$ (suit $Y$ )
P :: 0-5 HCP
X :: 6-8 HCP
1Y :: 9+ HCP, gf
1N :: stopper in Y, 6-8 HCP
new suit :: 5+, 5-8 HCP
2N :: two stoppers in Y, 9+ HCP, gf
$2 \mathrm{Y}::$ stiff or void in $\mathrm{Y}, 4+$ in other suits, gf
jump shift :: 6-7, 9+ HCP, gf
double jump shift :: excellent 6-7, 9+ HCP, gf
1C (CRASH) - X for Color, 1D for Rank, 1H for Shape
X/XX :: balanced, 9+ HCP, sets up heat-seeking auction or gf
new suit :: 5+, 9+ HCP, gf
P :: 0-8 HCP, forcing
1C : 1D (1X|2X) - natural
$P$ : minimum, balanced OR penalty pass
$X$ : takeout, shortness in $X$
1 N : balanced, 19-21 HCP, stopper in X
new suit : undefined
jump shift : 5+, 21+ HCP, forcing

1C : 1D (X) -
XX : defensive hand with strength in doubler's suits 2D : if $X$ shows diamonds, then gf 2 -suited cue-bid else ignore

```
1 \text { DIAMOND}
1D : 1+, 11-16 HCP, catchall
    P :: sign-off, 0-5 HCP
    1H :: 4+ hearts, 6+ HCP
    1S :: 4+ spades, 6+ HCP
    1N :: No 4cM, 6-10 HCP
    2C :: 5+ clubs, 10+ HCP, forcing, promises another bid
    2D :: 4+ diamonds, 10+ HCP, forcing
    2H :: strong hearts, 16+ HCP, slam try.
    2S :: strong spades, 16+ HCP, slam try.
    2N :: balanced, 12-15 HCP or 18-19 HCP, no 4cM
    3C :: strong clubs, 16+ HCP, slam try.
    3D :: strong diamonds, 16+ HCP, slam try.
    3H :: QJ+, 7 hearts, almost nothing outside
    3S :: QJ+, }7\mathrm{ spades, almost nothing outside
    3N :: balanced, 16-17 HCP, no 4cM,
    4C :: undefined (!)
    4D :: 7+ diamonds, almost nothing outside
    4H :: sign-off
    4S :: sign-off
[2N for minors and SWJS over X]
1D (X)
    1H :: 5+ hearts, forcing
    1S :: 5+ spades, forcing
    1N :: balanced, 7-9 HCP
    2C :: 5-6 clubs, <10 HCP
    2D :: 5-6 diamonds, <10 HCP
    2H :: 6+ hearts, 4-7 HCP
    2S :: 6+ hearts, 4-7 HCP
    2N :: 5 clubs, 5 diamonds, 7-9 HCP
    3C :: 6-7 clubs, 7-9 HCP
    3D :: 6-7 diamonds, 7-9 HCP
    XX :: 10+ HCP, no 5cM
```

```
[standard except jump raises are weak js; jump shifts are weak; cue
specific]
1D (1H)
X :: 4+ spades, forcing
1S :: 5+, forcing
(1S:)
X :: 4+ hearts, forcing
1N :: semi-balanced, 7-9 HCP, (stopper?)
(1N)
X :: penalty
2C :: 4+, forcing
(2C)
X :: a four-card major, forcing
2D :: 4+
2H :: 5+, forcing
2S :: 5+, forcing
2N :: 12+ HCP, 1.5 plus+ stoppers, gf
3D :: undefined (6+, 5-8 HCP?; diamond raise? (could be 1))
cue :: shows Ax or Kxx or Qxx of hearts
jump shift :: 6+, 5-8 HCP
jump-cue :: undiscussed (stiff?)
```

1 OF A MAJOR
[forcing NT, rev drury, flannery inference, 2/1 near gf, jordan] 1 M : can be strong 4 in 3rd/4th, denies 45, 11-16 HCP

P :: sign-off
1S :: 5+!, forcing
2S: 3
3S : 46 (or splinter)
1N :: forcing if nonpassed, 0-12 HCP
2m:3+
2D :: to play
2M :: 2+, 0-6 HCP, to play
2oM :: to play
2 N :: at most 2 of M, semi-balanced, 10-12 HCP
3C :: 5+, 9-10 HCP
3D :: 10 minor cards, 9-10 HCP
3M :: 3, semi-balanced, 10-12 HCP
2 H : rebid is 6+; new suit is $54+$ in majors

```
    2S :: can only be correction (impossible 2s?)
    2S: rebid is 6+; new suit is exactly 46 in majors.
    2N :: invitational
    3m :: to play
    3M :: invitational
    2N : 6(322), 15-16 HCP,
    3m : sign-off
    3M : sign-off
    all other responses to play
    3m : 5+
    3H}\mathrm{ : rebid is 6-7, unbalanced; new suit is 55 majors
    3S : rebid is 6-7, unbalanced; new suit is 56 majors, strong
    4M : sign-off
2m :: non-passed: 5+, lawrence gf
    followups -- look at lawrence
    passed: [reverse drury] (make this 2-way!)
2oM :: gf or undiscussed (wjs)
2M :: 3+, 7-9 HCP
    3M : trump ask
    3X : help-suit game try
    2N : undefined (short-suit? help-suit?)
    4X : undefined (control-asking bid?)
2N :: balanced, 13-15 HCP
3C :: 4+ to jack, strong(13+?) [Roth 3C]
    3D : shows shortness somewhere
        3H :: 2 of top three
            3S : 1 of top 3 (must bid 3S)
                3N :: shortness ask (bid shortness)
            3N : 0 of top 3, nothing to cue-bid(except shortness)
                4C :: shortness ask (what if club/spade short?)
            4M : 0 of top 3, no interest
            4X : 0 of top 3, cue-bid, slam interest
    3S :: A|K, no Q
            3N:2 of top 3
                4C :: shortness ask (see above)
            4M : to play
            4X : at most 1 of top 3, cue-bid
    3N :: No A or K (no way to find shortness after this)
            4m : cue-bid, slam interest
            4M : to play
    3H : 2 of top three trump, no shortness
    3S :: 1 of top 3
    3N :: 0 of top 3, nothing to cue-bid, slam interest
    4m :: 0 of top 3, cue-bid, slam interest
```

```
            4M :: to play
3S : A|K, no Q, no shortness
    3N :: 2 of top 3
    4m :: 1 of top 3, slam interest
    4M :: to play
    3N : no A or K, no shortness
    4m :: cue-bid, slam interest
    4M :: to play
    4M : undefined (super-solid suit with no control interest??)
    4X : solid trumps, [suit-control-ask]
    3D :: strong jump shift, 16+ HCP? (bergenize?)
    jump shift in oM :: strong jump shift, 16+ HCP?
    3M :: 4+, 10-12 HCP (bergenize?)
    3N : Mathe asking bid (change meanings of 3S / 3N over 3H?)
    3N :: 4+, strong preempt, stiff, no more than 1 king outside, good
trump
4m :: splinter, 11-13 HCP
double jump shift in oM : splinter, 11-13 HCP
4M :: to play (weaker than 3N)
1M (overcall) is same as 1D except jump raise is limit(4+ trump)
[in particular, cue-bids promise Ax or (K|Q)xx]
(bergenize?)
1M (X) is same as 1D except 2N is jordan(4+ trump)
(BROMAD?)
1 NOTRUMP
[forcing stm, adv. jxf, mss, gerber, texas] 1N : semi-balanced, 15-17 HCP, may have 5cM
P : : no 5cM or 6cm, 0-7 HCP
2C :: [forcing stayman] hand described later
```


## \{

```
2D : no 4cM
2H:4+ hearts
2S : 4+ spades, denies 4 hearts \}
2S/2H :: 4+ (because 2N artificial)
2N :: 8-9 HCP, could have no 4cM
new suit :: 5+, gf (4+ major?)
jump shift :: splinter
(other followups MBC?)
```

```
2D :: [advanced jacoby transfer] 5+ hearts
    2 H : less than 3 hearts or 15-16 HCP
        2S :: 55xx, 4-6 HCP
        jump shift :: 6-7 hearts, no 4 card side suit, splinter
    non-heart suit : doubleton, 17 HCP
    2N : x3xx, 17 HCP
    3H: 3433, 17 HCP
        (other followups MBC?)
2H :: [advanced jacoby transfer] 5+ spades
    2S : less than 3 spades or 15-16 HCP
        3H :: 55xx, 10+ HCP, gf
        jump shift :: 6-7 hearts, no 4 card side suit, splinter
        (other followups MBC?)
    non-spade suit : doubleton, 17 HCP
    2N : 3xxx, 17 HCP
    3S : 4333, 17 HCP
2 : : [minor suit stayman] relay to 2 N , promises (45) in minors
    2N : 3C :: 5+5+ minors, 0-9 HCP
        3D : to play
    2N : 3D :: 5+5+ minors, 10+ HCP, forcing to 4 m
    2N : 3H :: 31(45), 10+ HCP
    2N : 3S :: 13(45), 10+ HCP
    2N : 3N :: 22(45), 10-13 HCP, both doubletons weak
\(2 \mathrm{~N}:\) : relay to 3 C
    3C : P :: 6+ clubs, obviously to play
        3D :: 6+ diamonds, sign-off
        3H :: 40(54), 8+ HCP
        3S : : 04(54), 8+ HCP
        3N :: 22(54), 14-15 HCP, both doubletons weak
        4m :: 5+, balanced, 15-16 HCP
3C :: (4441) with a black stiff, 9+ HCP
    3D : singleton ask
        3H :: spade stiff
            3S : control-ask
                step 1 :: 1-2 controls
                step 2 :: 3 controls, and so on
        \(3 S\) :: club stiff
        4C : control-ask
            step 1 :: 1-2 controls
            step 2 :: 3 controls, and so on
3D :: 4(14)4, 9+ HCP
    3H : singleton ask
        \(3 S\) :: diamond stiff
            4D : control-ask
```

```
                    step 1 :: 1-2 controls
                    step 2 :: }3\mathrm{ controls, and so on
        3N :: heart stiff
            4H : control-ask (switch this?!)
            step 1 :: 1-2 controls
                            step 2 :: 3 controls, and so on
    3H :: 6-7 strong clubs, no 4 card side suit, slam interest
    3S :: 6-7 strong diamonds, no 4 card side suit, slam interest
    3N :: sign-off
    4C :: [Gerber]
    4D :: [Texas] 6+, transfer to 4H
    4H : 4N :: [Blackwood]
    4H :: [Texas] 6+, transfer to 4S
    4S : 4N :: [Blackwood]
    4S :: xx66, weak suits
    4N :: 4333, 15-16 HCP (see 2N for 5cm)
(1N (2X)
    X :: penalty
    2Y :: to play
    2N :: [lebensohl] relay to 3C
        3C : (3Y < X) :: to play
            (3Y > X) :: invitational
                3X :: stayman, stopper in X
    3Y :: forcing
    3X :: [stayman] no stopper in X
    3N :: to play if opener has stopper in X
1N(3X)
    X :: negative?
    what else?
    1N (X) play DONT?
)
```

2 CLUBS
2C : 6, 11-16 HCP
P :: sign-off
2D :: artificial, asks for further description
2H:4cM
2S :: major ask
\{
2N: 4 hearts

3C : 4 spades
\}
3D :: slam try
3M :: invitational
3N :: to play
4M :: to play
2N :: no 4CM, 10-11 HCP, invitational
3C :: 2+(3+?), 9-11 HCP
3M :: 6+, 12+(?) HCP
3N :: to play
4C :: 3+, slam try in clubs
4M :: undefined (to play? solid suit?)
5C :: sign-off
2S : no 4cM, 12-14 HCP
2N :: invitational to 3 N
3C :: to play
3D :: stopper ask
3H : heart stopper
3S : spade stopper
3N : diamond stopper
(4C : no stopper?)
3M :: 6+
3 N : singleton or void
4C : 7+, bad for notrump
4D : undefined (advance cue-bid?)
4M : 2+
3 N :: to play
4C :: 3+, slam-try in clubs
5C :: sign-off
2 N : two outside stoppers, 14-16 HCP
3C : : invitational to 3N or 5C
3D :: stopper-ask ["Diamond stopper-ask"]
3H : hearts and diamonds
3S : spades and diamonds
3N : not diamonds
3M : : 6+ (nf)
4M : 2+
4X : 2+, control for slam
$3 \mathrm{~N}:$ : to play
4C :: 3+, slam try in clubs
5C :: sign-off
3C : 6-7, good suit, one outside stopper, no outside four-card suit
3D :: stopper-ask
3M : major
3N : diamonds
3M :: 6+ (nf)
4M : 2+
$4 X: 2+$, control for slam

```
    3N :: to play
    4C:: invite to game
    4D :: 3 clubs, slam try in clubs
    4M :cue-bid
    4N : diamond cue-bid
    5C : sign-off
    5C :: sign-off
    3D : 4-5, 6+ clubs, 14-16 HCP
    3M :: 6+
    3N :: to play
    4m :: slam try in m
    4H :: [Blackwood: 03/14/2] (RKC for diamonds)
    5C :: sign-off
    3H: x5x6
    3S :: undefined
    3N :: to play
    4C :: invite to game in clubs
    4D :: slam try in hearts
    4H :: to play
    4S :: [Blackwood: 03/14/2] (RKC for hearts)
    5C :: sign-off
    3S:5xx6
    3N :: to play
    4C :: invite to game in clubs
    4D :: slam try in spades
    4H :: [Blackwood: 03/14/2] (RKC for spades)
    4S :: to play
    5C :: sign-off
    3N : no singleton, AKQ clubs, two outside queens+
    5C :: sign-off
2M :: 5+ (not forcing), 0-11 HCP
    P : 12-14 HCP, 2-3 in M
    2S:5
    2N : unbid suits stopped, 15-16 HCP
    3C : preference
    3D:5
    3M : undefined (invite to game? 3 card support with 15-16?)
    3H:5
    4M:4
2N :: balanced 10-11 or 5cM 12+ HCP, forcing
    3C : 12-14 HCP
    3M :: 5, 12+ HCP, forcing
        4M:3
        3N : denies 3-card support
    3D : 4-5, }6\mathrm{ clubs, 14-16 HCP
    3H : 3-4, 14-16 HCP
    3S:3-4, at most 2 hearts, 14-16 HCP
    3N}\mathrm{ : no }3\mathrm{ card major or 4 card diamond suit, 14-16 HCP
```

3C :: probably denies 4cM, invites to game in clubs (? HCP)
3D : 4+
3M : 5
4M :: 3
3 N : to play
3X :: 6-7, good suit, gf
3 N :: balanced, all suits stopped, $15-16 \mathrm{HCP}$ (not forcing)
4C :: 3-4, sign-off, 0 HCP
4D :: [Modified Roman Redwood]
\{
4H: 0/3 aces
4S: 1/4 aces
4N : 2 aces
5C : 2 aces + QC
\}
5D :: king-ask(03/14/2)
4M :: sign-off
5C :: sign-off
2C (overcall) $X$ :: negative thru 4s
2C (double) XX :: undefined (ignore competition when appropriate?)

2 DIAMONDS

2D : (4441), 16-24 HCP
OR 6 hearts, 6-12 HCP
(change range?)
OR balanced, 26-27 HCP, 3-4 Qs, 9+ points in quacks (balanced duck)
(forcing)
2H :: not strong enough to bid over weak-two in hearts
P : weak-two in hearts
(after a non-pass, all non asks are signoffs unless 4 m , which are invitational to game in minor)
2S : major stiff, 16-19 HCP
2 N :: asking bid 3C: 4144

3H :: strength ask \{ 3S : 16-17 HCP 3N : 18-19 HCP \}

4H :: [4-control ask] response : 5H :: [queen ask]
3D : 1444, 16-17 HCP

```
        3S :: [4-control ask]
        response : 4S :: [queen ask]
    3H: 1444,18-19 HCP
        3S :: [4-control ask]
        response : 4S :: [queen ask]
    2N : 4441, 16-19 HCP
    3C :: strength ask
        {
        3D : 16-17 HCP
        3H : 18-19 HCP
        }
            4C :: [4-control ask]
                response : 5C :: [queen ask]
    3C : 4414, 16-19 HCP
    3D :: strength ask (step 1 = 16-17; step 2 = 18-19)
        {
        3H: 16-17 HCP
        3S : 18-19 HCP
        }
            4D :: [4-control ask]
            response : 5D :: [queen ask]
    3D : 4144, 20-24 HCP
    3H :: [6-control ask]
        response : 4H :: [queen ask]
    3H : 1444, 20-24 HCP
    3S :: [6-control ask]
        response : 4S :: [queen ask]
3S : 4441, 20-24 HCP
    4C :: [6-control ask]
        response : 5C :: [queen ask]
    3N : balanced duck
2S :: 5+, forcing
    2N : (4441), 16-19 HCP
    3C :: singleton-ask
        3D : heart stiff
        3H : spade stiff
        3S : club stiff
        4C : diamond stiff
                further cues:4-control then queen
    3m : 3-4, honor, 6+ hearts, 9-12 HCP
    3D :: gf
    3M :: to play
    4X :: gf
3H:6+, 6-9 HCP
3S : A/K/Q-doubleton or three, 6+ hearts
3N : 4441, 20-24 HCP
4C : 4414, 20-24 HCP
```

```
    4D : 4144, 20-24 HCP
    4H : 1444, 20-24 HCP
    4S : to play
    4N : 6-control ask
2N :: balanced, forcing
    3C : 6+ hearts; 2/top 3, 3/top 5 (good suit)
    3H:: to play
    other :: gf
    3D : 6+ hearts; maximum
    3H :: forcing
        3N : balanced
        other: unbalanced
    3H:6+ hearts; minimum
    3S:4441, 16-24 HCP
    4C :: 4-control ask
    3N : 6+ hearts; AKQ of hearts
    4C : 4414, 16-24 HCP
    4D :: 4-control ask
    4D : 4144, 16-24 HCP
    4H :: 4-control ask
    4H : 1444, 16-24 HCP
        4S :: 4-control ask
3C :: 5+, game invite values (14+ HCP?), forcing
    3D : feature in diamonds, maximum weak two
        4C :: to play
        other:: gf
    3H : 6+, minimum weak two
    3S: feature in spades, maximum weak two, gf
    3N : 6+ hearts, maximum weak two, at least Qx in pointed suits
    4C:3+,6+ hearts
    4D : 4144, 16-24 HCP
    4H : 1444, 16-24 HCP
    4S : 4414, 16-24 HCP
    4N : 4441, 16-24 HCP
3D :: 5+, game invite values (14+ HCP?), forcing
    3H:6+, minimum weak two
    3S: feature in spades, maximum weak two, (gf?)
    3N : 6+ hearts, maximum weak two, at least Qx in black suits
    4C : 4144, 16-24 HCP
    4D : 3+,6+ hearts
    4H: 1444, 16-24 HCP
    4S : 4414, 16-24 HCP
    4N : 4441, 16-24 HCP
3H :: 3, preemptive (how show balanced wonder -- 4N?)
    3S : 4441, 16-24 HCP
    3N : 4144, 16-24 HCP
    4C : 4411, 16-24 HCP
    4D : 1444, 16-24 HCP
```

4H:: to play if weak-two
4S : 4441, 16-24 HCP
4N : 4144, 16-24 HCP
5C : 4411, 16-24 HCP
5D : 1444, 16-24 HCP
2D (overcall) X :: penalty
2D : response (overcall) $X$ : opener has 4441 and 4 in the suit overcalled 2D : response (overcall) next step : opener has 4441 and 1 in the suit 2D ( $X$ ) same except $X X$ is used for $X$.

2 HEARTS
$\qquad$
2H: 4414 or 4405, 12-15(poor 16) HCP
OR 45xx, 12-15(poor 16) HCP
P :: sign-off
2S :: sign-off
2N :: distribution-ask
3C : 4414 or 4405
3D :: further-ask
3H: 4414, 12-13 HCP 3S: 4405, 12-13 HCP 3N : 4414, 14-16 HCP, stiff top honor 4C : 4414, 14-16 HCP, no stiff top honor 4D : 4405, 14-16 HCP

$$
\{
$$ 3D : 4531 (three diamonds) 3H: 4522, 12-13 HCP 3S: 4513 3N : 4522, 14-16 HCP 4C : 4504 (four clubs) 4D : 4540 (four diamonds) \}

3M : sign-off
3N : to play
\{
4 m where m is long(3):: slam try in $m$
4 m where m is short $::$ general slam try \}

4H: sign-off
3C :: good 6+, game invite in NT or clubs
3D :: 6+(3 of top 4), game invite in NT or diamonds
3H :: trump strength-based invite in hearts
3S :: trump strength-based invite in spades
3N :: sign-off

4H :: sign-off
4S :: sign-off

## 2 SPADES

2S : 6, no void, no 5 card side suit, 2 of top 4, 6-12 HCP
( 4 N is always blackwood)
$P$ :: sign-off
2 N :: general ask
3C : 6 spades; 2/top 3, 3/top 5 (good suit)
35 :: to play
other :: gf
3D : 6(332); maximum
$3 \mathrm{H}: 6(331)$ or 6(421); maximum
3 S : minimum
3N: 6 spades to the AKQ
4C : $6 \times x 4$, one of top 3 clubs, $9+$ black HCP
4D : $6 \times 4 x$, one of top 3 diamonds, $9+$ pointed HCP
$3 X$ :: 5+, game invite values (14+ HCP?), forcing
3S : no fit, minimum
3 N : high honor in both unbid suits
4X:A/K/Q doubleton or three
3 Y : control, maximum
3 S :: sign-off
3N :: sign-off
4X :: [suit-control-ask]
4S :: sign-off

2 NOTRUMP

2 N : balanced, 24-25 HCP, at most 5/8 AKs
P :: no 5cM, 0-1 HCP
3C :: [stayman] (puppet this!), forcing
3D : no 4cM
3H :: 5 spades, 4 hearts
3 S :: 4 spades, 5 hearts
4N :: balanced, 8 HCP
3M : 4
3/4oM :: slam try in M
4 N :: balanced, 8 HCP
3D :: [jxf] 5 hearts, 0-16 HCP, forcing
3 H : default
4 N :: balanced, 7-8 HCP

```
    3S : 4 hearts, ace of spades
    4H:4, lots of aces and kings
    4m : 4 hearts, ace of m
    3H :: [jxf] 5 spades, 0-16 HCP, forcing
    3S : default
        4N :: balanced, 7-8 HCP
    4S : 4, lots of aces and kings
    4X :4 spades, ace of X
    3S :: [minor-suit stayman]
    3N}\mathrm{ : not interested in minor suits, to play
        4m : strong minor
        4M : singleton or void in M
    4m : good 3+
3N :: sign-off
4C :: slam interest in a minor(6+), 5+ HCP
    4D : no slam interest
    4H:slam interest in clubs
    4S : slam interest in diamonds
    4N : slam interest in both
    4D :: [modified roman redwood]
    4H:0/3 aces
    4S:1/4 aces
    4N:2 aces
4M :: 6+, slam try in M
4N :: balanced slam try, 8 HCP
3 and 4-level bids
3C : AKQ seventh somewhere, 9-11 HCP
    3D :: suit-ask
            (suit) : new suit :: [suit-control-ask]
                (raise) :: sign-off
    new suit :: 7+, forcing
        4X:2+
        (own suit): no support
    3X: 6+ NV, 7+ V; 0-9 HCP
    (raises) preemptive
    (game bids) sign-off
    4C :: trump-ask
        NV
        4D : no A/K 4D : no A/K seventh
        4H:A/K sixth
        4S:A/K seventh 4S:Two of top three seventh
        4N:Two of top three sixth
        5C : Two of top three seventh
```

new suit afterwards is [suit-control-ask]
(other new suits) natural, forcing

3N : 8+ minor, no ace, 2-8 HCP
P :: sign-off
4C :: to play four of opener's minor
4D :: to play four diamonds or five clubs
4M :: to play
4N :: [small slam force]
5 m : at most 1 top trump honor
$5 \mathrm{~N}: 2$ top honors in 8 card club suit
6C : 2 top honors in 8 card diamond suit
5C :: to play five of opener's minor
5D :: to play
5N :: [grand slam force]
6 m : at most 1 top trump honor
7m : 2 top trump honors

4C : 7-8 hearts, HK, 9-15 HCP, 2 2nd round controls, 8-9 tricks
4D :: quick-loser ask
4H : no 2-loser suit, non-solid trumps
4S : two losers in spades
4N : no 2-loser suit, solid trumps
5C : two losers in clubs
5D : two losers in diamonds
4H :: to play
4N :: [blackwood] (maybe kickback it to 4S?)

4D : 7-8 spades, SK, 10-15 HCP, 2 2nd round controls, 8-9 tricks
4H :: quick-loser ask
4S : no 2-loser suit, non-solid trumps
4 N : no 2-loser suit, solid trumps
5C : two losers in clubs
5D : two losers in diamonds
5H : two losers in hearts
4S :: to play
4N :: [blackwood]

4M : 74 or $8,0-10 \mathrm{HCP}$
new suit : to play
4N :: [blackwood] (kickback rkc?)
5M :: trump-ask
6M : can play trumps for 1 loser opposite xx

4N : [Acol 4N]
5C:: 0 aces
5D :: DA
5H :: HA
5S :: SA
5N :: 2 aces
6C :: CA

