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Chapter 1

1X

1.1 1C

```
1C -

1D*: 4+H

1H*: 4+S

1S*: inv+, 4+D; or 5+D

- 1N: min, 2-D or 4333 or some 4332

- 2C: min unbal

- 2D: 3+D

1N: 6-10

2C*: GF, 4+C

2D*: inv, 4+C

2M: 3-7, 6+M # not interested in 16-17, 2-M

2N*: 7-9, 5+C

3C*: 0-6, 5+C

3X: 7+X, about 6-6.5 tricks
```

1.1.1 1C - [1M-1]

```
1C - 1D^*;
1H*: 4+S # highest priority unless 4+ fit
1S*: 16+; or 13-14(15), 6+C, GT
  - 1N*: 8+
        - 2C*: 6+C, GT
             -P:s/o
             - 2N : re-inv
             - 3C : re-inv
   - 2C : min
   - 2D : min
   - 2H : min
  - 2S*: min, 5+S # implies 6+H
   - 2N+: C fit ST
   - 3H : solid H ST
1N : min bal
2C : min unbal
2D*: 14-16, 6+C, 4+D
2H : min, 4+H
2S^*: inv+, 4+H, spl S
2N : 18-19, bal
3C: (15)16-17, 6+C, GT
3D^*: inv+, 4+H, spl D
3H^*: 4+H, 18-19 bal
3S*: ... (TBD)
```

```
1C - 1H*;
1S*: 16+; or 13-14(15), 6+C, GT
```

```
- 1N*: 8+
        - 2C*: 6+C, GT
             - P : s/o
              -2N : re-inv
             - 3C : re-inv
   - 2C : min
   - 2D : min
   - 2H : min
   - 2S : min
   - 2N+: C fit ST
   - 3S : solid S ST
1N : min bal
2C : min unbal
2D*: 14-16, 6+C, 4+D
2H*: 14-16, 6+C, 4+H
2S^*: min, 4+S
2N : 18-19, bal
3C: (15)16-17, 6+C, GT
3D^*: inv+, 4+S, spl D
3H^*: inv+, 4+S, spl H
3S^*: 4+S, 18-19 \text{ bal}
```

1.2 1D

```
1D - # 11-21, 4+D unbal; 12-14/18-19, 4+D bal
1M : 6+, 4+M
1N : 6-10, nat
2C : inv, 6+C [3C]; or GF, 5+C
   - 2D*: 12-14
        - 2H*: GF, ask
             - 2S*: 5D unbal
             - 2N : min bal
             - 3C : 3+C unbal
             - 3D : 6+D unbal
             - 3N : max bal
        - 2S+: nat GF
        - 3C : nat inv
   - 2M*: may be stopper
   -2N:18-19 bal
   - 3C : GF, 14+, 4+C
   - 3D : solid D ST
   - 3M^*: GF, 4+C, spl
2D*: some 6+M pre # shouldn't be interested in 18-19 bal
  # resp. similar to 2D/V (multi) except 3D
   - P : s/o
   - 2H*: P/C
   - 2S*: P/C, may be interested in H
   - 2N^*: ask #
        - 3C*: min
             - 3D*: ask
             - 3H*: P/C
        - 3D^*: max, H
        - 3H*: max, S
   - 3C : nat, NF
   - 3D : nat, inv # then 3M = max and show suit
2H*: GF, 4+D
2S*: inv, usually 4+D, not prefer to declare
   - 2N : nat min
  - 3C : nat, F1
   - 3D : nat min
  - 3M : nat, stopper
2N : nat inv
3C*: 8-10, 4+D
3D^*: (0)3-7, 4+D
3M : 7+M, about 6 tricks, NF
```

1.2.1 XYZW

```
1D - 1H; 1S - 2C*: see utils/XYZW/PLOB
1D - 1M; 1N - ...: see utils/XYZW/2wPCB
```

1.2.2 1D - 2C

1.3 1H

```
1H - # 12-21, 5+H
1S*: F1; 4-6, 3+H [2H]; inv, 3H [3H/4H]; constr. 5+H [4H]; 5-11, 2-S;
   12-14, 4-S bal [3N]
1N*: 5+S, F1
2C : GF, nat
2D: GF, nat
2H : 7-9, 3+S
2S*: 12+, 4+H
2N^*: 8-9/12-13, C/S spl
  - 3C*: ask
        - 3D*: C spl
        -3H^*: S spl, 8-9
        - 3S+: S spl, 12-13, cue-bid
3C*: 10-11, 4+H bal; 10-11, 4+H spl # the latter is GF
   - 3D^*: ask, ST
        -3H^*: 10-11, 4+S bal
        - 3S+: spl # 3N* replaces the highest spl, i.e. D
3D^*: 8-9/12-13, D spl
3H : pre
3S^*: 10-12, S \text{ void}
3N^*: 12-14, 3H, bal w/o 6m, CoG
4X^*: 10-12, X void
4H : pre
```

1.3.1 Gazzilli after $1S^*/1N^*$

```
1H - 1S*: F1

1N*: 16+, any; or 12-15, 6+H

2m: 12-15, nat

2H*: 12-15, 4+S

2S*: 14-16, 6+H, 4+S

2N*: 14-16, 6+H, 4+m

- 3C*: ask

- 3D: 4+D

- 3H*: 4+C

3m: 14-16, 5+m, NF

3H: 15-17, (s-)solid 6+H

3S: inv, 5+S, NF

3N*: GF, solid 7+H
```

```
1H - 1N*: 5+S

2C*: 16+, any; or 12-15, 6+H

2D : 12-15, nat

2H*: 12-15, 4+C
```

```
2S : 12-15, 3+S

2N*: 14-16, 6+H, 4+X

- 3C*: ask

- 3D : 4+D

- 3H*: 4+C

- 3S : 4+S

3m : 14-16, 5+m, NF

3H : 15-17, (s-)solid 6+H

3S : inv, 6+H, 3+S

3N*: GF, solid 7+H
```

1.3.2 $1H - 2S^*$ (same as $1S - 2N^*$)

1.3.3 1H - (X)

```
1H - (X);
P : weak or some unbal inv # then bid/X = inv

XX : 10+, s-bal, usually not concentrated # forcing pass on
1S : 5+S, F1 # system on, may be psyche but rare

1N*: 5+C, 6-10; or 4+C, GF

2C*: 5+D, 6-10; or 4+D, GF

2D*: 3+H, 4-6 or 10+

2H : 3+H, 7-9

2S+: system on
```

1.4 1N

temporarily use BTUBWS

1.5 1S

```
1S - # 12-21, 5+S
1N*: F1; 4-6, 3+S [2S]; inv, 3S [3S/4S]; constr. 5+S [4S]; 5-11, 2-S;
  12-14, 2-S bal [3N]
2C : GF, nat
2D : GF, nat
2H : GF, nat
2S : 7-9, 3+S
2N^*: 12+, 4+S
3C^*: 8-9/12-13, C/D spl
  - 3D*: ask
        - 3H*: C spl
        -3S^*: D spl, 8-9
        - 3N+: D spl, 12-13, cue-bid
3D*: 10-11, 4+S bal; 10-11, 4+S spl # the latter is GF
  - 3H*: ask, ST
        -3S^*: 10-11, 4+S bal
        - 3N+: spl # 3N* replaces the highest spl, i.e. H
3H^*: 8-9/12-13, H spl
3S : pre
3N^*: 12-14, 3S, bal w/o 6m, CoG
4X*: 10-12, X void
4S : pre
```

1.5.1 Gazzilli after 1N

```
1S - 1N*; 2C*: 16+, any; or 12-15, 6+S
2D*: 8+, any
- 2S : 12-15, 6+S
- other : nat and GF
2H : 5-7, 5+H
2S : 4-7
```

```
# bids below applies to both 2H and 2S
- 2N*: GF, some 6+S
- 3C*: ask
- 3X : 4+X
- 3S*: 4+C
- 3N : no 4-card suit
- 3X : GF, 5+X # except raise = inv
- 3S : inv, 6+S
2N+: 5-7, nat # 2N usually mms
```

1.5.2 1S - 2N*

```
1S - 2N*: 12+, 4+S
3X : X short # then 3N = FF
3S : 14+, w/o shortness # then 3N = FF
3N*: FF, 12-13, w/o shortness
(TBD) after 3S/3N, choose from spl or cue-bid
# 4X usually with controls in two other suits, otherwise bid 3X instead
4m : 5+m
- +1*: ask
- 4S : min
4H : 5+H, extra
4S*: 5+H, min
```

$1.5.3 ext{ 1S - } (X)$

```
1S - (X);
P : weak or some unbal inv # then bid/X = inv
XX : 10+, s-bal, usually not concentrated # forcing pass on
1N*: 5+C, 6-10; or 4+C, GF
2C*: 5+D, 6-10; or 4+D, GF
2D*: 5+H, 6-10; or 4+H, GF
2H*: 3+S, 4-6 or 10+
2S : 3+S, 7-9
2N+: system on
```

Chapter 2
pre

2.1 2H/NV (Ekren)

```
2H^* - # 3-8, 4+MMs
2S : s/o
2N^*: ask
   - 3C*: min
      - 3D*: ask, GF
          -3M^*:5+oM
          - 3N : 44Ms
          - 4m^*: 55Ms, spl m
   - 3D*: mid+, 55Ms
     -3M:s/o
   - 3M^*: max, 5+oM
  - 3N^*: max, 44Ms
3C^*: 4+H, inv+
  - 3D*: re-inv
   - 3H*: min
   - 3S*: shape-FF, 4H but max
   - 3N+: 5H, super max, cuebid
   - 4H : 5H, max, not super max
3D^*: 4+S, inv+
  - 3H*: re-inv
  - 3S*: min
  - 3N*: shape-FF, 4S but max
   - 4C+: 5S, super max, cuebid
   - 4S : 5S, max, not super max
3M : s/o
3N : s/o
4C*: ask, ST
4D*: pick a 4M, not allowing re-raise
4M : s/o
```

2.2 2X/NV (wild)

```
2S - # 3-8, 5+S

2N*: inv+

- 3m : 3+m, min

- 3H*: 6+S, max

- 3S*: 6+S, min

- 3N*: 5S, max

3C*: 5+H, GF; 2(5+)xx, inv

- 3D*: 5(1-)xx, min; 52xx, inv; 5(2-)xx, max # then rebid 3N/4H

- 3H : 26xx, inv

- 3S : s/o # usually 25xx inv

- 3N : s/o
```

```
- 3H*: 5(2+)xx, min
- 3S*: 6(2-)xx, min
- 3N*: 6(2-)xx, max
- 4C+: 3+H, max

3D*: 16xx, inv; 6+H, GF

3H*: 3+S, inv+

3S: s/o

3N: s/o

4C*: ORKC

4D* → 4S: re-raise not allowed, usually with strength # could be preempt

4H: s/o

4S: s/o
```

```
2D^* - # 3 - 8, 5 + H
P : s/o
2H : s/o
2S : 5+S, NF # usually inv
  - 2N : 2-S, max
  - 3H : 6+H, max
  - 3S : 3+S, inv
2N^*: inv+
  -3m:3+m, min
  - 3H^*: 6+H, min
  -3S*:6+H, max
  - 3N^*: 5H, max
3C^*: 5+S, GF
3D^*: 3+H, inv+
3H : s/o
3S : s/o
3N : s/o
4C*: ORKC
4D^* \rightarrow 4H : re-raise not allowed, usually with strength # could be preempt
4H : s/o
4S : s/o
```

2.3 2D/V (multi)

```
2D - # 3-7, 6+M
P : s/o
2M/3M/4H*: P/C
4S : s/o
2N*: F1
   - 3C*: min
     - 3H*: P/C
  - 3D*: H, mid
  - 3H*: S, mid
  - 3S^*: H, max
  - 3N^*: S, max
3C : s/o
3D^*: some 5+M, GF
  - 3H : 6+H
       - 3S : 6+S
      - 3N : 5S
  -3S:6(2-)xx
  - 3N*: 6322
  - 4C*: 63xx+, spl D
   - 4D^*: 63xx+, spl C max
  - 4H*: 63xx+, spl C min
3N : s/o
4C^*: fit in both majors, slam interest, ask
  - 4D*: H
  - 4H*: S
4D*: s/o 4M, not allowing re-raise
```

2.4 2M/V (nat)

```
2M - # 8-11, 6+M
2S : nat F
2N*: ask feature
    - 3X : cue
3M : s/o
3N : s/o
4C*: ORKC
4D*: s/o 4M, not allowing re-raise
4M : s/o
```

Chapter 3 comp

3.1 Gladiator

3.2 overcall

```
(1m) -
# style: the stronger the hand, more shapely to pre 2M
# V/NV
P : # may be lengthy but not enough values, ex: AJxxxxx.xxx.x
1M : (8)9-17, 5+M # rebid <math>2M = 14-17
2M : 9-13(14), 6+M # promise defensive values
# V/V
1M: 8-17, 5+M # could be weaker (LD) if partner PH
2M : 6+M, pre # usually not 6322; unless ex: KQJ9xx.xx.Kxx.xx
# NV/NV
1M: 8-17, 5+M # 4oM or afraid of losing game
2M : (5)6+M, pre # usually unbal and partner PH if 5M
# KQxxx.JTxx.x.Qxx: 2S
# KJxxx.xxx.QJTx.x: 1S/2S
# KQJxx.xxx.Qxx.xx: 1S/1-2S
# NV/V
1M : 8-17, 5+M # 4oM or afraid of losing game
2M : 5+M, pre # wild if partner PH
# KQJxx.xxx.Qxx.xx: 1S/2S
# KJxxx.xx.xxx: P/2S
```

3.3 unusual

```
# if we are able to overcall the higher suit at 1-level, then range = 3-10
    or 16+; otherwise 10+
    (1M) - 2M*: 5+oM, 5+m
    (1M) - 2N*: 55+ms
    (1m) - 2m*: 55+Ms; 54+ if NV/V
    (1m) - 2N*: 5+H, 5+om

(1X) - (1Y) -
X* : 44+ unbid suits or strong
1N*: 54+ unbid suits
```

3.4 vs 1N

TBD

3.5 vs pre

```
1m - (3M) - X*: ask for stopper; may have 4oM
1m - (3M) - P - (P) - X*: ask for stopper; may have 4oM
# resp: pen with KJxx+ (IP) or equivalent values, otherwise
# 5 good oM [3/4oM] > 1.5 stop [3N] > 4 good oM [3/4oM] > 1 stop [3N]
```

Chapter 4
util

4.1 Forcing Pass

4.1.1 XX = Q

4.2 suit GT

```
[fit in 2S] -
2N*: HSGT or ST, no shortness
  - 3X*: Qxx or xxx in X # partner having ctrl/xx is consider helped
   - 3N+: max # may need to cuebid since partner may want to ST
3S:s/o
# case 1: bidder only shows one suit
3C^*: C spl GT; or H spl GT (lo); or C spl ST
   - 3D*: inv C spl
        - 3H*: H spl (lo)
        - 3S : C spl (lo)
        - 3N+: C spl ST
        - 4S : C spl (hi)
  - 3H*: inv H spl
3D*: D spl GT or ST
  - 3H*: inv
3H*: H spl GT (hi) or ST
# case 2: if bidder already shows another suit X, spl X replaced by long X
```

```
[fit in 2H] -
2S*: HSGT or ST, no shortness
  - 2N+: Qxx or xxx in X # partner having ctrl/xx is consider helped
   - 3H : min
   - 3S+: max # may need to cuebid since partner may want to ST
3H : s/o
# case 1: bidder only shows one suit
2N*: S spl GT; or D spl GT (lo); or S spl ST
  - 3C*: inv S spl
        - 3D*: D spl (lo)
        - 3H : S spl (lo)
        - 3S+: S spl ST
        - 4H : S spl (hi)
   - 3D*: inv D spl (lo)
3C*: C spl GT or ST
   - 3S*: inv
3D*: D spl GT (hi) or ST
# case 2: if bidder already shows another suit X, spl X replaced by long X
```

4.3 Lebensohl

TBD

4.4 Rubens

TBD

4.5 Slam bidding

4.5.1 cuebid

```
cue = 1/2nd ctrl
# if opener shows a suit (unless 1C - 1X; 1N/2N), then
opener's cue on that suit = 2 of AKQ, usually source of tricks
resp's cue on that suit = never shortness, can be Q
```

4.5.2 FF

```
[fit in 3M] -
4M : min
3M+1*: FF, mild slam interest
4X*: cuebid, strong slam interest
```

4.5.3 kickback RKC

```
[fit in S] - 4N*: ask number of keycards # 4 Ace + Trump K
5C*: 0/3 keycards
5D*: 1/4 keycards
5H^*: 2/5 keycards w/ Trump Q
5S*: 2/5 keycards w/o Trump Q
# case 1: resp. didn't show another suit
5N^*: 0/2/4 keycards, some void
   - 6C*: ask
        - 6X^*: void in X
6X*: 1/3 keycards, void in X
# case 2: resp. already shows another suit, now only two possibilities
5N^*: void in H (if resp. shows D) or D
   - 6C*: ask, no Trump Q
        - 6D*: 0/2/4 keycards w/ Trump Q
             - 6H*: inv
        - 6H*: 1/3 keycards w/ Trump Q
        - 6S*: w/o Trump Q
   - 6D*: want to inv 1/3 keycards
        - 6H*: extra but no Trump Q
        - 6S*: no extra
        - 7S : Trump Q, extra
   - 6H*: have Trump Q, want to inv 0/2/4 keycards
   -6S^*: s/o
6C*: 0/2/4 keycards, void in H (if resp. shows C) or C
   - 6D*: ask Trump Q
        - 6H*: Trump Q, no extra
```

```
- 6S*: no Trump Q
- 7S: Trump Q, extra

6D*: 1/3 keycards w/o Trump Q, void in C or H
- 6H*: inv

6H*: 1/3 keycards w/ Trump Q, void in C or H, extra

6S*: 1/3 keycards w/ Trump Q, void in C or H
```

```
[fit in X] - [4X+1]*: ask number of keycards
# similar responses, 5N replaces void in [X+1]
```

4.5.4 ERKC

```
[fit in X] -
# if opener already shows non-void Y, then it replaces the highest ERKC
5Y*: ask number of keycards, excluding Y
   - +1*: 0/3 keycards
   - +2*: 1/4 keycards
   - +3*: 2 keycards
```

4.5.5 Obvious ERKC

```
[opp. bids Y (or bidder showed shortness in Y) and we fit in X] - 4X+2*: ask number of keycards, excluding Y # 5Y replaces ERKC in X+2 or the highest ERKC (if X+2 is NT)
```

4.5.6 ORKC

```
preempt in X (not C) - 4C*: ORKC

4D*: min

4H+: same as resp. to RKC
```

4.5.7 2-suied RKC

```
1M - 2X; 3X - 3M; ... [4M+1]: 2-suited RKC
# Queen of M and X act as 0.5 keycards
+1*: 0/3/6 keycards # may +0.5
    - +2*: ask if there's extra 0.5
        - 5M*: no
+2*: 1/4/7 keycards # may +0.5
        - +3*: ask if there's extra 0.5
        - 5M*: no # +4 = 5M
+3*: 2/5 keycards
```

+4*: 2.5/5.5 keycards

4.6 UwU

TBD (low-low, high-high)

4.7 XYZW

4.7.1 2wPCB

(https://www.ptt.cc/man/BridgeClub/D6D1/D49B/D130/M.924860463.A.html)

```
1X - 1Y; 1N
2C^* \rightarrow 2D^*: transfer accepted
        - P : s/o
        - 2M : s/o, choose a partial [M <= Y]; inv, 5+Y, 4+M [M > Y]
        - 2N*: inv
        -3Z: inv, 6+Z [Z = Y] or 4+Z [Z = X] or 5+Z and 4Y [otherwise]
        - 3N*: 5332, CoG # different from BTUBWS
   - 2Y^*: max, 3Y
2D^*: GF, ask
  -2M:3M[M=Y] or 6M[M=X] or 4M[otherwise]
   - 2N : nat
  - 3X : good 5+X
2M : inv, 5+M [M = Y] or 4+M [otherwise], NF
2N^* \rightarrow 3C^*: transfer accepted
        - P : s/o
        - 3D+: ... (TBD)
3Z : ST, 4+Z [Z = X] or semi-solid 6+Z [Z = Y] or 5+Z [otherwise]
3N : s/o
4C+: ... (TBD)
4Y : s/o
```

4.7.2 PLOB

not done yet

```
- 2S*: GF, not prefer to declare NT

1N : nat NF

2X : s/o

- 2S*: F

- 2N+: nat inv

- 3S*: 6+C, 5+S, F

2N*: 15+, catchall

3C*: fit in C, ST

3D*: 5+H, 5+D, ST

3H*: 6+H, ST

3S*: 4+S, ST

3N*: 18-19, 4H
```

```
1D - 1H; 1S -
1N : nat NF
2C^*: any (9) 10-14
  - 2D : 12-14, 2-H
        - P : s/o
        - 2H : s/o
        - 2S*: F, not prefer to declare NT
             - 2N : min
             - 3N : max
        - 2N+: nat inv
   - 2H : F, 3H
  - 2S*: general GF
  - 2N+: nat GF
2X : s/o
2N^*: 15+, catchall
3C*: fit in D, ST
3D*: 5+H, 5+C, ST
3H*: 6+H, ST
3S^*: 4+S, ST
3N^*: 18-19, 4H
```