

APPENDIX

This part of the book provides you with basic knowledge about the game of PLO and also offers you utilities which will simplify your decisions on the tables.

Appendix 1 – Basic Rules of PLO

The goal of any poker game is simple: be the one who wins the money in the pot. There are two possible ways to win a pot (and money) in poker:

- ♠ You are the last remaining player in a hand
- ♠ You have the best made hand at the end of a hand against one or more players.

Before we take a look on how you can achieve one of these two goals above, let's first discuss the notion of a "hand." Unlike other games, a game of cash-game poker at a table doesn't have an ending or end-game strategy (unless all the players get up and leave the table at the same time). It is just an endless loop of hands, with each hand having the same cycle. Each PLO hand's cycle is played in four rounds, so called "betting rounds." The four betting rounds of each hand are divided into two phases: Pre-Flop and Post-Flop. Table 1 shows you the complete structure of a hand. You don't have to understand every term yet, so just take a look at the different phases of a hand.

PRE-FLOP (Betting Round 1)	
<ul style="list-style-type: none"> ♠ Move the "Dealer" button clockwise to the next player ♠ The player to the left of the button places $\frac{1}{2}$ the designated amount of the big blind for that level of stakes (Small Blind) (i.e., If the table stakes is \$1/\$2, the player in the Small Blind must put up one dollar before the cards are dealt) ♠ The player to the left of the Small Blind places the full designated amount of the big blind for that level of stakes (Big Blind) (i.e., If the table stakes is \$1/\$2, the player in the Big Blind must put up two dollars before the cards are dealt) ♠ Starting with the Small Blind and finishing with the Button, four cards are dealt to each player ♠ Beginning of the first betting round (Players Call, Fold, Raise, with Check-option for Big Blind if no one has raised) ♠ Money bet is placed into a collective "pot," which was initially seeded with the forced bets put in from the Small Blind and Big Blind. 	
POST-FLOP	
Flop (Betting Round 2):	<ul style="list-style-type: none"> ♠ Remove ("Burn") the top card of the deck (Protects against cheating). This will be completely transparent in an online game. ♠ Deal three cards from the deck face-up on the middle of the table. These are the board or community cards that all players share. ♠ Beginning of the second betting round ♠ Money bet is placed into the pot
Turn (Betting Round 3):	<ul style="list-style-type: none"> ♠ Burn the top card of the deck ♠ Deal one card from the deck face-up on the middle of the table ♠ Beginning of the third betting round ♠ Money bet is placed into the collective pot

River (Betting Round 4):	<ul style="list-style-type: none"> ♠ Burn the top card of the deck ♠ Deal the fifth and final card from the deck face-up on the middle of the table ♠ Beginning of the fourth and last betting round ♠ Money bet is placed into the collective “pot”
Showdown:	<ul style="list-style-type: none"> ♠ All remaining players have to show their 4 cards and the winner of the hand gets determined

Table 1: The structure of an Omaha poker hand

A hand can also end as soon as there is only one player left in the hand. That means that the hand may end after any betting round (even pre-flop) without a showdown. If there are still two or more players in the hand after the end of the 4th betting round (river), all remaining players have to show their cards to be eligible to win the pot. The one with the best made hand wins all the money in the pot. There is no reward for holding the second-best hand; if anything, people have lost fortunes finishing with the second-best hand! If two players have the exact same made hand, they split the money in the pot. There may be some circumstances where there are main pots and side pots, based on players being all-in for one pot, and the remaining players continuing to bet to form a secondary side pot. But this is a special case which we will not consider during this basic lesson. To be able to judge who has the best made hand,¹ we must know the card and hand rankings in PLO. Poker is played with a standard 52-card French playing deck (13 ranks of 4 suits). The hierarchy of the ranks is the following: 2 < 3 < 4 < 5 < 6 < 7 < 8 < 9 < T < J < Q < K < A. Unlike bridge, every suit in poker (hearts (♥), spades (♠), diamonds (♦), and clubs (♣)) are equal.

Notice that throughout the book, I use the 4 color deck notation for the illustrations. This means that every suit has its own color. These are per convention red for hearts, black for spades, green for clubs and blue for diamonds. This, of course is different from an actual card deck where clubs and spades are black, and diamonds and hearts are red. Also I will use the abbreviation “T” for the card value of “10.”

Unlike Hold’em, where you can build your hand with any combination of cards in your hand and the community cards, in Omaha you have to use EXACTLY 2 cards from the quartet of cards in your hand, also called “hole cards,” and EXACTLY 3 cards from the community cards. With these five cards, you determine your best hand. The hand rankings are presented in Table 2.

Name of Hand	5 Card Example	Description
Royal (Straight) Flush	A♥-K♥-Q♥-J♥-10♥	A, K, Q, J, T of the same suit
Straight Flush	8♠-7♠-6♠-5♠-4♠	5 consecutive ranks of the same suit
Four-of-a-Kind (“Quads”)	9♥-9♠-9♦-9♣-3♥	4 ranks of the same value
Full House (“Boat”)	Q♣-Q♠-Q♥-J♠-J♥	3 ranks of the same value plus 2 ranks of the same value
Flush	K♦-J♦-9♦-6♦-5♦	Any 5 cards of the same suit
Straight	J♥-10♦-9♠-8♠-7♣	5 consecutive ranks. An Ace can build two straights: A-K-Q-J-10, 5-4-3-2-A (“Wheel Straight”)

¹ Made hands will be just called “hands” from now on.

Three-of-a-Kind	Q♠-6♣-3♦-3♠-3♣	3 ranks of the same value
Two Pair	K♠-K♦-4♥-4♦-2♠	2 ranks of the same value plus 2 other ranks of the same value
Pair	K♦-K♠-10♣-5♥-3♠	2 ranks of the same value
High Card	K♥-8♦-5♠-3♠-2♣	5 cards of different values, not all the same suits and not directly connected

Table 2: The hand rankings in poker (including PLO)

Notice that in case that two or more players are holding the same hand, the player with the highest top rank wins the pot. (e.g., a straight of 8-7-6-5-4 wins against a straight of 5-4-3-2-A.

My preferred method to present you the rules of PLO is to introduce them to you on the basis of an actual hand played from beginning to end. For demonstration purposes, I will use *Figure 30* below. You can also take a look at Table 1 to see where in the hand you are.

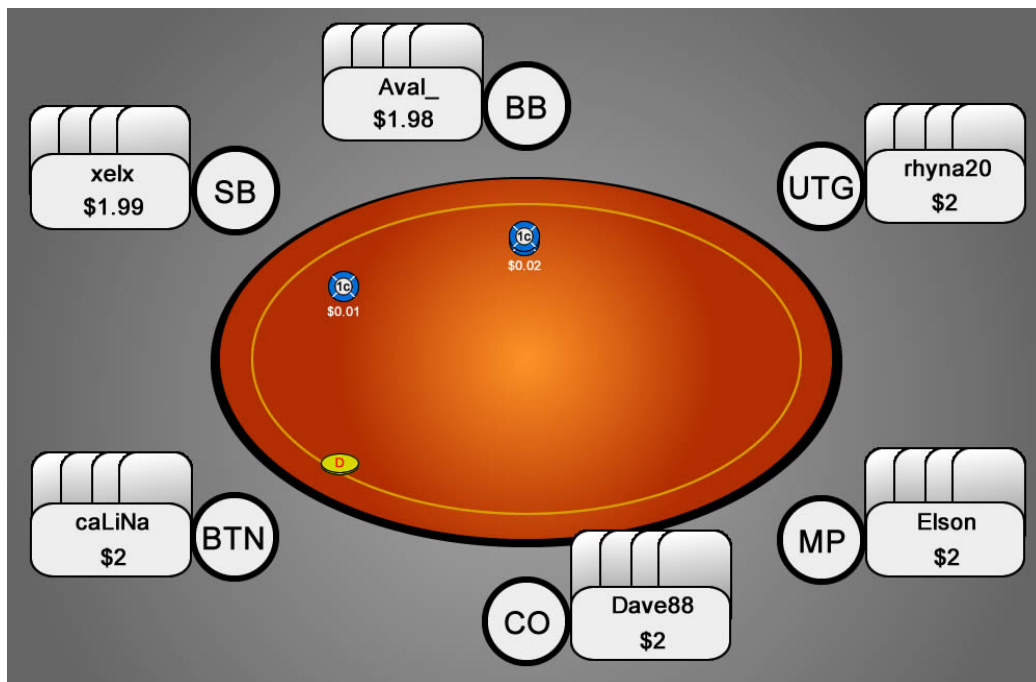


Figure 30: A SH-PLO table after moving the button, posting the blinds and dealing each player the 4 hole cards

Pre-Flop

Pre-Flop is the first phase and betting round of every hand. Before every player gets his hole cards dealt, the yellow button (located in the bottom left of the table) gets moved clockwise to the next player. The player to the left of the BTN has to pay a minimum stake for participating in the hand, the so-called "Small Blind" (SB). The player who sits to the left of the SB also has to put a stake into the pot - the "Big Blind" (BB). The size of the BB determines the "limit" of this table. In this case the, BB is \$0.02, also called "PLO 2." That means that every player can buy-in to a maximum of \$2 to the tables. After the button has been moved and the blinds posted, each player gets their 4 hole cards dealt face down. These cards can only be seen by the respective player. While it is possible at a casino to get a peek at someone's cards if they are handling their cards sloppily; online, you never see the cards of

your other opponents. Now that every player has his cards, the first betting round starts. UTG² (rhyna20) is the first player who has to make his decision based on three choices:

- ♠ Call
- ♠ Raise
- ♠ Fold

When you want to stay in the hand pre-flop you have to at least bet the amount of the big blind, which in this case would be \$0.02. This investment is referred to as a call. You can also put more money in the pot by raising. Because the game is called “Pot-Limit Omaha,” the biggest amount you can raise is the size of the pot. A pot sized raise is calculated by first calling the last bet (in this case, the posting of the big blind), and then raise the (new) amount which is in the pot. A pot sized raise in the example from above would be \$0.02 (calling the big blind) + \$0.05 (new amount in the pot) = \$0.07. Fortunately, you don’t have to do these calculations at an online table since there are buttons to click which will calculate and tell you much a pot sized raise would be. If your hand is too weak to play, then the last option is to just fold your hand. Folding means to throw your hole cards away (without showing them) and you are done with the hand. Folding here is free and should be taken into consideration quite frequently. In fact, good players in SH-PLO only play about 25% of their hands and fold the rest of them pre-flop. Playing too many hands is one of the leading causes for Omaha players to lose money!

So assuming that rhyna20 has a bad hand and folds, the next player to act is MP (Elson). MP would like to play his hand and calls the \$0.02. Now it’s the CO (Dave88) player’s turn to make his decision. Dave88 selects a pot sized raise, which is \$0.02 (calling the bet) + \$0.07 (new amount in the pot) = \$0.09. If the player on the BTN (caLiNa) would like to join the pot, caLiNa would have to pay at least \$0.09 to call the raise of CO. But caLiNa decides that this is too much for his weak hand and folds. Next to act is the SB (xelx), who already invested \$0.01; to remain eligible to win the pot, xelx gets a small discount and would need to invest an additional \$0.08 more to make the call, which he does. The BB (Aval_) has the option of folding his hand, calling for \$0.07, or re-raising even more. If Aval_ chooses to raise, then every player left in the hand would have to decide again if they want to call this new raise, fold their hand, or even re-raising Aval_’s re-raise. If everyone else folds their hands, the remaining player collects all the money, without even going to the flop, and a new hand is dealt. But for our example, BB player, Aval_ determines his hand is too weak for all that and just decides to fold. Therefore, Aval_ loses his \$0.02. *Figure 31* shows you what has taken place so far.

² As you might have already noticed, every seat has its own name. Don’t worry about them too much for now.

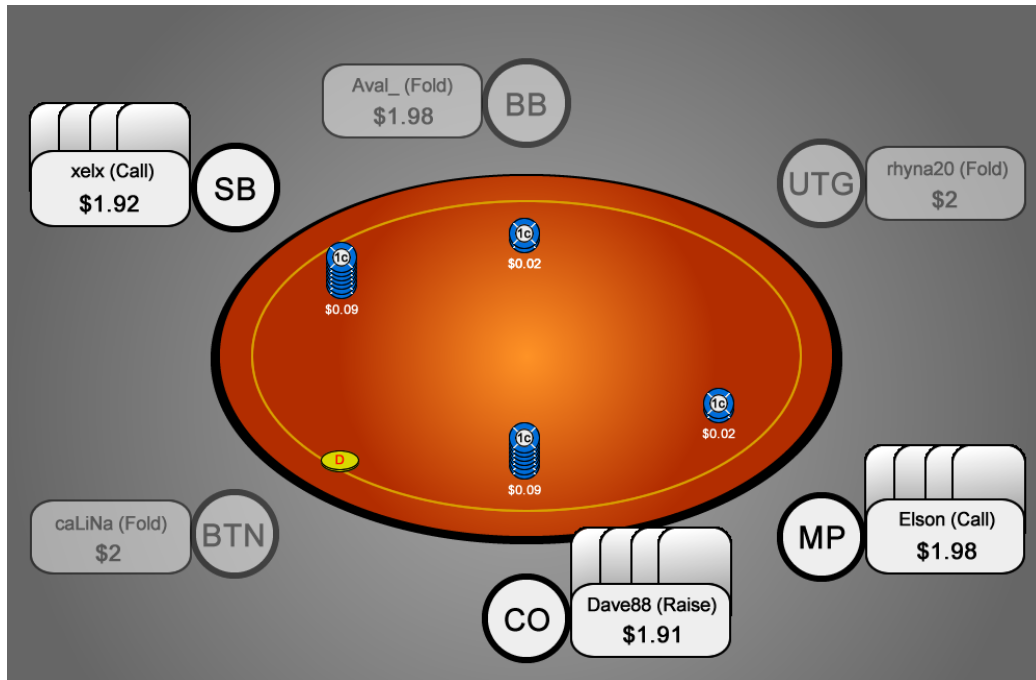


Figure 31: Sample hand after every player made his first decision

Now every player has made his decision; so we can move on, right? Not quite. Since there are three players left in the pot and MP now must decide if he wants to match the bets of the CO and SB. Therefore, MP (Elson) must act again. He can again choose to fold, call or re-raise. Elson decides to call the remaining \$0.07 and that closes the pre-flop action. After each betting round, the money that every player has invested into the hand – through bets, raises, and calls – gets added up into the pot on the middle of the table.

Post-Flop

Now we are in the “post-flop” phase. This phase starts by dealing three community cards to the middle of the table. We are now at the “flop.” *Figure 32* shows this post-flop scenario.



Figure 32: The flop – first 3 community cards get dealt

These 3 cards can now be used by every player to improve the hole cards in the hand they are holding (by thinking about what hand(s) listed in Table 2 could be made). The first player to act on the flop is the SB (xelx), since he is the first remaining player directly to the left of the button (which is different from pre-flop, where UTG - the first player after the two blinds - was first to act). Player xelx can now either check, fold, or bet. Checking basically means doing nothing; you decline to bet and just pass the action to the next player. Since checking is free, there is no merit in folding at this point in time, even with nothing. Betting means putting additional money into the pot. Betting can have three different tactical reasons:

Betting for Value: You bet because you want other people to pay out your strongly-made hands.

Betting for Protection: You bet because you want to protect your hand, that you are confident is best hand at the flop, from other hands that are trying to improve as more community cards are dealt.

Betting for Fold Equity: You bet because you want to directly win the money in the pot by forcing all the other players in the pot fold their hand. Your main intention when betting for fold equity should be to make hands fold which are better than yours at the current point of the hand.

For our example, the SB (xelx) does decide to check and now the next player in the pot clockwise has to act, which in this case is MP player Elson. Elson also decides to check and so the CO (Dave88) is now the last player to act (i.e., now has to announce his action). As you might already have observed in Figure 32, Dave88 in the CO checks as well. That means all players made their decision and since no one chose to bet the flop, the pot remains at \$0.29 and the turn card gets dealt. (See Figure 33)



Figure 33: The turn card brings the 5 of hearts

Now the same process from the flop starts again. SB opted to check again, MP now decides to bet \$0.22 on the turn and CO calls. SB decides his hand is too weak to stand the pressure of MP's bet and CO's call, and folds. Pot is now \$0.73. The fifth and final community card, the river card is the last community card dealt and therefore is the last betting opportunity for the two remaining players before showdown. Figure 34 shows this last betting round before the showdown.



Figure 34: Heads up at the river

MP checks, CO bets \$0.55 and MP calls this bet. That ends the betting. Now it's time to see who has the better hand and wins the pot value of \$1.83. *Figure 35* illustrates the showdown.



Figure 35: Both players show down their hands and the winner gets determined

Both players reveal their hole cards and the winning hand gets determined. As already mentioned, a player has to use exactly two cards from his hole cards and exactly 3 cards from the community cards³ to determine the best hand they can make out of those 5 cards. MP shows 10-8-7-6ds⁴ and CO reveals A-Q-10-3ss⁵. Let's take a look again at the hand ranks of Table 3 to see which hands are better than other hands:

Royal Flush	A♥-K♥-Q♥-J♥-10♥
Straight Flush	8♠-7♠-6♠-5♠-4♠
Four-of-a-Kind	9♥-9♠-9♦-9♣-3♥
Full House	Q♣-Q♠-Q♥-J♠-J♥
Flush	K♦-J♦-9♦-6♦-5♦
Straight	J♥-10♦-9♠-8♠-7♣
Three-of-a-Kind	Q♠-6♣-3♦-3♠-3♣
Two Pair	K♠-K♦-4♥-4♦-2♠
Pair	K♦-K♠-10♣-5♥-3♠
High Card	K♥-8♦-5♠-3♠-2♣

Table 3: The hand rankings in PLO

³ The community cards are called the "board."

⁴ A hand with 2 of your cards of an identical suit, and 2 of your other cards of a different (yet identical) suit is called "double suited."

⁵ A hand containing 2 or more cards of the same suit is called "single suited". Holding one card of each suit is called "rainbow" ('rb'), while holding 4 cards of the exact same suit are called "mono(tone)."

With the combination of two hole cards and three community cards, CO's best hand is a flush with A♠-Q♠-K♠-4♠-2♠. Since this flush of A♠-Q♠-K♠-4♠-2♠ is the nuts⁶, he wins the hand against MP's straight of 8♥-7♣-6♣-5♥-4♠. The underlined values are the cards used from each player's hole cards, whereas the other cards are used from the board. Because CO has the best hand, he wins the whole pot of \$1.83. Note that on actual online tables, there will be a small amount removed from that pot, which is called the "rake." This rake is the amount of money from every pot where at least the flop was dealt, that you have to yield to the poker site (which on average is about 5% of the pot). The rake is what keeps online poker sites and casino poker rooms in business.

Beside made hands, there are also drawing hands in poker. As we saw in the sample hand, you can hold a draw either on the flop or on the turn. These hands need one more community card to build a considerably stronger made hand. When talking about draws, one usually addresses draws to a straight or a flush. Theoretically, there are also draws to a "full house" and even to "four-of-a-kind." However, hands that draw to "boats" and "quads" are already considerably strong two-pair or 3-of-a-kind ("Trips" or "Set"⁷) made hands, compared to straight draws and flush draws which may presently be the weakest hands at the table. That's why the term draw is usually reserved for straight and flush draws.

You can determine the strength of a draw by counting the "outs," which are the cards that complete your draw. In PLO there are four different straight draws and one flush draw.

Straight Draws:

Gutshot: A gutshot is a straight draw that only one rank can complete for the straight (e.g. 8-7-6-4: only the 5 completes the straight). Because there are 4 cards of the same value of 5, you can hit your straight with 4 different community cards. Therefore, a gutshot has 4 outs.

Double Gutshot: A double gutshot is a straight draw where the card that completes the straight is neither the highest nor the lowest card of the straight. This draw might be a little tricky to recognize when starting out. An example for a double gutshot is 9-7-6-5-3: the 4 and the 8 complete the straight and therefore this draw has 8 outs.

Open Ended Straight Draw (OESD): An OESD is a straight draw with 4 connected cards, like 8-7-6-5. So you need to complete one of the "open ends" to complete your straights. This means that your OESD has 8 outs, in this case every 9 and every 4.

Wrap: Wraps only exist in Omaha because you need 3 to 4 hole cards to make a wrap. You have a wrap draw when you "wrap" two (or more) community cards with 3 or 4 of your hole cards. Wraps have between 9 and 20 outs. An example for a wrap would be a board of K-6-4 and your hand is 7-5-3-x.⁸ You are now wrapping the board with 3 of your hole cards and have a lot of possibilities to make your straight with the next card. Because there are a lot of different wraps, for now it's important for you to know that most wraps have between 13 to 16 outs.

Flush Draws:

You can also draw to a flush. This is way simpler to learn than the straight draws because there is only one flush draw in the game. You have a flush draw when there are exactly 2 cards of the same suit on the board and you have 2 or more cards of this suit in your hand. Now, every remaining card of this suit completes your hand to a flush. With the 2 flush cards of the board and 2 in your hand you have 9

⁶ The best possible hand on a specific board.

⁷ A "three-of-a-kind" using the pair in your hand.

⁸ It's common practice to use the asterisk "*" as a wildcard to notate an irrelevant card.

outs to the flush draw, since there are 13 cards of each suit. You lose 1 out for every additional card of the same suit in your hand (remember you have to use exactly 2 cards of your hole cards to build a hand)

You might have already heard the terms “runner-runner straight draw,” or “backdoor flush draw.” These terms describe straight draws and flush draws that need two more cards – the turn card and the river card – In order to complete a straight or a flush. In the course of this book I will use the term “backdoor” to describe those draws.

Table 4 shows the most important draws and backdoor draws, with examples of the relevant cards of the board, your relevant hole cards, and their respective outs.

DRAWS WITH ONE MORE CARD TO COMPLETE				
Name of the Draw	Community Cards	Hole Cards	Outs	Cards to Complete the Draw
Gutshot	J-10-x	A-K-x-x	4	Q♠, Q♣, Q♥, Q♦
Double Gutshot	J-9-5	8-7-x-x	8	10♠, 10♣, 10♥, 10♦, 6♠, 6♣, 6♥, 6♦
OESD	J-10-x	K-Q-x-	8	A♠, A♣, A♥, A♦, 9♠, 9♣, 9♥, 9♦
Flush Draw	J♣-10♣-x♦	A♣-K♣-x-x	9	2♣, 3♣, 4♣, 5♣, 6♣, 7♣, 8♣, 9♣, Q♣
Wrap	7-5-x	8-6-4-x	9-20	9, 8, 6, 4, 3 (of all sui10s)
DRAWS WITH TWO MORE CARDS TO COMPLETE				
Name of the Draw	Community Cards	Hole Cards	Cards for a Draw	
Backdoor Straight Draw	J-x-x	Q-10-9-x	A (For a Gutshot) K (For a Wrap) Q (For an OESD) 10 (For an OESD) 9 (For an OESD) 8 (For a Wrap) 7 (For a Gutshot)	
Backdoor Flush Draw	x♣-x♠-x♥	x♠-x♣-x♣-x♦	Any club (For a flush draw)	

Table 4: Draws in PLO

To wind up this chapter, let’s analyze the play of the two players from the example hand, and see why they chose the actions they did and what mistakes they made. To make it easier for you to follow, I will introduce a shorter method of presenting a hand, also known as the “hand history.” A hand history shows you the stack sizes of each player, the four betting rounds, and the resulting of the showdown.

Pre-Flop: (\$0.03) (6 players)

UTG (\$2.00): ???

MP (\$2.00): 10♣-8♥-7♥-6♣

CO (\$2.00): A♠-Q♠-10♦-3♥

BTN (\$2.00): ???

SB (\$1.99): ???

BB (\$1.98): ???

UTG folds, MP calls \$0.02, CO raises to \$0.09, *BTN folds*, SB calls \$0.08, *BB folds*, MP calls \$0.07

Flop: (\$0.29) K♠-7♣-2♠ (3 players)

SB checks, MP checks, CO checks

Turn: (\$0.29) K♠-7♣-2♠-5♥ (3 players)

SB checks, MP bets \$0.22, CO calls \$0.22, *SB folds*

River: (\$0.73) K♠-7♣-2♠-5♥-4♠ (2 players)

MP checks, CO bets \$0.55, MP calls \$0.55

Results:

CO shows A♠-Q♠-K♠-4♠-2♠ (flush, Ace high)

MP shows 8♥-7♣-6♣-5♥-4♠ (straight, 8 high)

CO wins \$1.83 with a flush, Ace high.

Let's now analyze how the players played their hands!

Pre-Flop: MP just called with a fairly good, but speculative hand. This hand can make both straights and flushes but only has 10 as its highest card value. CO raised with a reasonably strong hand. It contains 3 high cards and also has the possibility to hit the nut flush. Since the 3 adds very little value to the hand, CO's hole cards should not be considered a premium hand.

Flop: The flop gives the CO a "nut flush draw." This means that any spade on the turn or river gives him the best possible flush, which is A-high. MP only has a weak pair of 7s and a "backdoor flush draw." As you might remember, this means that any club would give him a flush draw on the turn. Because there were 3 players in the pot and the likelihood that someone has a king (for top pair) is reasonably high, MP decided to check. CO checks behind⁹.

Turn: SB checks again which means he must be holding a really weak hand. Therefore, MP decides it's now time to bet out into the field. The turn card gave him an Open-Ended-Straight-Draw (OESD), which means that there are now 8 cards on the river that completes his straight (every 4 and every 9). CO decides to call because he still has his strong flush draw. Additionally the 5♥ on the turn also gave him a "gutshot." This means that now every 4 on the river makes his straight. After seeing all this action unfold, the SB decides to call it quits and folds his obviously weak hand.

River: Fifth Street brings the 4♠. Even though he hit his straight, MP cannot continue his aggression, because the stronger flush draw also completed at the river. CO has now the nuts and therefore bets for value. MP thinks there is a possibility that CO could be bluffing by trying to represent the flush, and decides to make the "crying call" with his straight.

The only real mistake that MP made in this hand was to only call pre-flop. He should definitely have raised this hand to make as many players as possible fold. This would also have enabled him to be more aggressive post-flop, and possibly take down the pot before it got to showdown.

Before you resume with Day 1, you should assure that you picked up the important points of this Appendix section. Check off the things you now understand and review those items which you aren't quite confident with yet.

Rules:

- Structure of a Poker Hand
- Your Options in Pre-Flop and Post-Flop Betting Rounds

⁹ A check when last to act is called a "check behind," or "check back."

Hand Rankings

Draws:

Straight Draws (Gutshot, OESD, Wrap)

Flush Draw

Backdoor Draws

Appendix 2 – Hand Charts

This section shows you which hands we can play and defend in certain pre-flop situations. One main focus of the charts was to design them so they possessed the compactness to fit on exactly one DIN A4 page. This is important in making them user-friendly, if you want to use them during your sessions. As you will notice, there are some gaps in the defending charts, both IP and OOP. Sections with gaps are considered highly advanced content and will be supplemented with material throughout the body of this book. You will be active participant in filling out these gaps in the Exercise and Practice parts of the respective sections, so just ignore them for now. To keep the charts to within a single page, I had to make some compromises. There are also some general details missing, like how to play 3 cards of the same suit, monotone hands, and Ace-high hands without nut suit. In lieu of putting that on the chart, the following rules of thumb apply:

♠ **Monotone Hands:** Play them as if they were single suited from one position later (e.g., Q-Q-5-4ss is an open raise from MP, so open raise Q-Q-5-4mono only from CO).

♠ **Non-Nut Suit A-High Hands:** Same rule as for monotone hands (e.g., A♠-K♣-10♠-6♥ is an open raise from MP, so open raise A♥-K♣-10♠-6♠ from CO).

♠ **3 Cards of Same Suit:** Treat them like they were ss. (Note: For monotone and 3 cards of the same suit, remember that your number of outs of a flush draw will decrease from 9, to 7 and 8 respectively)

♠ **4-Betting:** In PLO, it is standard to only 4-bet with A-A-x-x. There is a lot more to learn before even considering 4-betting hands outside A-A-x-x.

Legend:

* Any card

ss Single Suited (for ace-high hands always nut-suit!)

ds Double Suited

rb Rainbow (Unsuited)

np No pair in the hand

B Non-Pair, Non-Ace Broadway (K-T)

A-J-J-xss+ This hand and all better hands of the same structure (e.g., A-Q-Q-xss)

A-B-B-7ss- This hand and all worse hands of the same structure (e.g., A-B-B-6ss)

6+6+6+6+ds Four double suited cards 6 or higher

P-P Pocket Pair

C-C-C-xss (9+) Three connected cards 9 or higher single suited (e.g. J-10-9-2ss)

CO-Range The range you would open raise from the CO

2 NLHE ds Two Texas Hold 'em hands double suited (e.g. K-J-6-5ds, Q-10-7-5ds, ...)

x-x-x-xds (80%) Top 80% of all double suited hands

STARTING HANDS	
UTG	
Pairs	AA**, KK**ss, KKQ8rb+, QQ**ds, AQQ*ss, QQ87ss+, JJ96ds+, AJJ*ss, JJ87ss+, QJJTrb+, ATT*ds+, ABTTss+, TT97ss, JT88ds+, AB77ds+
Double	KKPPrb+, QQPPss+, JJ77ss+, TTPPds, 4433ds+, 7766ss+,

Pairs	
Rundowns	A654ds+, A764ds+, A976ds+, A985ds+, A765ss, AT97ss+ 7654ds+, 8764ds+, 8754ds+, 9765ds+, 8765ss+, 9875ss+, T976ss+, J987ss+
In General	AKPPds, ABB*ds, ABCCds (4+), AJT*ss, A8+8+8+ss/np, A7+7+7+ds/np BB97ds+, 9+9+9+9+ss/np, KQJTrb
MP	
Pairs	ABPPds (6+), AA**, KK**rb, QQ54ss+, QCCss+, JJ**ds, KJJ9ss+, JJ65ss+, JJT9rb, TT76ds, BBTTss, ATT*ss, A997ss+, K998ds+, 9986ss+ 8876ss, JT66ds+
Double Pairs	JJPPss+, TT66ss+, 5544ss+, PPPPds+, QQ88rb
Rundowns	A543ds+, A653ds+, A754ds+, A874ds+, A654ss+, A875ss+, AT87ss+, AT96ss+ 6543ds+, 8764ds+, 8754ds+, 9765ds+, 7654ss+, 9875ss+, T976ss+, J987ss+
In General	AK**ds, ABCCds, AB9Cds, A8+8+*ds/np, BBB*ds, , Q987ds+, J975ds+ ABB*ss, BBB8ss+
CO/SB	
Pairs	APP*ds, QQ87rb+, JJ**ss+, TT**ds, 9965ss+, 8875ss+, 6654ss+, A66*ss+, 766*ds+, 6653ds+, 8755ds+, 5433ds+,
Double Pairs	PPPPss+, TT66rb+
Rundowns	ACCCss+ CCCCss+ (4+), 9874ss+
In General	A***ds, CCC*ds, 9+9+9+*ds, 2NLHE ds (e.g. KJ65ds) ABB*ss, ABCCss (6+), CCC*ss (9+), QT86ss+
BTN	
Pairs	All (Avoid 22**ss-66**ss)
Double Pairs	PPPP (all)
Rundowns	CCC*ss+, CCCrb
In General	****ds (80%) A***ss (80-90%), K***ss (60%) BB**ss (60%), CCC*ss (80%)

DEFENDING IP		
	Call	3-bet
Pairs	KK**ss, AQQ*ss, QQ54ss+, ABPPds, JJ**ds+, BTT*ds, 6554ds+ Strong JJ-99ss (e.g., JJ7ss+, ATT*ss+, TT97ss+, J997ss+) A877ss+, 7665ss+	AA**ss+, AKK*ss, KK54ds+, KKJ8ss+, AQQTss+, AJJTds, QJITss, BJJCss, ABTTds+
Double Pairs	KKPP, QQPP, JJ44ss+, JJ88rb+,	AAPPss+, KK99ds+, 8855ss+ 6644ss+, 4433ds+
Rundowns	A654ss+, A764ss+, AT87ss+	A543ds+, A653ds+, A765ds+ 6543ds+, 7653ds+, 8754ds+, 9765ds+ 7654ss+, 8764ss+, 9865ss+, T876ss+
In General	AK**ds, ABC*ds, ABCCds, BBB*ds, ABB*ss, AB87ss+, BCCCds (7+), BBB7ss+	ABB*ds, BBBCds, BBCCds (7+), AQT8ss+, KJT9ss+
	Squeeze	
	AA76ss+, KK87ss+, KK54ds+, ABB9ds, AT98ds+, T987ds+, ABBBss+, JT98ss+	
	Fold to 3-bet	
Pairs	KKT8rb, QQ83ss, JJT4ss, A996ss	
Aces	APP*ss, AB**ss, call ACCCcs	
Unpaired	KQ62ss, QT42ss, JT53ss	
	Raise vs. Limper	
Vs. 1	CO-Range MP vs. UTG: MP-Range	
Vs. 2+	MP-Range	
Overlimp		
Advanced 3-bets	Light 3-bets	Vs. high RFI (> %)

DEFENDING OOP		
	Call	3-bet
Pairs	AA**rb, KKJ7ss, QQ**ds, AJJ*ss, ATT9ss+, QJ8ss+, QTT9ss MW and vs. loose: KK**ss-JJ**ss, Q988ds, PPCCds (7+)	AA65ss+, AKK*ss, KK98ss+, KK54ds+, AQQ*ds, QQJ9ds+, T998ds+
Double Pairs		AAPPss, KK99ds+, JJTss+, TT88ds+, KKPPss, QQPPss, JJ88rb+, JJ44ss+, 8855ss+, 6644ss+, 4433ds+
Rundowns	A654ds+, A875ds+, A976ds+, A876ss+, A986ss+, AT87ss+, 6543ds+, 8764ds+, 8754ds+, 9765ds+, 7654ss+, 9875ss+, 9865ss+, J987ss+	JT98ss+, T987ds+
In General	ABB6ds-, QJ9*ds, ABB8ss, KQT8ss, KT98ss, sQJT7ss	AB98ds+, JT98ss+, T987ds+
	Squeeze	
	AA**ds, AAPPss, AAJ7ss+, AA87ss+, KK87ds+, KKJTss+, JJTds+, AJJTss+ KQJ9ss+, JT97ds+	
	Fold to 3-bet	
Pairs	KKT4ss, KQQ7ss, JJ63ds, J995ss	
Aces	APP*ss, A***ds, AB**ss	
Unpaired	BBCCss	
	Raise vs. Limper	
	AQQ*ss, AKQ6ds, AT98ss, KQJ5ds, JT97ss	
Advanced	Vs. 1 Limper in the , or if (VPIP < %):	
Overlimp		
	Call -Range in the :	
Advanced	♠ Vs.	
Defends	♠ Vs.	
	♠ Vs.	
	Vs. Steals (RFI > %)	
Advanced 3-bets		Light 3-bets

Appendix 3 – Your First ONLINE POKER Session

This chapter is dedicated to players who are just starting out with their online poker experience.

Before starting to play your very first hand, you should check if you have all the following preparations done.

Choosing Your Poker Site

This step is a difficult, but very important one. Choosing the right poker site for you is highly dependent on your preferences. I can only give you some input on which criteria there are and which sites I can recommend for the respective ones. If you want to play on a safe site, with an outstanding customer support and an awesome software interface to customize almost everything the way you want it to look and work, then “PokerStars” should be the way for you to go. Even though competition might be slightly tougher, it is still beatable. If you are looking for softer competition, then you should check out poker sites like “888poker.” Other poker networks that have been around for a long time include “PartyPoker” and “iPoker.” Another way to start out is to google for websites that review various poker networks.

U.S. Player Notice: Since April 15th 2011, also known as “Black Friday,” U.S. players are not permitted to play on the vast majority of poker sites. A few U.S.-friendly sites do exist, such as “Carbon Poker.”

Use the 4 Color Deck

Almost every poker site offers the option to play with a 4 color deck. This means that every suit has its own color. These are per convention red for hearts, black for spades, green for clubs and blue for diamonds. It helps you to faster determine your hand strength (you’d be amazed how many people at a casino will say they have a flush, but mistook their black clubs for spades). It also becomes especially handy when you start playing multiple tables simultaneously. It is the convention I use throughout the book.

Choose Your Preferred Seat

When you take an empty seat on the table, this seat won’t always be on your favorite position on the screen. To make sure that your position will always be where you like it to be you have to choose a “preferred seat.” This can mostly be selected in the options menu in the lobby or sometimes directly at the table.

Always Buy In For 100 Big Blinds (bb)

When you join a table, you will get asked how much money you want to buy in for. You should always opt to buy in for 100bb, because this is the standard stack size (full-stacked) for which all the concepts in this book will work best. With a big stack size, you have a lot of room to outplay your competition and, possibly, have enough stack behind you to win all their chips when they make major mistakes. If you play a \$0.01/\$0.02 table then \$0.01 is the price of the small blind, which is 0.5bb and \$0.02 is the big blinds. So on these tables, you should buy in for \$2, since $\$0.02 \times 100 = \2 .

Use the Auto-Rebuy Option

Almost all poker sites allow the option to auto-rebuy after you lost a threshold amount of money. Because we always want to play with 100bb, we should enable this option. It can be found either in the lobby of the poker site or directly on the table.

Choose “Always Wait For the BB” When Joining a Table

After you are satisfied with your seat you will be asked if you want to “play now” or to “always wait for the BB.” You should always choose the latter because there are only 2 players per round who have

to post the blinds - the SB and the BB. All the other seats can see their cards for free. When you choose to “play now,” then you are obligated to pay for the first hand you play, even if you sit in the CO, MP or UTG, which can be costly in the long run.

Use Pot Sized Bet Sizings Pre-Flop and 75% Pot Sized Bets Post-Flop

You already know which hands you can play aggressively. However, we haven’t talked about how big you should bet or raise. As a rule of thumb, you can’t go wrong by raising and 3-betting pot sized pre-flop. On the flop, choose a bet size around 75% of the pot post-flop. You will learn about more sophisticated bet sizings in the course of this book.

Now open your preferred poker site and do all the preparations. So you don’t lose track, here is a checklist to summarize the things to do:

Lobby Settings (for most sites):

- Choose Your Preferred Seat
- Use the Auto-Rebuy Option
- Choose “Always Wait for the BB” When Joining a Table

Table Settings:

- ✓ Always Buy In For 100 Big Blinds (bb)
- ✓ Use Pot Sized Bet Sizings Pre-Flop and around 75% Pot Sized Bets Post-Flop

Appendix 4 – Tracking software

Tracking software is a computer program that stores each action your opponents make into a database. You can retrieve the desired information you need from that database and display it onto a Heads-Up-Display (HUD).

When you use Holdem Manager2, I would suggest starting with the “Expanded” HUD. You can choose it in the “HUD-Settings.” When using PokerTracker 4, the HUD you are looking for is the “Cash – Legacy.” You can select it over the menu “Hud” -> “Edit Hud Profiles.”



Figure 36: Our basic starting HUD

These HUDs include basic and highly useful statistics, which are:

- ♠ **#Hands:** The total number of hands played by each player you have stored in your database. The higher this value is, the more confidence you have in all of your other statistics.
- ♠ **Voluntarily Put Money In the Pot (VPIP):** The VPIP describes the percentage of how many hands this individual played. Combined with PFR, this combination becomes our primary statistical means for categorizing our opponents. Average VPIP values are about 20-25%.
- ♠ **Pre-Flop Raise (PFR):** The PFR is the general statistic of the frequency a player raises. An average PFR value is about 15-20%
- ♠ **3-Bet (3b):** The 3-Bet value tells you how often a player re-raises a raise before him. An average 3b value is about 5-7%.
- ♠ **Continuation Bet Flop (CBet F):** This stat tells you how often this player continues his pre-flop aggression, post-flop, by betting the flop after raising pre-flop. Average CBet F values are about 60-65%.

♠ Fold To Continuation Bet Flop (Fold2CbF): This value is the counterpart of the CBet F stat and describes how often someone folds to c-bets. You should fold about 50-55% to continuation bets on the flop.

♠ Aggression Factor (AF): This is the aggression factor of a player. The calculation for the AF is as follows: (amount of times bet + amount of times raise) / (amount of times call). So an AF value of 2 means that a player bets or raises twice more often than he calls. An AF of below 1 is usually an indicator that a player slow-plays his strong hands. High AFs of 3 or more means that this player bluffs more frequently. High aggression is mostly recommended and a value of 2-3 should be considered ideal.

♠ Went To Showdown (WTSD): The total percentage of hands played all the way to showdown, after seeing the flop. An average value of this stat is around 25-28%. Values above 30% are strong indicators that you are facing a “calling-station,” whereas players with 22% or less WTSD will mostly give up before the showdown, but will probably show very strong hands when they elect to go with the hand “all the way.”

With this basic HUD, you will always know about the tendencies of your opponents. You will learn the usage of it throughout this book. You are now ready to continue with Day 3 **Error! Reference source not found.**

Appendix 5 – Hand vs. Hand Equity Chart

The following equity chart is divided into “Flop” and “Turn” equities. The flop column describes your equity with two cards to come (“i.e., the turn and river cards”). The turn column illustrates the equity you have with one card to come (“i.e., the river card only”). There are only slight differences between “flop-to-turn” equity compared to “turn-to-river” equity. In fact, from the turn to the river you have the chance of 1 out of 40 for every out you have (2.5%), whereas OTF you got 1 out of 41 (2.44%) to hit your out (always assuming villain doesn’t block an out of us). This chart is downloadable at www.<book-publisher>.com. After printing out this chart continue with your lesson (Day 6).

EQUITY CHART			
Vs. Hand	Your Hand	Flop (or 2 cards to come):	Turn (or 1 card to come):
Vs. Straight			
	Set	37%	22%
	Set + Gutshot to High Straight	50%	35%
	Set + Flushdraw	60%	40%
	Flushdraw	35%	20%
	Flushdraw + Gutshot to High Straight	47%	27%
	OESD to High Straight	35%	17%
	Flushdraw + OESD to High Straight	58%	33%
	Two Pair	24%	10%
	TwoPair + Gutshot to High Straight	37%	20%
	Two Pair + OESD to High Straight	48%	27%
	Two Pair + Flushdraw	53%	30%
	Two Pair + Flushdraw + Gutshot to Higher Straight	61%	37%
Vs. Flush			
	Set	37%	22%
	Two Pair	19%	10%
Vs. Set			
	Flushdraw	23%	15%
	OESD	28%	21%
	Gutshot	15%	10%
	Flushdraw + OESD:	40%	30%
	Flushdraw + Gutshot	32%	22%
Vs. Top Two Pair			
	Flushdraw	39%	20%
	Flushdraw + Gutshot	49%	28%
	OESD	43%	20%
	OESD + Flushdraw	56%	35%

Pair + Overcards	37%	27%
Vs. OESD		
Flushdraw	50%	65% / 35% (highcard)
Vs. Top Pair		
Flushdraw	43%	20%
OESD	43%	20%
Flushdraw + OESD	61%	35%

APPENDIX 6 – STATISTICS

In this chapter, I summarized every stat we discussed in the course of this book.

PRE-FLOP STATISTICS		
Statistic Name	Abbreviation	Meaning
3-bet	3b	How often a player re-raises a single raise before him
4-bet Range	4Bet Rng	An indicator of how often a player 4-bets non-AA** hands. A 4-bet Rng of around 2.5% indicates that this player only 4-bets AA**. Calculated by multiplying the PFR with the 4-bet value
BTN Steal	BTN Stl	How often a player steals from the Button
Call 3-bet	Call3Bet	How often a player calls a 3-bet
Fold BB to BTN Steal	FoldBB2BTN	How often a player folds his Big Blind to a Button Steal
Fold BTN to CO Steal	FoldBTN2CO	How often a player folds on the Button to a Cutoff Steal
Fold to 3-bet	Fold3Bet, F3b	How often a player folds to a re-raise
Pre-Flop Raise	PFR	How often a player raises pre-flop
Raise First-In	RFI	How often a player raises pre-flop when all the other players before him folded
Voluntarily Put Money In Pot	VPIP	How often a player puts money in the pot pre-flop except posting the blinds

POST-FLOP STATISTICS		
Statistic Name	Abbreviation	Meaning
Aggression Factor	AF	The aggression factor of a player. The calculation for the AF is as follows: (amount bet + amount raise) / (amount call)
Check-Raise Flop	Check-R F, CRF	How often a player raises the flop after checking OOP
Continuation Bet	C-bet, Cb, CBet	How often the PFA bets on the flop to continue his pre-flop aggression.
Continuation Bet Flop/Turn/River	CbF/T/R	How often this player continuation bets on the flop/turn/river.
Fold to Continuation Bet Flop/Turn/River	F2CbF/T/R	How often a player folds to a continuation bet on the flop/turn/river
Went To Showdown	WTSD	How often a player brings his hand to the showdown after seeing the flop

POP-UP STATISTICS

Statistic Name	Abbreviation	Meaning	Pop-up Stat
Bet vs. Missed C-Bet	BvMcb	How often a player bets when the PFA didn't c-bet	F2CbF
BTN vs. CO 3-bet	3bBTNvsCO	How often the player on the BTN 3-bets when facing a CO Steal	3-bet
Cold-Call 3-bet	CC3b	How often a player calls when there was a 3-bet before him	VPIP/PFR
Donk Bet	Donk, Db	How often a player bets out OOP into the PFA	F2CbF
Fold Continuation Bet to Raise on the Flop	CB-Fold F	How often a player folds to a raise after he continuation bet	CbF
Fold to Donk Bet	F2Db	How often the PFA folds IP to a bet	F2CbF
Fold SB to BTN Steal	FSB2BTN	How often a player folds his Small Blind to a Button Steal	FBB2BTN
Fold to Continuation Bet in a 3-bet Pot	F2Cb3bP	How often a player folds to a continuation bet in a 3-bet pot	F2CbF
Limp-Fold, Limp-Call, Limp-Raise	LF, LC, LR	How often this player folds, calls, or raises against a raise after he limped	VPIP/PFR
Skip Flop Continuation Bet and Check-Fold	FSkCbF	How often this player folds to a bet after he checked as the PFA	CbF

