

**BASIC
BLACKJACK**



Stanford Wong

BASIC

BLACKJACK

STANFORD WONG

Pi Yee Press

BASIC BLACKJACK

by
Stanford Wong
Pi Yee Press

copyright © 1992, 1993, 1995 by Pi Yee Press

All rights reserved. No part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the publisher. Inquiries should be addressed to Pi Yee Press, 7910 Ivanhoe #34, La Jolla, CA 92037-4511.

ISBN 0-935926-19-4

Printed in the United States of America

3 4 5 6 7 8 9 10

cover photo: Michael McCall

PREFACE

This manual is the most comprehensive discussion of blackjack basic strategy in existence. Included is advice for proper play for almost any rule variation you will encounter in any blackjack game anywhere.

Many rules variations have appeared since 1979, when I began publishing monthly newsletters. Every time I learn about a new rule for blackjack, I work out a strategy for playing against it and share the strategy with my newsletter readers. Many of the strategies published in this book first appeared in my newsletters. Others of these strategies first appeared in my long-out-of-print *Blackjack in Asia*.

Also included is the best of another out-of-print book, *Winning Without Counting*, the first blackjack book that explained how to win without counting cards. The price of *Winning Without Counting* originally was high (\$200), but its value was even higher — particularly the material on warps, the raison d'etre for the book. Dave Douglas is the person to whom I am thankful for introducing me to warps. I made a lot of money

playing the warps at Las Vegas Club. That was the easiest game to beat that I have ever found, and I am grateful that it lasted as long as it did. As pit bosses at Las Vegas Club became aware that its blackjack game really was the most liberal in the world, they took a step that stopped the giveaway. They had their dealers stop peeking at hole cards under 10s.

Thus some of the material in this book has been published previously, but in various hard-to-find back issues of newsletters and in books now out of print.

Almost all strategies in this book are calculated by a software product I created for IBM PCs: *Blackjack Analyzer*. You can buy this software and reproduce any advice in this book.

Win rates in this book are estimates based on simulations by *Blackjack Analyzer*. At a minimum, enough hands are simulated to bring the standard error down to 0.03%; generally that requires twenty million hands.

The best way to find out which casinos have the best rules for blackjack is through *Current Blackjack News*, a monthly newsletter published by Pi Yee Press. For ordering information, write to Pi Yee Press, 7910 Ivanhoe #34, La Jolla, CA 92037-4511 or call (619) 456-4080.

Thanks to Anthony Curtis and Dave Douglas for reading a draft of this manuscript and making helpful suggestions. Thanks to Donald Schlesinger and John Speer for catching typos in the first printing.

In the 1993 printing: Spooking was recognized as illegal.

In the 1995 printing: Nine tables were added and the cover was improved.

CONTENTS

LIST OF TABLES	10
CH 1 INTRODUCTION	13
CH 2 GENERIC BASIC STRATEGY	27
Calculating Basic Strategy	27
Table of Generic Basic Strategy	28
Pairs	29
Soft Hands	32
Hard Hands	32
Surrender	33
Insurance	33
CH 3 COMMON RULES VARIATIONS	35
Number of Decks	36
Dealer Hits Soft Seventeen	37
Lose All to a Natural	41
Dealer Final Totals	44
Fixed Shuffle Point.....	46

CH 4 PAYOUTS ON NATURALS	47
If a Natural Pays Other Than 3:2	49
Get Paid on a Tied Natural	52
Double Naturals Win 2:1	54
Extra Pay On Same-Suit Naturals	56
No Natural Winner for Dealer	57
CH 5 DOUBLING DOWN.....	59
Doubling on Three or More Cards	62
Doubling Eleven on Three or More Cards.....	62
Doubling For More With Match-Play Chips ...	62
Redoubling	66
CH 6 SPLITTING.....	67
Restriction on Splits	67
After Split, Restriction on Doubling	68
Split 10-10, Catch Ace For 3:2 Win	68
Split Any Sixteen.....	72
Optional Bet Split Rule	72
Split for Less	77
CH 7 SURRENDER.....	79
Early Surrender	82
Surrender Any Number of Cards	83
Surrender After Doubling Down	83
Surrender After Splitting	84
Surrender And Get a New Hand	84
CH 8 TIES	87
Dealer Takes Ties	87
Lose on 17-17	91
Lose Ties Except 21-21	93
Tie Insurance	94
CH 9 FIVE CARDS	95
Half a Bet	96
Automatic Win	96

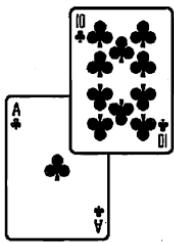
Twenty-One Only	97
Example: 6-Card Automatic Winner	110
Example: Five-Card Half Win	112
CH 10 6-7-8 ETC	115
Bonuses for 6-7-8	115
Bonuses for 7-7-7	116
Bonuses for 5-5-5-5	120
CH 11 ACES	121
After Splitting Aces	121
Coupon For an Ace	123
Ace as First Card	125
CH 12 JOKER	127
Joker as Card of Your Choice	127
Double Win With Joker	130
CH 13 BUSTED HANDS	131
Push on 22	131
22 Counts as 21	136
Push on Tie Over 21	140
Push on Anything Over 21	144
Bust Box	146
CH 14 OTHER BLACKJACK BETS	147
Field Bets	147
Over/Under	148
Red/Black	148
Multiple Action	148
Royal Match	150
CH 15 DOUBLE EXPOSURE	151
Ties Push	160
Hybrids	161
CH 16 TELLS	167
Definitions	168

Julius Fast	169
Ian Andersen	169
Steve Forte	170
Becoming a Kinesic	170
How to Spot a Tell	171
Playing Strategy for Tells	176
Estimating Accuracy of a Tell	179
How Certain Must You Be of a Tell?	180
Other Considerations for Kinesics.....	182
Tokes For Tells	184
CH 17 WARPS	187
Figure 1 Typical Warped Cards.....	189
Definitions	190
Quick Warp Strategy.....	191
Value of Playing the Warps	191
Finding Warped Cards	192
Likely Stiff and Likely Pat	197
Typical Warped Deck	198
Strategy for Playing Warps	199
Gain from Playing Warps	199
How Much Accuracy in Predicting Hole Cards .	205
CH 18 OTHER TRICKS	209
Front Loading	211
Spooking	216
See the Top Card	218
Seventeen-Card Cut	218
Dealer Errors	219
Benefiting From Your Misplays	232
GLOSSARY	239
LITERATURE CITED	247
INDEX	249
PUBLICATIONS BY STANFORD WONG	253

LIST OF TABLES

1 Generic Basic Strategy	30
2 Dealer Hits Soft 17	38
3 Lose All To Dealer's Natural	42
4 Probability of Dealer Final Total by Upcard	45
5 Probability of Natural	48
6 Expected Values of Unusual Payoffs on Naturals	51
7 Value of Getting Paid on Tied Natural	53
8 Probability of Simultaneous Naturals	55
9 Doubling on Any Number of Cards.....	60
10 Doubling a Match-Play Chip	63
11 Redoubling	64
12 Pair Splits With Double on Nine, Ten, or Eleven	69
13 Pair Splits With Double on Ten or Eleven	70
14 Pair Splits With Double on Eleven	71
15 Pair Splits That Benefit the Rider	74
16 Pair-Betting Strategy for Riders	75
17 Early Surrender	80
18 Dealer Wins Ties	88
19 Dealer Wins 17-17	90
20 Dealer Wins Ties Except 21-21	92
21 Bonus: Half a Bet	98

22 Bonus: One Bet	100
23 Bonus: One and a Half Bets	102
24 Bonus: Two Bets	104
25 Bonus: Three Bets	106
26 Bonus: Two Bets But Need 21	108
27 Six-Card Automatic Win	111
28 Five-Card Half Win (Macao).....	113
29 Gain From Splitting 7-7	117
30 Probability of 7-7-7	119
31 Double After Split Ace-Ace If Hitting Not Allowed..	122
32 Player Edge Given First Card	124
33 Basic Strategy For Value to Assign to Joker	129
34 Push on 22	132
35 22 Counts As 21	138
36 Probability of Push	141
37 Push on Tie Over 21	142
38 Push on Anything Over 21	145
39 Bust Box	146
40 Double Exposure, No DS, Part 1	152
41 Dbl Exp, No DS, Dealer Stands on Soft 17	154
42 Dbl Exp, No DS, Dealer Hits Soft 17	155
43 Double Exposure, DS, Part 1	156
44 Dbl Exp, DS, Dealer Stands on Soft 17	158
45 Dbl Exp, DS, Dealer Hits Soft 17	159
46 Ties Push, Part 1	162
47 Ties Push, Dealer Stands on Soft 17	164
48 Ties Push, Dealer Hits Soft 17	165
49 Conservative Tell Strategy	177
50 Typical Deck With 65&74 Predictive Accuracy	198
51 Warps: Hole Card 2-9	200
52 Warps: Hole Card 10/A	202
53 Gains on Warp Play	204
54 Front Loading: Dealer is Stiff	212
55 Front Loading: Dealer is Pat	214
56 Profitable Hands, by Upcard	222
57 Profitable Hands, by Dlr Total	224
58 Profitable Hands if Double	226



CHAPTER 1

INTRODUCTION

Chapter 2 presents generic basic strategy for blackjack. The rest of the book discusses situations where it is appropriate to deviate from generic basic strategy. Deviations from generic basic strategy are highlighted with bold type.

A lot of unusual rules and casino promotions have popped up over the years; things like a casino inserting three jokers into a six-deck shoe. I evaluated such things as they occurred and presented appropriate playing strategies in *Current Blackjack News*, but most back issues of that newsletter are no longer available. This book includes those otherwise-obscure analyses and playing strategies.

Basic Strategy

Casino profits at blackjack are due almost entirely to players deviating from basic strategy. The average player knows almost nothing about the proper play of blackjack hands, makes mistakes about 15% of the time, and loses at the rate of about 1.4% worse than basic strategy. (Peter Griffin has studied this subject; these numbers come from chapter 15 of his 1991 book *Extra Stuff*.) Standing on all stiffs against 2, 3, 4, 5, and 6 and hitting all stiffs against 7, 8, 9, 10, and ace will take you out of the 1.4% category and make you a better-than-average player. Even with good books on blackjack available in stores all over the country for decades, most players still stand on sixteen against 7; it is a costly error.

If you want to play blackjack to win, you must at least know an approximation to basic strategy. Chapter 2 presents generic basic strategy, an approximation that is reasonably correct for almost all blackjack rules. Succeeding chapters present more detail about basic strategy, so that you can fine-tune your play to match the precise rules you face. Playing basic strategy puts you close to even at all casinos, and gives you an edge at some.

If you want more information on which casinos have rules so liberal that basic strategy gives you an edge, the best source is *Current Blackjack News*.

Beyond Basic Strategy

If you find a casino in which the dealer checks hole cards under 10s, chapters 16 to 18 may help you pick up anywhere from half a percent to a couple of percentage points. If you play basic strategy as a base,

picking up half a percent will bring you up to the break-even point with standard rules, and picking up a percent will give you the sort of long-run advantage enjoyed by pros.

This book explains basic strategy. If you want to go beyond basic strategy and learn how to count cards, I have another book for you: *Professional Blackjack*. I also have a third blackjack book, *Blackjack Secrets*, that explains how to get away with playing a winning game of blackjack in a casino.

This probably is a good place for an admonition against illegal acts. I do not advocate cheating. I do not advocate such tactics as grabbing a handful of chips and running. There are plenty of ways to get a legitimate edge over a casino; you should not have to resort to ways that might lead to fines, prison, and a criminal record.

Ethics

The ethics of casino gambling are simple. The casino owner, and not you, is responsible for procedures. If you notice a vulnerability, you are not obligated to tell anyone about it. If you can capitalize on that vulnerability, you may do so. An example of a vulnerability is an incorrect payoff. Your bet is not lost until the dealer picks it up; if the dealer does not pick it up you have not lost. If the dealer pays you in error and no pit boss rushes over to correct it, then you have a winner. You may call it to the dealer's attention if you wish, but you have no legal or social obligation to do so.

Some vulnerable procedures give you extra information. For all of your decisions you may use whatever information is available regardless of the source.

Once when I was playing single-deck blackjack at El Capitan in Hawthorne, Nevada, the dealer was running lucky and winning almost every hand. When he accidentally broke a corner off the spade 7 during a shuffle, instead of replacing the card or the deck he continued to deal, thinking to give the players a break. I would have had no qualms about doubling down on hard thirteen or fourteen if I saw that the card I would get was missing a corner.

History of Winning Blackjack

Baldwin, Cantey, Maisel, and McDermott published a substantially correct basic strategy in the *Journal of the American Statistical Association* in 1956. Their book, *Playing Blackjack to Win*, came out in 1957.

The first published winning system was Edward O. Thorp's ten-count in his *Beat the Dealer* in 1962. In the early 1960s, blackjack was a one-deck game in which 50 of the 52 cards were dealt out, and one could double down after splitting pairs. At the end of the deck the dealer would run out of cards and shuffle to complete the round. Thorp's revolutionary system was effective for five or six years; it became obsolete due primarily to the casino countermeasure of shuffling early rather than dealing out almost all of the cards.

The high-low count, originated by Harvey Dubner in 1963, is still effective. The first published version of it was the 1966 revision of Thorp's *Beat the Dealer*. The most complete explanation of the high-low counting system can be found in *Professional Blackjack*. All of the currently popular counting systems are variations of Thorp's ten-count or Dubner's high-low.

By the mid 1970s, emphasis shifted from trying to make better decisions to trying to get by with playing winning blackjack in casinos. For good coverage of this topic see Ian Andersen's *Turning the Tables on Las Vegas* and my *Blackjack Secrets*.

More and more decks were used in blackjack. Double deck and four-deck shoes became widespread, particularly in Las Vegas. Then some casinos went to six decks, and to eight. Northern Nevada stayed predominantly single deck for a long time.

Card counters playing against four or more decks generally must use big bet variation because they have a positive expected win rate only a small fraction of the time; and big bet variation does not go unnoticed. Only where the rules are so liberal that basic strategy yields a positive expected win rate right after the shuffle can card counters beat the shoe games without big bet variation.

Team play, popularized by Ken Uston in *The Big Player*, involves players at several tables betting small amounts and counting the cards. When one of these small bettors finds a high count, the big player is signaled to come and make large bets.

Then came techniques for winning at blackjack without counting cards. *Winning Without Counting* was the first book to explain that topic. Then came Ken Uston's books, most notably *Million Dollar Blackjack*. Then came the best book on tells: Steve Forte's *Read the Dealer*.

The other main casino countermeasure in recent years is no longer checking hole cards under 10s. This procedure first appeared at Nevada Palace in East Las Vegas in May of 1981, and spread rapidly after being

Las Vegas. Dealers at Caesars Palace no longer check their hole cards unless their up-cards are aces. If the upcard is 10 and the hole card turns out to be an ace, the player loses only the original bet and not the extra bets on doubles or splits. The player loses on twenty-one in other than the first two cards if the dealer has a two-card twenty-one. If a player wants to surrender against a 10, the dealer places a tiddlywink on top of the bet; then when the hole card is turned up, the whole bet is lost if the dealer has a natural, or half the bet is lost if the dealer does not have a natural.

— *Current Blackjack News*, December 1982

introduced at Caesars Palace in Las Vegas in November of 1982.

Playing the Game

This section explains how blackjack is played. It is a slight modification of a short section of *Professional Blackjack*.

Dealing blackjack is more boring than playing blackjack. The dealer's actions are cut and dried. A set of rules fixed by the casino decides whether the dealer takes an additional card. The dealer does not try to beat you; rather the dealer must play the hand according to the established and publicly proclaimed rules. It makes no difference to the honest dealer whether your cards are face up or face down. The honest dealer has no influence over the outcome of your hand. The greedy dealer roots for you in expectation of a toke if you win and in hope of a toke even if you lose.

You make choices all the time. Casino rules limit your options, but at least you can make decisions that affect the outcome of your hand. Sometimes two players firmly disagree on how to play a particular hand. Most of the time when you have a choice, one alternative is superior to all others. Sometimes the correct choice is obvious, but at other times the choice which you know to be correct looks stupid to anyone watching you.

The typical blackjack game goes something like this. You approach the table and notice five to seven little circles or other symbols that look like place markers. Actually they are locations for sacrificial offerings. You put a bet on the nearest little symbol and say a prayer or some such. The dealer shuffles the cards with lightning speed and an annoyed expression and sets the pack in front of you. You cut the cards and pray again. The dealer picks up the cards and places them in a box called a shoe. Or, if one or two decks are used: With a quick motion called burning a card, the dealer removes the top card and places it face up on the bottom of the pack or face down in the discard tray. The dealer gives one card face down to each player, one card face up to the dealer, a second card face down to each player, and a second card face down to the dealer. Variations exist; for example, some casinos deal all the players' cards face up.

Aces count either one or eleven. Face cards count ten. All other cards count their face amounts. A two-card combination of an ace and a 10 (meaning 10 or face card) is known as a "natural" or a "blackjack." If you have a natural you turn both cards face up and smile. The dealer with an ace or 10 up may check the hole card to see if the hand is a natural. With any other

upcard, the honest dealer has no reason to look at the hole card. A dealer with a natural turns both cards face up and yawns. If the dealer has a natural and you do not, you lose. If you have a natural and the dealer does not, you happily win one and a half times your bet. If both you and the dealer have naturals, you stop smiling and start cursing because no money changes hands.

Insurance

Most casinos offer "insurance," a side bet that you may make when the dealer shows an ace. A dealer showing any other card does not offer insurance. Some casinos never offer insurance, ace or no ace. The insurance bet is almost always limited to half the original bet. An exception was the Palace in Reno, which in the early 1960s allowed insurance up to the full amount of your bet.

If you wish to take insurance, place a new bet in front of your original bet. The dealer with a natural (i.e. a 10 in the hole) pays two to one on the insurance bet. If the dealer does not have a natural, you lose your insurance bet. If both you and the dealer have naturals, the insurance bet still wins two to one. If the dealer has a natural while you do not, the win on the insurance bet equals the loss on the original hand and no money changes hands; hence the "insurance" tag.

Most of the time you will not have a natural and the dealer will not have a natural. Then you must select one of several options. The order in which you will consider them is: surrender, split a pair, double down, hit or stand. Not all options are available in all casinos. In any casino, however, you may have to make several consecutive decisions.

Surrender

A few casinos offer “surrender,” and generally only on your first two cards — seldom after hitting or splitting a pair. Early surrender is surrender that is allowed before the dealer checks for a natural. Late surrender is when you must wait to surrender until after the dealer checks for a natural. If the dealer does not check the hole card, and acknowledges your desire to surrender by putting a tiddly-wink or some such on your cards, and picks up your whole bet in the event of a natural, you are playing against late surrender. Late surrender is more common, but early surrender is more profitable for the player.

You surrender by saying “Surrender” or “Take them; I don’t want them!” or some such expression of hopelessness. The dealer than picks up your cards and half of your bet. You keep the other half of your bet, and sit back to watch while the other players and the dealer finish their hands.

Splitting a Pair

You can split any pair. A pair is two cards with the same point value, such as ace-ace, 2-2, etc. Generally any 10-10 is a pair and may be split; e.g., you may split a jack and a king at most casinos. “Splitting a pair” is accomplished by turning both cards face up and placing an additional bet equal to the first bet by the two turned-up cards. You then have two hands with a bet on each.

If you split ace-ace, each will receive one — and only one — additional card on each ace. In other words, at most casinos you cannot get more than two additional cards after splitting aces. There are exceptions; the occasional casino allows resplit of aces or multiple hits to split aces.

If you split any other pair — that is, any pair except aces — you ask for additional cards on the first hand until satisfied with it, then move on to the second hand and ask for additional cards for that one until satisfied. If the first additional card to either of the split pair is a third of the kind, it may be resplit to make a third hand in most casinos. Resplitting to make four hands is generally allowed, but not resplitting to make five or more hands.

Doubling Down

“Doubling down” means turning the cards face up and placing by your original bet an additional bet of the same amount or smaller. The dealer then gives the hand one more card — never any more than that, and never any less.

At most casinos you can double down on your first two cards. Rarely will you find a casino that will allow doubling down on three or more cards. At many casinos you can double down on a two-card total after a pair split. When the text of this book says “double down on any first two cards,” then you cannot double down after splitting. At most casinos you can double down on any first two cards, but some casinos restrict doubling down to certain totals, such as ten and eleven only.

Hit

To “hit” a hand means to receive another card. You signal for a hit by scratching the table with your cards. Then the dealer inserts another card face up in front of you. Additional scratching brings additional cards. If your first two cards are face up, you ask for a hit by scratching the table with a finger or tapping the table in the vicinity of the hand that needs the hit. If a hit brings your total to twenty-two or more with all aces counting one, your hand is “busted.” If you are

courteous you place your busted hand face up on the table. If you are discourteous you throw your cards at the dealer. In either case you have lost and the dealer picks up your busted hand and your bet.

Stand

To "stand" is to be satisfied with the hand, i.e. to want no more cards from the dealer. If the cards have been dealt face down, you indicate your desire to stand by placing your cards face down under your bet. Manners demand that this be done without handling the bet. To touch your bet after you have received cards is to invite suspicion of cheating. If the cards are face up, you indicate your decision to stand by shooing an imaginary fly away from your cards.

The Dealer's Hand

After all the players finish their hands, the dealer turns up the hole card and plays out the hand according to preset rules. If the hand totals sixteen or less, the dealer takes a hit and continues hitting until the hand totals seventeen or more. The dealer cannot split pairs, double down, or surrender. Most casinos specify that their dealers stand on soft seventeen, but at some places house policy is dealers hit soft seventeen. Only at the Golden in Austin, Nevada, have I seen rules that give the dealer a choice of hitting or standing on soft seventeen. Elsewhere the dealer has no choice; the casino rules either specify a hit or specify a stand, and all dealers in the casino act in accordance with these rules.

After reaching seventeen or more, the dealer turns your cards face up. If your cards add up closer to twenty-one than the dealer's or if the dealer's total exceeds twenty-one, the dealer pays you even money. If the dealer's total is closer to twenty-one without going

over, you lose. In the event of a tie, no money changes hands; that is called a "push."

After settling the payoff, the dealer picks up the used cards and places them on the bottom of the pack or in the used-card tray.

Time for the next round. Put another offering on the sacrificial spot and pray again. This time the dealer does not shuffle, does not offer the deck for a cut, and does not burn a card. Rather, the next round is dealt from the unused cards.

This procedure has many minor variations. At some casinos, dealers do not check the hole card to see if the hand is a natural. One deck may be used, or two or more decks may be shuffled together. The cards may be held by the dealer or placed in a box called a "shoe." Used cards may be placed on the bottom of the pack or stacked on the table or placed in the chip rack. One or more players may battle against one dealer at the same table; each player tries to beat the dealer. A player may play more than one hand. Players' naturals may be paid off immediately or after the dealer's hand is finished. The dealer may shuffle after every other round or halfway through the pack or not until most of the cards have been used. You will encounter other minor variations from casino to casino.

The dealer will deal several rounds between shuffles but generally will not start a new round with fewer than 26 cards (single-deck games) or 52 cards (multiple-deck games). With one deck and four or more spots bet, you can plan on two rounds per shuffle; with one deck and three spots bet, you generally will get three rounds per shuffle. Only with fewer than three spots bet, or with multiple decks, will you get more than three rounds per shuffle.

Blackjack is the only casino game in which dealer procedures and player options vary so much from casino to casino. This book covers almost all past, present, and proposed rules for blackjack.

To keep up with what rules and playing conditions currently are offered in American casinos, you might consider *Current Blackjack News*, published monthly plus special issues since 1979.

Expected Win

This book assumes that decisions are made on the basis of expected value, also called expected win. Whether an action turns out to have been correct or incorrect on one isolated hand does not matter. What does matter is what the average outcome would be over thousands and thousands of such decisions. A positive expected win rate means that you are expected to win in the long run, and a negative expected win rate means that you will lose in the long run. For example, when your expected win rate is -0.5%, you are expected to lose at the rate of 0.5%.

Risk

Caution: Having a positive expected win rate is no guarantee that you will win on any particular hand. You can have a positive expected win rate and yet lose big for a day, a month, or even a year. Always keep your biggest bets small in relation to your playing capital. You will occasionally have terrible slumps in which you lose 100, 150, or 200 bet sizes.

For a close approximation of the optimal bet size for playing one hand of blackjack at a time, multiply your expected win rate times your bankroll and bet

80% of that. If you are playing two hands at a time, then on each hand bet 60% of your expected win rate times your bankroll. For example, if your bankroll is \$1000 and your expected win rate is 1.8%, then you ought to bet about \$14 on one hand or \$11 on each of two hands. To overbet by double or more is to invite financial disaster. If your bankroll decreases, cut your bets proportionately; if it increases, raise your bets proportionately. See *Professional Blackjack* for a more thorough discussion of risk and bet size.

How to Read the Tables

Each column represents a different upcard. The rows cover your possible hands. To read what a table says to do for a particular combination of your hand and the upcard, find the row corresponding to your hand and the column corresponding to the upcard.

If you have a pair and have the option of splitting, look first for a row corresponding to your pair. If you are not going to split, then look for a row corresponding to the total in your hand.

The arrangement of hands follows that used by Edward O. Thorp in *Beat the Dealer*. Other authors have chosen to turn the tables upside down. Rewrite the tables if you wish — copying them may be an aid in understanding them.

Soft and Hard Hands

The smallest soft hand is twelve. A hand such as ace-8 is called soft nineteen; it is not called nine though it can have the value of nine. Therefore the only hands that are called eleven or less are aceless hands, and the word "hard" is not needed to describe them.

CHAPTER 2

GENERIC BASIC STRATEGY

Basic strategy is the best way to play a blackjack hand on the first round after a shuffle. For a person who does not count cards, basic strategy is the best way to play every hand.

Calculating Basic Strategy

Basic strategy can be either total-dependent or composition-dependent. Total-dependent means the decision rules require only the dealer's card and the total points in your hand. Composition-dependent means the decision rules require knowledge of the dealer's card and the precise cards that make up your hand. For example, total-dependent strategy says stand on twelve against 4. Composition-dependent strategy for

twelve against 4 requires you to specify how you get to twelve: Do you have 7-5, 8-4, 3-2-2-5, or what? If you got to twelve by 10-2 or 2-10 (where 10 means any 10-count card), and only one deck is being used, you should hit. If you got to twelve by any other route, or multiple decks are being used, you should stand.

There are few differences between composition-dependent and total-dependent strategies for single deck, and none that are important for multiple decks. (The more decks shuffled together, the less difference one card makes.) This book uses total-dependent strategy.

The details of basic strategy depend on the particulars of the rules. However, you must start somewhere. This chapter presents a version of basic strategy that is approximately correct for the most common sets of rules — a generic basic strategy. Succeeding chapters will present the modifications of this generic basic strategy that are appropriate for different sets of rules.

Blackjack is most commonly played with the dealer's hand showing one card face up. If you are playing blackjack in a game where you get to see two cards face up in front of the dealer, go directly to chapter 15 because the chapters before it will not help you.

Table of Generic Basic Strategy

Table 1 presents generic basic strategy. It contains advice for every decision the blackjack player commonly makes. Each column is a different dealer upcard. (10, J, Q, and K are lumped together as 10.) Each row is a different player hand.

Technically, table 1 is basic strategy for multiple decks and dealer stands on soft seventeen.

Pairs

The order of decisions presented in table 1 is the order in which you evaluate your hand. First you check to see if you have a pair. At most casinos, any two 10-count cards, e.g. J-K, are a pair and may (but should not) be split. If you have a pair, the first part of the table tells you how to play your hand. Use this part of the table to decide whether to split your pair. To split means to make another bet equal in size to your first bet, and play each card as the start of a separate hand.

If you split a pair and catch another card of the same value, resplit if you can. If it is correct to split a pair, it is correct to resplit.

You may or may not be allowed to double down after splitting a pair. For example, if you split 8-8 and catch a 3 for eleven, you may or may not be allowed to double down on that eleven. If doubling down after splitting is allowed, then splitting is more attractive and you should split more often. The first part of table 1 assumes you are not allowed to double down after splitting. If you are allowed to double down after splitting, then use the last part of table 1 — the part on the facing page. The decisions that are hits in the first part of table 1 and splits on the facing page are: 6-6 against 2, 4-4 against 5 or 6, 3-3 against 2 or 3, and 2-2 against 2 or 3.

Table 1
Generic Basic Strategy

Table 1 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	h	h	h	h
6-6	spl	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	spl	spl	h	h	h	h	h
3-3	spl	spl	spl	spl	spl	spl	h	h	h	h
2-2	spl	spl	spl	spl	spl	spl	h	h	h	h

KEY:

- : Stand.
- db: Double down; if you cannot double, then hit.
- dbs: Double down; if you cannot double, then stand.
- h: Hit.
- spl: Split.
- sr: Surrender; if you cannot surrender, then hit.

Soft Hands

If you do not have a pair, then see if you have an ace. Aces count your choice of one or eleven. A hand in which an ace counts eleven is called a soft hand, and the total points in it is called a soft total. The second part of table 1 explains how to play soft hands.

The double-down advice is broken down into db and dbs. The reason is you need to know what to do with a particular total if you cannot double down. For example, suppose you have soft eighteen and the dealer shows 3. Your best play is to double down, so that is what you do if you can. But if your soft eighteen is a three-card hand, say ace-2-5, then you probably will not be allowed to double down. The table lists "dbs" for that hand, which means if you are not allowed to double down then you should stand.

Note that sometimes it is correct to hit eighteen. If you have soft eighteen and the dealer shows 9, 10, or ace, then hitting your soft eighteen is better than standing on it.

One decision that is very close is soft thirteen against 5. It does not matter whether you hit or double down.

Hard Hands

The lower two parts of table 1 explain how to play the rest of your hands. Hands labeled "hard" might contain aces, but all such aces are counted as one. Hands from 5 to 11 do not contain an ace; if a hand totaling eleven or less has an ace it is a soft hand and is played according to the "soft" part of the table.

Surrender

Surrender means losing half a bet for the privilege of not playing out the hand. Generic basic strategy presents strategy for late surrender, which means you cannot surrender if the dealer has a natural. Most of the value of surrender comes from surrendering sixteen against 10. Late surrender is worth 0.1%.

If you are playing blackjack at a casino that does not offer surrender, or if you are not allowed to surrender due to having more than two cards, then hit those hands for which table 1 advises surrender.

Insurance

Table 1 does not show insurance. Basic strategy says never take insurance. Even if you have a natural, you are better off not insuring it: You are better off winning 3:2 most of the time than winning even money for sure.

If you have a natural yourself, insurance gives you a sure winner (and thus sometimes is called "even money") but you still should not buy it; you are ahead in the long run taking a chance on a push or winning 150% of your bet. You should take chances when the odds favor you. Maybe 150% and maybe 0% is better than a certain 100% when the 150% occurs more than two-thirds of the time. If you remove your 10-ace and the dealer's ace from one deck, 49 cards are left, each of which is equally likely to be the hole card. Fifteen of the 49 cards will give the dealer a natural, and the other 34 will give the dealer a lesser hand. Not insuring your natural results in your winning 150% of your bet 34 times and pushing 15 times, out of 49 total. This

averages out to winning 104% of your bet by not insuring. Would you rather win 104% of your bet on average or 100% for certain? The professional blackjack player would go for the 104% because it makes more money in the long run. Multiple-deck calculations are similar and yield the same advice: Do not buy insurance.

An exception is if you are using a coupon. If an insurance bet protects the coupon as well as the bet, as generally is the case, then always insure a coupon.

CHAPTER 3

COMMON RULES VARIATIONS

This chapter presents the changes to generic basic strategy that are appropriate for the most common rules variations: dealer hits soft seventeen and lose all to a natural.

Whether or not you can double down after splitting was covered in the previous chapter.

Two other common rules variations are restrictions on totals on which you may double down (for example, double on ten or eleven only) and restrictions on resplits. For both of these rules variations, no modification to generic basic strategy is required. If you are not allowed to double down on certain totals, generic basic strategy already tells you how to play your hands. If you are not allowed to resplit (to make three or more

hands), generic basic strategy already tells you how to play your hands.

Number of Decks

Technically, table 1 is accurate only for multiple-deck games. However, it is a very close approximation for single deck. I personally switch back and forth frequently between single and multiple decks in a day of playing blackjack, and I play the same version of basic strategy no matter how many decks I face.

It is possible to make strategy adjustments based on the precise number of decks shuffled together, but doing so is an intellectual exercise only and does not result in significantly increased win rates. For precision in playing single-deck blackjack, see pages 173-178 of Peter Griffin's *The Theory of Blackjack*.

You are 0.3% better off playing against one deck than against two decks. Playing against four decks is another 0.2% worse than playing against two decks. Playing against more than four decks is worse yet, but by only a small amount.

Blackjack with one deck, dealer stands on soft seventeen, double any first two cards and not after splitting, is an even game — zero edge for the casino. With double deck and these rules the casino's edge is 0.3%, and with four or more decks and these rules the casino's edge is 0.5%.

If you can double down after splitting, you gain 0.14%.

Dealer Hits Soft Seventeen

Technically, table 1 is accurate only for games in which the dealer stands on soft seventeen. However, it is a close approximation if the dealer hits soft seventeen. In a typical day I play blackjack in a dozen casinos, and I have found it easier to use generic basic strategy no matter what the dealer does on soft seventeen. I do use the appropriate changes for pair splits based on whether I am allowed to double down after splitting.

You are 0.2% worse off when the dealer hits soft seventeen. This is not intuitively obvious because the dealer who hits soft seventeen busts more often. The reason you are better off when the dealer stands on soft seventeen is seventeen is an easy number to beat.

If you wish to play basic strategy that is more accurate when the dealer hits soft seventeen, there are only a few changes: Double down on eleven against ace; double down on soft nineteen against 6; double down on soft eighteen against 2; and surrender fifteen, seventeen, and 8-8 against ace. Surrendering 8-8 against ace is 3% better than the generic play (splitting). Surrendering seventeen against ace is 1.6% better than the generic play (standing). Each of the other modifications to basic strategy for dealer hits seventeen are better than the generic play by 1% or less.

Table 2 is table 1 modified to apply to dealer hits soft seventeen. Like table 1, table 2 (and forthcoming strategy tables) has two sets of pair-split advice. The early part of the table is for double down not allowed after splits, and the last part of the table is for double down allowed after splits. Differences from generic basic strategy are shown in bold face.

Table 2
Dealer Hits Soft 17

Table 2 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	srx
7-7	spl	spl	spl	spl	spl	spl	h	h	h	h
6-6	spl	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	spl	spl	h	h	h	h	h
3-3	spl	spl	spl	spl	spl	spl	h	h	h	h
2-2	spl	spl	spl	spl	spl	spl	h	h	h	h

KEY:

-: Stand.

db: Double down; if you cannot double, then hit.

dbs: Double down; if you cannot double, then stand.

h: Hit.

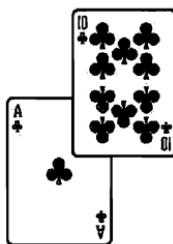
spl: Split.

sr: Surrender; if you cannot surrender, then hit.

srs: Surrender; if you cannot surrender, then stand.

srx: Surrender; if you cannot surrender, then split.

Note: Bold face highlights differences from generic basic strategy.



Lose All to a Natural

The tables of strategy presented so far presume that the most you lose if the dealer has a natural (a two-card twenty-one) is one bet. There are two different procedures that have this result. One is that a dealer with an ace or 10 up checks under it to see if the two-card total is twenty-one; and if it is, the hand is over so you never get the opportunity to play out your hand. The other procedure that has the same result is you are allowed to play out your hand even if the dealer has a potential natural, but if the dealer finishes up with a natural you lose only your initial bet.

Table 3 supposes you play out your hand before the dealer checks the hole card, and if the dealer has a natural you lose your whole bet on doubles or splits. In this case, the only time you should put out an extra bet when the dealer might have a natural is when you have ace-ace against 10. Go ahead and split those aces against a 10, but hit ace-ace against ace, do not split 8-8 against 10 or ace, and do not double down against ace or 10. If surrender is allowed, then surrender 8-8 against both 10 and ace.

You are 0.1% worse off if you lose all to a natural.

Table 3
Lose All To Dealer's Natural

Table 3 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	h
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	sr	sr
7-7	spl	spl	spl	spl	spl	spl	h	h	h	h
6-6	spl	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	spl	spl	h	h	h	h	h
3-3	spl	spl	spl	spl	spl	spl	h	h	h	h
2-2	spl	spl	spl	spl	spl	spl	h	h	h	h

KEY:

- : Stand.
- db: Double down; if you cannot double, then hit.
- dbs: Double down; if you cannot double, then stand.
- h: Hit.
- spl: Split.
- sr: Surrender; if you cannot surrender, then hit.
- srs: Surrender; if you cannot surrender, then stand.

Dealer Final Totals

Table 4 is an aid in understanding the strategies presented in this book. It gives the probability of various dealer final totals for a given dealer upcard. For example, a dealer starting with a 7 has a .369 probability of ending up with exactly seventeen. The total for each column sums to 1.000 except for rounding. The top half of table 4 applies when the dealer stands on soft seventeen, and the lower half is for the dealer hits soft seventeen.

The numbers in table 4 have been found by simulations of more than 20 million pairs of hands with six decks shuffled, five dealt out. Other numbers of decks would yield slightly different results.

Table 4
Probability of Dealer Final
Total by Upcard

<i>Dealer's Total</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>dealer stands on soft seventeen</i>										
BJ	0	0	0	0	0	0	0	0	.077	.308
21	.119	.115	.112	.108	.097	.074	.070	.061	.035	.054
20	.124	.121	.117	.112	.102	.079	.069	.121	.340	.131
19	.130	.125	.121	.117	.106	.078	.129	.351	.112	.131
18	.135	.130	.124	.123	.107	.138	.360	.117	.112	.131
17	.140	.134	.131	.122	.166	.369	.129	.120	.112	.130
bust	.353	.374	.395	.418	.422	.262	.243	.230	.212	.115
<i>dealer hits soft seventeen</i>										
BJ	0	0	0	0	0	0	0	0	.077	.308
21	.120	.116	.113	.108	.106	.074	.070	.061	.035	.066
20	.126	.122	.118	.112	.110	.079	.069	.121	.340	.143
19	.132	.127	.123	.118	.115	.078	.129	.351	.112	.143
18	.136	.132	.126	.123	.115	.138	.360	.117	.112	.143
17	.130	.126	.122	.118	.115	.369	.129	.120	.112	.057
bust	.356	.377	.398	.419	.439	.262	.243	.230	.212	.139

Fixed Shuffle Point

The numbers in this chapter apply right after a shuffle. They also apply if the dealer deals a fixed number of rounds between shuffles. Unfortunately, the normal procedure is for the dealer to shuffle rather than deal another round if fewer than an arbitrary number of cards remain. This lowers your expected win rate.

The reason is that your expected win rate is higher when excess 10s and aces remain to be used, and it is lower when excess small cards remain to be used. Rounds that contain excessive small cards tend to use up more cards. Rounds that contain excess 10s and aces tend to use up fewer cards. A fixed shuffle point means that more hands are dealt when excess 10s and aces have already been used.

The fixed shuffle point lowers your average expected win rate by about 0.1% according to "Experimental Comparisons of Blackjack Betting Systems" by John Gwynn and Armand Seri. If the dealer is shuffling at a fixed point and you are getting a variable number of rounds between shuffles, then your expected win rate is lower on the rounds that are only sometimes dealt. If you are counting cards, you are already allowing for this phenomenon. If you are not counting cards, you might want to count the number of rounds between shuffles and decrease your bets (or sit out hands) on all rounds in excess of the minimum; they are the rounds on which excess small cards are likely to appear, to your detriment. (This advice applies to any number of decks, but is difficult to implement on other than single deck.)

CHAPTER 4

PAYOUTS ON NATURALS

The most common payoff on a natural (two-card twenty-one) is 3:2, with no money changing hands if the dealer also has a natural. This chapter discusses deviations from that norm. Other payoffs sometimes seen are 2:1, 8:5, and even money. Sometimes certain naturals, such as A-J of spades, are paid extra. Some blackjack games pay on a natural even if the dealer also gets a natural.

To find the values of these alternatives, it is helpful to know your probability of getting a natural, and the probability of the dealer getting a tying natural. These probabilities depend on the number of decks shuffled together, as shown in table 5.

Table 5
Probability of Natural

<i>Number of Decks</i>	<i>Probability of Untied Natural</i>	<i>Probability Dealer Also Has a Natural</i>	<i>Total Probability of a Natural</i>
1	4.6492%	0.1773%	4.8265%
2	4.5783	0.2014	4.7797
3	4.5552	0.2091	4.7643
4	4.5437	0.2129	4.7566
5	4.5369	0.2151	4.7520
6	4.5323	0.2167	4.7489
7	4.5290	0.2177	4.7468
8	4.5266	0.2185	4.7451
infinite	4.5096	0.2241	4.7337

Alton, IL. I will be mailing the regular December issue in a couple of days, but this is news that I thought you would like to have right away

Alton Belle will pay 2:1 on naturals for bets up to the table limit every Tuesday during December. The special payouts apply from midnight to midnight.

According the Snyder and Dalton newsletters, the Alton Belle is all six decks with dealers hitting soft seventeen. You can double down after splitting. Normally the casino's edge is 0.6%, but with the 2:1 payout on naturals you have an edge of 1.6%.

This news comes from a California subscriber. I am adding a year to his subscription as a thank-you. I called the Alton Belle (800-336-7568) myself to confirm the details.

— *Current Blackjack News*, 1 December 1994

If a Natural Pays Other Than 3:2

The expected value of a higher or lower payoff on naturals can be calculated from table 5. The results are shown in table 6.

Naturals Pay 2:1

In some of the most generous blackjack games ever offered, the outstanding feature was the casinos paid 2:1 on naturals. The Nevada Hotel in downtown Las Vegas did it in the summer of 1979. The Riviera on the Strip in Las Vegas did it in March of 1984. Horseshoe in Las Vegas for a few days before Christmas for

many years paid 2:1 on naturals on bets of \$5 or less. In 1994 there were several 2:1 games, of which the most famous was at Alton Belle in Alton, Illinois. On Tuesday, 6 December 1994, blackjack players won a huge amount at Alton Belle — estimates range from \$0.3 million to \$1.2 million.

The extra payout is half a bet; so the expected value to you is half the probability of an untied natural, or about 2.3%. Generally when a casino pays 2:1 on naturals, your expectation is to win a bet an hour. For example: If you make one \$500 bet each round, your expected result is to win about \$500 per hour.

Naturals Pay 1:1

If naturals pay only even money, the cost to you is half a bet, so the expected value is the negative of half the probability of an untied natural, or about -2.3%.

Naturals Pay 8:5

If naturals pay 8:5, as they did at El Rancho in 1990, the extra payout is a tenth of a bet. The value to you is a tenth of the probability of an untied natural, or about 0.5%.

Natural Pays 3:2 Only If You Win Next Hand

A reader tells about a strange rule he encountered where a natural wins either even money or 3:2, with the extra being paid only if you win the next hand. Your probability of winning the next hand is .44, so this rule costs you 1.27%.

Table 6
Expected Values of Unusual
Payoffs on Naturals

<i>Number of Decks</i>	<i>EV of Untied Naturals Pay 2:1</i>	<i>EV of Untied Naturals Pay 1:1</i>	<i>EV of Untied Naturals Pay 8:5</i>
1	2.3246%	-2.3246%	0.4649%
2	2.2892	-2.2892	0.4578
3	2.2776	-2.2776	0.4555
4	2.2719	-2.2719	0.4544
5	2.2684	-2.2684	0.4537
6	2.2661	-2.2661	0.4532
7	2.2645	-2.2645	0.4529
8	2.2633	-2.2633	0.4527
infinite	2.2548	-2.2548	0.4510

Get Paid on a Tied Natural

The expected value of getting paid on a tied natural is the payment you receive times the probability that both you and the dealer have naturals. If naturals win even money, then getting paid on a tied natural is worth about 0.2%. If naturals win 3:2, then getting paid on a tied natural is worth about 0.3%. If naturals pay 2:1, then getting paid on a tied natural is worth about 0.4%. More precise probabilities are shown in table 7.

Table 7
Value of Getting Paid on Tied
Natural

<i>Number of Decks</i>	<i>Expected Value If Paid 1:1</i>	<i>Expected Value If Paid 3:2</i>	<i>Expected Value If Paid 2:1</i>
1	0.1773%	0.2660%	0.3546%
2	0.2014	0.3020	0.4027
3	0.2091	0.3136	0.4182
4	0.2129	0.3193	0.4258
5	0.2151	0.3227	0.4303
6	0.2167	0.3250	0.4333
7	0.2177	0.3266	0.4354
8	0.2185	0.3278	0.4370
infinite	0.2241	0.3361	0.4482

Double Naturals Win 2:1

Like to play two hands of blackjack at a time? Then you would have loved Harolds Club in Reno in 1984. At two tables upstairs, each player had double bet spots. You could place a bet in each spot or just one bet on the line separating the two spots. One bet got one hand, and two bets got two hands.

On these special tables, if you played two hands and got two simultaneous naturals, you received 2:1 on both bets instead of the normal 3:2. Otherwise, the blackjack rules and payouts were standard. The only problem playing this game was finding an empty seat; the tables always seemed to be full. I do not know what killed this game, but it was not lack of customer interest.

The probability of getting two simultaneous naturals is the same as the probability of getting a natural that is tied by the dealer. If the dealer gets a natural to tie both of yours, then you do not get paid; so you must subtract the probability of three simultaneous naturals. This is shown in table 8.

The probability of getting two simultaneous naturals is about 0.2%, and the extra half-a-bet payoff makes this rule worth about 0.1%.

Table 8
Probability of Simultaneous
Naturals

<i>Number of Decks</i>	<i>Probability of You Have Two Naturals</i>	<i>Probability Dealer Also Has a Natural</i>	<i>Probability Of Two United Naturals</i>
1	0.1773%	0.0044%	0.1729%
2	0.2014	0.0073	0.1940
3	0.2091	0.0084	0.2007
4	0.2129	0.0089	0.2040
5	0.2151	0.0093	0.2059
6	0.2167	0.0095	0.2072
7	0.2177	0.0096	0.2081
8	0.2185	0.0098	0.2088
infinite	0.2241	0.0106	0.2135

Extra Pay On Same-Suit Naturals

Sometimes a casino will pay a bonus for particular naturals. In October of 1985 the Mint in Las Vegas paid 2:1 on A-K of diamonds. In June of 1985 Jerry's Nugget in North Las Vegas paid 3:1 on any natural in hearts. In 1990 the Frontier paid 2:1 on A-J of the same suit even if the natural was tied by the dealer.

The easiest way to analyze promotions like this is to start with the fact that there are 64 different naturals possible. That is, you have four different aces and sixteen different 10-count cards, giving 64 different ace-10 combinations. Figure out how many of those combinations receive the bonus, and divide by 64 to get the probability you will get the bonus given you have a natural.

Ace and 10 Specified

At the Mint, only one natural out of 64 earned the bonus. Six decks were used, and table 5 shows the probability of an untied natural as 4.5323%. Dividing that by 64 gives the probability of winning the bonus: 0.0718%. The bonus was half a bet, making the expected value of the bonus 0.0354%. That was not enough of a giveaway to make the Mint's games attractive.

Natural of a Specified Suit

Four naturals receive the bonus. Vegas World paid its bonus on A-K of spades, A-Q of spades, A-J of spades, and A-10 of spades.

Jerry's Nugget paid the bonus on A-K of hearts, A-Q of hearts, A-J of hearts, and A-10 of hearts. The amount of its bonus is 1.5 bets. The probability of receiving an untied natural is shown in table 5. You get the expected value by multiplying the probability times the payoff. For single deck, the probability of receiving

the bonus payoff is 4.65% times 4/64, or 0.29%. Multiplying that by the amount of the bonus, 1.5, shows that the value of the bonus was 0.44% at single deck. Jerry's also offered the bonus at four decks, where it was worth 0.43%.

The Jerry's Nugget promotion was a fun game, and it lasted Sunday through Thursday for the whole month of June!

A-J Suited

The Frontier's 1990 bonus is slightly more difficult to figure out because it also applied to tied naturals. One way to handle it is treat it as two separate bonuses and then add the values together.

Extra pay on A-J suited means extra pay on four naturals because there are four suits. The Frontier offered one and six decks, so you need the one- and six-deck probabilities from table 5. The amount of the bonus is half a bet for an untied natural and two bets for a tied natural. Multiplication shows the probability of receiving the bonus on an untied natural is 0.29% at single deck, making that part of the bonus worth 0.15%. The probability of receiving the bonus on a tied natural is 0.01% at single deck, making that part of the bonus worth 0.02%. Thus the total value of the Frontier's bonus is 0.17% at single deck. The value of the bonus at six decks is 0.16%. The reason it is slightly more valuable at one deck is the higher probability of a natural.

No Natural Winner for Dealer

A few casinos have experimented with having dealers' two-card twenty-ones count as ordinary twenty-ones rather than naturals. If both bets are at risk on

doubles and splits, then use basic strategy as presented in table 3 for doubles and splits.

With Ace Up

Hide-Away in Wendover did it in 1987. Before that, Jim Kelley's Nuggets at Reno and Crystal Bay did it in 1985.

The modification to basic strategy is to hit hard seventeen against ace. The value to you of this form of the rule is 0.2%.

With 10 Up

More common is for this rule to be in effect only if the dealer starts with a 10 or face card up.

If only your original bet is at risk on splits and doubles if the dealer has a two-card twenty-one, no modification to basic strategy is necessary. The value to you of this form of the rule is 0.2%. (If dealer naturals are ordinary twenty-ones for both 10 and ace up, the total value to you is 0.4%).

If your whole doubled bet is at risk on splits and doubles if the dealer has a two-card twenty-one unless you get twenty-one to tie, the changes to basic strategy are: Do not double down on eleven against 10 and do not split 8-8 against 10. This form of the rule is also worth 0.2%.

This is the way blackjack is played in many Asian casinos. As of 1995, it was the rule at several casinos in Reno and at Harrah's in Tunica.

CHAPTER 5

DOUBLING DOWN

This chapter covers unusual opportunities to double down.

Some casinos restrict doubling down. Common is a rule that says double down allowed on ten or eleven only. Generic basic strategy still applies, except that you must hit or stand instead of doubling. The key to generic basic strategy tells whether to hit or stand: db means hit if you cannot double down, and dbs means stand if you cannot double down. Restricting doubling down to ten or eleven costs about 0.2%.

Restricting doubling down to nine, ten, or eleven costs about 0.1%. Another way of saying the same thing is doubling on soft hands is worth about 0.1% and doubling on nine is worth about 0.1%.

Table 9
Doubling on Any No. of Cards

Table 9 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	h	h	h	h
6-6	spl	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	h	h	h	h	h	h	h
3-3	h	spl	spl	spl	spl	spl	h	h	h	h
2-2	spl	spl	spl	spl	spl	spl	h	h	h	h

KEY:

-: Stand.

db: Double down; if you cannot double, then hit.

dbs: Double down; if you cannot double, then stand.

h: Hit.

spl: Split.

sr: Surrender; if you cannot surrender, then hit.

Doubling on ten is worth 0.5%, so if you can double only on eleven you are worse off by 0.7% compared to doubling on any first two cards.

Doubling on eleven is worth 0.7%, so no doubling allowed costs 1.4%.

Doubling on Three or More Cards

Several casinos, most notably Las Vegas Club in Las Vegas, have allowed doubling down on any number of cards. If you can double down after one more card, you are less likely to want to double down or split with a small total. Doubling down when you can double on any number of cards is shown in table 9. This option is worth 0.2%.

Doubling Eleven on Three or More Cards

In 1990 the Gold Club in Sparks allowed doubling down on any first two cards, and also on any total of eleven on more than two cards. This causes no change to basic strategy. Simulation shows that you gain 0.16% from being able to double down on eleven in three or more cards, compared to not being able to double down on three or more cards.

Doubling For More With Match-Play Chips

Several travel agencies sell casino-vacation packages of room, airfare, and match-play chips. Here is an

Table 10

Doubling a Match-Play Chip

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
soft 21	-	-	-	-	-	-	-	-	-	-
soft 20	-	-	-	-	-	-	-	-	-	-
soft 19	-	-	-	db s	db s	-	-	-	-	-
soft 18	db s	db s	db s	db s	db s	-	-	h	h	h
soft 17	h	db	db	db	db	h	h	h	h	h
soft 16	h	h	db	db	db	h	h	h	h	h
soft 15	h	h	db	db	db	h	h	h	h	h
soft 14	h	h	h	db	db	h	h	h	h	h
soft 13	h	h	h	db	db	h	h	h	h	h
11	db	db	db	db	db	db	db	db	db	h
10	db	db	db	db	db	db	db	db	h	h
9	db	db	db	db	db	h	h	h	h	h
8	h	h	h	h	h	h	h	h	h	h
7	h	h	h	h	h	h	h	h	h	h
6	h	h	h	h	h	h	h	h	h	h
5	h	h	h	h	h	h	h	h	h	h

KEY:

-: Stand.

db: Double down; if you cannot double, then hit.

db:s: Double down; if you cannot double, then stand.

h: Hit.

example, a package Donald Schlesinger found offered in the *New York Daily News* in 1989. \$289 bought round-trip airfare between New York and Las Vegas, a room at the Riviera, and meals. After making minimum \$5 bets for two hours a day for four days, partici-

Table 11
Redoubling

Table 11 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	h	h	h	h
6-6	spl	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	db	db	h	h
4-4	h	h	db	db	db	h	h	h	h	h
3-3	spl	spl	spl	spl	spl	spl	h	h	h	h
2-2	spl	spl	spl	spl	spl	spl	h	h	h	h

KEY:

-: Stand.

db: Double down; if you cannot double, then hit.

dbs: Double down; if you cannot double, then stand.

h: Hit.

spl: Split.

sr: Surrender; if you cannot surrender, then hit.

NOTE:

Redouble except with hard twelve or more or with soft nineteen or more.

pants received \$100 in cash and \$100 in match-play chips. The chips were picked up after one play whether they won or lost, so their expected value was about half the \$100 nominal value. (The chips would have been worth the full amount of the nominal value if they could have been kept until lost — that is, rebet after a win.) Thus the net cost of the trip was about \$139.

The match-play chips had to be played with regular chips. An interesting rule is if you wanted to double down with a regular \$5 chip and a \$5 match-play chip, you could do so with two regular \$5 chips. Since the match-play chip was worth about half its nominal value, this was like doubling for more: starting with a \$7.50 bet and doubling down for \$10. Basic strategy for it includes more aggressive doubling, as shown in table 10.

Redoubling

Redoubling is mentioned in Ed Thorp's classic *Beat the Dealer* as being available at one time at some casinos in Cuba and Canada. In case it ever reappears, table 11 has basic strategy for it. Redoubling means doubling once again. For example, suppose you double down on nine and catch a deuce for eleven. Would you not like to bet more money on your hand? With redoubling you could. Redoubling is worth 0.4% with no doubling after splits, and 0.6% with doubling down allowed after splits.

Redoubling means taking more risk: Variance is 1.4 instead of 1.3, and 1.43 if doubling is allowed after splitting.

CHAPTER 6

SPLITTING

This chapter covers unusual opportunities for splitting pairs. Splitting aces is covered in the chapter on aces.

Restriction on Splits

If splits are not allowed, you are worse off by 0.4%.

If splits are allowed but not resplits, you are 0.1% worse off than if you could resplit. If you can resplit only on the first card of a split pair, the cost is half of being unable to resplit at all.

After Split, Restriction on Doubling

Generic basic strategy has advice for splitting pairs if you cannot double down after splitting and if you can double down on any two cards after splitting. Table 12 is advice for splitting pairs if you can double down only on nine, ten or eleven after splitting. Table 13 is advice for splitting pairs if you can double down only on ten or eleven after splitting. Table 14 is advice for splitting pairs if you can double down only on eleven after splitting.

Split 10-10, Catch Ace For 3:2 Win

At the Nevada Club in Reno in 1987, if you split 10-10 and caught an ace, you received 3:2 payment the same as if that 10-ace were a natural. This is not generous enough to cause you to deviate from basic strategy. That is, basic strategy still says do not split 10-10. Thus for a basic strategy player, this rule has no value.

Table 12
Pair Splits With Double on
Nine, Ten, or Eleven After
Splitting

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	h	h	h	h
6-6	spl	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	spl	spl	h	h	h	h	h
3-3	spl	spl	spl	spl	spl	spl	h	h	h	h
2-2	spl	spl	spl	spl	spl	spl	h	h	h	h

KEY:

-: Stand.

db: Double down; if you cannot double, then hit.

h: Hit.

spl: Split.

Table 13
Pair Splits With Double on Ten
or Eleven After Splitting

<i>Player's</i>		<i>Dealer's Upcard</i>									
<i>Hand</i>		2	3	4	5	6	7	8	9	10	A
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	h	h	h	h	h
6-6	spl	spl	spl	spl	spl	h	h	h	h	h	h
5-5	db	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	h	h	h	h	h	h	h	h
3-3	h	spl	spl	spl	spl	spl	h	h	h	h	h
2-2	h	spl	spl	spl	spl	spl	h	h	h	h	h

KEY:

-: Stand.

db: Double down; if you cannot double, then hit.

h: Hit.

spl: Split.

Table 14
Pair Splits With Double on
Eleven After Splitting

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	h	h	h	h
6-6	h	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	h	h	h	h	h	h	h
3-3	h	h	spl	spl	spl	spl	h	h	h	h
2-2	h	h	spl	spl	spl	spl	h	h	h	h

KEY:

-: Stand.

db: Double down; if you cannot double, then hit.

h: Hit.

spl: Split.

Split Any Sixteen

In 1986 Hide-Away in Wendover allowed you to split any sixteen. A simulation splitting 10-6 and 9-7 (no resplits on those hands, and no splitting ace-5) for a double-deck game with dealer hitting soft seventeen showed a player edge of 1.2% instead of the normal casino edge of 0.5%. Thus splitting 10-6 and 9-7 is worth about 1.7%.

Optional Bet Split Rule

The proposed rules for blackjack in New Jersey contained an unusual pair split rule. This section, which was originally published as part of *Winning Without Counting*, explains this rule and tells how two people acting together can take advantage of it.

The Rule

Players in addition to the seated player may bet on the hand, and the seated player has the right to call the play of the hand. The remainder of this section will refer to this seated player as the *caller*. Another bettor on the hand will be called a *rider*. If the caller decides to double down, the rider has the option of putting out more money but the hand receives only one more card. If the caller decides to split a pair, the rider's original bet goes on one card and the rider has the option of making an equal bet on the other card. Suppose a caller bets \$10 and a rider bets \$30 on the same hand. To split a pair, the caller must put out an extra \$10 to have \$10 wagered on each card of the pair. The rider's \$30 goes on one card, and the rider may bet \$30 or zero on the other card.

For hit or stand, double down, and insurance decisions, correct strategy for a selfish caller is also the correct strategy for a caller concerned about a rider. Only on pair splits does the caller's interest conflict with the rider's interest. Surrender strategy for a selfish caller is the same as for a caller concerned about a rider except on pairs.

Selfish Pair Splits

A caller who is playing selfishly and ignoring the wishes of a rider should stick with basic strategy for pair splits. Basic strategy pair splits benefit both caller and rider. There is no pair split that benefits a caller but hurts a rider. The rider wants the caller to make all of these splits and more.

Sacrifice Splits

A caller who wants to make those decisions that are in the best interest of a rider should split pairs according to table 15. To the caller, splitting means putting more money on the table. To the rider, splitting may mean putting out more money or it may mean keeping the same bet but having it start with a different hand total. There are times when the rider wants to split a pair that a selfish caller would not split. For example, the rider would much rather have money riding on 7 than on fourteen. Such a split is a *sacrifice split* — it costs a caller and benefits a rider. Splits that cost the caller very little and benefit the rider very much are 2-2, 3-3, and 7-7 against 8. If the rider's bet is at least seven times as large as the caller's bet, then for all of the sacrifice splits in table 15 the expected gain to the rider exceeds the expected cost to the caller.

Table 15

Pair Splits That Benefit the Rider

<i>Player's Hand</i>		<i>Dealer's Upcard</i>									
		2	3	4	5	6	7	8	9	10	A
<i>double not allowed after split</i>											
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	spl	spl	spl
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
6-6	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
5-5	db	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	h	h	h	h	h	h	h	h
3-3	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
2-2	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
<i>double allowed after split</i>											
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	spl	spl	spl
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
6-6	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
5-5	db	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	spl	spl	h	h	h	h	h	h
3-3	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
2-2	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl

KEY:

-: Stand.

db: Double down; if you cannot double, then hit.

h: Hit.

spl: Split.

Table 16
Pair-Betting Strategy
for Riders

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double not allowed after split</i>										
A-A	bet	bet	bet	bet	bet	bet	bet	bet	bet	bet
10-10	-	-	-	-	-	-	-	-	-	-
9-9	bet	bet	bet	bet	bet	-	bet	no	no	no
8-8	no	bet	bet	bet	bet	bet	no	no	no	no
7-7	no	no	no	no	bet	no	no	no	no	no
6-6	no	no	no	no	no	no	no	no	no	no
5-5	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	h	h	h	h	h	h	h
3-3	no	no	no	bet	bet	no	no	no	no	no
2-2	no	no	no	bet	bet	no	no	no	no	no
<i>double allowed after split</i>										
A-A	bet	bet	bet	bet	bet	bet	bet	bet	bet	bet
10-10	-	-	-	-	-	-	-	-	-	-
9-9	bet	bet	bet	bet	bet	-	bet	no	no	no
8-8	bet	bet	bet	bet	bet	bet	no	no	no	no
7-7	no	no	bet	bet	bet	no	no	no	no	no
6-6	no	no	no	bet	bet	no	no	no	no	no
5-5	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	bet	bet	h	h	h	h	h
3-3	no	no	bet	bet	bet	no	no	no	no	no
2-2	no	no	bet	bet	bet	no	no	no	no	no

KEY:

-: Stand.

bet: Bet on both hands.

db: Double down; if you cannot double, then hit.

h: Hit.

no: Refuse to bet on the second hand.

Basic Strategy For Riders

Suppose you are a rider. You have made a bet on a hand that is under the control of another person, the caller. You should not do this unless the caller plays proper basic strategy. Your only decisions as a rider are whether to put out more money if the caller doubles down, and whether to put out more money if the caller splits a pair.

The caller's interest and your interest are perfectly matched in the double-down decision. You should approve of all double-down decisions the caller makes. If the caller doubles down, you also should double down.

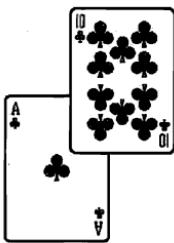
If the caller splits a pair, your initial bet goes on one of the split cards. You must then decide whether to bet on the other card. Table 16 covers pair-betting strategy for riders.

Using Sacrifice Splits

When the optional bet split rule is in effect, you can gain about 0.2% by using sacrifice splits. Your caller will lose about 0.2%. Either you and your caller must share wins and losses, or you must pay your caller a salary to provide the incentive to make sacrifice splits. Your caller bets the table minimum and makes sacrifice splits but otherwise plays normally. You make a big bet as a rider on your caller's hand and use the pair betting strategy for riders. Your bet should be at least seven times as big as your caller's bet. The seven-times rule assures that the expected gain to the rider exceeds the expected cost to the caller on every sacrifice split.

Split for Less

Similar to the optional bet split rule is splitting for less. On some blackjack slot machines that can be played for eight coins, you can split for fewer than eight coins if you wish. Basic strategy for these machines includes splitting for either one or eight coins, but never two to seven coins. The recommended strategy for splitting for less is shown in table 16 — simply interpret “bet” as meaning “split for the full amount” and “no” as meaning “split for the minimum.”



CHAPTER 7

SURRENDER

Surrender is the option of losing half a bet rather than playing the hand out to try to beat the dealer. Usually you are better off playing out the hand rather than surrendering. But there are a few situations that present such a small chance of winning or pushing that you are better off surrendering half your bet.

Surrendering has an expected (and actual) win rate of minus half a bet. Thus surrendering is the preferred play when the best alternative has an expectation of worse than -0.5 (which is -50%).

If you cannot push, then the break-even point for surrendering is losing three times as many hands as you win. If standing on a stiff means that you win exactly one hand out of four, then surrendering has the same expected value as standing.

Table 17

Early Surrender

Table 17 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	srx	srx
7-7	spl	spl	spl	spl	spl	spl	h	h	sr	sr
6-6	spl	spl	spl	spl	spl	h	h	h	h	sr
5-5	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	spl	spl	h	h	h	h	h
3-3	spl	spl	spl	spl	spl	spl	h	h	h	sr
2-2	spl	spl	spl	spl	spl	spl	h	h	h	h

KEY:

- : Stand.
- db: Double down; if you cannot double, then hit.
- dbo: Double down; if you cannot double, then stand.
- h: Hit.
- spl: Split.
- sr: Surrender; if you cannot surrender, then hit.
- srs: Surrender; if you cannot surrender, then stand.
- srx: Surrender; if you cannot surrender, then split.

The situation is more complicated with a hand that can push. If you cannot possibly win but have a 50-50 chance of pushing, then playing out the hand has the same expected value as surrendering.

Putting it all together, for each four hands you play, if the number of wins plus half the number of pushes equals one, then surrendering has the same expected value as playing out the hand.

The most common form of surrender is called *late surrender*, which means you can surrender only if the dealer does not have a natural. If you have asked for surrender and the dealer turns out to have a natural, you lose your whole bet the same as if you had not wanted to surrender. Generic basic strategy has strategy for late surrender.

Early Surrender

Early surrender means if you decide to surrender and it turns out the dealer has a natural, you lose only half a bet the same as if the dealer did not have a natural. Early surrender against an ace is quite valuable due to the frequency with which the dealer will have a 10-count card as the second card. When casinos first came to Atlantic City, they offered blackjack with early surrender.

Basic strategy for early surrender is to surrender more often against 10 and ace, as shown in table 17. Early surrender is worth 0.7%, or 0.6% more than late surrender. Early surrender against an ace is worth 0.4%, and early surrender against a 10 is worth 0.3%. (Surrender against a 9 is worth little.)

If you are playing blackjack in a casino that allows early surrender against 10 but not against ace,

then use the 10 column of table 17 and the ace column of table 1.

Likewise if you are playing blackjack in a casino that allows early surrender against ace but not against 10, then use the ace column of table 17 and the 10 column of table 1.

Surrender Any Number of Cards

Late surrender on any number of cards is an option available in some Asian casinos. It doubles the value of late surrender, to 0.2%.

Basic strategy for late surrender of any number of cards includes hitting fifteen against 10. If you can surrender on any number of cards after splitting: With 8-8 against 10 or ace, split rather than surrender.

I have never heard of a casino offering early surrender of any number of cards, but here are the modifications of table 17 for it: Hit fourteen, including 7-7, against 10. Hit five and seven against ace.

Surrender After Doubling Down

Some Asian casinos have offered surrender after doubling down. Any stiff (i.e. 16 or less) after doubling down against 8, 9, 10, or ace should be surrendered. This makes it worthwhile to double down on eleven against ace if you lose but one bet to a natural, but otherwise does not change basic strategy.

Surrendering a stiff against an 8 saves 1% of a doubled bet, which is 2% of one bet. Surrendering a stiff against 9 or 10 saves 4% of a doubled bet. Surrendering a stiff against an ace saves 17% of a doubled bet if the dealer stands on soft seventeen, or 10% of a

doubled bet if the dealer hits soft seventeen. These are numbers for late surrender.

For early surrender after doubling down: Surrendering a stiff against 10 saves 18% of a doubled bet. Surrendering a stiff against an ace saves 27% of a doubled bet if the dealer stands on soft seventeen, or 22% of a doubled bet if the dealer hits soft seventeen. Early surrender against 8 or 9 is the same as late surrender.

Surrender after doubling adds 0.1% to the value of surrender. If you can double eleven only, the value is 0.08%.

Surrender After Splitting

This option also has been available in some Asian casinos. You have the option of surrendering all hands, but not just one hand. Generic basic strategy applies. Since you should not be standing on a stiff against 7 or higher, you should not be in the position of wanting to surrender after splitting a pair, except after splitting aces if you get but one card per ace.

After splitting aces: Surrender if you have all stiffs and the dealer shows 8, 9, 10, or ace. If you have a seventeen and a stiff and the dealer shows 10 or ace, surrender both hands. Other hands you should not surrender.

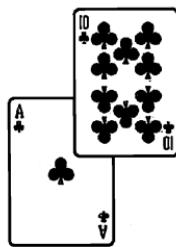
The value of surrender after splitting is less than 0.01%.

Surrender And Get a New Hand

In 1984 Harolds Club in Reno introduced "Second Chance 21." If you did not like your first two cards,

you could get rid of them. The dealer gave you two new cards, and also picked up half of your bet.

If you do not count cards, the best time to give up half your bet for a new hand is never. For every combination of first two cards and dealer's upcard, you are better off playing out your original hand instead of getting second-chance cards. Half your bet is too high a price to pay to replace even the worst hand.

BASIC BLACKJACK

CHAPTER 8

TIES

Dealer Takes Ties

Suppose you must beat the dealer to win. That is, suppose the dealer wins ties. Basic strategy for ties lose is shown in table 18. This table applies only to the situation where the dealer has one card face up; if you are playing double exposure, go to chapter 15.

There are several prominent differences from generic basic strategy when ties lose. You double down less, split less, and surrender more. You are less likely to hit a stiff, except that seventeen against an ace should be hit if it cannot be surrendered. Try to deal this game rather than play it, because winning ties gives the dealer 8.8%.

Table 18

Dealer Wins Ties

<i>Player's Hand</i>	2	3	4	5	6	7	8	9	10	A
<i>Dealer's Upcard</i>										
A-A	spl									
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	-	-	-
8-8	spl	srs	srs	sr						
7-7	-	-	-	spl	spl	h	h	h	sr	sr
6-6	-	-	spl	spl	spl	h	h	h	h	h
5-5	db	h	h	h						
4-4	h	h	h	h	h	h	h	h	h	h
3-3	h	h	h	h	spl	h	h	h	h	h
2-2	h	h	h	spl	spl	h	h	h	h	h
soft 21	-	-	-	-	-	-	-	-	-	-
soft 20	-	-	-	-	-	-	-	-	-	-
soft 19	-	-	-	-	-	-	-	-	-	-
soft 18	-	-	db	db	db	-	h	h	h	h
soft 17	h	h	h	db	db	h	h	h	h	h
soft 16	h	h	h	db	db	h	h	h	h	h
soft 15	h	h	h	h	db	h	h	h	h	h
soft 14	h	h	h	h	h	h	h	h	h	h
soft 13	h	h	h	h	h	h	h	h	h	h
hard 21	-	-	-	-	-	-	-	-	-	-
hard 20	-	-	-	-	-	-	-	-	-	-
hard 19	-	-	-	-	-	-	-	-	-	-
hard 18	-	-	-	-	-	-	-	-	-	-
hard 17	-	-	-	-	-	-	srs	srs	srs	sr
hard 16	-	-	-	-	-	h	srs	srs	srs	sr
hard 15	-	-	-	-	-	h	h	sr	srs	sr
hard 14	-	-	-	-	-	h	h	h	sr	sr
hard 13	-	-	-	-	-	h	h	h	h	h
hard 12	-	-	-	-	-	h	h	h	h	h
11	db	h								
10	db	h	h	h						
9	h	h	h	h	db	db	h	h	h	h
8	h	h	h	h	h	h	h	h	h	h
7	h	h	h	h	h	h	h	h	h	h
6	h	h	h	h	h	h	h	h	h	h
5	h	h	h	h	h	h	h	h	h	h

double not allowed after split

Table 18 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	-	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	srs	srs	sr
7-7	-	spl	spl	spl	spl	h	h	h	sr	sr
6-6	-	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	db	h	h	h
4-4	h	h	h	h	h	h	h	h	h	h
3-3	h	h	spl	spl	spl	h	h	h	h	h
2-2	h	h	spl	spl	spl	h	h	h	h	h

KEY:

-: Stand.

db: Double down; if you cannot double, then hit.

dbs: Double down; if you cannot double, then stand.

h: Hit.

spl: Split.

sr: Surrender; if you cannot surrender, then hit.

srs: Surrender; if you cannot surrender, then stand.

Table 19

Dealer Wins 17-17

Table 19 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	srs	spl
7-7	spl	spl	spl	spl	spl	h	h	h	h	h
6-6	spl	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	spl	spl	h	h	h	h	h
3-3	h	spl	spl	spl	spl	h	h	h	h	h
2-2	spl	spl	spl	spl	spl	h	h	h	h	h

KEY:

- : Stand.
- db: Double down; if you cannot double, then hit.
- dbs: Double down; if you cannot double, then stand.
- h: Hit.
- spl: Split.
- sr: Surrender; if you cannot surrender, then hit.
- srs: Surrender; if you cannot surrender, then stand.

Lose on 17-17

Suppose the dealer wins just one tie: seventeen to seventeen. This is the rule in some Maryland charity games. Basic strategy for playing against this rule is shown in table 19. Losing tied seventeens costs you 1.7%.

Table 20
Dealer Wins Ties Except 21-21

Table 20 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	-	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	srs	srs	sr
7-7	-	spl	spl	spl	spl	h	h	h	sr	sr
6-6	-	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	db	h	h	h
4-4	h	h	h	h	spl	h	h	h	h	h
3-3	h	h	spl	spl	spl	h	h	h	h	h
2-2	h	h	spl	spl	spl	h	h	h	h	h

KEY:

-: Stand.

db: Double down; if you cannot double, then hit.

dbs: Double down; if you cannot double, then stand.

h: Hit.

spl: Split.

sr: Surrender; if you cannot surrender, then hit.

srs: Surrender; if you cannot surrender, then stand.

Lose Ties Except 21-21

Suppose the dealer wins all ties but one: twenty-one to twenty-one. Basic strategy for playing against this rule is shown in table 20. Losing all ties except twenty-ones costs you 7.0%.

Tie Insurance

Tie insurance is a side bet that you and the dealer will end with the same total. If you bust your tie insurance bet loses, even if the dealer later busts with the same total.

This bet was offered by Vegas World in 1979. You had to make the bet before receiving your cards, but you could bet any amount up to the table max regardless of the size of your blackjack bet. If you split a pair, the tie-insurance bet applied to the first hand. If you got a tie on an unbusted hand, the tie-insurance bet paid six for one. In 1980 the payoff was raised to seven for one.

Table 36 (from the chapter on busted hands) can be used to analyze tie insurance. As can be seen from adding up the appropriate numbers, the probability of tying the dealer with an unbusted hand is 9.44%. With basic strategy and the higher payoff, the casino edge on tie insurance is 34%. Even if you hit all stiffs to get the highest chance of a tie, the casino edge is 28%. Worse bets exist, but are hard to find.

CHAPTER 9

FIVE CARDS

Though the title of this chapter is "Five Cards," it also covers bonuses for hands of six and seven cards. The strategy for playing them depends on the size of the bonus and the number of additional cards required to be eligible for the bonus.

The tables in this chapter tell you when you should hit, given the additional number of cards you need to qualify for the bonus. For example, 2 means you need two more cards to qualify for the bonus. If the bonus is for five cards, then 2 describes a hand that already has three cards. If the bonus is for six cards, then 2 describes a hand that already has four cards. If the bonus is for seven cards, then 2 describes a hand that already has five cards.

In the keys to the tables in this chapter is a number preceding db or spl. The number means if the

bonus is for this many or fewer cards, then hit. For example, if the bonus is for a six-card hand, then you should hit those hands for which the advice is 6db, but if the bonus is for a seven-card hand you should double if the advice is 6db.

Half a Bet

If the bonus is small, you might be better off refusing the bonus. For example, Macao has a bonus of half a bet for a five-card hand. With a bonus that small, some five-card hands are worth more when played out to maybe win, maybe push, maybe lose. Table 21 is for use when the bonus is half a bet. In it, ref means refuse the bonus and stand.

Automatic Win

Table 22 covers the situation of a set number of cards is an automatic winner of the same amount as you have bet. In this case, it is always worthwhile accepting the bonus — you should never turn it down. Five-card automatic winner is worth 1.4%, six-card automatic winner is worth 0.1%, and seven-card automatic winner is worth close to zero.

Note that it is worthwhile hitting soft twenty-one. A sure winner is worth more than a hand that will probably win but might push.

Tables 23-25 cover the situations of a set number of cards is an automatic winner of more than you have bet. Table 23 is for 3:2 payoff, table 24 is for 2:1 payoff, and table 25 is for 3:1 payoff.

Twenty-One Only

Table 26 covers the situation of a set number of cards is an automatic 2:1 winner only if you get exactly twenty-one. This bonus is less valuable than if you were to get the bonus no matter what the total points in your hand. If you must get exactly twenty-one to get the bonus, there are very few deviations from basic strategy. There are a few hands that should be hit if you are just one card away from the bonus, and that is it.

When the number of cards required for the bonus is five and you must get exactly twenty-one, the bonus is worth 0.2%. This bonus has been offered in Atlantic City since 1991.

Table 21

Bonus: Half a Bet

Table 21 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	5spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	h	h	h	h
6-6	spl	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	spl	spl	h	h	h	h	h
3-3	5spl	spl	spl	spl	spl	spl	h	h	h	h
2-2	5spl	5spl	spl	spl	spl	5spl	h	h	h	h

KEY:

- : Stand.
- db: Double down; if you cannot double, then hit.
- db1: Double down; if you cannot double, then stand, except hit if two (or one) additional cards will qualify for the bonus.
- h: Hit.
- ref: Stand, and refuse the bonus.
- spl: Split.
- sr: Surrender; if you cannot surrender, then hit.
- 1: Hit if one additional card will qualify for the bonus.
- 2: Hit if two (or one) additional cards will qualify for the bonus.
- 3: Hit if three (or fewer) additional cards will qualify for the bonus.
- 5db: If the bonus is for five cards, hit; otherwise double.
- 5spl: If the bonus is for five cards, hit; otherwise split.
- 6db: If the bonus is for six (or fewer) cards, hit; otherwise double.

Table 22

Bonus: One Bet

Table 22 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	5spl	5spl	5spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	h	h	h	h
6-6	spl	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	5spl	spl	h	h	h	h	h
3-3	6spl	5spl	spl	spl	spl	spl	h	h	h	h
2-2	5spl	5spl	5spl	spl	spl	5spl	h	h	h	h

KEY:

-: Stand.

db: Double down; if you cannot double, then hit.

db2: Double down; if you cannot double, then stand, except hit if two (or one) additional cards will qualify for the bonus.

h: Hit.

spl: Split.

sr: Surrender; if you cannot surrender, then hit.

1: Hit if one additional card will qualify for the bonus.

2: Hit if two (or one) additional cards will qualify for the bonus.

3: Hit if three (or fewer) additional cards will qualify for the bonus.

5db: If the bonus is for five cards, hit; otherwise double.

5spl: If the bonus is for five cards, hit; otherwise split.

6db: If the bonus is for six (or fewer) cards, hit; otherwise double.

6spl: If the bonus is for six (or fewer) cards, hit; otherwise split.

Table 23

Bonus: One and a Half Bets

Table 23 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	h	h	h	h
6-6	spl	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	db	5db	h	h
4-4	h	h	h	5spl	5spl	h	h	h	h	h
3-3	6spl	5spl	5spl	spl	spl	spl	h	h	h	h
2-2	6spl	5spl	5spl	5spl	5spl	5spl	h	h	h	h

KEY:

-: Stand.

db: Double down; if you cannot double, then hit.

db2: Double down; if you cannot double, then stand, except hit if two (or one) additional cards will qualify for the bonus.

h: Hit.

spl: Split.

sr: Surrender; if you cannot surrender, then hit.

1: Hit if one additional card will qualify for the bonus.

2: Hit if two (or one) additional cards will qualify for the bonus.

3: Hit if three (or fewer) additional cards will qualify for the bonus.

5db: If the bonus is for five cards, hit; otherwise double.

5spl: If the bonus is for five cards, hit; otherwise split.

6db: If the bonus is for six (or fewer) cards, hit; otherwise double.

6spl: If the bonus is for six (or fewer) cards, hit; otherwise split.

Table 24

Bonus: Two Bets

Table 24 Continued

Player's Hand	Dealer's Upcard									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	5spl	5spl	5spl	5spl	5spl	5spl	5spl	5spl	5spl	6spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	h	h	h	h
6-6	spl	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	db	5db	h	h
4-4	h	h	h	5spl	5spl	h	h	h	h	h
3-3	6spl	5spl	5spl	5spl	spl	5spl	h	h	h	h
2-2	6spl	6spl	5spl	5spl	5spl	5spl	h	h	h	h

KEY:

- : Stand.
- db: Double down; if you cannot double, then hit.
- db2: Double down; if you cannot double, then stand, except hit if two (or one) additional cards will qualify for the bonus.
- h: Hit.
- spl: Split.
- sr: Surrender; if you cannot surrender, then hit.
- 1: Hit if one additional card will qualify for the bonus.
- 2: Hit if two (or one) additional cards will qualify for the bonus.
- 3: Hit if three (or fewer) additional cards will qualify for the bonus.
- 5db: If the bonus is for five cards, hit; otherwise double.
- 5spl: If the bonus is for five cards, hit; otherwise split.
- 6db: If the bonus is for six (or fewer) cards, hit; otherwise double.
- 6spl: If the bonus is for six (or fewer) cards, hit; otherwise split.

Table 25

Bonus: Three Bets

Table 25 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
double allowed after split										
A-A	5spl	5spl	5spl	5spl	5spl	5spl	5spl	6spl	6spl	6spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	h	h	h	h
6-6	spl	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	5db	5db	h	h
4-4	h	h	h	5spl	5spl	h	h	h	h	h
3-3	6spl	6spl	5spl	5spl	5spl	5spl	h	h	h	h
2-2	6spl	6spl	6spl	5spl	5spl	6spl	h	h	h	h

KEY:

- : Stand.
- db: Double down; if you cannot double, then hit.
- db3: Double down; if you cannot double, then stand, except hit if three (or fewer) additional cards will qualify for the bonus.
- h: Hit.
- spl: Split.
- sr: Surrender; if you cannot surrender, then hit.
- 1: Hit if one additional card will qualify for the bonus.
- 2: Hit if two (or one) additional cards will qualify for the bonus.
- 3: Hit if three (or fewer) additional cards will qualify for the bonus.
- 5db: If the bonus is for five cards, hit; otherwise double.
- 5spl: If the bonus is for five cards, hit; otherwise split.
- 6db: If the bonus is for six (or fewer) cards, hit; otherwise double.
- 6spl: If the bonus is for six (or fewer) cards, hit; otherwise split.

Table 26
Bonus: Two Bets But Need 21

Table 26 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	h	h	h	h
6-6	spl	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	spl	spl	h	h	h	h	h
3-3	spl	spl	spl	spl	spl	spl	h	h	h	h
2-2	spl	spl	spl	spl	spl	h	h	h	h	h

KEY:

- : Stand.
- db: Double down; if you cannot double, then hit.
- db1: Double down; if you cannot double, then stand, except hit if one additional cards will qualify for the bonus.
- h: Hit.
- spl: Split.
- sr: Surrender; if you cannot surrender, then hit.
- 1: Hit if one additional card will qualify for the bonus.

Example: 6-Card Automatic Winner

This section shows how to break a complicated table of this chapter into parts, one of which applies to each number of cards in your hand.

For a long time, Las Vegas Club in downtown Las Vegas has had an interesting collection of blackjack rules, including 6-card automatic winner. This rule has been offered from time to time by many casinos besides Las Vegas Club.

Table 27 contains the 6-card winner information in table 22, but expressed in a different format. Table 27 contains only the rows with changes to generic basic strategy, broken down by number of cards in your hand. Note that with three cards, generic basic strategy applies.

Also note that with five cards, any soft hand should be hit. Why stand on soft twenty-one and maybe win, maybe push when you can take a sixth card and win for sure?

KEY:

- : Stand.
- db: Double down.
- h: Hit.
- spl: Split.

Table 27
Basic Strategy Modifications
for Six-Card Automatic Win

First Two Cards

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
soft 15	h	h	h	db	db	h	h	h	h	h
<i>double not allowed after split:</i>										
2-2	h	h	h	spl	spl	spl	h	h	h	h
<i>double allowed after split:</i>										
3-3	h	spl	spl	spl	spl	spl	h	h	h	h

Three-Card Hands: No Changes

Four-Card Hands

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
soft 19	-	-	-	-	-	-	-	-	h	-
soft 18	h	h	h	h	h	-	h	h	h	h
hard 13	h	-	-	-	-	h	h	h	h	h
hard 12	h	h	h	h	h	h	h	h	h	h

Five-Card Hands

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
soft 21	h	h	h	h	h	h	h	h	h	h
soft 20	h	h	h	h	h	h	h	h	h	h
soft 19	h	h	h	h	h	h	h	h	h	h
soft 18	h	h	h	h	h	h	h	h	h	h
hard 17	-	-	-	-	-	-	h	h	h	h
hard 16	h	h	-	-	-	h	h	h	h	h
hard 15	h	h	h	h	h	h	h	h	h	h
hard 14	h	h	h	h	h	h	h	h	h	h
hard 13	h	h	h	h	h	h	h	h	h	h
hard 12	h	h	h	h	h	h	h	h	h	h

Example: Five-Card Half Win

Here is another example of how to break a complicated table of this chapter into parts, one of which applies to each number of cards in your hand. This example has a slight twist.

For many years, casinos in Macao have offered to pay half on an unbusted hand containing exactly five cards. Casinos elsewhere in Asia have offered the five-card half win at times. I originally published strategies for these games in *Blackjack in Asia* in 1979.

The twist is in Macao, if you get a five-card hand against a 10 you can collect your half win before the dealer checks for an ace in the hole. (In Macao the dealer does not even take a hole card under a 10.) This means the strategy for playing the five-card half-win is as shown in table 21 for all dealer upcards except 10; in Macao you should accept a half win on twenty against 10. With a three-card soft nineteen against 10 in Macao, standing is 0.4% better than hitting. The five-card half win is worth about 0.7% to the player. If you cannot collect your half win before the dealer checks the hole card under a 10, the five-card half win is worth about 0.6% to you.

This book does not present every possible combination of rules variations. The best way to get basic strategy for the particular combination of rules you are playing is to get *Blackjack Analyzer*, a computer program for IBM PCs. This is the same program used to derive almost all the strategies presented in this book.

Table 28 contains the five-card half-win information in table 22, in the form of changes to generic basic strategy, broken down by number of cards in your hand. It also says to accept a half win on a five-card

Table 28
Basic Strategy Modifications
for Five-Card Half Win (Macao)

First Two Cards: No Changes

Three-Card Hands

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
soft 18	h	-	-	-	-	-	h	h	h	h
hard 12	h	h	h	-	-	h	h	h	h	h

Four-Card Hands

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
soft 20	-	-	-	-	-	-	-	-	h	-
soft 19	h	h	h	h	h	-	-	h	h	h
soft 18	h	h	h	h	h	h	h	h	h	h
hard 15	h	-	-	-	-	h	h	h	h	h
hard 14	h	h	h	h	h	h	h	h	h	h
hard 13	h	h	h	h	h	h	h	h	h	h
hard 12	h	h	h	h	h	h	h	h	h	h

Five-Card Hands

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
any 21	-	-	-	-	-	-	-	-	-	-
any 20	-	-	-	-	-	-	-	-	1/2	-
any 19	1/2	1/2	1/2	1/2	1/2	-	-	1/2	1/2	1/2
any less	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2

KEY:

-: Stand.

h: Hit.

1/2: Accept half win.

twenty against 10 because in Macao you collect against a dealer's 10-up natural.

CHAPTER 10

6-7-8 ETC

This chapter covers bonuses for 6-7-8, 7-7-7, and four 5s.

Bonuses for 6-7-8

Double Pay For Mixed Suits

In 1990 The Red Lion in Elko paid double for any 6-7-8; the cards did not have to be of the same suit. The appropriate modification to basic strategy is to hit 6-7 against all upcards except 5, and hit 6-8 against 2. Simulation shows this rule is worth less than 0.2%.

If late surrender had been offered, basic strategy would have been to hit rather than surrender with any 7-8 against 10. With early surrender, basic strategy says to hit rather than surrender with 6-8 or 7-8 against 10, and with 6-7 against ace.

Double Pay For Same Suit

Many casinos have offered double pay for 6-7-8 of the same suit. Basic strategy says to hit 6-7 of the same suit against 2. If late surrender is offered, hit rather than surrender with 7-8 of the same suit against 10. If early surrender is offered, hit 6-8 (but surrender 7-8) of the same suit against 10.

Triple Pay For 6-7-8 of the Same Suit

This has been a rule in Macao and a few other places in Asia. The value of this rule is about 0.02%. Basic strategy says to hit 6-7 of the same suit against 2 and against 3. If late surrender is offered, hit rather than surrender with 7-8 of the same suit against 10. If early surrender is offered, hit rather than surrender with 6-8 or 7-8 of the same suit against 10.

Bonuses for 7-7-7

7-7-7 is such a rare hand that bonuses for it are worth little.

7-7-7 Suits Specified

In the summer of 1987, Peppermill in Las Vegas had a progressive bonus that started at \$100 and increased by five cents every time a customer got a natural, with a ceiling of \$1000. To win the bonus, a customer had to be betting \$3 or more and had to get either 7-7-7 all spades or 7-7 of spades and 7 of hearts.

This was in a four-deck game. If you hit all hands containing 7-7 of spades or one spade one heart, you would have gotten the bonus-winning hand once per 52,795 hands of blackjack. If you split 7-7 instead of hitting it against 2-7, you would have won the bonus once per 96,633 hands. Thus the bonus, when it got to its maximum, was worth a penny or two a hand.

Table 29 shows the gain for splitting rather than hitting if there is no bonus for 7-7-7. They are the amounts that must be overcome in order to justify hitting 7-7 instead of splitting. One column is for splits with no double after splits, and the next column is for splits with doubling down allowed after. Also included are the expectations of finishing with exactly twenty-one. This is the information you need, along with the ratio of the bonus to your bet size, to calculate whether to hit 7-7 instead of split.

Here is an example using the data of table 29. If the bonus is \$200 and you are betting \$20, the ratio of the bonus to your bet is 10. Suppose you need to hit a 7 of spades to win the bonus. What ratio of the remaining cards are spade 7s? If you have seen three cards out of four decks and one of the cards you have seen is a spade 7, then $3/205$ of the unseen (or unremembered) cards are spade 7s. The expected value of the bonus is $3/205$ times the increase in the payoff if you win the bonus. The increase in the payoff is 10 minus what you

Table 29
Gain From Splitting 7-7

<i>Dealer Card</i>	<i>Gain</i>	<i>Gain w/dbs</i>	<i>EV of 21</i>
2	.144	.207	.882
3	.196	.273	.885
4	.254	.350	.888
5	.316	.434	.892
6	.364	.495	.903
7	.188	.235	.926

would have won on average without the bonus, for example it is 10 minus 0.882 if the dealer shows a deuce. Multiplying the increase in value times the probability of hitting the winning card gives an expected value of 0.13 against a deuce, and slightly less against other dealer upcards. According to table 29 you need a higher expected value than that to justify hitting instead of splitting, so basic strategy says split.

2:1 On 7-7-7

A few years ago a reader sent a report on Austrian casinos. One of the rules is an immediate even-money bonus paid on 7-7-7. The original bet is still at risk on the twenty-one. The dealer does not take a hole card, so it is possible that the 7-7-7 could lose to a natural, giving you a push overall on the hand. Six decks are used. This rule does not require a change in basic strategy; you are better off splitting 7-7 against 2-7. The probability of your getting 7-7-7 is 0.02%. The bonus is exactly one bet, so the expected value of the bonus is 0.02%.

Triple Pay For 7-7-7

This has been a rule in Macao and a few other places in Asia. The value of this rule is about 0.05%. The reason it is worth more than double the Austrian bonus is the triple pay comes regardless of the dealer's final hand. No modification of basic strategy is required.

Probability of 7-7-7

Assuming you play basic strategy, meaning split 7-7 against 2-7, and assuming you do not win on 7-7-7 if the dealer gets a natural, table 30 gives the probabilities of getting a hand of 7-7-7.

Table 30
Probability of 7-7-7

<i>Decks</i>	<i>Prob (%)</i>
1	.0094
2	.0155
3	.0177
4	.0188
5	.0195
6	.0200
7	.0203
8	.0206
infinite	.0224

Bonuses for 5-5-5

Reno Ramada in 1988 and Eddie's Fabulous 50's in Reno in 1989 offered a \$25 bonus to the recipient of 5-5-5 at single or double deck. With basic strategy, you should hit 5-5 against only 10 and ace; against other dealer upcards you should double down. On single deck you get 5-5-5 once per 752,162 hands; on double deck you get it once per 188,604 hands.

In 1991 Tropicana in Las Vegas offered a bonus for four red 5s. This hand occurs once per 2 million hands at six decks, and once per 1.8 million hands at eight decks. Is a harder-to-win bonus possible in blackjack?

CHAPTER 11

ACES

After Splitting Aces

If you can resplit aces, you are 0.1% better off if four or more decks are used, but only 0.03% better off at single deck. At double deck you gain about 0.06%. When it happens, the opportunity to resplit an ace is worth 84%.

If receiving a 10 after splitting aces counts as a natural and pays 3:2, you gain 0.2%.

Aces Treated Like Non-Aces

In 1980 Vegas World offered a version of blackjack in which aces were treated like any other pair on splits. That is, they could be resplit, and you could double down or hit as often as you wanted. Harrah's in Reno did this in 1986. When you can hit after splitting aces, regular basic strategy applies. If you can hit after splitting aces, you gain 0.1%.

Table 31
Double After Split Ace-Ace
If Hitting Not Allowed

<i>Player's</i>		<i>Dealer's Upcard</i>								
<i>Hand</i>	2	3	4	5	6	7	8	9	10	A
A-9	-	-	-	-	-	-	-	-	-	-
A-8	-	-	-	-	-	-	-	-	-	-
A-7	-	db	db	db	db	-	-	0.6	-	-
A-6	db	db	db	db	db	db	a	a	0.9	0.9
A-5	db	db	db	db	db	a	a	a	a	a
A-4	db	db	db	db	db	a	a	a	a	a
A-3	db	db	db	db	db	a	a	a	a	a
A-2	db	db	db	db	db	a	a	a	a	a
A-A	db	db	db	db	db	a	a	a	a	a

KEY:

- : Stand.
- a: Double down, but for as little as possible.
- db: Double down for the full amount.
- 0.6: Double down for as little as possible, but not for over 60% of your original bet. If you do not have the option of doubling that small, then you are better off not doubling down at all.
- 0.9: Double down for as little as possible, but not for over 90% of your original bet. If you do not have the option of doubling that small, then you are better off not doubling down at all.

Doubling Down But Not Hitting

The Treasury in Las Vegas in 1979 and the Reno Ramada in 1988 allowed doubling down after splitting aces. Hitting was not allowed; just standing or doubling. Basic strategy, if you double for the full amount, is to double down with soft eighteen or less against 3-6; double down on soft seventeen or less against 2, 7, 8, and 9; and double down on soft sixteen or less against 10 or ace. This strategy, which includes a correction by Julian Braun, adds 0.1% to your win rate.

When the Treasury had this option, a Las Vegas card counter thought up the strategy of doubling down a large bet for just \$1. Table 31 has basic strategy if you can double down for less.

If you split your aces and catch another ace, you are better off resplitting if it is allowed. Table 31 assumes you are not allowed to resplit aces.

Coupon For an Ace

Lady Luck in Las Vegas and Harvey's at Stateline are among the many casinos that have given out coupons to be used as an ace for the first card of a blackjack hand. Typically the maximum bet you can make with the coupon is \$5, so you cannot get rich. However, starting out with an ace puts the advantage solidly in your favor.

A simulation keeping track of the final result as a function of the player's first card, using six decks and dealer stands on soft seventeen, gave the results shown in table 32. For each number, the standard error is 0.1%. Other numbers of decks and other rules would yield similar numbers.

Table 32 shows that when starting with an ace as your first card, you have an edge of about 50% of your bet. Thus with a \$5 bet, a coupon for an ace is worth about \$2.50.

Several years ago, according to Anthony Curtis, Lady Luck in Las Vegas awarded each natural with a coupon that could be used as an ace with a \$5 bet. For someone making flat \$5 bets, this was equivalent to receiving 2:1 on naturals. The coupons were given out over a long holiday weekend, and could be used only during a four-hour period at the end of the weekend. Curtis discovered that patrons who received the coupons and would not be around to use them were happy to sell them for \$1 each. By the time the four-hour

Table 32
Player Edge Given First Card

ace	50.5%
10	14.3
9	-1.2
8	-8.7
7	-18.2
6	-21.0
5	-19.4
4	-17.5
3	-15.5
2	-13.0

period arrived, Curtis had 600 coupons. He and a friend played one after another; they cleared \$1500.

Ace as First Card

Table 32 can also be used to find the value of knowing the first card you will receive. This sometimes happens in Atlantic City, which has a rule that a card accidentally drawn from the shoe is not burned, but is the next card to be dealt. Daniel Forbes describes two such incidents.

At a nickel table I had hands of nineteen and twenty against a dealer 6. She turned over an ace and promptly reached for the shoe. Because my hands were winners, I subtly suggested her move was a no-no. She did flash the next card, however, but slid it under the edge of the shoe as she paid the table. I knew the waiting piece of plastic-coated former forest was none other than a meek little ace, and I excused myself as I left centerfield, passing our second baseman on the way to first base. I put down a substantially high stack of chips, placing a red one out for the dealer and asked serenely, "You don't burn that card, do you?" "No," she demurely replied as she slapped the ace down for first base. She gave herself a queen and me a 4 to go with the ace. The old ace-4-8-paint syndrome reared its horrible head as our checks became property of Harrah's.

— Daniel Forbes, 1981 #1

My brother and I were playing at the Nugget and on a particular hand the dealer had a 6 showing. When it came time to play her hand, she instinctively slid a card from the shoe as she flipped over her ace hole card. She slid the card from the shoe under the edge of the shoe, but not before I had seen it was another ace. Because my brother was playing the first two hands, I handed him \$100 and said, "Put it on the first spot." I had regrets, though, and quickly gave him a second \$100 to cap the hand off. \$5 for the dealer was added to the spot (she knew what the forthcoming card was). After the cards were dealt, our A-2 looked all right against her 4. All right enough to double and catch a paint. We waited quietly as she turned over her other 4. And died. Her first hit, a 2, sent us scurrying. We were called back to the table when the shoe produced yet another 2. The final kiss came as the shoe produced a 6, leaving us on the adverse end of an \$800 swing. That's zero for two.

— Daniel Forbes, 1981 #2

CHAPTER 12

JOKER

Joker as Card of Your Choice

Sands in Las Vegas played blackjack with jokers in October of 1989. A couple of years earlier, the Dunes in Las Vegas had a blackjack tournament in which jokers were used. The details were the same in both cases.

Jokers were inserted into shoes at the rate of three jokers per six-deck shoe. If the dealer got a joker, it was burned. A customer who got a joker in the first two cards had to specify the value of the joker before playing the hand. A customer who got a joker as a hit card had to specify its value before another card was dealt.

Value

Simulation shows that one joker per deck is worth about 4.2% to the customer. Thus three jokers per six decks gives you 2.1%.

Basic Strategy

Proper play of a joker does not depend on how many jokers are shuffled into the pack.

When assigning a value to the joker, make a total of twenty-one if possible; if twenty-one is not possible, then try for twenty. Otherwise, either make a total of eleven or call the joker an ace; the details follow.

Strategy if Doubling Down Is Permitted:

- 1) Make a total of twenty-one for a natural if possible.
- 2) With 9-joker, call the joker an ace for twenty.
- 3) With 8-joker, if the dealer shows 7, 8, 9, or ace, call the joker an ace and stand; for other dealer upcards, call the joker a 3 and double.
- 4) With a joker and a 2-7, make a total of eleven and double down except do not double down against an ace.

Strategy if Doubling Down Is Not Permitted:

- 1) Make a total of twenty-one if possible.
- 2) With a total of nine plus a joker, call the joker an ace for twenty.
- 3) With a total of eight plus a joker, if the dealer shows a 10 call the joker a 3 for eleven and hit; for other dealer upcards, call the joker an ace for nineteen and stand.
- 4) With a total of seven plus a joker, if the dealer shows a 7 call the joker an ace for eighteen and stand; for other dealer upcards, call the joker a 4 for eleven and hit.

5) With a joker plus less than seven, make the total eleven and hit.

Strtategy for Joker-7 or Joker-8

The only time basic strategy for using the joker depends on the dealer upcard is when the card or cards with it total seven or eight. This portion of the strategy is shown in table 33.

Table 33
Basic Strategy For Value to
Assign to Joker

<i>You Have</i>		<i>Dealer's Upcard</i>									
<i>Joker</i>	<i>Plus</i>	2	3	4	5	6	7	8	9	10	Ace
<i>if doubling down is allowed:</i>											
8		3-db	3-db	3-db	3-db	3-db	A	A	A	3-db	A
7		4-db	4-db	4-db	4-db	4-db	4-db	4-db	4-db	4-db	4-h
<i>if doubling down is not allowed:</i>											
8		A	A	A	A	A	A	A	A	3-h	A
7		4-h	4-h	4-h	4-h	4-h	A	4-h	4-h	4-h	4-h

KEY:

A: Call the joker an ace and stand.

3-db: Call the joker a 3 and double down.

3-h: Call the joker a 3 and hit.

4-db: Call the joker a 4 and double down.

4-h: Call the joker a 4 and hit.

Double Win With Joker

For Sunday through Thursday through the entire month of April of 1993, **Saddle West** in Pahrump, Nevada, added a joker to each four-deck shoe. If the dealer got the joker, it was burned and the player was no worse off. If the player got the joker, the player won double. Examples: A \$50 5-joker won \$100. A \$50 eleven on which you doubled down (and then had \$100 riding) won \$200 if the double-down hit was the joker.

If a joker means a double win, the value of one joker per 209 cards is 200% of a bet. Your average hand uses 2.6 cards. With the extra pay on doubles, a joker per four decks is worth about 2.8% to you.

As cards are used without the joker appearing, your edge goes up inversely with the number of cards yet unseen. For example, if the joker is still undealt when only two decks are left, the value is twice as much, or 5.6%.

Since basic strategy otherwise lost at the rate of 0.7% at Pahrump, your edge right after a shuffle was 2.1%. If the joker was still undealt halfway through the four decks, your edge with basic strategy was 4.9%.

CHAPTER 13

BUSTED HANDS

Push on 22

Occasionally a casino will issue a coupon that can be used to get a push on a total of twenty-two. The Treasury in Las Vegas gave away "catch 22" cards in 1980. Westward Ho in Las Vegas had such a coupon in the coupon books it distributed in 1985. Marina in Las Vegas did it in 1989 and again in 1990. In each of these cases, you could keep the coupon until you needed it.

Those at the Treasury were probably the biggest giveaway because they were easy to get, the maximum bet was \$200, and the promotion lasted a few weeks. You could get a coupon a day from the casino cage, the hotel desk, or any floorman.

Table 34
Push on 22

Table 34 Continued

Player's Hand	Dealer's Upcard									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	-
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	spl	h	h	h
6-6	db	db	db	db	db	h	h	h	h	h
5-5	db	db	db	db	db	db	db	h	h	h
4-4	h	h	spl	spl	spl	h	h	h	h	h
3-3	spl	spl	spl	spl	spl	spl	spl	h	h	spl
2-2	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl

KEY:

-: Stand.

db: Double down; if you cannot double, then hit.

dbs: Double down; if you cannot double, then stand.

h: Hit.

spl: Split.

With Generic Basic Strategy

With generic basic strategy, you get a total of twenty-two about one hand out of 22. That should be easy to remember. The coupon has an expected value of one bet less your expected loss (if any) for playing basic strategy for 22 hands. Typically your expected loss from playing basic strategy is 0.5% per hand, making the coupon worth 89% of a bet. Another way of saying the same thing is: For an average of 22 hands you are playing with an advantage of 4.5% more than you normally would have. If basic strategy costs you half a percent, then with a coupon for a push on twenty-two your net edge is 4.0% per hand. As soon as you use the coupon, this extra advantage is gone.

Basic Strategy For Push on 22

The strategy of table 34 applies when twenty-two is a push. Use it if the coupon is good for only one bet, whether you get twenty-two or not. Also use it if you do not have the problem of losing the right to push on twenty-two as soon as your coupon is gone.

Modified Basic Strategy

If, however, you will lose the coupon the first time you use it to save a bet on a twenty-two, it is wise to modify table 34. The modification is to stick with generic basic strategy except for doubling down on twelve.

The reason for this modification is twenty-two is a common total; you will get to use the coupon for sure. Using table 34 instead of generic basic strategy gives you the expectation of using the coupon in fewer hands, but the expected value of the coupon is less due to the cost of violating generic basic strategy.

Doubling Down On Twelve

If the coupon specifies a maximum and you are betting more than half of that maximum, before doubling down on twelve you ought to check with the dealer to be sure the coupon will save a doubled bet. The Marina's 1989 coupon would save a doubled bet of any amount, and the table limits were \$500; so some coupons saved bets of \$1000. Unfortunately, those coupon books were withdrawn after less than two days. When the Marina reissued its coupon books in 1990 they had "\$5 max" stamped on them, which meant saving a doubled bet only if the original bet was \$2.50 or less. The coupon was more valuable with \$5 bets and not doubling down on twelve than with \$2.50 bets and doubling down on twelve.

Save Coupon For a Doubled Bet

A strategy to consider is to save your coupon for a doubled bet, and not waste it on an undoubled twenty-two. This means using modified basic strategy. You double down and catch twenty-two about 1% of the time. Thus the coupon should last for about 100 hands. Its total value is less than 200% of a bet because you have to subtract the cost of doubling down in violation of basic strategy; that costs you about 75% of a bet. Thus the value of the coupon is about 125% of a bet less the loss on playing basic strategy for 100 hands. A card counter might profit from saving the coupon for a doubled bet.

On a per-hand basis, your expected win rate while waiting to use the coupon is 1.25% less your loss on basic strategy. If basic strategy costs you half a percent, then over 100 hands it costs you half a bet, making the coupon worth only 75% of a bet. Therefore,

use the coupon on the first twenty-two you get rather than waiting for a doubled bet.

22 Counts as 21

While taking our kids skiing in the mountains around Lake Tahoe in January of 1990, we stayed at a motel that gave flyers to turn in for coupon books at the casinos. The best value was the one for Lake Tahoe Bill's. It could be used to turn a twenty-two into a twenty-one.

This coupon was good for one hand only, whether you got twenty-two or not. If by chance you can use such a coupon in a casino that allows doubling down on any two cards, then you gain 14.6% of whatever you bet with this coupon. Not being able to double down on twelve cuts 2.2% off the value of the coupon.

One dealer said the coupon was for bets of \$5 or less, so I did not use a coupon at her table. I played my coupons at other tables, with \$200 bets.

Basic strategy is radically different if twenty-two counts as twenty-one, and is shown in table 35. The biggest changes, besides always doubling down on hard twelve, are in pair splits. Examples: Always stand on ace-ace and call it twenty-two; always split 2s, 3s, 8s, and 9s; and always double down on 6-6. The reason some 10-10s are split if you can double down after splitting is the possibility of catching a deuce for twelve and doubling down.

Only at Bill's. Win with 22! With this coupon, 22 is your lucky number! Bill's dealers will consider all totals of 22 as 21. Coupon must be presented to dealer when bet is placed. Not redeemable for cash. One per person per day. Void if detached. Expires 6-30-90.

Table 35
22 Counts As 21

Table 35 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	-	-	-	-	-	-	-	-	-	-
10-10	-	-	-	spl	spl	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	spl	spl	h	h
6-6	db	db	db	db	db	db	db	db	db	db
5-5	db	db	db	db	db	db	h	h	h	h
4-4	spl	spl	spl	spl	spl	spl	spl	spl	h	h
3-3	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
2-2	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl

KEY:

-: Stand.

db: Double down; if you cannot double, then hit.

dbs: Double down; if you cannot double, then stand.

h: Hit.

spl: Split.

Push on Tie Over 21

In 1980 Vegas World created a version of blackjack called "pushover 21." The feature for which it is named was explained in advertisements as "If you bust, you haven't lost when the dealer busts likewise, it's a push." What that collection of words pretending to be a sentence means is if you bust with the identical total as the dealer, you have a push.

This seems like a good place to share some numbers I worked out at the request of Donald Schlesinger. He wanted the probability of the player and dealer tying with seventeen when the player plays basic strategy, so I simulated fifteen million hands to find the probability of ties, as shown in table 36. I used six decks and dealer stands on soft seventeen; other numbers of decks and dealer hits soft seventeen would be slightly different. The standard error on each of the numbers in table 36 is less than 0.01%. The dealer must hit to at least seventeen, so there is no chance of a tie with sixteen or less.

Adding up the appropriate numbers from table 36 gives the probability of player and dealer busting with the same total as 0.81%. If that sounds low, remember that you do most of your busting when the dealer is likely pat, and when the dealer is most likely to bust you stop short of busting.

Basic strategy for pushover 21 is shown in table 37. The player gains 0.9% with this rule and this strategy.

Table 36
Probability of Push

<i>Total</i>	<i>Probability</i>
17	1.90%
18	1.77
19	1.79
20	3.25
natural	0.21
other 21	0.52
22	0.29
23	0.19
24	0.15
25	0.11
26	0.07

Table 37
Push on Tie Over 21

Table 37 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	h	h	h	h
6-6	h	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	spl	spl	h	h	h	h	h
3-3	spl	spl	spl	spl	spl	spl	h	h	h	h
2-2	spl	spl	spl	spl	spl	spl	h	h	h	h

KEY:

-: Stand.

db: Double down; if you cannot double, then hit.

dbs: Double down; if you cannot double, then stand.

h: Hit.

spl: Split.

"IF YOU BUST, YOU HAVEN'T LOST WHEN THE DEALER BUSTS LIKEWISE, IT'S A PUSH (STANDOFF) YOU DON'T LOSE YOUR MONEY."

— ad by Vegas World, 1980

Push on Anything Over 21

In 1995 Fitzgeralds in Las Vegas gave away coupons that said "No Bust '21.' Wager this coupon with \$5 at any '21' game and get your bet back if you go over 21." Your edge using this coupon was 30%.

Basic strategy for using this coupon is shown in table 38. This table assumes that you cannot count an ace as eleven to get a push; for example, 3-ace-8 is twelve and not twenty-two. It also assumes that the coupon applies to only the first hand (or only the second hand) on split pairs.

KEY:

- : Stand.
- db: Double down; if you cannot double, then hit.
- h: Hit.
- spl: Split.

Table 38
Push on Anything Over 21

Bust Box

An interesting variation of blackjack offered someplace in the world (the reader who asked about it would not say where) is called bust box. Bust box is a side bet that you will bust. The maximum you are allowed to bet in the bust box is half your original bet. After you make the bust-box bet, you get one and only one more card. If you bust, the bust-box bet wins even money. If you do not bust, the bust-box bet loses.

Modifications to basic strategy for taking advantage of the bust box are shown in table 39. They include betting the bust box with fifteen and sixteen against 7-10 and ace, with seventeen against 8-10 and ace, and with a pair of 8s against 9 and 10 regardless of whether you are allowed to double down after splitting.

Each time the bust-box bet is recommended, you gain 3% to 4% of an original bet (6% to 8% of the bust-box bet). Overall, the value to you of being able to make bust-box bets is 0.2% of your original bet.

Table 39
Bust Box

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	Ace
hard 17	-	-	-	-	-	-	bs	bs	bs	bs
hard 16	-	-	-	-	-	b	b	b	b	b
hard 15	-	-	-	-	-	b	b	b	b	b
8-8	spl	spl	spl	spl	spl	spl	spl	b	b	spl

KEY:

-: Stand.

b: Bet the bust box if possible; else hit.

bs: Bet the bust box if possible; else stand..

spl: Split.

CHAPTER 14

OTHER

BLACKJACK BETS

This chapter discusses blackjack bets that did not fit into one of the other chapters: field, over/under, red/black, multiple-action, and royal match. Insurance is discussed in chapter 2. Bust box is discussed in chapter 13.

Field Bets

Several casinos have blackjack layouts that offer field bets, which are side bets that your first two cards will total twelve through sixteen. Ace-ace and 8-8 pay double. The casino edge on field bets is 8.9%.

Over/Under

These two bets started at Caesars Tahoe in 1988. You bet on whether the total on your first two cards will be over thirteen or under thirteen. Aces count one. Thirteen loses. The casino edge on the "over" is 6.8% or more, with the exact amount depending on the number of decks. The "under" bet is worse than the "over," giving the casino more than 10%.

British casinos started offer over/under bets in January of 1995, and they pay 7:1 on ace-ace on the under. This reduces the casino edge on the "under" to 6.5%.

Red/Black

This bet started at Four Queens in Las Vegas in 1992. You bet on the color of the dealer's first card. If the dealer's first card is a deuce of the color you bet, you have a push; that gives the casino its edge: 3.8%.

Multiple Action

In multiple-action blackjack, you may make up to three bets, each of which has action against a different dealer hand.

Your hand is the same for all three of your bets. The dealer's first card is the same for all three of your bets. The dealer's hand is finished out once, and then the first bet for each player is settled. Then all dealer cards are discarded except the first one, and the dealer's hand is played out again. The result of this hand is used to settle each player's second bet. Then once again all dealer cards except the first one are discarded, the

hand is played out again, and each player's third bet is settled.

Four Queens introduced this new variation of blackjack in December of 1991, and it is spreading quickly.

Playing Strategy

You should use the same playing strategy at multiple action as at regular blackjack. The fact that the dealer will be playing out a hand three times does not affect basic strategy.

Even if you know you should hit your hand, sometimes you will be tempted to stand. The excitement of remaining alive to play against the dealer is sufficiently strong an incentive to induce some players to intentionally go against basic strategy. That is a mistake.

Betting Strategy

From a risk standpoint, multiple action is slightly more risky than regular blackjack. Of course one bet of multiple action has the same risk as one hand of regular blackjack. However, making two bets on one hand at multiple action is slightly more risky than playing two simultaneous hands of regular blackjack. Likewise, playing three hands of multiple action is slightly more risky than playing three simultaneous hands of regular blackjack.

Your optimal bet size as a proportion of your bankroll depends on the number of simultaneous bets you are making. For one bet, it is your edge divided by the variance of possible outcomes. For each of two simultaneous bets (or two simultaneous hands), it is your edge divided by the sum of the variance and the covariance. For each of three simultaneous bets or

hands, it is your edge divided by the sum of the variance plus twice the covariance. Typically the variance is around 1.3 and the covariance is around 0.5.

Simulation shows that the covariance between multiple-action bets is about 10% higher than the covariance between simultaneous hands in a regular blackjack game. Your optimal bet size if you are making two bets at multiple action is 97% of your optimal bet size if you were playing two simultaneous hands at regular blackjack. Your optimal bet size if you are making three bets at multiple action is 96% of your optimal bet size if you were playing three simultaneous hands at regular blackjack.

An easy-to-remember rule is 14/16. For two hands, bet a total of 140% of what you would bet on one hand (70% per hand). For three hands, bet a total of 160% of what you would bet on one hand (53% per hand).

Royal Match

Royal Match is a side bet at blackjack — you are wagering that your first two cards will be of the same suit. If your first two cards are K-Q of the same suit, you win extra. This bet was first introduced in 1992.

If your first two cards are K-Q of the same suit, you win ten to one on your “royal” bet. At single deck, you will be dealt K-Q of the same suit one hand out of 331.5. If your first two cards are of the same suit but not K-Q, you win three to one on your royal bet. The casino edge is 3.8%.

In January of 1993 Santa Fe in Las Vegas offered the Royal Match side bet with these 3:1 and 10:1 payoffs at six decks. Whereas at single deck the casino has an edge, at six decks you have an edge of 1.1%.

CHAPTER 15

DOUBLE

EXPOSURE

This is blackjack with both the dealer's cards dealt face up and the dealer wins ties. This version of blackjack was originated by Vegas World in October of 1979.

Part of table 18 applies, but it supplies only part of the strategy. You also need to know what to do when the dealer shows more than ten, and when the dealer shows a soft total.

Tables 40-42 apply when double after split is not allowed. Tables 43-45 apply when double after split is not allowed. Table 43 just happens to be identical to table 40.

Surrender is never offered at double exposure.

Table 40

Double Exposure, No DS, Part 1

<i>Player's Hand</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>	<i>13</i>	<i>14</i>	<i>15</i>	<i>16</i>
<i>Dealer's Total</i>										
A-A	spl	spl	spl	spl	h	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	spl	spl	spl	spl
9-9	-	spl	-	-	-	spl	spl	spl	spl	spl
8-8	spl	spl	-	-	-	spl	spl	spl	spl	spl
7-7	h	h	h	h	-	spl	spl	spl	spl	spl
6-6	h	h	h	h	h	spl	spl	spl	spl	spl
5-5	db	db	h	h	h	db	db	db	db	db
4-4	h	h	h	h	h	spl	spl	spl	spl	spl
3-3	h	h	h	h	h	spl	spl	spl	spl	spl
2-2	h	h	h	h	h	spl	spl	spl	spl	spl
soft 21	-	-	-	-	-	-	-	-	-	-
soft 20	-	-	-	-	-	-	db	db	db	db
soft 19	-	-	-	-	-	db	db	db	db	db
soft 18	-	h	h	h	h	db	db	db	db	db
soft 17	h	h	h	h	h	db	db	db	db	db
soft 16	h	h	h	h	h	db	db	db	db	db
soft 15	h	h	h	h	h	db	db	db	db	db
soft 14	h	h	h	h	h	db	db	db	db	db
soft 13	h	h	h	h	h	db	db	db	db	db
hard 21	-	-	-	-	-	-	-	-	-	-
hard 20	-	-	-	-	-	-	-	-	-	-
hard 19	-	-	-	-	-	-	-	-	-	-
hard 18	-	-	-	-	-	-	-	-	-	-
hard 17	-	-	-	-	-	-	-	-	-	-
hard 16	h	-	-	-	-	-	-	-	-	-
hard 15	h	h	h	-	-	-	-	-	-	-
hard 14	h	h	h	h	-	-	-	-	-	-
hard 13	h	h	h	h	h	-	-	-	-	-
hard 12	h	h	h	h	h	-	-	-	-	-
11	db	db	db	db	h	h	db	db	db	db
10	db	db	h	h	h	h	db	db	db	db
9	h	h	h	h	h	h	db	db	db	db
8	h	h	h	h	h	h	db	db	db	db
7	h	h	h	h	h	h	h	db	db	db
6	h	h	h	h	h	h	h	db	db	db
5	h	h	h	h	h	h	h	db	db	db

Table 40 Continued

<i>Player's Hand</i>	<i>Dealer's Total</i>			
	17	18	19	20
A-A	h	h	h	h
10-10	-	-	-	h
9-9	-	spl	h	h
8-8	spl	h	h	h
7-7	spl	h	h	h
6-6	spl	h	h	h
5-5	h	h	h	h
4-4	h	h	h	h
3-3	spl	h	h	h
2-2	spl	h	h	h
soft 21	-	-	-	-
soft 20	-	-	-	h
soft 19	-	-	h	h
soft 18	-	h	h	h
soft 17	h	h	h	h
soft 16	h	h	h	h
soft 15	h	h	h	h
soft 14	h	h	h	h
soft 13	h	h	h	h
hard 21	-	-	-	-
hard 20	-	-	-	h
hard 19	-	-	h	h
hard 18	-	h	h	h
hard 17	h	h	h	h
hard 16	h	h	h	h
hard 15	h	h	h	h
hard 14	h	h	h	h
hard 13	h	h	h	h
hard 12	h	h	h	h
11	h	h	h	h
10	h	h	h	h
9	h	h	h	h
8	h	h	h	h
7	h	h	h	h
6	h	h	h	h
5	h	h	h	h

KEY:

- : Stand.
- db: Double down; if you cannot double, then hit.
- dbs: Double down; if you cannot double, then stand.
- DS: Double after split.
- h: Hit.
- spl: Split.

Table 41
Dbl Exp, No DS, Dealer Stands
on Soft 17

Table 42
Dbl Exp, No DS, Dealer Hits
Soft 17

Table 43
Double Exposure, DS, Part 1

<i>Player's Hand</i>		<i>Dealer's Total</i>									
		7	8	9	10	11	12	13	14	15	16
A-A	spl	spl	spl	spl	spl	h	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	spl	spl	spl	spl	spl
9-9	-	spl	-	-	-	-	spl	spl	spl	spl	spl
8-8	spl	spl	-	-	-	-	spl	spl	spl	spl	spl
7-7	h	h	h	h	h	-	spl	spl	spl	spl	spl
6-6	h	h	h	h	h	h	spl	spl	spl	spl	spl
5-5	db	db	h	h	h	h	db	db	db	db	db
4-4	h	h	h	h	h	h	spl	spl	spl	spl	spl
3-3	h	h	h	h	h	h	spl	spl	spl	spl	spl
2-2	h	h	h	h	h	h	spl	spl	spl	spl	spl
soft 21	-	-	-	-	-	-	-	-	-	-	-
soft 20	-	-	-	-	-	-	-	db	db	db	db
soft 19	-	-	-	-	-	-	db	db	db	db	db
soft 18	-	h	h	h	h	h	db	db	db	db	db
soft 17	h	h	h	h	h	h	db	db	db	db	db
soft 16	h	h	h	h	h	h	db	db	db	db	db
soft 15	h	h	h	h	h	h	db	db	db	db	db
soft 14	h	h	h	h	h	h	db	db	db	db	db
soft 13	h	h	h	h	h	h	db	db	db	db	db
hard 21	-	-	-	-	-	-	-	-	-	-	-
hard 20	-	-	-	-	-	-	-	-	-	-	-
hard 19	-	-	-	-	-	-	-	-	-	-	-
hard 18	-	-	-	-	-	-	-	-	-	-	-
hard 17	-	-	-	-	-	-	-	-	-	-	-
hard 16	h	-	-	-	-	-	-	-	-	-	-
hard 15	h	h	h	-	-	-	-	-	-	-	-
hard 14	h	h	h	h	-	-	-	-	-	-	-
hard 13	h	h	h	h	h	h	-	-	-	-	-
hard 12	h	h	h	h	h	h	-	-	-	-	-
11	db	db	db	db	h	h	db	db	db	db	db
10	db	db	h	h	h	h	db	db	db	db	db
9	h	h	h	h	h	h	db	db	db	db	db
8	h	h	h	h	h	h	db	db	db	db	db
7	h	h	h	h	h	h	h	h	db	db	db
6	h	h	h	h	h	h	h	h	db	db	db
5	h	h	h	h	h	h	h	h	db	db	db

Table 43 Continued

<i>Player's Hand</i>	<i>Dealer's Total</i>			
	17	18	19	20
A-A	h	h	h	h
10-10	-	-	-	h
9-9	-	spl	h	h
8-8	spl	h	h	h
7-7	spl	h	h	h
6-6	spl	h	h	h
5-5	h	h	h	h
4-4	h	h	h	h
3-3	spl	h	h	h
2-2	spl	h	h	h
soft 21	-	-	-	-
soft 20	-	-	-	h
soft 19	-	-	h	h
soft 18	-	h	h	h
soft 17	h	h	h	h
soft 16	h	h	h	h
soft 15	h	h	h	h
soft 14	h	h	h	h
soft 13	h	h	h	h
hard 21	-	-	-	-
hard 20	-	-	-	h
hard 19	-	-	h	h
hard 18	-	h	h	h
hard 17	h	h	h	h
hard 16	h	h	h	h
hard 15	h	h	h	h
hard 14	h	h	h	h
hard 13	h	h	h	h
hard 12	h	h	h	h
11	h	h	h	h
10	h	h	h	h
9	h	h	h	h
8	h	h	h	h
7	h	h	h	h
6	h	h	h	h
5	h	h	h	h

KEY:

- : Stand.
- db: Double down; if you cannot double, then hit.
- dbs: Double down; if you cannot double, then stand.
- DS: Double after split.
- h: Hit.
- spl: Split.

Table 44
Dbl Exp, DS, Dealer Stands on
Soft 17

Table 45
Dbl Exp, DS, Dealer Hits Soft 17

There are important differences in strategy that depend on whether the dealer hits or stands on soft seventeen. One important difference is if the dealer stands on soft seventeen, then A-6 is played according to the column labeled 17. If the dealer hits soft seventeen, then there is a separate column for that hand.

Table 40 contains that part of basic strategy for double exposure that applies no matter what the dealer does on soft seventeen. Table 41 is the rest of basic strategy for use if the dealer stands on soft seventeen. Table 42 is the rest of basic strategy for use if the dealer hits soft seventeen. Thus a complete set of basic strategy for double exposure with no double after splitting is table 40 plus either table 41 or table 42. The same logic ties table 43 to tables 44 and 45.

The casino's edge for four or more decks, stand on soft seventeen, no double after splits, no resplits, and naturals pay even money is 0.2%. Hitting soft seventeen gives the casino another 0.4%. Allowing double after splits gives the player 0.2%. Allowing resplits gives the player 0.3%. Restricting doubling down to ten or eleven gives the casino 1.3%, of which 0.4% is for doubling on nine and 0.9% is for doubling on less than nine. Naturals paying 3:2 gives the player 2.3%.

Ties Push

In 1995 Bourbon Street in Las Vegas had an fun and profitable promotion: Every 50 minutes a light would go on, and for the next five rounds both dealer cards would be dealt face up. Normal Bourbon Street rules applied, meaning ties were pushes. The edge to the customers was about 10% for each of those five hands. Strategy for taking advantage of that situation

is shown in tables 46-48. These tables assume that doubling down is not allowed after splitting.

Hybrids

A few Las Vegas casinos have offered hybrids: If the dealer's first card is 10, the second card is face up. Naturals pay even money. No doubling or splitting is allowed, which simplifies basic strategy. If ties lose when the dealer's first card is a 10, this is a miserable game for the player — the casino's edge is 2.8%. If no money changes hands on ties, the casino's edge is 0.3%.

Table 46

Ties Push, Part 1

<i>Player's Hand</i>	<i>Dealer's Total</i>									
	7	8	9	10	11	12	13	14	15	16
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	spl	spl	spl	spl
9-9	-	spl	spl	-	-	spl	spl	spl	spl	spl
8-8	spl	spl	spl	h	-	spl	spl	spl	spl	spl
7-7	spl	h	h	h	h	spl	spl	spl	spl	spl
6-6	h	h	h	h	h	spl	spl	spl	spl	spl
5-5	db	db	db	h	h	db	db	db	db	db
4-4	h	h	h	h	h	db	db	db	db	db
3-3	spl	h	h	h	h	spl	spl	spl	spl	spl
2-2	spl	h	h	h	h	spl	spl	spl	spl	spl
soft 21	-	-	-	-	-	-	-	-	-	-
soft 20	-	-	-	-	-	-	db	db	db	db
soft 19	-	-	-	-	-	db	db	db	db	db
soft 18	-	-	h	h	-	db	db	db	db	db
soft 17	h	h	h	h	h	db	db	db	db	db
soft 16	h	h	h	h	h	db	db	db	db	db
soft 15	h	h	h	h	h	db	db	db	db	db
soft 14	h	h	h	h	h	db	db	db	db	db
soft 13	h	h	h	h	h	db	db	db	db	db
hard 21	-	-	-	-	-	-	-	-	-	-
hard 20	-	-	-	-	-	-	-	-	-	-
hard 19	-	-	-	-	-	-	-	-	-	-
hard 18	-	-	-	-	-	-	-	-	-	-
hard 17	-	-	-	-	-	-	-	-	-	-
hard 16	h	h	h	h	-	-	-	-	-	-
hard 15	h	h	h	h	h	-	-	-	-	-
hard 14	h	h	h	h	h	-	-	-	-	-
hard 13	h	h	h	h	h	-	-	-	-	-
hard 12	h	h	h	h	h	-	-	-	-	-
11	db	db	db	h	h	db	db	db	db	db
10	db	db	db	h	h	db	db	db	db	db
9	h	h	h	h	h	db	db	db	db	db
8	h	h	h	h	h	db	db	db	db	db
7	h	h	h	h	h	h	db	db	db	db
6	h	h	h	h	h	h	h	db	db	db
5	h	h	h	h	h	h	h	db	db	db

Table 46 Continued

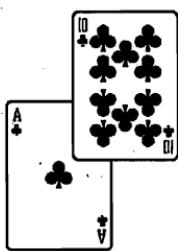
<i>Player's Hand</i>	<i>Dealer's Total</i>			
	17	18	19	20
A-A	h	h	h	h
10-10	-	-	-	h
9-9	-	spl	spl	h
8-8	spl	spl	h	h
7-7	spl	h	h	h
6-6	spl	h	h	h
5-5	h	h	h	h
4-4	h	h	h	h
3-3	spl	spl	h	h
2-2	spl	spl	h	h
soft 21	-	-	-	-
soft 20	-	-	-	-
soft 19	-	-	-	h
soft 18	-	h	h	h
soft 17	h	h	h	h
soft 16	h	h	h	h
soft 15	h	h	h	h
soft 14	h	h	h	h
soft 13	h	h	h	h
hard 21	-	-	-	-
hard 20	-	-	-	-
hard 19	-	-	-	h
hard 18	-	-	h	h
hard 17	-	h	h	h
hard 16	h	h	h	h
hard 15	h	h	h	h
hard 14	h	h	h	h
hard 13	h	h	h	h
hard 12	h	h	h	h
11	h	h	h	h
10	h	h	h	h
9	h	h	h	h
8	h	h	h	h
7	h	h	h	h
6	h	h	h	h
5	h	h	h	h

KEY:

- : Stand.
- db: Double down; if you cannot double, then hit.
- dbs: Double down; if you cannot double, then stand.
- DS: Double after split.
- h: Hit.
- spl: Split.

Table 47
Ties Push, Dealer Stands on
Soft 17

Table 48
Ties Push, Dealer Hits Soft 17



CHAPTER 16

TELLS

This chapter was originally part of *Winning Without Counting*.

One of the blackjack dealer's cards is face up, and you may use this information for making strategy decisions. One of the dealer's cards is face down, and the value of this card is not supposed to be available to you. With certain upcards, the dealer might look at the hole card to see if the hand is a natural. Most common is for the dealer to check the hole card only if the upcard is an ace. At a few casinos, the dealers also check hole cards under 10s. If the hole card does not give the dealer a natural, you complete your hand in the normal manner — hitting, doubling down, splitting pairs, and standing as you wish.

The dealer who has looked at the hole card but does not have a natural has information that you do

not have, but that may be valuable to you. When the upcard is an ace the dealer must check for a 10 in the hole, a fact that this chapter ignores because the dealer is unlikely to tell the hole card under an ace, and even if you know this hole card you could gain only a small amount of expected win by deviating from basic strategy. The value of tells comes when the upcard is 10 and the dealer must check to see if the hole card is an ace. The dealer then knows whether the hand is stiff or pat. If you have this information you can profit from knowing when to deviate from basic strategy.

Definitions

Body Language

Body language includes both unintentional and intentional movements of the body to signal a message.

Tell

The dealer with 10 up who uses body language to signal whether the hand is pat or stiff is said to have a *tell* or be *telling* the hole card.

Read the Dealer

To read the dealer is to correctly interpret a tell.

Tell Strategy

Tell strategy is the modification of basic strategy that is appropriate to capitalize on a tell.

Play the Tell

To play the tell is to read the dealer and use tell strategy.

Kinesics

Kinesics is a systematic study of the relationship between body language and communication.

Kinesic

If you are sensitive enough to read the dealer and you know how to play the tell, you are a kinesic.

Julius Fast

A well-written introduction to kinesics is *Body Language* by Julius Fast. This book is recommended reading if you want to become a kinesic.

An aside from Fast's *Body Language*: Suppose that you like to play alone with a dealer. Can you use body language to tell other customers that you would rather be alone? Certainly — sit in the middle seat and spread yourself out to take up as much of the table as possible. The first person to join you will be an insensitive lout incapable of reading your "keep off" signs. If you do not mind other players but do not want to interact with them, then sit in a corner seat. If you want other players who will interact with you, then sit in an intermediate position.

Ian Andersen

Ian Andersen applies kinesics to blackjack in *Turning the Tables on Las Vegas*. This book is recommended reading if you wish to become a kinesic.

Andersen is reputed to have made a million dollars at blackjack. He is an expert card counter and fabulous as a kinesic. My guess is that two-thirds of his blackjack winnings came as a result of his ability as a kinesic, and one-third came as a result of his ability as a counter. It is a simple matter of arithmetic — my guess is that expert kinesics win twice as fast as expert counters.

Andersen has a lot of tricks for encouraging tells. He thinks that the dealer is more likely to tip off the value of the hole card if the player has been liberal with tokes. He advocates toking the dealer whether the tell is intentional or unintentional; his thesis is that a toke reinforces a desirable behavior.

Steve Forte

Edward O. Thorp was the first blackjack author to mention tells, in his *Beat the Dealer*. Ian Andersen was the first kinesic to explain how to exploit tells to win at blackjack. Steve Forte may not be old enough to have been first, but he did it best in his *Read the Dealer*. This book is required reading if you wish to become a kinesic.

Becoming a Kinesic

If you are sensitive, then you can become a kinesic, and you can use your kinesic skill to win at blackjack if you can find dealers who look at hole cards under 10s. This chapter discusses how to become a kinesic.

What is being discussed in this chapter is understanding and using the body language signals that are sent out by the blackjack dealer. This is a skill that poker players try to develop. An expert poker player always seems to fold whenever you have a good hand in spite of your best attempts to hide its value. That expert poker player is sensitive to your body language and knows the value of your hand just as surely as if your cards were face up. You can develop your own

sensitivity and win money by reading the body language of the blackjack dealer.

A word of caution is in order here: Prearranging a set of signals with a dealer is cheating. It can get the dealer fired and may cause you to be barred for life from playing in any casino in Nevada. Both you and the dealer can be prosecuted if the casino wants to press charges. You might find yourself facing a \$5000 fine and ten years in prison. Most casino owners dislike skillful players, but all casino owners are downright hostile to cheaters. It is perfectly legal to be alert and sensitive. It is also legal to use all information freely available so long as you do not cause it to be available. Winning as a kinesic is not illegal, just as winning with card counting is not illegal.

How to Spot a Tell

Walk around without playing and check out the dealers. Finding tells is much easier for a spectator than for a player. The spectator can pay 100% attention to the dealer and not worry about pit bosses, other customers, or the cards. A spectator need not get caught up in the play of the hands and does not have to make sure that the dealer pays off correctly. An alternative is to play for small stakes and use basic strategy while you are sizing up the dealer. When you think that you have discovered a tell, then increase the size of your bet.

Body language of the unintentional type signals an emotional message, and the word "emotional" is important. The dealer who feels emotional involvement in the outcome of the hand is likely to show this emotion upon checking the hole card. A dealer who is

not emotionally involved in the game will not unintentionally tip off the hole card with body language. To get the advantage of tells, avoid dealers who do not care whether anyone wins or loses.

The dealer who wants you to hit might signal you by holding the pack close to your cards (in a hand-held game), or by putting a hand on the table close to your cards. This tell may well be intentional. To use this tell, you must first decide whether the dealer is rooting for you or against you. A common situation is for the dealer to root for you for the first few hands to encourage a toke, and then turn against you if you are not toking heavily.

The Dealer Likes You

The dealer who wants you to win is likely to yield useful information. Friendly dealers are more likely to tell with eye and hand signals. Sometimes a friendly dealer will respond to a direct question. Show a pair of eights to a friendly dealer with 10 up and pause; a smile from the dealer says split and a frown says hit. (Surrendering is preferred over hitting 8-8 with a frown; but standing on the total of sixteen is always inferior to either splitting or hitting.) If you really want to be bold and no pit boss is watching, say "Shall I split them?" and wait for a yes or no. Do this jokingly because your table may be bugged. Do not overuse this friendly-dealer trick because pit bosses tend to view such goings-on as cheating. Customers do get kicked out for asking the dealer for hole-card information.

Do not play too quickly when the dealer shows 10. Give the dealer a chance to show an emotional reaction. You do not have to show your cards to the dealer — your pause tells the dealer that you are considering how to play a stiff.

One friendly dealer at Sahara Tahoe was telling with her stance, but I had to pause long enough for her unconscious reaction to take place. I sat in first base. If the dealer was pat she would remain facing me directly throughout the pause. If she was stiff she would gradually turn toward the next player. So I knew whether to hit or stand by waiting and watching whether her body turned.

The Dealer Does Not Like You

Once when I was playing blackjack in Las Vegas, a large black man wearing an excessive amount of gold and diamonds sat down at first base. The dealer must have disliked him intensely, because her body language advised him to play his hand wrong every time she had a 10 up. When she was stiff, she encouraged him to hit; when she was pat she encouraged him to stand. I played my hand opposite of what her body language was saying to him.

Tension

The dealer who is rooting against you is also likely to yield useful information. The dealer who craves to win is likely to tense with a stiff and relax with a pat hand. The same is true if big money is at stake. You may be able to read the dealer's hand as stiff or pat if you can learn to distinguish dealer tension from dealer relaxation.

Select a dealer who seems nervous and very involved in the game. Watch that dealer for a while to establish a base behavior pattern. Look for ways that the dealer differs from this base when checking the hole card under a 10. Does the line defining the jaw become more definite, indicating tension? Where are the dealer's hands? What gestures do the hands make?

Where is the dealer looking? Look for a gum chewer and see if the jaws speed up or slow down or stop completely when the hole card is checked.

Other signs of tension are: avoiding eye contact, rigid posture, rocking or shifting the body, clearing the throat, tapping fingers, withdrawing the chin into the chest, hunching the shoulders, perspiring, hands shaking, lowering of both eyebrows, and squinting with a pout.

Pupils

The pupils of the eyes widen when the brain detects something pleasing. Unfortunately, this information is almost useless to a blackjack player. The reason is that the lights in a casino are in the ceiling, and the dealer's head is above your head; this means that the dealer's face is in a shadow. You will probably be unable to see the dealer's eyes, let alone gauge the size of the pupils. Looking up at the dealer's face is an unnatural thing for you to do anyway — most blackjack players gaze at their cards and the dealer's cards. The only part of the dealer most players notice is the manicure. However, if you can somehow see the dealer's pupils, watch for expansion if the dealer is satisfied or contraction if the dealer dislikes the hand. Any reaction will probably occur as soon as the dealer checks the hole card. Pupillary response is a sign of tension or relaxation: Small is tension, big is relaxation.

Encouraging tells

Experiment a bit. See what works best with your own personality and natural style. Try being friendly and see if that encourages tells; it works for Ian Andersen and for me. Try being angry. Or ominous. Or try a drunk act. Since the tell is an emotional reaction on the

dealer's part, anything you can do to get the dealer emotionally involved in the outcome of the game is likely to lead to tells. The dealer who does not care whether you win or lose is not likely to subconsciously tip off the hole card.

Discouraging a Tell

One time I spotted a dealer at the Desert Inn in Las Vegas who made a fist of his right hand if he was stiff and put the hand flat on the table if he was pat. This tell was particularly easy to remember — flat is pat. This dealer also made a fist if his upcard was 2, 3, 4, 5, or 6 and kept his hand flat for 7, 8, or 9 up. I played for twenty minutes with perfect information; never once did the dealer fail to accurately disclose his hole card when the upcard was 10. Then, remembering Andersen's advice about rewarding all tells, I bet \$5 for the dealer. That toke turned out to be a mistake, because from then on the dealer's right hand was always flat on the table. I knew that something was wrong on the first hand when the upcard was 5 and yet his hand was flat. Perhaps the toke stilled the dealer's competitiveness and made him relax. The clenched fist, a sign of stress, occurred no more. By rewarding the tell with a toke I destroyed the attitude that caused the tell. Apparently feeding the goose that lays golden eggs can kill it.

Tells On the Upcard

Observation of the "flat is pat" dealer suggests looking for a tell by comparison of the dealer's reactions with the upcard. Instead of looking for tells on four hands out of thirteen, you can look for tells on twelve out of thirteen. The dealer's emotional reactions might well be the same with 4 up as with 10 up and 4

in the hole; each hand must be hit and is likely to bust. An upcard of 3 might cause the same emotional reaction as 10 up and 3 in the hole. You can more quickly understand the body-language vocabulary of a dealer who responds emotionally to the upcard.

Intelligence of the Dealer

All blackjack dealers are reasonably intelligent, but brighter dealers are less likely to tell. Some dealers are very bright; do not waste your time studying them. Look for dealers who are intelligent enough to add to twenty-one and find the larger of two numbers, but not bright enough to conceal their emotions. Try to sit at third base against such a dealer. Watch the dealer's reactions to the other players and their hands. Even if you do not spot a pattern you may catch an occasional slip if you are alert. One time at the Silver Slipper in Las Vegas a young female dealer showed a queen. A friend of hers in the middle seat hit fourteen and busted, whereupon the dealer said, "Turkey!" I sat in third base and stood on thirteen. I was not at all surprised when the dealer's hole card turned out to be a 6.

Playing Strategy for Tells

Reading the dealer will make you no money unless you know how to use the information you have gained. This section tells how to use this information. A conservative approach is recommended because you must not alert pit bosses to the fact that you have information that they do not want you to have. If a pit boss suspects that you are reading a particular dealer: You will soon find a different dealer at your table, and yourself watched closely. Pit bosses do not like people

Table 49

Conservative Tell Strategy

<i>Player's Hand</i>	<i>Dealer Pat</i>	<i>Dealer Stiff</i>
ace-ace	h	spl
10-10	-	-
9-9	-	-
8-8	sr	spl
7-7	sr	-
6-6	h	h
5-5	h	db
4-4	h	h
3-3	h	h
2-2	h	h
soft 19 or more	-	-
soft 18	h	-
soft 17 or less	h	h
hard 17 or more	-	-
hard 16	sr	-
hard 15	sr	-
hard 14	sr	-
hard 13	h	h
hard 12	h	h
11	h	db
10	h	db
9	h	h

KEY:

-: stand.

db: double down.

h: hit.

spl: split.

sr: surrender if you can; otherwise hit.

Note: Use this table when the upcard is 10. Generic basic strategy applies against other upcards.

who get an edge with kinesics any more than they like card counters.

Playing strategy against a dealer who is stiff and playing strategy against a dealer who is pat are discussed individually. My recommendation for conservative use of tells is shown in table 49.

Playing Strategy Against a Stiff

Suppose the upcard is 10 and your finely-honed kinesic sense tells you that the dealer is without a doubt stiff. If you know for certain that the dealer's hand is a hard total of twelve to sixteen: You do not want to bust your own hand, and you want to get more money into action if possible.

Almost all of the expected value from reading the dealer to be stiff comes from proper play of ten through sixteen. My recommendations for deviating from generic basic strategy are: Stand on soft eighteen, stand on hard fourteen or more, do not surrender, and double down on hard ten. If you know that the dealer will not care and no pit boss is watching, then stand on hard twelve or more.

When the dealer is stiff it is theoretically correct to split all pairs except 5-5, double down on totals of eleven or less, double down on soft totals of twenty or less, and stand on hard twelve or more. Many of these plays alert the pit boss that you are able to read the dealer. Splits and double downs require your cards to be face up on the table in full view of closed circuit television and any pit boss who wanders by. A pit boss who sees you double down on nine against 10 when you have been playing solid blackjack against other upcards will strongly suspect that you have hole-card information.

Playing Strategy Against a Pat Hand

If the upcard is 10 and you are certain from reading the dealer's body language that the hole card is at least 7, I recommend surrendering hard fourteen, fifteen, and sixteen when the surrender option is available. Sometimes you can surrender hard thirteen and hard seventeen, but only if no pit boss is nearby and the dealer will not call one over to witness your unusual play. Otherwise, stick with basic strategy except do not double down and do not split any pair. If a pit boss is camped at your elbow and you get ace-ace, you should split.

It is theoretically correct to surrender hard seventeen and hard eighteen, and to hit hard seventeen if you cannot surrender. These plays are not conducive to long life as a player. Pit bosses get nervous when you hit hard seventeen.

Estimating Accuracy of a Tell

When you think that you have spotted a pattern, use that pattern to make predictions. That is, observe the dealer and form a hypothesis telling how behavior with a stiff differs from behavior with a pat hand. Then, after you have your hypothesis, take a sample. Do not count your hypothesis-forming observations as part of your sample.

When the upcard is 10, predict stiff, pat, or no tell before you see the hole card. "No tell" means either the dealer is momentarily distracted just as tell-time comes or you cannot make a prediction because of conflicting signals or lack of signals. It is important to make your prediction before you see the hole card. Do not change your prediction after you see the hole card. Do not bias

your results by wishful thinking. Count how often your predictions are correct and how often they are wrong. Check both sides of the hypothesis — that is, be sure that you can predict a stiff as well as a pat hand.

If you have spotted a tell immediately and confirmed it quickly, then get out your blackjack money and play the tell. Continue to monitor the accuracy of the tell. Do not let an occasional predictive error discourage you from using the tell, but reduce your bets or quit playing the tell if you suspect that it is no longer valid.

Sometimes spotting a tell takes a long time. Perhaps you find a dealer with potential but only start to feel confident about a tell after you have been observing for ten minutes. After studying the dealer for this long as a spectator, you might feel awkward and arouse suspicions if you jump in with a large bet. Of course, if you think you can get away with it, then do it. I prefer to leave the casino, make careful notes describing the dealer and the tell, and then return to the same dealer at a later date. Upon return I will play rather than be a spectator, initially betting modestly and observing the dealer to see if the tell still exists, and then betting higher if it does.

How Certain Must You Be of a Tell?

Suppose that you have found a dealer who you think acts slightly differently when pat than when stiff. Suppose that in predicting pat you have erred once out of four predictions, and in predicting stiff you have erred once out of six predictions, so that overall you have been correct in eight out of ten predictions. Is

this sufficient accuracy to justify using conservative tell strategy?

If the tell is absolutely accurate every time, you will gain about 2.3% by using conservative tell strategy. Whether surrender is allowed makes little difference. Your overall expected win rate equals your basic strategy expected win rate plus 2.3%. For example, with typical rules, basic strategy loses at the rate of about 0.5%. Playing a 100% accurate tell with typical rules gives you an expected win rate of about 1.8%.

If you think that you have spotted a tell but the dealer is sending out random signals, then playing the tell is a mistake. Using conservative tell strategy when there is no tell costs you 0.7%. Again using basic strategy and typical rules as an example, using conservative tell strategy in the absence of a tell will cause you to lose at the overall rate of 1.2%.

If the dealer sometimes sends out information and sometimes sends out misleading signals so that interpreting a tell is like listening to music partly obscured by background noise, then playing the tell may or may not be warranted. The decision whether or not to act on a potential tell depends on three factors: the accuracy of the tell; the potential extra win if the tell is accurate and you act on it; and the potential loss due to acting on a tell that does not exist.

For all of the deviations from basic strategy in table 49, potential benefits are high and potential mistakes are not costly. If you can call the hole card correctly two-thirds of the time, you ought to use conservative tell strategy.

The benefits of standing on a stiff when the dealer is stiff are large. Standing on a stiff against 10 in the absence of a tell is a mistake but not an expensive

mistake. The mere hint of a dealer stiff should be enough to induce you to stand on hard fifteen or hard sixteen.

Doubling down on nine or less, doubling down on soft hands, and splitting pairs other than 8-8 and ace-ace are not recommended because they tend to advertise your kinesic ability. There is another reason that they are not recommended: Mistakes are costly. These plays offer small potential gains and large potential losses.

Continue to monitor your predictive accuracy. If it drops to less than two out of three, your predictions are probably worthless and you ought to revert to basic strategy or find a different dealer. If your predictions are wrong more than one-third of the time, you will lose faster with table 49 than with basic strategy.

Other Considerations for Kinesics

Once you have identified a tell, there are some things you should keep in mind if you want to continue using the tell to make money. Read hole card information only, look at the dealer as little as possible, and do not disclose your secret to the dealer.

Read Hole Card Information Only

When you read the dealer's tell, read only hole card information; do not pick up on the dealer's playing biases. If you are a very sensitive person and you show your cards to an emotional dealer, the dealer's body language tells you how the dealer thinks you should play your hand; but it does not tell you how to win money if the dealer has no more information than you

do. For example, if the upcard is 7 and you have sixteen, showing your cards to the dealer might result in the dealer's body language saying "stand." The honest dealer has not looked at the hole card under the 7, and thus body language cannot give you any useful information. Ignore the dealer's signals and hit your sixteen. Another example: If you have a natural and the upcard is an ace, the dealer's body language says to buy insurance. This does not mean that the dealer has sneaked an early peek at the hole card and it is 10; it means that the dealer believes that players with naturals should insure them. Do not do it — it will cost you money in the long run.

Do Not Stare at the Dealer

Do not look at the dealer any more than you have to. This applies after you have discovered and established the validity of the tell. Sharp pit bosses know that the critical instant for a tell is right after the dealer checks the hole card, and they know that an emotionally involved dealer is more likely to tell the hole card. When you get your cards, glance at them quickly. A third of the time you will have a hard hand worth seventeen or more or a soft hand worth nineteen or more, and then you will have no reason to look for the tell because you would not use it even if you found it. Only look for a tell if you may need it for a decision. You do not want a pit boss to wonder why you are studying the dealer. If the tell is in the dealer's hands there is no problem; looking at the dealer's hands is a perfectly natural thing for a blackjack player to do. But if the tell is in the dealer's face, then look at the face only when you need information.

Keep It a Secret

Do not let the dealer know what you are doing. If the tell is intentional, talking about it with the dealer brings it into the category of cheating. If the tell is unintentional, letting the dealer know about it may end it.

A friend of Allan Wilson related his own true story about a tell. This friend had discovered the tell while sitting at third base in a shoe game in Las Vegas. If the dealer had a stiff he would partly remove a card from the shoe before third base indicated hit or stand. If the dealer was pat he would not remove a card part way from the shoe. Wilson's friend sat at third base and hit or stood depending on whether the dealer pulled a card part way out of the shoe. The friend made a couple of hundred dollars before the dealer took a break. Wilson's friend quit playing blackjack, picked up his chips, and followed the telling dealer. He asked the dealer to guess how he had made his money and, of course, the dealer guessed that it was just luck. Then Wilson's friend told the dealer the real reason! Needless to say, the dealer changed his dealing style, and Wilson's friend made no more money from that tell.

Tokes For Tells

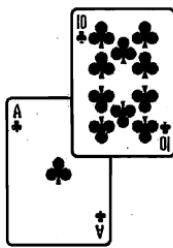
Be careful not to overpay the dealer. Dealers have inflated ideas about how much their assistance is worth. If your tokes average over 2.3% of your bets: You are paying more for the tell than your expected win from it, and you would be better off with no tokes and no tell.

I once saw a young woman in Reno who thought that she had discovered a money machine because her dealer was telling the hole card in exchange for a toke.

On every hand the woman would bet \$10 for herself and \$1 for the dealer. Toking at the rate of 10% was paying way too much for the tell. A fairer division of the spoils would be a 50-50 split of the 2.3% gain from tells less the loss from playing basic strategy. The amount to be split usually is 1.8%. The young woman would have had a good deal if she had held her tokes to about 0.9% of her bets, which with \$10 bets would have meant toking \$1 on every eleventh hand. She should have counted the hands on her fingers and toked \$1 when she ran out of fingers. Had she used basic strategy except against 10 and conservative tell strategy against 10, her expected win rate after tokes would also have been 0.9%. With such a low level of tokes it is doubtful whether the dealer would have continued to tell the hole card.

An alternative is to take after each hand that was turned from a loser into a winner by the dealer's aid.

Psychologists have found random rewards more effective at reinforcing behavior than periodic rewards. So you might try random rewards. Be sure to keep track of the total amount of your tokes to avoid over-payment.



CHAPTER 17

WARPS

This chapter is an abridged version of a chapter that originally was published as part of *Winning Without Counting*.

Once when I was playing blackjack at a large Las Vegas casino, my dealer startled me by saying, "I used to count cards too." After a few minutes of silence I said, "What do you mean, *used to*?" He said, "I found something better." So I asked, "Do you play the tells?" He said, "No, I found something better than that." After thinking for a few minutes I asked, "What is better than tells? Give me a hint." He said, "Sometimes some of the cards are bent." I said, "Do you mean you cheat?" He said, "No, someone bends the cards for me." I said, "Who?" He said, "Who do you think?" Suddenly I knew what he meant. I was amazed that in all of my years at blackjack I had never realized that a certain group of

cards might be bent enough to pick up a warp and retain it through the shuffle.

That is how I met Dave Douglas. We have been friends ever since.

This chapter explains how you can read the value of a card from its warp, and also discusses what to do to profit from this information. Some of the topics covered are: finding warped cards, accuracy in correlating warps with point value of the cards, playing strategy to use the information contained in the warps, and value of playing the warps.

Do not bend the cards yourself; that is cheating. But if someone else (not in your employ) bends the cards, be alert for information you can use. Occasionally a sloppy dealer will allow one card to maintain a distinctive warp. Being able to positively identify the dealer's hole card once in 52 hands gains you about 0.2% on the average.

What is more valuable and much more common is to find a whole class of cards with systematic and identifiable warps.

Who will bend the cards for you and without collusion on your part? These days, probably nobody. But in the past, the dealer did! The dealer checked for a natural with an ace or 10 showing, and did not check under any other cards. If the dealer bends upcards while checking the hole card, those upcards will be warped differently from the rest of the cards. The hole card can be anything, so warping it does not help you. Today, upcards are warped only if they are aces, which does not help you much. Formerly, upcards were warped if they were 10 or ace. Sometimes the cards were permanently distorted. Permanently, that is, until someone warped them anew. At casinos in which the dealers

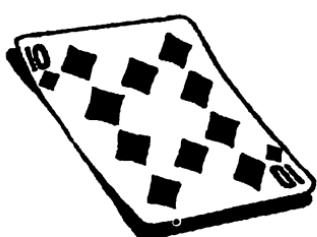
do not take a hole card or do not look at it, you will not find systematically warped cards.

If you can find a casino where the dealer checks the hole card under a 10, you might be able to find warps. I found good warps at King 8 in Las Vegas in 1992 while putting the finishing touches on this book.

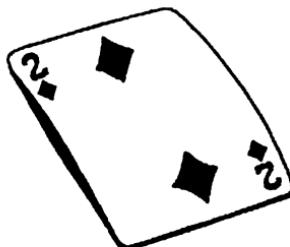
Look for aces and 10s to be warped the way upcards are warped when the dealer checks for a natural. Look for the other cards to be warped the opposite. When a warped 10 or ace lies face down it forms an arch; its middle is raised off the table. When one of the other cards lies face down it forms a cup; its ends are raised off the table. This is the shape of the cards in figure 1.

It takes practice to detect differences in warps, as they are slight. And there are many different readable pattern possibilities. As the cards rest face down on the table perhaps the lower right and upper left corners of the 10s and aces are warped more severely than are the other two corners, while all of the corners of the

Figure 1 Typical Warped Cards



Arch when face down



Cup when face down

other cards are warped equally. Sometimes all of the cards are warped into arches, but aces and 10s are warped more severely. Sometimes all of the cards are warped into arches, but along different axes: aces and 10s are warped into short arches while the other cards are warped into long arches. Sometimes one group is flat while the other group is warped.

Definitions

The one thing that is common to all patterns of distortion is that aces and 10s tend to be warped differently from the rest of the cards. This chapter refers to these two groups as 10/A and 2-9. Other terms originating in *Winning Without Counting* are “read the warps,” “65&74 accuracy,” “65&74 warp strategy,” and “play the warps.”

10/A

The term 10/A means a card that is equally likely to be 10, jack, queen, king, or ace.

2-9

The term 2-9 means a card that is equally likely to be 2, 3, 4, 5, 6, 7, 8, or 9.

Read the Warps

To read the warps is to look at the hole card while it is face down and on the basis of its warp predict it to be 10/A or 2-9 with greater accuracy than by guessing.

65&74 Accuracy

This is a certain level of accuracy in reading the warps. The meaning of 65&74 is discussed later in this chapter.

65&74 Warp Strategy

This is the modification of basic strategy that is theoretically correct if you can read the warps with 65&74 accuracy.

Play the Warps

To play the warps is to read the warps and use a warp strategy to play your hand.

Quick Warp Strategy

There is an easy way to gain two-thirds of the potential value of playing the warps. The method is to buy insurance against ace when you think the hole card is 10/A, and on all other decisions stick with basic strategy. Insurance is sold only when the dealer shows an ace. You can buy insurance whether or not you have a natural yourself. If you can neutralize the dealer's ace-up naturals, you can win. All the rest of this chapter only adds half again to what you gain by playing the warps on insurance decisions.

Value of Playing the Warps

At most blackjack tables, all of the cards have the same warp and thus trying to play the warps is a waste of effort or worse. Be careful with this material — if you try to use it when there is no information in the warps, you will lose faster than if you had never heard of playing the warps. When readable warped cards are present, the information in them is generally worth about one percent. On rare occasions playing the warps gains you an extra two percent. Gains from playing the warps are available to you if you use basic strategy and

can transform a negative-expected-win game into one of positive expected win.

Most pit bosses are aware that blackjack can be beaten by card counters. Some pit bosses are so insistent on beating every customer that they try to identify card counters to harass them. If you play the warps you play unlike a card counter. The more that pit bosses and dealers know about card counting and proper play of the hands, the more likely they are to think you will lose in the long run. A pit boss will watch you closely, see you make an expert play due to the warp of the hole card, think it is a bad play, and walk away happy. Buying insurance when less than a third of the remaining pack is 10s looks like a bad play to most blackjack experts. Standing on sixteen against 7 or 8 makes pit bosses smile.

Most casino owners do not like winners no matter how they win. Some pit bosses expect every customer to lose. Players who have won big just by being lucky occasionally find themselves harassed by sweating pit bosses. This chapter is no amulet that will allow you to win without getting kicked out of any casino. But it will give you a winning tool, and at the same time it will give you camouflage. When you use this material you will be welcomed by pit bosses who do not like card counters but tolerate winners.

Finding Warped Cards

To find warped cards, look for cards with dirty edges, indicating that the pack has been in play for a while. A good rule of thumb is to allow one hour per deck. That is, a single deck that has been in play for an hour may be readable. A double deck may be readable

after two hours of play, and a four-deck shoe might be good after four hours. (Of course, first you must find a casino where the dealers check hole cards under 10s.) Cards do not become warped at empty tables, but tables with one or two players are better than full tables. The fewer the players the more rounds per hour, meaning the more cards warped per hour.

When you walk by a table, glance at the cards that are face up. If you see systematic warps, then the warps are probably readable. It is also possible for the warps to be readable, yet be so slight that you can read them only if you are sitting down with your eyes close to them. Therefore, if you see dirty cards sit down and play a few hands and check them out.

Different dealers handle the cards differently, so the information in warped cards varies from dealer to dealer. Playing conditions and procedures differ from casino to casino, and thus the casino itself is a factor to be considered. Weather seems to be a factor too — if you become a warp player you will come to like humid days.

Casino Factors

You cannot play the warps if the dealer does not check the hole card. Therefore, the strategies in this chapter are not applicable in most casinos now.

Any single-deck game seems to be best, perhaps because one dealer can warp a large percentage of the aces and 10s in a short time. But double-deck games can be excellent, as can shoe games. Big casinos and small casinos can both be good. Northern Nevada possibly because it has higher humidity, seems to be better than Las Vegas. Warped cards are more widespread and can be read with more accuracy on rainy days.

A major casino factor seems to be the way the cards curl when new. Some fresh decks are warped into

arches and others are warped into cups. Chances of finding readable warps are higher at casinos that use cards that are initially warped into cups. If all of the new cards are warped into cups, then only aces and 10s will be bent into arches by the dealers. If all of the cards are arches to start, then the dealer who looks under aces and 10s will warp them more severely; when all of the cards have the same general shape but some are warped more than others, it is difficult to make confident predictions about the hole card.

At some casinos dealers must work at a table for an hour at a time, and at other casinos dealers are relieved every twenty minutes. Naturally, longer is better. Usually a change of dealer means less warped-card information, but not always. Sometimes one dealer warps the cards and then the relief handles them so gently that the warps remain for a long time, even though the relief may not reinforce the warps. In some casinos dealers who have taken breaks return to their same tables. This is better for warp players than when table assignments are at the whim of a pit boss.

At some casinos each dealer has a deck of cards and the cards follow the dealer from table to table. There are two nice things about having the deck stay with the dealer. First, you do not have to worry that the relief dealer is a butcher who will eliminate all of the warps in two seconds. Second, you can build a file of dealers who handle the cards in a way you can use; then you can go directly to these dealers instead of spending precious time looking for readable warps. If you are playing at one of these casinos and your dealer takes a break, just take a break yourself and come back in twenty minutes to the same dealer and the same cards.

You may come to prefer having the cards dealt face up as a defense against card-squeezing customers.

Check out those casinos that try to save money by using the same cards for a long time. You may see cards with coffee on their faces, and cards with edges so feathery that the dealer has difficulty shuffling. The cards at some casinos get so filthy that you will wash your hands before you use the toilet instead of after.

At the other extreme, at some casinos cards are changed frequently even if the dealer has been standing alone. About the only time to find warped cards at these places is shortly before the swing shift goes home at two in the morning. Pit bosses seem reluctant to introduce new cards when they know the table will soon be closed.

Do not fear that your ability to play the warps has been discovered just because it seems as if the pit boss is constantly switching in new cards whenever you play. If you play against the most dilapidated cards in the casino, then you are also playing against the cards most likely to be replaced.

Dealer Factors

Look for a dealer who shuffles gently. A back-breaking shuffle or a riffle of the edges of the pack can erase all of its information. Look for a dealer who really bends the upcard while checking for a natural. Some dealers do not bend the upcard at all — they push it toward you and bend only the hole card. Other dealers pick up both cards without bending either of them appreciably. What you want is a dealer who mangles the upcard while checking for a natural but shuffles as if fingers were feathers. The players must handle the cards gently too, of course, but seldom will a player bend the cards so severely as to remove the warps put

into them by the dealer. Caution — you must resist the temptation to help the dealer warp the cards, as to do so is cheating.

Playing with warped cards is not enough. You must be able to read the warps in the dealer's hole card. Perhaps the dealer pulls cards out of the shoe so slowly that you can read the warp while the card is moving. More generally, you must read the warp in the hole card after it is covered by the upcard. You are closer to the dealer's cards in the middle seat, but it is easier to read the warps from either side.

If the dealer has pressed down on the two cards, you may have to wait for a few seconds for the hole card to pop back into its distorted shape. Against such a dealer, seats from the middle of the table to third base are better than first base.

If the dealer arranges the upcard squarely on top of the hole card, you are reduced to reading shadows. This is difficult, but you can do it with practice. With enough experience you will find information that is invisible to the beginning warp reader. It is much easier to read the warps in the hole card if the upcard is off center and farther away from you. If you notice that your dealer consistently places the upcard off center toward you, then try moving to the other half of the table.

If, with an ace up, the dealer does not take a hole card before asking for insurance or covers the cards with a hand or leans on the ace, find a different dealer. Most of the value of playing the warps comes from buying insurance when the dealer is likely to have a natural. It is generally not very profitable to play the warps if you cannot use them to make intelligent insurance decisions.

Here is a trick you can use against a dealer who offers insurance before taking a hole card, but it requires perfect timing: At the instant the dealer takes a hole card, say "wait," and raise your hands as if you need more time to consider insurance. Then look at the warp of the hole card and announce your decision.

Likely Stiff and Likely Pat

You know the upcard, and you have a pretty good idea whether the hole card is 2-9 or 10/A. You can use this information in playing strategy by first deciding whether the dealer is likely stiff or likely pat.

Against upcards of 2, 3, 4, 5, 6, or ace, when you think the hole card is 10/A, then the dealer is likely stiff. Against 7, 8, 9, or 10, when you think the hole card is 2-9, the dealer is likely stiff. When the dealer is likely stiff, you are justified in deviating from basic strategy to be more likely to double down, split a pair, or stand, and less likely to surrender.

Against upcards of 7, 8, 9, or 10, when you think the hole card is 10/A, then the dealer is likely pat. Against upcards of 2, 3, 4, 5, 6, or ace, when you think the hole card is 2-9, the dealer has a hand that is likely to become pat. When the dealer is already pat or would be pat with ten more points, you are justified in deviating from basic strategy to be more likely to hit or surrender, and less likely to split or double down.

To justify deviating from basic strategy, the gain if the prediction is right must more than offset the cost if it is wrong.

Typical Warped Deck

Experience has shown that when information seems to be present, you are right about 65% of the time when you think the hole card is 10/A and 74% of the time when you think the hole card is 2-9. About two thirds of your total predictions are 2-9, and one third are 10/A. These accuracy and prediction rates suggest that the 52 cards in a single deck are commonly warped as shown in table 50.

For the deck of table 50, predictions of 10/A number 17 out of 52, or 33%. These 10/A predictions are right 11 times and wrong 6 times for an accuracy rate of 65%. The alternate prediction, 2-9, is made 35 times out of 52, and is right 26 times and wrong 9 times for an accuracy rate of 74%. Overall accuracy is 37 right, 15 wrong. This seems like a lot of mistakes, and it is. Yet proper use of the information in the typical deck with 65&74 predictive accuracy gains 1% over basic strategy.

Table 50
Typical Deck With 65&74
Predictive Accuracy

	<i>Actually</i>		
	10/A	2-9	Total
Prediction is 10/A	11	6	17
Prediction is 2-9	9	26	35
Total	20	32	52

Strategy for Playing Warps

Tables 51 and 52 contain basic strategy for playing warps with 65&74 accuracy. Table 51 is for use when the hole card is likely 2-9. Table 52 applies when the hole card is likely 10/A.

Gain from Playing Warps

Table 53 breaks down your gains from playing the warps. The calculations are for four decks, but the one-deck numbers are comparable. The numbers are calculated by taking gain per event times frequency of the event. The order is determined by the numbers in the last column, carried out to more decimal places. Notice that two-thirds of the gain from playing the warps comes from judicious purchase of insurance. The dealer shows 10 four times as often as any other point value, so gains against 10 are relatively important. Potential gain on warp play versus basic strategy is virtually unaffected by whether the dealer hits or stands on soft seventeen.

You can find your advantage at a given casino by adding your basic strategy expected win rate to your gain from playing the warps. Suppose that half of the time you have 65&74 accuracy and the other half of the time you are unable to get any useful information. Half of the time you use 65&74 warp strategy and gain about 1%, and the other half of the time you use basic strategy and gain nothing from the warps. Your gain averages approximately 0.5%. If you are playing a typical game at which basic strategy gives the casino 0.5% edge, adding the 0.5% gain from playing the warps brings your expected win rate up to zero.

Table 51
Warps: Hole Card 2-9

Table 51 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	spl	spl	h	h
6-6	spl	spl	spl	spl	spl	spl	h	h	h	h
5-5	db	db	db	db	db	db	db	db	h	h
4-4	h	h	h	h	h	h	h	h	h	h
3-3	h	spl	spl	spl	spl	spl	spl	h	h	h
2-2	spl	spl	spl	spl	spl	spl	spl	h	h	h

DO NOT BUY INSURANCE

KEY:

- : Stand.
- db: Double down; if you cannot double, then hit.
- dbs: Double down; if you cannot double, then stand.
- h: Hit.
- spl: Split.
- sr: Surrender; if you cannot surrender, then hit.
- srs: Surrender; if you cannot surrender, then stand.

Table 52
Warps: Hole Card 10/A

Table 52 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	sr	sr	spl
7-7	spl	spl	spl	spl	spl	spl	h	h	h	h
6-6	spl	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	h	h	h	h
4-4	h	spl	spl	spl	db	h	h	h	h	h
3-3	spl	spl	spl	spl	spl	spl	h	h	h	h
2-2	spl	spl	spl	spl	spl	spl	h	h	h	h

BUY INSURANCE

KEY:

- : Stand.
- db: Double down; if you cannot double, then hit.
- dbs: Double down; if you cannot double, then stand.
- h: Hit.
- spl: Split.
- sr: Surrender; if you cannot surrender, then hit.

Table 53
Gains on Warp Play

<i>Decision</i>	<i>Upcard</i>	<i>Gain if 100% Accurate</i>	<i>Gain if 65&74 Accurate</i>
insure	ace	2.10%	.71%
not double 11	10	.20	.06
double on 10	10	.21	.06
stand on 16	10	.13	.04
stand on 16	7	.10	.02
hit hard 17	8	.03	.02
not double 10	9	.05	.02
not double 11	3	.05	.01
not split 8-8	10	.04	.01
stand on hard 16	8	.07	.01
hit hard 17	9	.06	.01
stand on hard 16	9	.04	.01
not double 10	8	.03	.01
stand on hard 15	7	.09	.01
all others		.22	.05
Total		3.48%	1.05%

How Much Accuracy in Predicting Hole Cards

It is critical to know how accurate your hole-card estimates are. You do not have to be absolutely certain of the identity of the hole card, but you must have some information to justify acting on your predictions.

Information means being able to call the hole card with greater frequency than is possible by guessing. The odds of correctly guessing 10/A are 5/13 or 0.385, and the odds of correctly guessing 2-9 are 8/13 or 0.615. If you find that you are right about 38.5% of the time when you think the hole card is 10/A and about 61.5% of the time when you think the hole card is 2-9, then you are probably guessing.

In the long run you cannot gain anything from the use of guesses, and you will lose faster if you deviate from basic strategy due to guessing. If you have no information, what you gain by guessing right and using 65&74 warp strategy is less than what you lose by guessing wrong and deviating from basic strategy. Mistakes are expensive. You lose an extra half percent when you are trying to play the warps but are really acting on the basis of random signals. In other words, basic strategy is half a percent better than playing the warps if you are guessing about the hole card.

One of the reasons that you may not have perfect accuracy is that cards from the 10/A group also serve as hole cards. Whereas upcards from the 10/A group are warped into arches, a hole card under an ace or 10 is warped in the opposite direction. A dealer who puts a healthy warp in the upcard while checking for a natural is also likely to put a definite and opposite warp in the hole card. If in checking for a natural the dealer

always bends the hole card to look like 2-9, you may not want to hazard a prediction against a 10 — unless you can see the warp in the hole card before the dealer bends it.

Minimum Accuracy to Justify Insurance

If you are accurate on at least 41% of your predictions of 10/A, then at least a third of your 10/A predictions will be 10s. This is more accuracy than you have by guessing, though only slightly more. Therefore, as soon as you know that your 10/A predictions are better than guesses, buy insurance whenever the upcard is ace and you think the hole card is 10/A.

Minimum Accuracy for Other Decisions

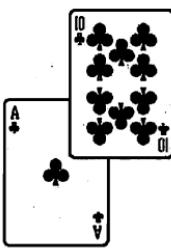
Whereas it is possible to pick up 1% with 65&74 warp strategy and 65&74 accuracy on predictions, if you use 65&74 strategy with guesses (that is, 38.5 & 61.5 accuracy) you will lose 0.5% faster than with basic strategy. You must be at least 46% accurate on 10/A predictions and 71% accurate on 2-9 predictions to make profitable use of the 65&74 warp strategy. That is, 46&71 predictive accuracy with 65&74 warp strategy has the same expected win rate as basic strategy. If you have some small amount of predictive accuracy, but less than 46% on 10/A predictions and less than 71% on 2-9 predictions, then do not use 65&74 warp strategy; to do so will cost you money in the long run.

You can use part of the 65&74 warp strategy if your predictive accuracy on one group is above the minimum. For example: If you have 50&67 predictive accuracy, then deviate from basic strategy when appropriate if your prediction is 10/A; but stick with basic strategy when your prediction is 2-9

A Fresh Deck

Suppose that you have found a valuable situation — a comfortable seat with a good view of a well-warped single deck and a friendly dealer who is reinforcing the warps. Now suppose the pit boss brings in fresh cards. Instead of leaving, you might consider playing basic strategy while waiting for the dealer to warp the new cards.

Suppose that every time the upcard is 10 or ace, the dealer warps that card enough that you can distinguish it with certainty on subsequent rounds. The deck contains usable information as soon as the first 10 or ace serves as an upcard. Keep track of which specific cards are warped. At a busy table you can probably do this on paper without exciting unwelcome interest. With fewer than seven 10/A cards identifiable out of the twenty in the deck, use only that part of the 65&74 warp strategy that involves deviation from basic strategy when you predict the hole card to be 10/A. For example, buy insurance when the hole card looks like 10/A, but do not stand on sixteen against 7 when the hole card looks like 2-9 if the pack contains six or fewer identifiable 10/A cards per deck. After seven or more 10/A cards per deck are warped, then use the full 65&74 warp strategy, because at least 71% of the unwarped cards are from the 2-9 group.



CHAPTER 18

OTHER TRICKS

The previous two chapters covered two things that you can use to gain an advantage at blackjack if the dealer checks the hole card under a 10. This chapter discusses additional tricks, most of which do not require that the dealer check under a 10. Some of the tricks in this chapter can be used only once on any particular dealer or pit boss. Almost all of the material in this chapter was originally published in *Winning Without Counting*.

"Trick" is used to mean an artful way of seizing an advantage. Some of the tricks are playful, some are mischievous, and some are deceptive, but "artful" is my choice for an adjective to describe them. You must decide in light of your own moral attitude which tricks are for you.

When casinos went from one deck to multiple decks, making it tougher to win by counting cards, frustrated counters started looking for other methods of getting an edge at blackjack. Two tricks they perfected are front loading and spooking. Both of these tricks involve devious means of getting hole card information.

Front loading probably is legal, and spooking probably is not. My own opinion is that you should have the right to use all information freely available. The information used by front loaders and spooks is not quite as freely available as tells and warps, but if casino owners and pit bosses do not want you to have this extra information they can make it unavailable. The passive acquisition and use of information provided by innocent casino employees should not be considered cheating. Players who use front loading or spooking are merely taking advantage of sloppy casino procedures.

After front loading and spooking are sections on benefiting from dealer errors and from your own errors.

Do not be worried about other customers noticing what you are doing. Most of the time they will not even know what is going on, and if they do see you benefit by nonstandard means will not say anything except perhaps "Merry Christmas." Most of my successful tricks pass unnoticed. I always repress the urge to say, "Hey, look at what I got away with." As an example of how little attention one customer pays to another, I once played blackjack next to an attractive young woman at the Horseshoe in Las Vegas for twenty minutes before I noticed that all she was wearing above her waist were

long hair and a massive silver necklace, neither of which covered her lovely breasts.

Front Loading

Front loading, a winning trick if the dealer takes a hole card, requires a confederate and a careless dealer. Your confederate must have good eyes, and also must have lousy posture, short stature, or a wheel chair. Front loading means your confederate with eyes at table level sees the dealer's hole card as it is placed under the upcard and passes the information to you. You are betting big and intentionally not paying too much attention to the dealer's cards.

If no pit boss is watching, front loading could gain about 10% with perfect hole-card information. (See tables 46-48 for the appropriate six-deck strategy. The appropriate one-deck strategy is worked out in Ed Thorp's *Beat the Dealer*, page 90.) However, pit bosses do watch, and they pay special attention to winning players and big bettors who make bizarre plays. A front-loading friend of mine was kicked out of Harrah's for splitting 10-10 against 8 when the hole card turned out to be another 8.

To use front loading without attracting attention, you should use a conservative strategy such as that shown in tables 54 and 55. Table 54 is for use when the dealer is stiff or has a likely stiff, meaning the dealer's two-card total is four to six or twelve to sixteen, including soft hands. Table 55 is for use when the dealer is pat or has a likely pat, meaning the dealer's total is seven to eleven or seventeen to twenty. Conservative strategy for front loaders uses hole card information in

Table 54
Front Loading: Dealer is Stiff

Table 54 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	spl	spl	spl	spl	spl	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
7-7	spl	spl	spl	spl	spl	spl	-	-	-	-
6-6	spl	spl	spl	spl	spl	h	h	h	h	h
5-5	db	db	db	db	db	db	db	db	db	db
4-4	h	h	h	spl	spl	h	h	h	h	h
3-3	spl	spl	spl	spl	spl	spl	h	h	h	h
2-2	spl	spl	spl	spl	spl	spl	h	h	h	h

KEY:

-: Stand.

db: Double down; if you cannot double, then hit.

h: Hit.

spl: Split.

Table 55
Front Loading: Dealer is Pat

Table 55 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	spl	spl	spl	spl	spl	spl	spl	spl	spl	spl
10-10	-	-	-	-	-	-	-	-	-	-
9-9	-	-	-	-	-	-	spl	spl	-	-
8-8	spl	spl	spl	spl	spl	spl	spl	h	h	h
7-7	spl	spl	spl	spl	spl	spl	h	h	h	h
6-6	h	h	h	h	h	h	h	h	h	h
5-5	db	db	db	db	db	h	h	h	h	h
4-4	h	h	h	h						
3-3	h	h	h	h	h	h	h	h	h	h
2-2	h	h	h	h	h	h	h	h	h	h

KEY:

-: Stand.

db: Double down; if you cannot double, then hit.

h: Hit.

spl: Split.

a manner that will not set off alarms in the pit boss's head.

Insurance is the most important decision. If the upcard is ace and you know that the hole card is 10, buy insurance. If you are 100% accurate on insurance bets but otherwise do not use hole card information, your expected gain is 2.4%.

You are going to look like a poor player if you occasionally stand on fourteen against 7, 8, 9, 10, or ace or refuse to double down on eleven against those same upcards. Conservative strategy for front loaders advises against surrendering and doubling down on soft totals because these plays are generally not made by poor players. For the same reason, tables 54 and 55 recommend standing on all soft eighteens.

I have not worked out the precise gain from using conservative front-loading strategy, but my guess is that it is at least 6% and possibly close to 7%. With an edge this high, the exact number does not matter. Your problem as a front loader is how much you can win before the pit bosses are attracted by your winnings and start looking around for a reason for your success. Pit bosses are suspicious of anyone who wins. As soon as a pit boss notices the altitude of your confederate's eyes, it is time to leave.

Mason Malmuth's *Blackjack Essays* contains several photographs illustrating dealers flashing the hole card.

Spooking

There have been times, when watching a blackjack game from behind the dealer, that I have been able to see the value of the hole card under a 10 from

twenty feet away. It was not because my eyesight was exceptional — it was not; it was because a dealer would lift the back of the hole card more than an inch off the table and hold it there for several seconds. This was sloppiness on the part of the dealer; the hole card does not have to be lifted high, and does not have to be held up for any length of time. (Nowadays such sights are rare; few casinos ask their dealers to check hole cards.)

My reaction every time I saw such a thing was to wish that I had brought a friend with me into the casino. One of us could have played blackjack while the other found something to do behind the dealer, assisting with the play of the hand after the dealer checked under a 10.

That would have been spooking, and to do it now is illegal in Nevada. Conservative tell strategy (table 49) gains 2.3% if a spook gives a player perfect information about hole cards under all 10s.

In Nevada, spooking is illegal and front loading is legal. The reason, according to Las Vegas attorney Andrew Blumen, is that in front loading, the players are seated where the casino intends them to be. Positioning a confederate to take advantage of the dealer is what the courts object to. The courts do not object to customers passing information in a non-obvious manner because they realize that to pass information aloud would tip off casino personnel about the dealer sloppiness, ending the situation for the customers. Casino customers have no obligation to police dealer sloppiness.

If you are playing blackjack in a casino in which the dealer checks the hole card under a 10, watch the dealer's cards closely as the hole card is being checked. You may be able to glimpse it. It is rare to find a dealer

sloppy enough to flash the hole card to first base, but it does happen. Conservative tell strategy (table 49) gains you 2.3%. One caution — if you spot a flasher, do not act on your hand too quickly. For example, if you see that the dealer has a natural and you throw in your hand before the dealer has shown the natural to the players, whoever is watching you will know that you are getting your information early.

See the Top Card

Akin to front loading and spooking is to know the top card before it is dealt. Some one-deck dealers carelessly push the top card slightly forward as they wait for you to indicate whether you want to hit. If the dealer pushes the top card forward and tilts the deck up, you may be able to see the face of the top card. I once stood on fifteen against 8 at Circus Circus in Las Vegas because I could see the top card — a 7.

Seventeen-Card Cut

Some professional blackjack players have perfected the seventeen-card cut. This is for use when playing against a dealer who shows the bottom card before the cut. After the cut, the known card is seventeenth from the top. One card is burned, fourteen cards go to the players, and one card is the dealer's upcard. The known seventeenth card is the dealer's hole card. Tables 54 and 55 contain the appropriate playing strategy.

Dealer Errors

Dealers are human, and as such they occasionally make errors. Accept it. Their errors may benefit you, the casino, or themselves. I saw an Atlantic City dealer unconsciously replace two winning \$2.50 toke bets with four \$5 chips, all the while idly chatting with the pit boss who appeared to be watching her like a hawk. All seven customers noted the three-to-one payoff and said nothing. The dealer picked up the \$20 and dropped it into the toke box.

When a dealer makes an error in the casino's favor, speak up and get it corrected. Even if the dealer already has picked up your cards, if you suspect a mistake do not be shy about having the hand reconstructed to verify the result. When the dealer makes an error in your favor, overlook the error and forgive the dealer. Pit bosses catch a fraction of the errors that dealers make. Occasionally a righteous customer, probably someone who is in a casino for the first time and betting \$1, will call attention to an error in your favor and get it corrected. Cursing such a customer is normal.

There are a few generalities regarding dealer errors. Dealers who like you are more likely to err in your favor. Dealers are less likely to err on big bets, though mistakes do happen with bets of all sizes: I once won \$300 on a \$200 natural though the dealer had a tying natural. If the dealer makes an error on the total points in a hand, it will probably be on a hand containing four or more cards. Dealers get so much practice on hands of two and three cards that they have all of these combinations memorized. They do not have to add 5-7-

8; they know at a glance that it is twenty. With four or more cards, most dealers have to count the points.

Play Against Exposed Hole Card

If the dealer inadvertently exposes the hole card, use that information as fully as possible. If the dealer is stiff, double down on a soft hand or on eleven or less, split all pairs except 4-4 and 5-5 (on which doubling down is better than splitting), and stand on all stiffs. If the dealer is pat, do not double down on anything, and hit until your total equals or exceeds that of the dealer. Do not be like the little old lady at Harrah's in Reno who refused to hit hard seventeen after the dealer accidentally showed her his twenty, because "I never hit seventeen!"

If the dealer's two-card total is ten or less, play as if the upcard were that total. For example, if the upcard is 3 and the hole card is 4, act as if you were playing against 7. If the dealer's two-card total is eleven: Do not double down, do not split, and hit until you have sixteen or more.

Inadvertently Exposed Cards in New Jersey

New Jersey blackjack procedures of 1978 had one peculiarity that the pit bosses would have loved to change. If the dealer unintentionally exposed the next card out of the shoe, that card was kept in play and not burned! Example: I was in the seat next to third base with ace-3 against 2. The player next to first base showed twelve, motioned for a hit, received a king, and then vehemently denied that he had wanted a hit. He was not forced to take the king, but was allowed to stand on twelve. The hands between the twelve and my soft fourteen were pat. My choices were take the king or stand on soft fourteen. I stood. Third base stood

on soft seventeen. I was hoping for 10 in the hole, but the dealer turned up 7 and hit with the king for nineteen.

On another occasion, I had eleven against an ace and was not going to double down. A player ahead of me said "surrender," and the dealer hit him with a jack. He was allowed to surrender, and I quickly decided to double down. I pushed another \$100 on the table, took the jack for twenty-one, and won.

What should you do if you have 10-7 and you have a chance to take an inadvertently exposed 4? Hit, you say? Wrong. You should double down.

If no one wants the exposed card and the dealer has a pat hand and does not need it, it is supposed to go to first base as the first card of the next round. I would love to sit at first base and know before I bet that I was going to have a 10 or ace as my first card but I have never been so lucky. The only time I saw a 10 exposed and not used, the pit boss ordered it burned instead of dealt to first base. The man playing first base was upset but did not make a fuss.

Natural Bonus

If you are walking through the Resorts International casino in the early morning when action slows down and pit bosses are not overly enthusiastic in their supervision, look for me. You will be able to identify me by my bet size — exactly \$125. You are welcome to join me, but you ought to bet \$125 yourself because our dealer thinks the payoff for a natural on a \$125 bet is \$225. I give her lots of practice, but she just keeps making the same mistake over and over. For variety I bet a different amount when a pit boss is nearby. And I count cards, so if you see me jump to \$200 or more it means that the deck is very rich. But I am fond of my

Table 56

Profitable Hands, by Upcard

<i>Player's Hand</i>	2	3	4	5	6	7	8	9	10	A
<i>Dealer's Upcard</i>										
A-A	+	+	+	+	+	+	+	+	+	+
10-10	+	+	+	+	+	+	+	+	+	+
9-9	+	+	+	+	+	+	+	-	-	-
8-8	-	+	+	+	+	+	-	-	-	-
7-7	-	-	-	-	+	-	-	-	-	-
6-6	-	-	-	-	-	-	-	-	-	-
5-5	+	+	+	+	+	+	+	+	+	+
4-4	-	+	+	+	+	+	-	-	-	-
3-3	-	-	-	+	+	-	-	-	-	-
2-2	-	-	-	+	+	-	-	-	-	-
soft 21	+	+	+	+	+	+	+	+	+	+
soft 20	+	+	+	+	+	+	+	+	+	+
soft 19	+	+	+	+	+	+	+	+	+	+
soft 18	+	+	+	+	+	+	+	-	-	-
soft 17	-	+	+	+	+	+	-	-	-	-
soft 16	-	-	+	+	+	-	-	-	-	-
soft 15	-	+	+	+	+	-	-	-	-	-
soft 14	+	+	+	+	+	-	-	-	-	-
soft 13	+	+	+	+	+	-	-	-	-	-
hard 21	+	+	+	+	+	+	+	+	+	+
hard 20	+	+	+	+	+	+	+	+	+	+
hard 19	+	+	+	+	+	+	+	+	+	+
hard 18	+	+	+	+	+	+	+	-	-	-
hard 17	-	-	-	-	-	-	-	-	-	-
hard 16	-	-	-	-	-	-	-	-	-	-
hard 15	-	-	-	-	-	-	-	-	-	-
hard 14	-	-	-	-	-	-	-	-	-	-
hard 13	-	-	-	-	-	-	-	-	-	-
hard 12	-	-	-	-	-	-	-	-	-	-
11	+	+	+	+	+	+	+	+	+	+
10	+	+	+	+	+	+	+	+	+	+
9	+	+	+	+	+	+	+	-	-	-
8	-	+	+	+	+	+	-	-	-	-
7	-	-	-	-	+	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-

double not allowed after split

Table 56 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>									
	2	3	4	5	6	7	8	9	10	A
<i>double allowed after split</i>										
A-A	+	+	+	+	+	+	+	+	+	+
10-10	+	+	+	+	+	+	+	+	+	+
9-9	+	+	+	+	+	+	+	-	-	-
8-8	+	+	+	+	+	+	-	-	-	-
7-7	-	-	+	+	+	-	-	-	-	-
6-6	-	-	-	+	+	-	-	-	-	-
5-5	+	+	+	+	+	+	+	+	+	+
4-4	-	+	+	+	+	+	-	-	-	-
3-3	-	-	+	+	+	-	-	-	-	-
2-2	-	-	+	+	+	-	-	-	-	-

KEY:

- +: You gain on average using generic basic strategy.
- : You lose on average using generic basic strategy.

Table 57
Profitable Hands, by Dlr Total

<i>Player's Hand</i>	<i>Dealer's Final Total</i>					
	17	18	19	20	21	bust
<i>double not allowed after split</i>						
A-A	+	+	-	-	-	+
10-10	+	+	+	0	-	+
9-9	+	+	-	-	-	+
8-8	+	-	-	-	-	+
7-7	+	-	-	-	-	+
6-6	+	-	-	-	-	+
5-5	+	+	+	-	-	+
4-4	+	-	-	-	-	+
3-3	+	-	-	-	-	+
2-2	+	-	-	-	-	+
soft 21	+	+	+	+	+	+
soft 20	+	+	+	0	-	+
soft 19	+	+	0	-	-	+
soft 18	+	0	-	-	-	+
soft 17	+	-	-	-	-	+
soft 16	+	+	-	-	-	+
soft 15	+	+	-	-	-	+
soft 14	+	+	-	-	-	+
soft 13	+	+	-	-	-	+
hard 21	+	+	+	+	0	+
hard 20	+	+	+	0	-	+
hard 19	+	+	0	-	-	+
hard 18	+	0	-	-	-	+
hard 17	0	-	-	-	-	+
hard 16	-	-	-	-	-	+
hard 15	-	-	-	-	-	+
hard 14	-	-	-	-	-	+
hard 13	-	-	-	-	-	+
hard 12	-	-	-	-	-	+
11	+	+	+	-	-	+
10	+	+	+	-	-	+
9	+	+	-	-	-	+
8	+	-	-	-	-	+
7	+	-	-	-	-	+
6	+	-	-	-	-	+
5	+	-	-	-	-	+

Table 57 Continued

<i>Player's Hand</i>	<i>Dealer's Upcard</i>					
	17	18	19	20	21	bust
<i>double allowed after split</i>						
A-A	+	+	-	-	-	+
10-10	+	+	+	0	-	+
9-9	+	+	-	-	-	+
8-8	+	-	-	-	-	+
7-7	+	-	-	-	-	+
6-6	+	-	-	-	-	+
5-5	+	+	+	-	-	+
4-4	+	-	-	-	-	+
3-3	+	-	-	-	-	+
2-2	+	-	-	-	-	+

KEY:

- +: You gain on average by hitting until your total equals or exceeds the dealer's total.
- : You lose on average by hitting until your total equals or exceeds the dealer's total.
- 0: You have a push.

Table 58

Profitable Hands if Double

<i>Player's Hand</i>	<i>17</i>	<i>18</i>	<i>19</i>	<i>20</i>	<i>21</i>	<i>bust</i>	<i>Dealer's Final Total</i>
soft 19	+	+	-	-	-	-	+
soft 18	+	-	-	-	-	-	+
soft 17	-	-	-	-	-	-	+
soft 16	-	-	-	-	-	-	+
soft 15	-	-	-	-	-	-	+
soft 14	-	-	-	-	-	-	+
soft 13	-	-	-	-	-	-	+
11	+	+	-	-	-	-	+
10	+	+	-	-	-	-	+
9	+	-	-	-	-	-	+
8	-	-	-	-	-	-	+
7	-	-	-	-	-	-	+
6	-	-	-	-	-	-	+
5	-	-	-	-	-	-	+

KEY:

- + If you have doubled down, you gain on average.
- : If you have doubled down, you lose on average.

\$125 bet and the extra 0.7% it yields against this dealer. Just do me one favor — do not bet \$150. I like this dealer and I do not want to confuse her.

Dead Hands

In general, seize any opportunity presented. For example, suppose that you stand on seventeen against 9 and when the dealer tries to turn over the hole card, surprise — there is no hole card. If any customer has asked for a hit and taken the card that should have been the dealer's hole card, you will probably have the option of calling your hand dead or waiting to win, lose, or push after the dealer's hand is completed from the top of the pack. Table 56 gives advice on what to do. With seventeen against 9, opt to call your hand dead because it is a likely losing hand.

There are many situations in which you may have the option of calling your hand dead, effectively getting a push on the hand. Generally these situations occur when someone has received a card out of turn and this affects either your hand or the dealer's hand.

Another example: You double down and the dealer neglects to give you a card. You will probably have the option of declaring your hand dead or receiving the next card to be dealt. If you see such a situation arising — if for example the dealer does forget to give you your double-down card, do not be in any hurry to get the error corrected. Wait until the dealer's hand is finished. The more information you have about the dealer's final hand the better you can play your own hand. Table 58 gives advice for this situation.

Needless to say, if the dealer busts do not take another card to a stiff — just stand on your hand and accept the payoff.

Tables 56, 57, and 58 classify hands according to whether they are net winners or net losers. Table 56 classifies hands according to the upcard, table 57 classifies hands according to the dealer's finished hand, and table 58 assumes you have doubled down. The difference between table 57 and 58 is table 57 assumes you do not double down.

You should play hands with positive expected wins, and call hands dead if they have negative expected wins. In other words, play likely winners and accept pushes on likely losers. Against a pat hand, hitting is more profitable than doubling down. Hit soft seventeen against seventeen.

Encouraging Dealer Errors

There are ways to encourage dealer errors. Get the dealer to like you, and you will occasionally be the beneficiary of an unconscious error. Start a conversation — get the dealer talking and thinking about something other than blackjack — and errors are possible. Of course you must stay alert and attentive yourself in case the error is in the casino's favor.

Count For the Dealer

Count the dealer's total quickly and shout the total out loud. Do this correctly a dozen or more times. Then, when the dealer has a five-card twenty-one, count the total as twenty-two. The dealer may listen to your number instead of adding up the points. Dealers do not count the points in hands of two and three cards — they know at a glance what the total is. But with five cards they must count, unless you relieve them of that burden. One time I shouted "thirteen" after the fourth card brought the dealer's total to thirteen. The fifth card was 8 so I shouted "twenty-two" and the dealer

paid us off. The other players at the table knew what happened, but fortunately the dealer did not ask them why they were laughing.

The Perfect Twenty

Use this trick against 10. You must have a hand worth twenty points in at least four cards. When you take your final hit bringing your hand to twenty, give the dealer a big smile and sound very happy. Say something like "I've got you now!" or "You can't beat me." Do not say that you have twenty-one because you don't, but if you sound as happy as you would with twenty-one, then perhaps the dealer will assume that you really do have twenty-one.

The reason for using this trick only when the upcard is 10 is that twenty is a good hand against other upcards, but against a 10 only twenty-one justifies big happiness. The reason for only doing it on hands with four or more cards is, as mentioned earlier, you rarely fool dealers on total points of hands containing two or three cards; but on totals they have to add up, dealers who are lazy or in a hurry might just believe your addition.

It is best to use this trick with a dealer who likes you and wants you to win. A dealer who wants to beat you will double-check all of your winning totals.

The Happy Twenty-Two

Stand on twenty-two. This trick also works best on a five-card hand. Dealers do not seem to make many errors on four-card busted hands. On hands of six or more cards that are busted, the dealer generally does a careful card-by-card count. But five cards is in between — dealers think that they should be able to glance at a five-card hand and tell immediately whether the hand

has busted; yet a five-card twenty-two can look like twenty-one. Therefore, the proper way to play a five-card twenty-two is to look happy and satisfied and place your first two cards under your bet as if you had twenty-one. When the dealer turns over your cards and pays you, just take the money and smile. If the dealer discovers that your hand has busted, then look apologetic. After all, customers make mistakes just as dealers do. Never act as though you got caught with your hand in the cookie jar; just admit that you have trouble adding up the numbers on five cards. If you are counting cards, getting caught at this trick helps in another way — pit bosses reason that you cannot be counting cards if you cannot even tell twenty-two from twenty-one.

The Unhappy Seventeen

This trick is very similar to the happy twenty-two. When you have a five-card sixteen and the upcard is 2, 3, 4, 5, or 6 so that your best play is to stand, mumble something about "another lousy seventeen" as you slide your first two cards under your bet. If the dealer busts, you will be paid automatically whether the dealer thinks that you have sixteen or seventeen. If the dealer gets eighteen or better you will lose anyway whether the dealer thinks that you have sixteen or seventeen. But if the dealer ends up with exactly seventeen, you have a possible push.

You can use these miscounting tricks again and again as long as they keep working. Once the dealer catches you making an addition error, that dealer will no longer believe the numbers you assign to your hand. Once lost, your credibility will return only with a change of dealers. Use the miscounting tricks only when the

conditions are exactly right, and stop using them against any dealer who catches you making an error.

Harold Smith's Natural

Harold Smith, one of the founders of Harold's Club, liked to play blackjack at Harrah's in Reno. He played by himself and never sat down — he had all the chairs removed from the table to give him lots of walking room. Security officers kept the crowd of onlookers at a respectful distance. Smith would bet piles of \$100 chips on each of two or more hands — sometimes he would play every hand on the table.

One time when I was watching he bet four or five \$100 chips on every hand on the table. First base received a natural. The dealer paid off the natural in the normal manner, matching Smith's four chips with a like stack and placing two more chips on top of the double stack. Smith let the ten chips sit while he attended to his other hands. While the dealer was watching Smith's left hand at third base, his right hand was busy at first base rearranging the ten chips into two stacks of five each. Then he called the dealer's attention to first base and asked if that was the correct payoff for a natural. The dealer remembered the natural and thought that she had paid it off correctly. She asked Smith if he removed any chips from the betting circle, and he assured her that he had not. The pit boss was laughing as the flustered dealer paid Smith another \$250 so that he had the correct chips for a \$500 natural. The pit boss said nothing at the time, though he probably told the dealer about it in private during her break.

Harold Smith was so well-known and well-liked that he could have gotten away with just about anything. Perhaps if this trick were attempted by someone

less respected, the pit boss would not be so inclined to laugh it off.

Two Aces

In a game in which the cards are dealt face down, the best way to play ace-ace is to turn them up with the same excitement and emotion as you use in turning up a natural. Perhaps the dealer will think that you have a natural and pay you 150% on your bet. This is more than the expected win on splitting aces no matter what the upcard. It works best when you are alone with the dealer and playing very fast. Only a dealer who is trying to outrun you will stumble on this one.

Fourteen Wins 150%

Here is another trick that works only when the cards are dealt face down. An ace is a pointy card. A natural is a pointy card and a 10. A four is also a pointy card. The best play of 10-4 is to turn them up with the 10 covering all of the 4 except for the pointy top; this tends to look like a natural until the dealer spreads your cards. Only once have I been paid 150% on fourteen, winning \$75 on a \$50 bet, but on other occasions alert pit bosses have rushed over to stop the payoffs. Pit boss, "What are you doing?" Dealer, "Paying off a natural." Pit boss, "But that is not a natural." Dealer, "Yes it is." Pit boss, "Look again." Dealer, "Oh my gosh. It is not a natural!" Customers chuckle.

Benefiting From Your Misplays

Everyone makes mistakes from time to time. If you are alert, you may profit from yours. If you are prepared, you can make timely misplays that have profit potential. When you make a misplay be alert for ways to benefit. Most pit bosses will let you get away

with something once, especially if you are friendly, acting happy, and having a good time. If you project a grim image, the pit boss may be less willing to let you profit on your error. The following misplays have profit potential.

Stand on a Small Stiff

With cards totaling less than twelve and no ace in your hand, place your cards face down next to your bet, but do not slide them under your bet. Be distracted — ask your neighbor for the time or scan an attractive person of the sex of your choice. Allow the dealer to think you are standing. Wait while the dealer hits at least one other player's hand. You must not discover your need for a card until the dealer has given at least one card to a hand past yours on the table. If you wish you can wait until the dealer's hand is finished. The outcome will be the same — all hands, including the dealer's, must be finished before the dealer can come back to you.

If the dealer busts, you win. If the dealer does not bust, you suddenly realize that you meant to hit your hand. "Hey, I want a card. You passed me by." Be apologetic, but insistent. Make a fuss. Do not let the dealer bluff you. The dealer does not have the authority to give you another card, so the pit boss will be called. You will either be given another card (or two or three) or you will have the option of calling your hand dead, effectively giving you a push. Use table 57 to decide whether to take the push. If you take the push, act as if it is a fair and neutral outcome. Do not repeat this trick for the same dealer or the same pit boss.

The best time to stand on a small stiff is against a 10. Salvaging no worse than a push with 2-3 against 10 is doing handsomely by the hand, and is possible with

a little acting. The reason for restricting this trick to an aceless hand is that some gamblers for no good reason prefer standing over hitting on hands such as soft fifteen; thus you will have a more difficult time convincing the pit boss that you really intended to hit the hand.

I first used this trick by accident at Harrah's in Reno. With \$50 bet, I had 2-5 against 7. I scratched once, caught a 4, somehow thought that I had nineteen, and stood with a total of eleven. The dealer turned up a jack for seventeen. I said, "My nineteen is a winner." When the dealer turned up my two cards, neither she nor I could believe that the total was only eleven. I had simply blundered, and was very fortunate that my point total was less than twelve. The dealer said "Nobody stands on eleven!" and called for the pit boss. He was a mile away and it took him an hour to get to the table. The other players wanted to know why the game was temporarily halted, and I felt about two inches high. This was my most embarrassing moment since waking up in a high school physics class and discovering unfamiliar faces — the familiar ones had left when the bell rang. Finally the pit boss came and the dealer explained the problem. "This player stood on eleven. It was a mistake. Nobody stands on eleven." I sheepishly added, "I thought I had nineteen." The pit boss said, "Hit the hand." The dealer hit it with a 4, bringing the total to fifteen. The dealer said, "What do I do now?" The pit boss answered, "Hit it again." She did — with a king. So I lost the \$50. The point of the story is that the two hits came at the dealer and pit boss's insistence — I was willing to live with the error. The \$50 loss occurred anyhow, but I would gain if

such an event were replayed a million times. In effect, I transferred to the dealer the first opportunity to bust.

Errors to Avoid

There are some errors for which no recourse is given. Try to avoid these errors:

Do not hit when you know you should stand. If you scratch with sixteen against 5 and catch 8, no amount of complaining will remove the 8.

Do not stand when you know you should hit if you have a hand on which some gamblers stand.

Do not make mistakes on double downs or pair splits.

Do not double down on a natural. This play is permitted in most jurisdictions, and no recourse is given to those fools who turn naturals into losers.

The funniest mistake I have ever seen was one time at Harrah's in Reno when I was playing next to a drunk. He looked at his hand, saw sixteen, and scratched the table for a hit. As he was scratching he turned to talk to me. He stopped scratching when the dealer said, "I think you have too many, sir." He looked at his two hits, both 10s, and said "Yes, I guess I do." The dealer scooped up his bet and his thirty-six point hand. The next player, who was doubling down on eleven, did not say anything about the drunk taking a card that would have given him twenty-one, but he was probably thinking some mean thoughts. The dealer busted and he won anyway.

Double Down on Nine

In some casinos you are allowed to double down only on two-card totals of ten or eleven, and never on nine. However, a careless dealer may not notice that your two cards do not total ten or eleven. I have seen a

customer accidentally double down on eight in such a situation and get away with it. Neither the dealer nor the player noticed the error. The dealer busted and paid every hand.

Only attempt to double down on nine if basic strategy recommends doubling down. If the dealer notices that you have only nine, act embarrassed because you made a stupid arithmetic error. If the dealer does not notice that your first two cards total only nine and you win, accept the double payoff. If you lose, you have a choice: You can either allow the double loss, or you can suddenly discover your error and allow the dealer to take only your original bet. "Golly, look at that. I doubled down on nine. I'm sorry. I thought I had ten." For variety you can say, "I thought I was in Las Vegas." If a casino does not allow doubling down on nine, then the dealer will not pay or collect more than the original bet if the error is caught.

Split Nonpairs

Suppose you have 8-9 against 8. If you stand your expected win is negative. If you hit your hard seventeen your expected win rate is worse. Surrender, if it is allowed, is even more costly. Don't you wish you could split your 8-9 and try for a win and a push? Maybe you can. Spread your two cards on the table and put out an additional bet as if you were splitting a pair. The easiest nonpair to split is 6-9, probably because of the similarity in the shapes of the numbers. Nonpairs such as 6-9, 7-8, and 8-9 are good splits except against ace or 10.

Most likely the dealer will notice that you do not have a pair and point out your error. "Oh. By golly, I thought I had a pair. Sorry about that." If you get away

with splitting them, you have turned a potential losing hand into a potential winning hand.

As with other artful plays, if the hands win, then win quietly; and if they lose, then accept your loss equally quietly. Your edge comes from splitting cards that you would really like to split if you were not constrained by the rules of the game.

One time I split a \$50 6-9 against 4 at Harrah's in Reno. The other five players at the table chuckled among themselves as the dealer hit both of my hands, turning them into nineteen and twenty. Their mirth turned to anger when the dealer turned up the hole card, a 7, and hit it with a queen for twenty-one. All of our hands were beaten. I was willing to accept my \$100 loss, but the other players loudly demanded that the dealer disallow my split and redistribute the cards to bust her own hand. The pit boss rushed over to settle the dispute. He explained that the dealer's twenty-one stood and all the players lost, but that I lost only \$50 because the 6-9 split should not have been possible. That broke up a friendly game. The other players scattered, and I had the dealer all to myself.

Scratch-Stand

This trick takes practice. Scratch the table as you are sliding your cards under your bet. This is most profitably done with sixteen or seventeen against 10. You want the dealer to give you a card, but at the same time you want the dealer to think that you intended to stand and that giving you a card was an error. If the dealer does not give you a card, you have not done the scratch-stand correctly. Likewise you have not done it correctly if the dealer gives you a card and thinks that you intentionally asked for it.

If the card fits, keep it. If it would bust you, then insist that you do not want it. Make the dealer take it back. The dealer can do this without calling the pit boss over, but may call the pit boss anyhow. You will be allowed to get by with the scratch-stand once, but only once. Do not repeat the scratch-stand with the same dealer. If the pit boss saw it, do not repeat the scratch-stand for the same pit boss. If it is done properly, the scratch-stand looks like an honest mistake the first time. A second scratch-stand, even a perfect one, makes you look like a hustler. Dealers and pit bosses do not like to lose to hustlers. They may tolerate your winning with luck, but not your winning with guile. There are plenty of dealers and plenty of pit bosses, so make the rounds. Then learn a new trick.

The scratch-stand works particularly well in Atlantic City because of the variety of hand signals used by the customers. You can warm up the dealer by using a signal for hit that is barely distinguishable from your signal for stand.

GLOSSARY

Blackjack has its own vocabulary. This glossary defines all of the blackjack idioms used in this book. Some commonly used words have two meanings in blackjack conversations, and this glossary explains which of the meanings I have chosen to use.

Ace. An ace is a card that you may count as either one or eleven. The easiest way to count a hand containing an ace is to count the ace as eleven initially. If your hand total comes to more than twenty-one with the ace as eleven, then count the ace as one.

Action. Your action is the total amount you bet on all of your hands. If you play 100 hands at \$25 each, then your action is \$2500.

Basic strategy. Basic strategy for blackjack is the set of playing decisions you should make in order to maximize your advantage, using no information about cards remaining in the pack except that the cards in your hand and the upcard are not among them. You are presumed to know the number of decks shuffled together, the details of the rules, and what procedures the dealer must follow.

Blackjack. Blackjack is the name of the game. In conversation but not in this book, blackjack also means a natural.

Burn. After the shuffle and cut, one card is placed on the bottom of the pack or in the discard tray. This procedure is called burning a card, and the card temporarily removed from play is called the burned card or burn card.

Bust. To bust is to go over twenty-one. If you bust you lose. If the dealer busts and you do not bust, you win. If both you and the dealer bust, you lose; this is the basis for the casino's edge.

Bust box. After you see your first two cards, you may make an additional wager equal to half of your bet. Then you get one more card. If you bust, your bust-box bet wins even money. If you do not bust, your bust-box bet loses.

Comp. Comp stands for complimentary. It is used as both noun and verb. Beverage comps are available to all players in most casinos. A pit boss who likes your action may comp you to a meal, which means you eat free except you probably will want to leave a tip for whoever waits on you. The free meal itself is called a comp. Other comps sometimes lavished upon big bettors are: hotel rooms, shows, and air fares.

Counting cards. Card counting means keeping some sort of track of which cards have been played. Card counters generally vary bet size and playing strategy as the composition of the remaining pack changes.

Cut. When you cut the pack you divide it into two parts. The dealer then inverts the order of the two parts.

Deal. To deal is to distribute the cards.

Dealer. The dealer is the casino employee who deals the cards.

Deck. This book uses deck to mean 52 cards. A single deck contains four aces, four each of 2 through 9, and sixteen 10s. In conversation but not in this book, deck is also used to mean pack.

Double down. When you double down, you turn your cards face up, double your bet, and receive one more card. The advantage of doubling down is that you are allowed to increase your bet after you see your hand and the dealer's upcard. The disadvantage is that you must take one and only one more card.

Doubling down after splitting. Suppose you split 8-8 against 5. If one of your hands catches 3 for eleven, you should like to double down. At some casinos you are allowed to double down after splitting a pair, and at others you are not.

Double exposure. The dealer gets two cards face up before you play your hand.

Early surrender. Early surrender is when you may surrender before the dealer checks for a natural. If the dealer turns over a natural after you have early-surrendered, the early surrender saved you half a bet.

Even money. This is another term for insurance, and is used when you have a natural.

Field bet. This is a side bet that your first two cards will total twelve through sixteen. Ace-ace and 8-8 pay double.

First base. You are at first base if you are playing the spot nearest the dealer's left hand. If you are playing first base, the dealer serves your hand first before moving on to the hands of the other players.

Five-card half win. If you have five cards and you have not busted, you have the option of turning in your hand and accepting a win equal to half of your bet. This rule is offered at a few casinos in Asia.

Front loading. Seeing the dealer's hole card as it is placed under the upcard.

Hand. The dealer gives you two cards to start your hand, and you may take more cards if you wish. All these cards are your hand. The dealer's cards are the dealer's hand. In conversation but not in this book, hand is also used to mean round.

Hard. Any hand that does not contain an ace is a hard hand. A hand with an ace can be hard too, if the hand

totals twelve or more and all aces in the hand count one. Examples: 6-7 is hard thirteen; 5-10-ace is hard sixteen. Since twelve is the smallest soft hand, the word "hard" is not used with hands of eleven or less.

Hit. To hit a hand is to take a card. The card you receive when you hit is also called a hit.

Hole card. When the dealer gets a card face up and a card face down, the hole card is the card that is face down. You are not supposed to know the value of the hole card until after you play your hand.

Insurance. Insurance is a side bet that the dealer has a natural. You may buy insurance only when the dealer's upcard is an ace. If the dealer has a natural, the insurance bet wins double. If the dealer does not have a natural, the insurance bet loses.

Late surrender. Late surrender is when you must wait to surrender until after the dealer checks the hole card to see if the hand is a natural. If the dealer has a natural you may not surrender.

Lose all to a natural. When you double down or split and the dealer winds up with a natural, you lose both bets. This rule is common in Europe.

Lose one bet to a natural. When you double down or split and the dealer winds up with a natural, you lose only your original bet.

Macao surrender. See five-card half win.

Multiple action. You make three bets on your hand. The dealer starts with the same upcard and finishes his or her hand three times, once for each of your bets.

Natural. A natural is a two-card hand of twenty-one points. The only way to make twenty-one in two cards is ace-10. In conversation but not in this book, a natural is sometimes called a blackjack.

Over/under. This is two side bets. You can bet that your first two cards will total over thirteen, or that they will total under thirteen. Aces count one and thirteen loses.

Pack. This book uses pack to denote any collection of cards, as distinguished from deck, which is 52 cards.

Pair. A pair is two cards of the same value, such as 7-7 or 8-8. Whether two unlike 10s (such as queen-king) are a pair is up to the casino management. Generally a pair may be split and played as two hands.

Pat. A pat hand is an unbusted hand worth at least seventeen points. A dealer or player who has a pat hand is said to be pat.

Pit. A pit is a collection of gaming tables.

Pit boss. This book uses pit boss to mean a casino employee in a line position between the shift manager and the dealers. A pit boss supervises dealers or other pit bosses. In casinos, pit bosses may have fancier titles — floor person, pit supervisor, casino executive, floor manager, and so on. Pit bosses watch out for cheating, settle disputes, give comps to big bettors, and handle some of the paperwork required by tax collectors.

Player. A player is a casino customer. This book is written in second person, and you are assumed to be a player. A pit boss will call you a player if you make large bets.

Push. A push is a tie, and no money changes hands. A push occurs when both you and the dealer have unbusted hands with the same total points. If you bust you cannot push.

Red/black. This is two side bets. You can bet that the dealer's first card will be red, or that it will be black. If the dealer gets a deuce of the color you bet, you push.

Resplit. The opportunity to resplit occurs when you split a pair and receive another card of the same value. To resplit means to put out a third bet and play the cards as three hands. You sometimes have opportunities for further resplits to make four or more hands.

Round. One round includes making bets, dealing two cards to each player and the dealer, serving the players' hands, finishing the dealer's hand, and making the payoffs.

Royal match. This is a side bet that your first two cards will be of the same suit.

Shift. Casino employees generally work eight-hour days. A working stint is called a shift. Shift is also used to describe a group of employees who come to work at the same time and go home at the same time.

Shift boss. The shift boss supervises all of the pit bosses on a particular shift. Shift bosses give free hotel rooms and airfare to very big bettors.

Shoe. A shoe is a box for holding cards. Since dealing with more than two decks held in the hand is awkward, three or more decks are dealt out of a shoe. Sometimes one or two decks are dealt from a shoe.

Shoe game. A shoe game is a blackjack game in which the dealer deals out of a shoe.

Soft. A soft hand contains at least one ace and is valued at twenty-one or less when one ace is counted as eleven. Examples: ace-6 is soft seventeen, and ace-6-ace is soft eighteen. The smallest soft hand possible is twelve, and the largest is twenty-one.

Split. To split you must have a pair. Turn both cards face up, put out an additional bet equal to your original bet, and play the cards as two hands.

Spooking. This is positioning a confederate behind the table to see the dealer's hole card. Spooking is illegal in Nevada.

Stand. To stand is to take no more cards.

Stiff. A stiff is a hand that is not pat and that may bust if hit once. Stiffs include hard twelve through sixteen. In conversation but not in this book, stiff has another meaning: a person who does not tip.

Surrender. To surrender is to give up half of your bet for the privilege of not playing out your hand. You keep the other half of your bet.

Tell. The dealer's body language signals the value of the hole card.

Third base. You are at third base if you are playing the spot nearest the dealer's right hand. If you are playing third base, the dealer serves all other players' hands before attending to yours. Your hand is last before the dealer turns up the hole card.

Tie. A tie is when you and the dealer end up with the same total points.

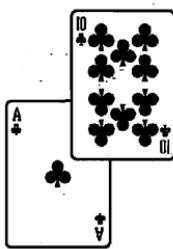
Toke. To toke a dealer is to give the dealer money or chips as a tip. The tip itself is called a toke. The word has come into such general usage in Nevada that all service persons speak of receiving tokes. The most unusual toke I have ever seen was when a well-endowed braless blonde came out of the Dunes (formerly a casino in Las Vegas) and toked the male parking attendant by giving him a peek inside her blouse.

Twenty-one. This is another name for the game of black-jack.

Upcard. The upcard is the card in the dealer's hand that is face up for all the players to see before they play their hands.

Warp. Some cards are shaped differently than others.

10. The number 10 means a card worth ten points. Since the cards marked 10, J, Q, and K are each worth ten points, 10 refers to any of them.



LITERATURE CITED

- Andersen, Ian. *Turning the Tables on Las Vegas*. New York: The Vanguard Press, 1976.
- Baldwin, Roger, Wilbert Cantey, Herbert Maisel, and James McDermott. "The Optimum Strategy in Blackjack," *Journal of the American Statistical Association*. 51 (1956); 429-439.
- Baldwin, Roger, Wilbert Cantey, Herbert Maisel, and James McDermott. *Playing Blackjack to Win*. New York: M. Barrows & Co., 1957.
- Fast, Julius. *Body Language*. New York: Simon & Schuster, 1970.
- Forte, Steve. *Read the Dealer*. Berkeley: RGE, 1986.
- Griffin, Peter. *Extra Stuff*. Las Vegas: Huntington Press, 1991.
- Griffin, Peter. *The Theory of Blackjack*. Las Vegas: Huntington Press, 1979; last revised 1988.
- Gwynn, John M., Jr. and Armand Seri. "Experimental Comparisons of Blackjack Betting Systems," presented at the Fourth Gambling Conference, 1978.
- Malmuth, Mason. *Blackjack Essays*. Las Vegas: Mason Malmuth, 1987; last revised 1991.

- Thorp, Edward O. *Beat the Dealer*. New York: Random House, 1962; revised 1966.
- Uston, Ken. *Million Dollar Blackjack*. Hollywood: SRS Enterprises, 1981.
- Uston, Ken. *The Big Player*. New York: Holt, Rinehart and Winston, 1977.
- Wong, Stanford. *Blackjack Analyzer*. La Jolla: Pi Yee Press, 1992; last revised 1994.
- Wong, Stanford. *Blackjack in Asia*. La Jolla: Pi Yee Press, 1979.
- Wong, Stanford. *Blackjack Secrets*. La Jolla: Pi Yee Press, 1993.
- Wong, Stanford. *Current Blackjack News*. La Jolla: Pi Yee Press, monthly since 1979.
- Wong, Stanford. *Professional Blackjack*. La Jolla: Pi Yee Press, 1975; last revised 1994.
- Wong, Stanford. *Winning Without Counting*. La Jolla: Pi Yee Press, 1978.

INDEX

Symbols

22 counts as 21 136-139

A

ace 121-125

ace as first card 125

Andersen, Ian 17, 169-
170, 174-175

B

Baldwin, Roger 16

Basic Blackjack 253

Beat the Dealer 16, 26,
66, 211

Betting Cheap Claimers
254

Big Player, The 17

Blackjack Analyzer 5, 256

Blackjack Count Analyzer
256

Blackjack Essays 216

Blackjack in Asia 4

Blackjack Secrets 15, 17,
253

Blumen, Andrew 217

Body Language 169

bonus for 5-5-5-5 120

bonus for 6-7-8 115-116

bonus for 7-7-7 116-118

Braun, Julian 123

bust box 146

busted hands 131-136

C

caller 72-76

Cantey, Wilbert 16

Caro, Mike 254

Casino Tournament Strat-

egy 254

cheating 15

count for the dealer 228-
229

coupon for an ace 123-125

Current Blackjack News 5,
13-14, 25, 255-256

Curtis, Anthony 5, 124–125, 254

D

dead hands 227–228
 dealer errors 219–232
 dealer final totals 44–45
 dealer takes ties 87–93
 double down 22, 59–66
 double down after splitting aces 123–125
 double exposure 151–161
 double for more 66
 Douglas, Dave 4–5, 187–188
 Dubner, Harvey 16

E

early surrender 82–83
 ethics of casino gambling 15–16
 expected win 25, 36–46
 “Experimental Comparisons of Blackjack Betting Systems” 46
Extra Stuff 14

F

Fast, Julius 169
 field bet 147
 five cards 95–97
 fixed shuffle point 46
 flasher 217–218
 Forbes, Daniel 125
 Forte, Steve 17, 170
 fourteen wins 150% 232
 front loading 211–216

G

generic basic strategy 28–34

Griffin, Peter 14, 36
 Gwynn, John M. Jr. 46

H

happy twenty-two 229–230
 hard hand 32
 history of winning blackjack 16–18
 hit after splitting aces 121
 hole card exposed 220

I

insurance 20, 33–34

J

joker 127–130

K

kinesic, kinesics 168–169

L

late surrender 82
 lose all to a natural 41–43
 lose on 17–17 91

M

Maisel, Herbert 16
 Malmuth, Mason 216
 match-play chips 62–66
 McDermott, James 16
Million Dollar Blackjack 17
 multiple action 148–150

N

natural 47–58
New York Daily News 63
 no hole card 41–43
 number of decks 36

O

Optimal Strategy For Pai Gow Poker 254

over/under 148

P

perfect twenty 229

Playing Blackjack to Win
16

Professional Blackjack
15, 16, 18–26, 253

Professional Video Poker
254

push on 22 131–136

pushover 21 140

R

Read the Dealer 17, 170

red/black 148

redoubling 66

resplit aces 121

rider 72–76

royal match 150

S

sacrifice splits 72–76

Schlesinger, Donald
63, 140

scratch-stand 237–238

second chance 21 84–85

Seri, Armand 46

seven cards 95–97

seventeen-card cut 218

six cards 95–97

Smith, Harold 231–232

soft hand 32

split 21–22, 67–77

split any sixteen 72

split nonpairs 236–237

spooking 216–218

stand on a small stiff 233–
235

Stanford Wong Video

Poker 256

surrender 21, 33, 79–85

surrender after doubling
down 83–84

surrender after splitting
84

surrender and get a new
hand 84–85

surrender any number of
cards 83

T

tell 167–185

Theory of Blackjack, The
36

Thorp, Edward O. 16, 26,
66, 170, 211

tie insurance 94

toke 170, 175, 184–185,
219

Tournament Blackjack 256

Turning the Tables on Las
Vegas 17, 169

two aces 232

U

unhappy seventeen 230–
231

Uston, Ken 17

V

Video Poker Analyzer 256

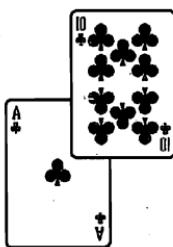
VPEXACT 256

W

warps 187–207

Wilson, Allan 184

Winning Without Counting
4, 17, 72, 167, 187, 209



PUBLICATIONS BY STANFORD WONG

Books

Blackjack

Basic Blackjack is a comprehensive presentation of basic strategy and win rates for all common rules and most exotic rules for the game of blackjack.

Blackjack Secrets is an introduction to card counting (high-low system) and explains how to get away with playing a winning game of blackjack in casinos.

Professional Blackjack has a complete and accurate presentation of the *high-low*, the counting system used by more card counters than any other because of its combination of simplicity and power. If you want a more advanced counting system, *Professional Blackjack* also contains the *halves*.

Casino Tournaments

Casino Tournament Strategy explains how to get an edge over the other players in tournaments. It covers blackjack, craps, baccarat, and keno.

The strategies required for success in a blackjack tournament are completely different from the strategies that a professional blackjack player would use to support himself.

In September 1994 Anthony Curtis won the \$60,000 first prize in a blackjack tournament at the Riviera in Las Vegas. Years earlier, Curtis helped develop the material in *Casino Tournament Strategy*.

Video Poker

Professional Video Poker shows how to get an edge on video poker at both Nevada and Atlantic City casinos. The material was developed with the aid of two video-poker pros. (Yes, there are people who support themselves playing video poker.)

Pai Gow Poker

Optimal Strategy For Pai Gow Poker shows how to get an edge at pai gow poker. Jeff Mervis, who helped create the material in this book, supports himself by playing pai gow poker in the card casinos of California. Mike Caro, author of *Professional Pai Gow Poker Report*, says "Those serious players seeking to make a living at pai gow poker will find Wong's *Optimal Strategy for Pai Gow Poker* an almost perfect path to profit." New in the 1992 edition: a chapter on pai gow poker tournaments.

Betting on Horses

Betting Cheap Claimers. If you are intrigued by the possibility of betting on horses and want to learn

something about it, *Betting Cheap Claimers* is a good place to start. It explains how to get a big edge in handicapping tournaments. It explains two methods a casual casino racebook customer can use to find bets with a positive expectation, and backs up both with empirical tests that have statistical significance. It discusses money management. It also has an introduction to handicapping, a glossary, and an index.

Newsletter

Current Blackjack News, a newsletter for blackjack players, has been published monthly since 1979, and monthly plus special editions since 1992. It has had some spectacular news items. December 1994: Alton Belle in Alton, Illinois paid 2:1 on naturals at blackjack on bets up to \$1000; your expected win rate was one bet per hour. October 1994: the Grand in Biloxi paid 80:1 on two sic bo bets that won once per 72 games, giving you a 12.5% edge; your expectation with flat \$100 bets was to win \$1500 per hour. April 1994: Lady Luck in Las Vegas had a second-chance option that gave basic-strategy players a 0.7% edge. April 1993: Saddle West in Pahrump, an hour west of Las Vegas, added a joker to every blackjack shoe; a hand with a joker paid double. April 1993: Las Vegas Hilton dealt blackjack with a 50-50 rule; basic-strategy players enjoyed a 1.9% edge.

Current Blackjack News also keeps you up to date on more mundane things, such as how many decks are used and the details of the rules.

Current Blackjack News is available by fax as well as by mail.

Software

Blackjack

Blackjack Count Analyzer is a computer program for playing blackjack. It works on IBM PCs and compatible computers. Besides playing blackjack, *Blackjack Count Analyzer* generates tables of strategy indexes and runs high-speed simulations. It handles all common and uncommon rules variations, and also some rules variations that have never been offered in any casino.

A simplified version of it, *Blackjack Analyzer*, also is available; *Blackjack Analyzer* uses basic strategy only, whereas *Blackjack Count Analyzer* supports card counting.

Casino Tournaments

Tournament Blackjack is a computer program for playing blackjack tournaments. It works on IBM PCs and compatible computers. It can be used to analyze tournament situations by simulation.

Video Poker

Stanford Wong Video Poker, like its predecessor *Video Poker Analyzer*, is a computer program for playing and analyzing video poker. It works on IBM PCs and compatible computers.

Also available is *VPEXACT*, a program whose only function is to cycle through all possible hands of video poker to calculate the payback to the customer.

Ordering Information

Write to Pi Yee Press, 7910 Ivanhoe #34, La Jolla, CA 92037-4511 for prices and an order form. Or call (619) 456-4080. Or fax (619) 456-8076.

Basic Strategy

What a blackjack neophyte needs is basic strategy. It must be mastered before one goes on to card counting. *Basic Blackjack* has the most complete explanation of basic strategy available anywhere.

Blackjack experts will appreciate *Basic Blackjack* because of its wealth of information on unusual rules. If you travel to a foreign country and encounter a strange rule, *Basic Blackjack* likely tells you how to play against the rule and how much you gain from exploiting it. If you play blackjack in the United States and encounter a strange rule or an unusual promotion or a coupon that promises an unusual payback, *Basic Blackjack* most likely covers the situation. Thus *Basic Blackjack* belongs in every blackjack player's library, and in every traveling blackjack player's suitcase.

All common rules variations are covered in *Basic Blackjack*. In addition, the book provides strategies and expected values of such exotic rules as naturals paying other than 3:2, bonuses for certain naturals, dealer's two-card twenty-one is not a natural, doubling down on more than two cards, doubling down after splitting aces, doubling for more, redoubling, sacrifice splits, early surrender, surrender after doubling down, surrender after splitting a pair, surrender and get a new hand, dealer takes ties, dealer takes 17-17 ties, dealer takes all ties except 21-21, tie insurance, bonuses for five cards, six cards, or seven cards, coupon for an ace, jokers, push on 22, 22 counts as 21, push on tie over 21, bust box, field bets, over/under, red/black, multiple-action blackjack, royal match bets, and double exposure.

Winning Without Counting

Basic Blackjack also explains how to win with basic strategy, reprinting the best parts of the out-of-print classic *Winning Without Counting*. One chapter explains tells and another chapter explains warps. A chapter entitled "Other Tricks" explains front loading, spooking, what to do if you see the top card, how to encourage and exploit dealer errors, and how to benefit from misplays.

ISBN 0-935926-19-4
\$14.95



5 14 95

9 780935 926194