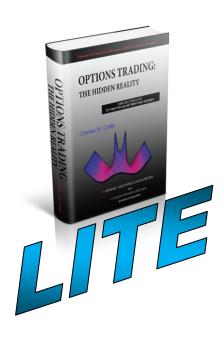


# Options Trading: The Hidden Reality *LITE*5 Part Training Course

# Part 5



By Charles M. Cottle RiskDoctor.com

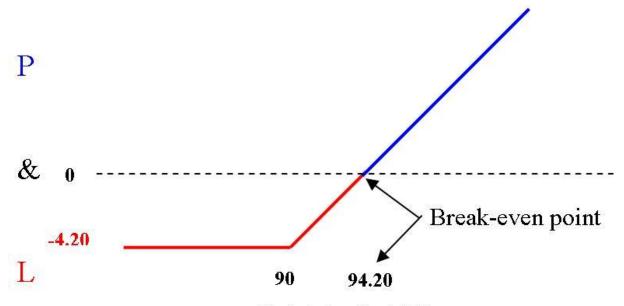


# **Risk Doctor Answer Key for Part 3**

# (Questions Begin on Page 1)

You are long 1000 Underlying shares of EBAY going for 93.40 (\$93,400). The purchase of 10 October 90 Puts can provide a floor, limiting your downside risk. If you buy 10 Puts for .80 each (each \$80 for a total of \$800);

A. What will you then want to happen to the Underlying stock? You want it to go up because this is synthetically long 10\*90 Calls for 4.20 each (\$4200).



Underlying Stock Price

B. What will be the most you can lose between now and expiration? \$4200 just like owning 10 real Calls for 4.20 each. (that is .80 for each Put becoming worthless while the stock drifts lower from 93.40 to 90 losing the 3.40.

C. What is your break-even point(s) in terms of the Underlying price? 94.20 because the stock makes back the .80 that the Put will lose by expiration.

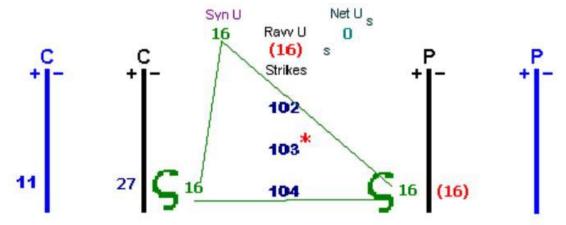
D. What is the simplest trade you can make to stop the exposure (locking in the gain or the loss, whatever it may be)?

Sell the real call to complete the conversion. (you may be wondering what then? But that is for a later discussion).

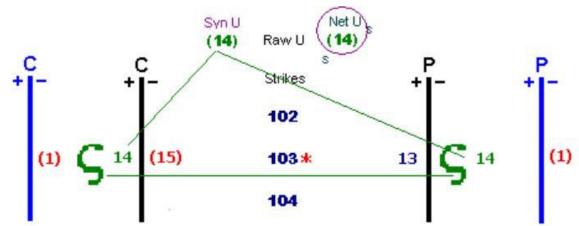


B. A government estimate will be announced in one minute. Which one (only one) vehicle (stock or calls, or puts) would you buy or sell, and in what quantity in order to neutralize to a safe exposure (Hint: Card up and dissect position.) Remember to check your Net Call Units and Net Put Units.

A. The DJX is at 102.80. You are short 16 futures, long 27 of the 104 calls and short 16 of the 104 puts. **Sell 11 104 calls**.

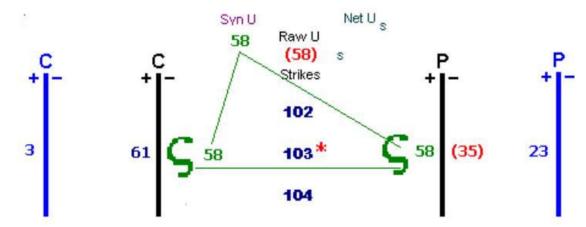


B. The Bonds are at 103.02. You are short 15 of the 103 calls and long 13 of the 103 Puts. Buy 14 Futures. If the buy only 13 they will be short 2 calls or if they buy 15 futures they will be short 2 puts. Less of a bias if sell 14.

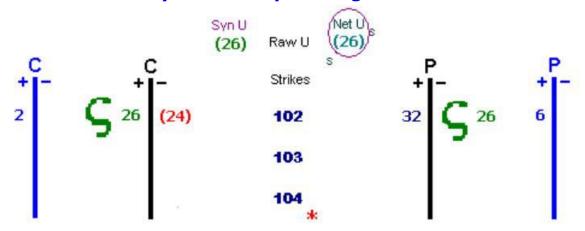




C. The Bonds are at 102.30. You are short 58 futures, long 61 of the 103 calls and short 35 of the 103 puts. **Sell 20 puts.** 

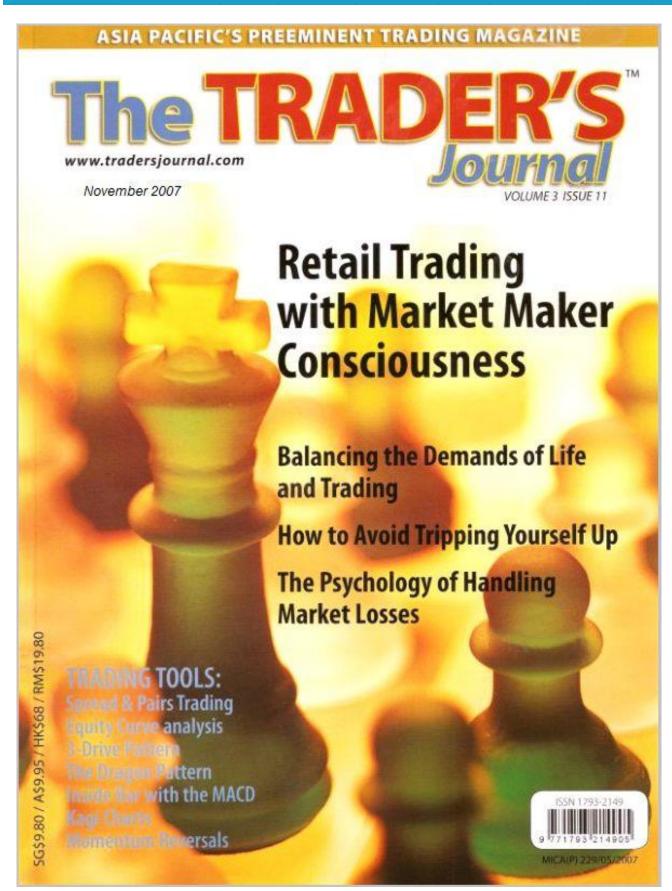


D. The DJX is at 104.42. You are short 24 of the 102 calls and long 32 of the 102 Puts. **Buy 26 futures. Buying 28 would give you 4** straddles but they would be quite long delta.

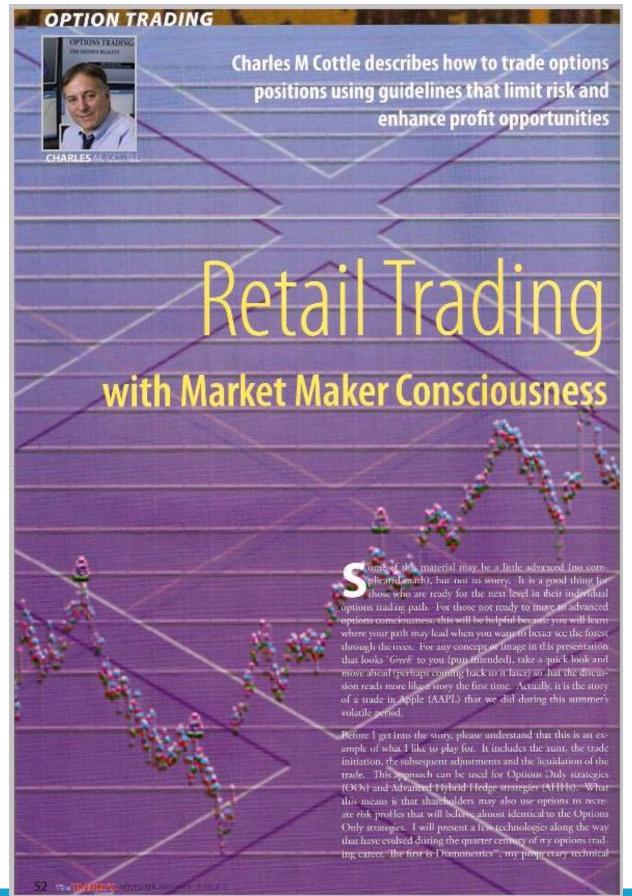


Congratulations! You are done but it is only the beginning if options are for you. The following is an article that I wrote for <u>The Trader's Journal</u> because it paints a picture of where your options trading consciousness can lead. It highlights the management of a series of trades and adjustments in Apple (AAPL) options during the volatile summer of 2007, initiated during a Live Ri\$k Doctor Trading Event.











Retail Trading with Market Maker Consciousness

By Charles M. Cottle (Author of Options Trading: the Hidden Reality)

Some of this material may be a little advanced (no complicated math), but not to worry. It is a good thing for those who are ready for the next level in their individual options path. For those not yet ready to move to advanced options consciousness, this will be helpful because you will learn where your path may lead when you want to better see the forest through the trees. For any concept or image presented that looks 'Greek' to you (pun intended), take a quick look and move ahead (perhaps coming back to it later) so that the discussion reads more like a story the first time. Actually it is the story of a trade (in AAPL)that we did during this summer's volatile period.

Before I get into the story, please understand that this is an example of what I like to play for. It includes the hunt, the trade initiation, the subsequent adjustments and the liquidation of the trade. This approach can be used for Options Only strategies (OOs) and Advanced Hybrid Hedge strategies (AHHs). What this means is that shareholders may also use options to recreate risk profiles that will behave almost identical to the OOs. I will be presenting a few technologies, along the way, that have evolved during the quarter century of my options trading career. The first is Diamonetrics™, my proprietary technical analysis tool, which is used to project a likely expiration range for which to play. The next technology is Position Dissection, which I use to predetermine the components or spreads (butterflies and calendars) that are synthetically embedded in the position, for possible harvesting or rolling along the way until eventual liquidation. We shall also see the power of 3D graphic analysis over time.

#### First a little bit about trade allocation: Model Portfolio

You may have discovered that options are more suitable for Week-Trading or Month-Trading as opposed to Day-Trading, because realistically, when putting on an options trade, one often waits at least a few days because it is for a longer time horizon than a day and has a different trend dynamic (bullish, bearish, a little sideways or potentially explosive).

#### Objective to Achieve 25% per Annum:

Ideal world: Win when you are right and win when you are wrong. Can this be done? Yes, with high probability trades that take advantage of time erosion, sound trade management and position adjustment. Also it is sweet to have an approach that never allows for getting scared out of a trade. How can this be done? It is no surprise that certain spreads have a kind of 'built-in' stop. But in addition to that, you are still in the trade, which means that if the market moves back your way, you can get back some or all of the loss, or even better, win. With a little creative adjusting the position can be molded into something that would be akin to planting seeds that can grow into a bountiful harvest.

Out of the twenty or so standard options spread strategies only about four, or combinations of two or more of those four, are worth trading. The four are verticals, butterflies, calendars and cheap long options. When you do some combining, like two adjacent butterflies, you get a condor, and when you combine a calendar with a vertical, you get a diagonal. Combining two diagonals gives you a double diagonal or a straddle strangle swap, whichever you wish to call it. Your trading results become more consistently profitable when a position has a high probability of winning (more ways to win than lose) and has limited risk (i.e. you are less likely to get scared out of the trade). This is my approach.

There are those that believe keeping it simple by just buying calls when you are bullish and buying puts when your bearish is a better way to go. I think that it is difficult to be right consistently enough to profit long term using that approach.

To achieve an annual return target of about 25%, I suggest a diversified approach of carrying around 11 simultaneous limited risk strategies:

- 3 Bullish candidates
- 3 Bearish candidates
- 3 Sideways direction candidates
- 1 potentially Explosive candidate, or 1 Cheap shot lottery ticket-type play occasionally.



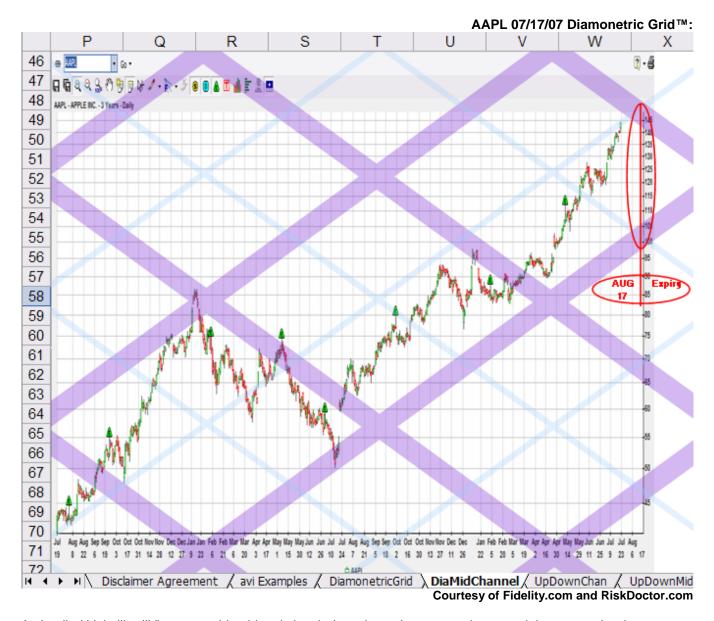
For example, as a rough guideline, put no more than 7% of your options account at risk on any one play. For a \$100,000 account that means no more than \$7,000 capital at risk, per trade. In the table below, the size per trade (QTY) is rounded down to the nearest whole contract, and it is assumes a round turn commission at the rate of \$1.50 per contract (.75 each way). The execution prices are an assortment of what you might look for, but it will vary, so adjust the size accordingly.

Trd	Trade Description	QTY	Price / Trd	Total	RT	MaxLoss	Marg	jin	<b>Buying Pwr</b>	
#	Max Risk Per Trade \$7000		Dr/(Cr)	Dr/(Cr)	Comm	per Trd	per Trd	Total	Reduced	
1	Bull Credit Spread	21	(1.80)	(3780)	\$63	3.20	500	10500	\$6,783	
2	Bull Credit Spread	23	(2.00)	(4600)	\$69	3.00	500	11500	\$6,969	
3	Bull Credit Spread	27	(2.50)	(6750)	\$81	2.50	500	13500	\$6,831	
4	Bear Credit Spread	21	(1.75)	(3675)	\$63	3.25	500	10500	\$6,888	
5	Bear Credit Spread	24	(2.15)	(5160)	\$72	2.85	500	12000	\$6,912	
6	Bear Credit Spread	27	(2.45)	(6615)	\$81	2.55	500	13500	\$6,966	
7	Condor or Butterfly (Positive Time Decay)	34	2.00	6800	\$204	2.00	0	0	\$7,004	
8	Calendar Spread (Positive Time Decay)	13	5.20	6760	\$39	1.00	0	0	\$6,799	
9	Double Diagonal (Positive Time Decay)	19	3.50	6650	\$114	3.50	0	0	\$6,764	
10	Debit Play (Negative Time Decay)	67	1.00	6700	\$201	1.00	0	0	\$6,901	
11	Cheap Shot Double Butterfly	112	0.50	5600	\$1,344	0.50	0	0	\$6,944	
No	No more than 7% on any one play (You could start with half and add at better prices) \$75,76									
Res	Reserve for Adjustments \$24,									

#### July's AAPL Trade:

The Diamonetric Grid™ or D-Grid below is superimposed upon Fidelity.com's 2-Year logarithmic candlestick chart of AAPL. This D-Grid is placed to harness up-channels that are symmetrical with down-channels. The wide transparent channel lines are called WickZones™ whose width or thickness varies according to volatility of the underlying at extremes. Drawing the red vertical line at AUG expiry on the 17<sup>th</sup> identifies a likely expiration range of 97 to 153 as defined by the WickZones. Since AAPL was trading at 144 it represented an opportunity to get short in a manner that had good downside potential, allowing for it to take a little heat on the upside, as AAPL sought its ultimate high on the move, before retracing.





As Implied Volatility (IV) was reaching historic levels (next image) we wanted a spread that was rather immune to the effects of IV and judging from the options chain decided to go with a vertical bear spread with the underlying within the 2 strikes to minimize the sensitivity of IV fluctuations.

The elevated IV was not attractive enough to sell the any out-of-the-money (OTM) credit spread call verticals (risking 3 or more times what we could make) because they remained quite cheap and the nature of this trade was 'top-picking' during AAPL's bull tear. Since we met on a Sunday, we used the options chain from the previous Friday to get an idea of pricing. We chose the 150/125 bear debit spread and based upon a price of just over \$10, our quantity was determined to be 6 to keep the cost within our parameter of no more than \$7000 per trade. This, by the way, was our only negative time decay trade. That meant that the value would shrink overtime if the underlying remained unchanged – down to the in-the-money (ITM) amount of 6.25 (150 strike - 143.75 underlying price).



## Implied Volatility spiked in July:



Courtesy of IVolatility.com

#### AAPL 07/20/07 Friday's Close:



July 23<sup>rd</sup>:

**Courtesy of Fidelity.com** 

6 AUG 150/125 bear put vertical debit spreads were filled at \$10.28. The total cost of the trade was \$6168 plus a commission of \$12.00 for a total cost of \$6180.

The position had a -266.25 Delta, Gamma of 4.84, Theta of -\$36.79 per day and a Vega of \$39.09 per 1% change in IV which stood at 58.25%

# July 27<sup>th</sup>:

APPL Update: AAPL has climbed to a high of 148.92 but closed at 143.85 This tested us but AAPL remained beneath the down-sloping WickZone and the up-sloping 'half-channel'.

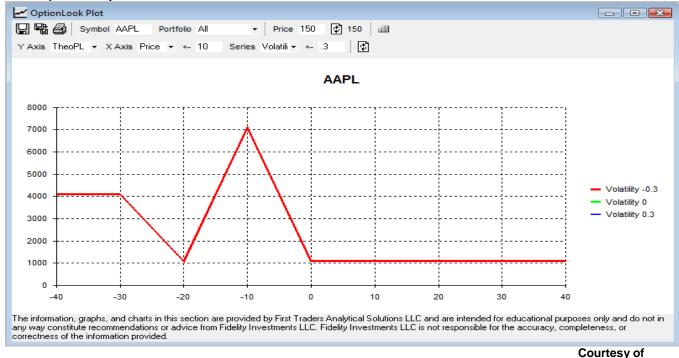
July 31<sup>st</sup>:

**AAPL Adjustment** when AAPL dipped on its way to a low of 131.25 we sold 12 AUG 140/130 put verticals for 4.20 (6.65 for the 140 puts while paying 2.45 for the 130 puts) thereby taking most of our money off the table.



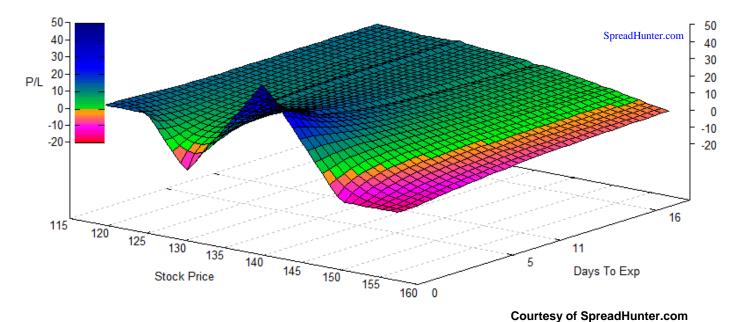
The spread took in \$5040 less a commission of \$18. Our total running cost at this point was \$1158 debit. But what did we have now?

2D Graphic Analysis:



#### Fidelity.com

#### 3D Graphic Analysis:



Some folks have difficulty with 3D so let's reconcile the two images. The Top image from Fidelity's OptionsTraderPro shows the 'Hockey Stick' expiry shape'. The front left side of the 3D image from SpreadHunter.com, represents that same Hockey Stick expiry shape as in the 2D graph above. The rest of the image is color coded to show the degree of P/L. Time is moving from the back right to the front left and the far



right corner shows a slightly bearish position with regard to the P/L profile of July 31<sup>st</sup>. At the tall peak it looks like a big butterfly and off to the left there is an additional, but smaller bear vertical.

Let's make some more sense of this using a Positions Dissector Spreadsheet and discover exactly where that butterfly and vertical are. The initial trade is displayed in column (H), the adjustments in column (I) and it all nets out to column (J). The first procedure performed by the spreadsheet (below) is converting any ITM option to OTM defined by the 'PivotK' (Cell G13) which is set to 140 in this instance. The results are displayed in the light green shaded columns (C) for net calls and (K) for net puts. You can probably see in those columns the 6\*130/140/150 iron butterflies and an extra 6\*130/125 bear spreads. To formally dissect the butterflies we enter them in columns (N, O and P). The results are in column (M) showing 24 baby butterflies (6\*130/140/150 'pregnant' butterflies) and a 130/125 bear spread in column (X).

	C	D	E	F	G	Н	1	J	K	L	M	N	0	P	Q	T	V	X
1			Raw Calls	Tota	Net Cont	tracts	Raw Puts						(//i				C P	
2	- 31			10 1000 1000		1						-				123		1
3				PivotK	140	4		1 4 1	Date:	1		.L				PivotK	140	
4		В 1	Month	AUG	5 8	J.		Inc Adj	Y	l		DH-	rfly Dis			AUG		1
5	Raw Position						100.00			The state of the s		Work Sheet						
6	nC	гC	Adj	Cur	K	Cur	Adj	гP	nP	K		Bfly1	Bfly2	Bfly3	K	С	K	P
5					125	(6)	Α.	(6)	(6)	125			Contract of the Contract of th		125		125	(6)
6					130		12	12	12	130			<u>.</u>		130		130	6
7		4		S	135					135	6	6	R 6	-	135		135	
8	(6)			-	140		(12)	(12)	(6)	140	12	12			140		140	ALCOHOLD IN
9					145					145	6	6	7		145		145	
0	6				150	6		6		150					150		150	
1					155					155					155		155	
9					Net					Net	24	24	1		Net		Net	

Courtesy of RiskDoctor.com

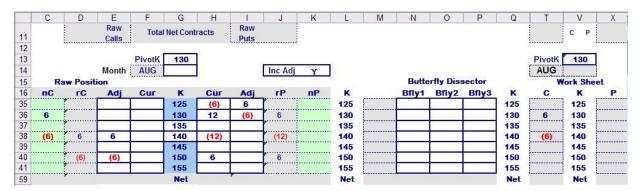
# August 1st:

APPL visited a low of 127.77 and on the way down, we sold off the 125/130 put vertical bear spread taking in 2.25, on 6 spreads (130 puts at 5.40 and 3.15 for the 125 puts) crediting \$1350 less 9.00 commission. This provided funds to acquire (synthetically buy back) the 140/150 call vertical spread (the short vertical component of our 130/140/150 butterfly). We had been long the 140/150 put vertical so buying the call vertical boxed that off. Paying 1.48 (2.25 for the 140 calls and sold the 150 calls at .77), spent \$888 plus 9.00 commission, leaving us with long deltas (the 130/140 bull spread). Total running cost: \$714

Looking at the updated Position Dissector, we see that the initial position and first adjustment have been consolidated in column (H). The August 1<sup>st</sup> adjustments populates columns (E) and (I) and with a PivotK setting at 130 in Cell (G13), it leaves us with a net position of no puts in column (K) and 6 bull spreads in column (C). So, we have reversed and were now playing to the upside.



## Position Dissection: Profit Taking and Reversing:

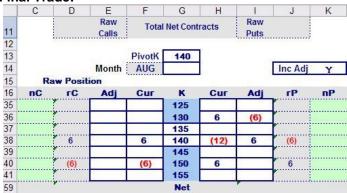


#### Courtesy of RiskDoctor.com

# August 6<sup>th</sup>:

Took profits in AAPL: by purchasing 6\*140/130 Put verticals for 5.00 (\$3000 plus 9.00 commission) for a total investment of \$3723 leaving us with 6\*130/140 Box Spreads with an expiration value of \$6000 that was exercised for a nominal fee. Total Profit of \$2277. This was not a homerun but a nice 36% in roughly 2 weeks.

#### **Position Dissection after Final Trade:**



Courtesy of RiskDoctor.com

Final Trade in column (I) leaving 6 AUG 140/150 boxes (columns D and J) to later be exercised.



#### 10/0507 Updated D-Grid for AAPL: Points shown where trades and adjustments were applied.



Courtesy of Fidelity.com and RiskDoctor.com

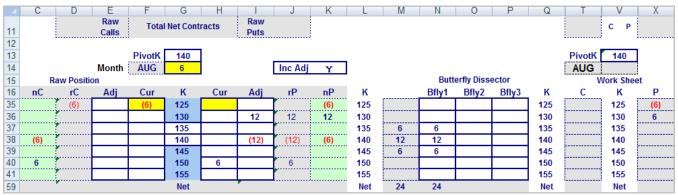
According to this type of approach, during the live trading seminar, we found 9 trade candidates to make on July 23<sup>rd</sup>. In summary: 3 were bullish, 3 bearish and 3 sidewaysish. 6 positions with positive time decay, 3 with negative decay. We made 11 adjustments, 7 liquidations, 2 box-offs. 4 winners, 5 losers. 13 day profit: just over \$7000 after commissions, on \$44,000 value at risk (about 16%) of a \$100,000 account (about 7%). Our AAPL trade was chosen to be featured here because of the interesting adjustments and risk management.

# A word about Hybrid Hedging:

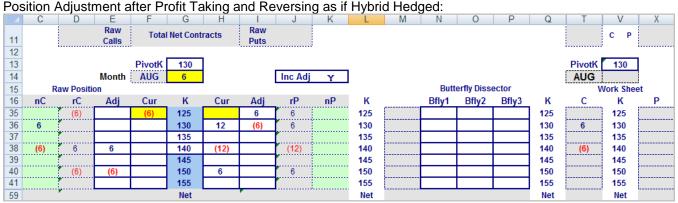
To summarize this series of trades as if there were 600 shares of AAPL to be hedged with the same market opinions formed and same risk threshold consciousness here would be the series of dissections. The differences from the above dissections are shown with highlighted yellow cells:

Dissection as if had 6oo shares (6 entered in Cell G14) of AAPL and hedged initially with the sale of 6 AUG 125 Calls:



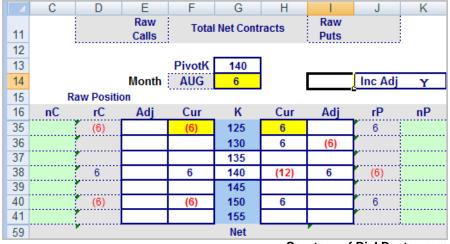


Courtesy of RiskDoctor.com



Courtesy of RiskDoctor.com

Final Position after Boxing Off (Includes 125 Conversion requiring a Roll if stock position is to be maintained:



Courtesy of RiskDoctor.com

Charles M Cottle first became a member of the CBOE in 1981 then the CBOT in 1983 and CME in 1985, retiring from the floor in 1995. Charles taught thousands of market makers all over the world and teaches hedge funds, brokers and private investors through books and webinar series available at www.RiskDoctor.com.