THE OPTIONS CLEARING CORPORATION

#23484

Back to Infomemo Search

DATE: AUGUST 30, 2007

SUBJECT: REMINDER: APPROVAL OF PROPOSED CONTRACT ADJUSTMENT CHANGES TO ELIMINATE ROUNDING

EFFECTIVE DATE: SEPTEMBER 4, 2007

This Information Memo is a reiteration of previously published OCC Information Memos about changes to equity option contract adjustment methodology to be effective on September 4, 2007 (see Information Memos 22687, 22232, 23211, and 23348). Information remains unchanged from previously published Memos.

The Securities and Exchange Commission (SEC) has approved changes to the OCC By-Laws governing the way contract adjustments are executed for a wide variety of stock splits and distributions (see SEC Release No. 34-55258 dated February 8, 2007). The changes eliminate rounding of strike prices in contract adjustments. They also represent a significant departure from long-standing practice**.** The changes are also described in a supplement to the Options Disclosure Document (ODD), Characteristics and Risks of Standardized Options, which commenced publication on May 9, 2007.

Effective Date

OCC has agreed to allow additional lead time from the date of SEC approval before implementation to allow clearing members and other parties to prepare for the changes. Accordingly, the changes in contract adjustment methodology to eliminate the rounding of strike prices (described below) will be effective with adjustments whose **ex-distribution date** is **September 4, 2007** and thereafter.

Background and Rationale

Currently, Article VI, Section 11 of OCC's By-Laws specifies two alternative methods of adjusting for stock splits and stock dividends. In cases where one or more whole shares are issued with respect to each outstanding share, the number of outstanding option contracts is correspondingly increased and strike prices are proportionately reduced to reflect the split ratio. For example, in the event of a 3-for-1 split, an XYZ 60 option calling for the delivery of 100 shares of XYZ stock would be divided into three XYZ 20 options, each calling for the delivery of 100 shares of XYZ stock.

In all other cases, the deliverable and premium/strike multiplier are increased, and strike prices are reduced. For example, in a 3-for-2 split, an XYZ 40 option calling for the delivery of 100 shares would be adjusted to a new adjusted option symbol that would call for the delivery of 150 shares with a reduced strike price of 26 5/8 (40 / 1.5 = 26.6666, rounded to the nearest eighth). The new adjusted option symbol would also have a premium/strike multiplier of 150.

Since equity option strike prices are currently denominated in eighths, adjusting strikes according to either of the methods mentioned above will periodically require rounding of adjusted strikes to the nearest eighth. The need to round to the nearest eighth results in economic inequities measured in terms of the in-the-money value of positions after the adjustment. These inequities due to rounding have historically been accepted as immaterial. Recently, however, they have become a source of concern to exchanges and market participants. Over the years, option trading volume and open interest have increased significantly. Larger positions, sophisticated trading techniques, and spread strategies can easily magnify small single-contract rounding inequities into sizeable amounts. The OCC Board of Directors has determined it desirable to implement an adjustment method that will eliminate rounding inequities that arise solely as an artifact of the adjustment process.

Symbology Initiative

The Symbology Initiative is a multi-year project affecting all options industry participants. (Information about the Symbology Initiative can be viewed at www.optionsclearing.com/symbology/.) Among other objectives, the Symbology Initiative will revise option symbology and data formats and eliminate ticker codes. As part of this effort, equity options will be converted from strike prices expressed in fractions to decimals. Once equity option strike prices are converted to decimals, the economic inequities arising from rounding fractions in contract adjustments will be eliminated. Accordingly, the OCC By-Laws indicate that the “New Method” of contract adjustment to eliminate rounding (see below) will no longer be used when equity option strike prices are expressed in decimals. At that time, equity option contract adjustments will revert to the current “standard” methodology.

The Symbology Initiative currently anticipates that the conversion of equity options strike prices to decimals will occur on July 31, 2009. Accordingly, the New Method of contract adjustments to eliminate rounding will be effective for adjustments occurring September 4, 2007 through July 30, 2009 (Note: these dates specify the ex-distribution dates for the contract adjustments.) Per the current Symbology Initiative timetable, contract adjustments which are “ex-distribution” on July 31, 2009 will be handled by the current, “standard” methodology.

New Method

The need for rounding strike prices can be avoided by using a different adjustment methodology - ***adjusting the deliverable but not the strike price or premium/strike multiplier (the “New Method”).*** Going back to the example of the 3-for-2 stock split, it would be possible to adjust outstanding XYZ options to call for the delivery of 150 shares of XYZ stock, leave the strike price at 40, and continue to use 100 as the “multiplier” for calculating premiums and extended strike prices. This would eliminate the need for rounding because the strike price would remain unchanged (see examples below). This is the method currently used for property distributions such as spin-offs, mergers, or stock dividends with cash in lieu of fractional shares. This method can simply be extended to cover a wider variety of contract adjustments.

The basic features of all adjustments under the New Method are:

- **a) Strike prices remain unchanged.**
- **b) The additional shares are added to the contract deliverable.**
- **c) The adjusted option continues to use 100 as the multiplier to extend premium and strike amounts.**
- **d) The number of contracts remains the same.**

With the exception of 2 for 1 and 4 for 1 stock splits, all contract adjustments in response to splits or stock distributions will be done using the "New Method". Because 2 for 1 and 4 for 1 splits are not likely to require rounding of strikes to eighths, these events would be handled using current methods. (In the case of 2 for 1 and 4 for 1 splits, if rounding of strike prices would otherwise occur in a contract adjustment using current methods – e.g., where there had been a previous adjustment - then the "New Method" of contract adjustment will be used for these splits as well. The "New Method" would be used if *any* strike price would otherwise require rounding, and would be applied to *all* strikes of the option to be adjusted, including strikes that would not otherwise require rounding.)

OCC notes that inequities due to rounding would not present a problem if option strike prices could be denominated in decimals (pennies). OCC's systems can presently accommodate decimal strike prices, but OCC is aware that many industry participants cannot. OCC intends that the new adjustment method to avoid rounding will be an interim solution – until such time as the option industry can accommodate decimal strike prices for equity options (Note: option industry initiatives are scheduled to provide for decimal strikes in November, 2009.) **Accordingly, the New Method will apply only to equity options denominated in fractions.**

Examples of New Method – No Change in Strike Prices

3 for 2 Split		**Old Method**	**New Method**
	Before Ex Date	Ex Date	Ex Date
Option Symbol	ABC	XXX	XXX
Stock Price	42	28	28
Strike	40	**26 5/8**	**40**
Premium/Strike Multiplier	100	**150**	**100**
Deliverable	100 ABC	**150 ABC**	**150 ABC**
Price Formula for Underlying	1.0 (42)	**1.0 (28) = 28**	**1.5 (28) = 42**
# Contracts	1	**1**	**1**

Note: a) Strikes do not change, b) the premium/strike multiplier does not change, c) the price formula to calculate the value of the underlying changes.

3 for 1 Split

	Before Ex Date	Old Method Ex Date	New Method Ex Date
Option Symbol	ABC	ABC	**XXX**
Stock Price	42	14	14
Strike	40	**13 3/8**	**40**
Premium/Strike Multiplier	100	100	100
Deliverable	100 ABC	**100 ABC**	**300 ABC**
Price Formula for Underlying	1.0 (42)	**1.0 (14) = 14**	**3.0 (14) = 42**
# Contracts	1	**3**	**1**

Note: a) Strikes do not change, b) number of contracts does not change, c.) the new deliverable is 300 shares, d) the price formula to calculate the value of the underlying changes, e) the option symbol changes, f) the premium/strike multiplier remains unchanged.

15% Stock Dividend

	Before Ex Date	Old Method Ex Date	New Method Ex Date
Option Symbol	ABC	XXX	XXX
Stock Price	42	36.52	36.52
Strike	40	**34 3/4**	**40**
Premium/Strike Multiplier	100	**115**	**100**
Deliverable	100 ABC	**115 ABC**	**115 ABC**
Price Formula for Underlying	1.0 (42)	**1.0 (36.52) = 36.52**	**1.15 (36.52) =42**
# Contracts	1	**1**	**1**

Note: a) Strikes do not change, b) the premium/strike multiplier remains unchanged, c) the price formula to calculate the value of the underlying changes.

4 for 3 Split

	Before Ex Date	Old Method Ex Date	New Method Ex Date
Option Symbol	ABC	XXX	XXX
Stock Price	42	31.50	31.50
Strike	40	**30**	**40**
Premium/Strike Multiplier	100	**133**	**100**
Deliverable	100 ABC	**133 ABC**	**133 shares, plus $10.40 cash in lieu of .33 shares**
Price Formula for Underlying	1.0 (42)	**1.0 (31.50) = 31.50**	**1.33 (31.50) Plus $.10 cash in 1ieu of .33 = 42**
# Contracts	1	**1**	**1**

Note: a) Strikes do not change, b) the premium/strike multiplier remains unchanged, c) the price formula to calculate the value of the underlying changes.

Important Option Trading Considerations

It will be important for option investors to realize that **after adjustments are made using the New Method, it will no longer be possible to determine if an adjusted option is in- or out-of-the-money by simply comparing the underlying stock price to the option strike price.** For example, returning to the example of the 3 for 2 split (see above), if an investor simply compared the adjusted strike to the underlying stock price – as an investor does under current adjustment methodology - the investor might erroneously assume that with a stock price of 28, an adjusted XXX 40 Call option is 12 points out-of-the-money (40 – 28 = 12). Actually, that option series is 2 points in-the-money: deliverable value of $28 x 150 = $4200, versus the strike value of $40 x 100 = $4000. In this case, an option trader wishing to bid the in-the-money amount would bid "2" or $200 ($2 x 100, the premium multiplier). **After the New Method is effective, option investors must always be aware of the number of shares in the deliverable and the fact that the multiplier used for premium and strike dollar extensions remains unchanged.**

Although this trading consideration resulting from the New Method is an important change for the split adjustments, it is already familiar to the options industry, as this methodology for adjustments has long been used for spinoffs and mergers. In these kinds of adjustments - which often involve multiple stock components in the deliverable, unusual share amounts and/or cash components – it is also not possible to determine in- or out-of-the-money value by simply comparing a single stock price to the strike price. (Also in these cases, the premium/strike multiplier remains 100.)

For questions regarding this memo, call 1-888-OPTIONS or email options@theocc.com.