

## Options Study Form A

(page 3 of 5)

## OCC CLEARING MEMBER INFORMATION

Name of firm \_\_\_\_\_ SEC file No. 8- \_\_\_\_\_

7. Please indicate the number of accounts (as of March 31, 1978) which the clearing member carried in each of the following categories:

	Number of accounts
a. Public customer <u>options</u> accounts	
(1) Firm (other than introduced)	_____
(2) Introduced (fully disclosed)	_____
(3) Omnibus (number of firms) <sup>1/</sup>	_____
b. All other public customer accounts	_____
c. Options specialist-market makers	_____
d. Equity specialist-market makers	_____
e. Combined equity-options specialist-market makers	_____
f. Registered options traders	_____
g. Registered equity traders	_____
h. Combined registered equity-options traders	_____
i. Options floor broker accounts	_____
j. Other broker-dealer(s) proprietary omnibus options accounts	_____
k. Customer accounts introduced to another broker-dealer	
(1) Fully disclosed <input type="checkbox"/>	_____
(2) Omnibus <input type="checkbox"/>	_____

l. Please provide sample copies of all standard account agreements for each type of account, included in 7 c. through 7 j. above, that the clearing member carries. Please include the firm's name and SEC file number, on each form.

<sup>1/</sup> If possible, provide the number of individual customer options accounts carried by the clearing member in all omnibus accounts: \_\_\_\_\_

OCC CLEARING MEMBER INFORMATION

Name of firm \_\_\_\_\_ SEC file No. 8- \_\_\_\_\_

8. Please provide the following information with respect to the clearing member firm's proprietary accounts as of the close of business on each trade date specified: 1/

Trade date	(a)	(b)	(c) MARKET VALUE		(e)
	Long option positions	Short option positions	Long underlying equity positions	Short underlying equity positions	Gross error account <u>2/</u>
1978-Apr 7	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
28	_____	_____	_____	_____	_____

1/ Omit pennies. If, during the period covered, the clearing member did not have a position in a class of options in which it had a proprietary position in the underlying securities, do not include the value of those position(s) in columns (c) or (d).

2/ Including "out" accounts, suspense or difference accounts or any other similar accounts for all long or short positions.

9. Please provide the market value of short option positions in the proprietary accounts of the clearing member as of:

December 31, 1976 \_\_\_\_\_

December 30, 1977 \_\_\_\_\_

## Options Study Form A

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## OCC CLEARING MEMBER INFORMATION

Name of firm \_\_\_\_\_ SEC file No. 8- \_\_\_\_\_

10. To the extent the firm cleared specialist-market maker or registered options trader accounts during the following periods, please provide, as of the close of business for the dates specified below, the following:<sup>1/</sup>

	(a) Net worth	(b) Net capital	(c) Excess net capital	(d) <sup>2/</sup> Total (a)(6) & (c)(2)(x) deductions	(e) <sup>3/</sup> Aggregate equity	(f) <sup>2/</sup> Net charges to net worth
(OMIT PENNIES)						
1976-Mar 31	_____	_____	_____	_____	_____	_____
Jun 30	_____	_____	_____	_____	_____	_____
Sep 30	_____	_____	_____	_____	_____	_____
Dec 31	_____	_____	_____	_____	_____	_____
1977-Mar 31	_____	_____	_____	_____	_____	_____
Jun 30	_____	_____	_____	_____	_____	_____
Sep 30	_____	_____	_____	_____	_____	_____
Dec 30	_____	_____	_____	_____	_____	_____
1978-Mar 31	_____	_____	_____	_____	_____	_____
Apr 17	_____	_____	_____	_____	_____	_____
Apr 28	_____	_____	_____	_____	_____	_____

<sup>1/</sup> Omit pennies and indicate by n.r. if member was not registered for the date(s) specified.

<sup>2/</sup> As defined in 17CFR 240.15c3-1, paragraphs (a)(6) and (c)(2)(x). It should be noted that prior to January 1, 1977, the effective date of certain amendments to Rule 15c3-1(c)(2)(x), that section 15c3-1(c)(2)(xi) effectively set forth the deductions for the accounts of registered options traders and that section 15c3-1(a)(6) regarding the 1,000 percent test was not effective until August 1, 1977.

<sup>3/</sup> In all options specialist-market maker and registered options trader accounts.

Special Study of the Options Markets  
Attachment to letter dated June 7, 1978

Options Study Form B

1. Name of member \_\_\_\_\_ 2. SEC file No. 8- \_\_\_\_\_

3. Floor member of \_\_\_\_\_  
(name of exchange)

4. Cleared by \_\_\_\_\_ 5. SEC file No. 8- \_\_\_\_\_  
(name of firm)

6. Please indicate form of doing business: Sole proprietorship  Partnership  Corporation

7. Indicate the capacity(s) in which the member is registered:

Options specialist  Options market maker  Options trader  Options principal member

8. To the extent a firm traded during these periods please provide the market value of following:

Trade date	Option positions		Underlying security positions		Equity or (deficit)	Total (a)(6) &/or (c)(2)(x) deductions <sup>2/</sup>	Net(a)(6) &/or (c)(2)(x) charges to clearing member <sup>2/3/</sup>
	Long	Short	Long	Short			
	1975-Dec 31	_____	_____	_____			
1976-Jan 15	_____	_____	_____	_____	_____	_____	
Jan 30	_____	_____	_____	_____	_____	_____	
Mar 31	_____	_____	_____	_____	_____	_____	
Jun 30	_____	_____	_____	_____	_____	_____	
Sep 30	_____	_____	_____	_____	_____	_____	
Dec 31	_____	_____	_____	_____	_____	_____	
1977-Mar 31	_____	_____	_____	_____	_____	_____	
Jun 30	_____	_____	_____	_____	_____	_____	
Sep 30	_____	_____	_____	_____	_____	_____	
Dec 30	_____	_____	_____	_____	_____	_____	
1978-Mar 31	_____	_____	_____	_____	_____	_____	
Apr 12	_____	_____	_____	_____	_____	_____	
Apr 13	_____	_____	_____	_____	_____	_____	
Apr 14	_____	_____	_____	_____	_____	_____	
Apr 17	_____	_____	_____	_____	_____	_____	
Apr 18	_____	_____	_____	_____	_____	_____	
Apr 19	_____	_____	_____	_____	_____	_____	
Apr 20	_____	_____	_____	_____	_____	_____	
Apr 21	_____	_____	_____	_____	_____	_____	
Apr 24	_____	_____	_____	_____	_____	_____	

<sup>1/</sup> Omit pennies and indicate by n.c. if member was not registered for the date(s) specified.

<sup>2/</sup> As defined in 17CFR 240.15c3-1, paragraphs (a)(6) and (c)(2)(x). It should be noted that prior to January 1, 1977, the effective date of certain amendments to Rule 15c3-1(c)(2)(x), that section 15c3-1(c)(2)(xi) effectively set forth the deductions for the accounts of registered options traders.

<sup>3/</sup> If excess equity, state amount in parenthesis.

Exhibit 5

TABLE 1

All Options Exchanges Floor Participants Equity by Size: 1976-1978\*

	Deficit		0 - 4,999		(Amounts in Thousands of Dollars) 5,000 - 24,999		25,000 - 99,999		100,000 & Over		Total	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
76 Dec 31	48	(679)	253	394	212	2,594	170	8,695	135	69,488	818	81,172
77 Dec 30	45	(579)	272	371	219	2,766	214	11,021	154	70,153	904	84,310
78 Mar 31	33	(441)	246	359	219	2,833	209	10,889	158	71,635	865	85,716
78 Apr 13	33	(483)	244	380	230	3,078	213	11,370	152	71,061	872	85,890
78 Apr 14	48	(751)	237	365	228	3,017	215	11,281	142	71,600	870	86,262
78 Apr 17	85	(2,341)	232	372	220	2,899	209	10,670	129	62,724	875	76,664
78 Apr 18	68	(2,022)	230	359	237	3,113	208	10,890	129	64,084	872	78,446
78 Apr 24	58	(2,083)	232	352	230	2,932	215	10,898	133	66,893	868	81,076

\*Does not include options specialists, registered traders or market makers that are not subject to 17 CFR 240.15c3-1(a)(6) or (c)(2)(x).

TABLE 2

## AMEX Options Specialists and Registered Traders Equity by Size: 1976 - 1978\*

	Deficit		0 - 4,999		(Amounts in Thousands of Dollars) 5,000 - 24,999		25,000 - 99,999		100,000 & Over		Total	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
76 Dec 31	1	(35)	0	0	8	174	36	1,998	45	21,128	90	23,301
77 Dec 30	3	(135)	0	0	21	406	70	3,498	54	30,620	148	34,524
78 Mar 31	3	(130)	0	0	26	504	60	2,958	59	32,715	147	36,177
78 Apr 13	3	(131)	0	0	27	537	64	3,570	54	31,783	148	35,890
78 Apr 14	4	(290)	1	*	30	556	63	3,522	50	30,464	148	34,542
78 Apr 17	10	(834)	3	8	23	439	64	3,558	48	28,957	148	32,961
78 Apr 18	8	(751)	4	8	24	467	64	3,652	47	28,714	147	32,841
78 Apr 24	11	(921)	2	5	21	425	64	3,538	50	29,975	148	33,943

\* Less than \$500.

\*Does not include options specialists or traders that are not subject to 17 CFR 240.15c3-1(a)(6) or (c)(2)(x).

TABLE 3

## CBOE Options Market Maker Equity by Size: 1976 - 1978\*

	Deficit		0 - 4,999		5,000 - 24,999		25,000 - 99,999		100,000 & Over		Total	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
76 Dec 31	36	(612)	203	280	165	2,053	126	6,323	81	45,308	611	53,963
77 Dec 30	35	(401)	225	302	161	1,924	122	6,532	93	37,026	636	45,784
78 Mar 31	23	(273)	210	305	154	1,843	128	6,856	92	37,321	608	46,325
78 Apr 13	24	(319)	208	328	168	2,100	126	6,791	90	37,970	616	47,189
78 Apr 14	36	(425)	201	304	164	2,058	128	6,688	86	39,953	615	49,003
78 Apr 17	68	(1,226)	194	300	162	2,032	123	6,098	75	32,568	622	40,998
78 Apr 18	52	(1,010)	191	293	178	2,244	123	6,292	76	34,167	620	42,996
78 Apr 24	39	(902)	198	298	175	2,104	128	6,393	75	35,479	615	44,274

\*Does not include market makers which are not subject to 17 CFR 240.15c3-1(a)(6) or (c)(2)(x).

TABLE 4

## MSE Options Market Makers Equity by Size: 1976 - 1978\*

	Deficit		0 - 4,999		(Amounts in Thousands of Dollars)				100,000 & Over		Total	
	No.	Amount	No.	Amount	5,000 - 24,999		25,000 - 99,999		No.	Amount	No.	Amount
76 Dec 31	5	(12)	37	80	28	266	3	109	0	0	73	455
77 Dec 30	6	(28)	34	52	19	190	9	344	2	809	76	1,395
78 Mar 31	5	(19)	24	35	24	267	10	472	1	323	64	1,096
78 Apr 13	5	(18)	26	40	20	237	10	464	1	322	62	1,063
78 Apr 14	5	(18)	26	44	19	210	11	524	1	343	62	1,121
78 Apr 17	5	(18)	24	38	20	219	11	539	1	350	61	1,146
78 Apr 18	5	(18)	24	34	22	247	10	526	1	345	62	1,152
78 Apr 24	4	(18)	24	38	20	194	11	493	2	463	61	1,188

\*Does not include market makers that are not subject to 17 CFR 240.15c3-1(a)(6) or (c)(2)(x).



TABLE-5

## PSE Options Market Makers Equity by Size: 1976 - 1978\*

	Deficit		0 - 4,999		(Amounts in Thousands of Dollars) 5,000 - 24,999		25,000 - 99,999		100,000 & Over		Total	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
76 Dec 31	6	(20)	12	32	11	101	2	141	3	1,844	34	2,118
77 Dec 30	0	(0)	9	15	14	181	8	402	3	1,317	34	1,915
78 Mar 31	0	(0)	10	16	10	130	9	393	4	1,074	33	1,614
78 Apr 13	0	(0)	8	9	10	123	10	370	4	649	33	1,152
78 Apr 14	2	(5)	7	10	12	160	8	305	3	446	32	920
78 Apr 17	1	(250)	9	19	11	146	8	352	2	300	31	817
78 Apr 18	1	(227)	9	17	11	127	7	268	3	411	31	823
78 Apr 24	2	(230)	8	11	10	143	8	307	3	393	31	854

\*Does not include options market makers that are not subject to 17 CFR 240.15c3-1(a)(6) or (c)(2)(x).

TABLE 6

## PHLX Options Specialists &amp; Registered Traders Equity by Size: 1976 - 1978\*

	Deficit		0 - 4,999		5,000 - 24,999		25,000 - 99,999		100,000 & Over		Total	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
76 Dec 31	0	(0)	1	1	0	0	3	124	6	1,209	10	1,335
77 Dec 30	1	(14)	4	1	4	65	5	245	2	380	16	692
78 Mar 31	2	(20)	2	3	5	88	3	212	1	202	13	505
78 Apr 13	1	(15)	2	3	5	80	3	175	2	338	13	596
78 Apr 14	1	(12)	2	7	3	34	5	242	2	394	13	678
78 Apr 17	1	(13)	2	6	4	62	3	124	3	549	13	741
78 Apr 18	2	(15)	2	8	2	27	4	153	2	447	12	635
78 Apr 24	2	(12)	0	0	4	65	4	168	3	583	13	816

\*Does not include options specialists or registered traders that are not subject to 17 CFR 240.15c3-1(a)(6) or (c)(2)(x).

Exhibit 6

TABLE 7

Options Exchange Floor Participants Equity Requirements: 1976 - 1978  
 (Amounts in Thousands of Dollars)

	Equity	Equity Requirements	Charges to Market Maker Clearing Firms
76 Dec 31	81,172	45,785	8,751
77 Dec 30	84,310	64,478	11,916
78 Mar 31	85,716	58,992	9,968
78 Apr 13	85,890	63,381	12,256
78 Apr 14	86,262	66,437	16,265
78 Apr 17	76,664	66,089	21,049
78 Apr 18	78,446	62,723	15,862
78 Apr 24	81,076	56,080	11,614

Exhibit 7

BOARD OF GOVERNORS  
OF THE  
FEDERAL RESERVE SYSTEM  
WASHINGTON, D. C. 20551



DIVISION OF BANKING  
SUPERVISION AND REGULATION

December 5, 1978

Mr. Richard L. Teberg  
Director - Special Study of  
the Options Market  
Securities and Exchange Commission  
500 North Capitol Street  
Washington, D. C. 20549

Dear Dick:

This is in response to your letter, dated October 25, 1978 in which you discussed the use of the Black-Scholes option pricing model (the "delta model") as a method for determining the amount of an underlying stock held by an options marketmaker which could constitute a bona-fide hedge for purposes of the specialist credit requirements of Regulation T. With regard to this matter you enclosed for our consideration a paper reviewing the potential applications of the "delta model," which was prepared by the Commission's Directorate of Economic Policy and Research.

At your request the Board's staff reviewed this paper along with a number of other studies regarding the use of the "delta model" as a risk management device. After careful study and analysis we have concluded that it would be inappropriate to include the model as part of the specialist credit provisions of Regulation T.

As you are aware, we are concerned that the level of underlying stock held in a marketmaker's account not be excessive in terms of that required by the marketmaker to fulfill his marketmaking function in accordance with the objectives of Regulation T. These objectives insofar as they relate to the use of preferential credit by specialists, were first spelled out by the Board in discussions with the New York Stock Exchange regarding its request that preferential credit be given specialists on that exchange. In considering the exchange's request the Board stated:

Mr. Richard L. Teberg

"The Board is, of course, interested in the orderly and efficient operation of securities markets. It is also concerned with the fact that rules of general application such as those relating to margin requirements should not provide special concessions for any individual or group unless such concessions are justified by appropriate considerations that are consistent with the general purposes of the regulation." <sup>1/</sup>

In applying the Board's guidelines regarding the use of specialist's credit to the purchase and sale of the underlying stock by option marketmakers the staff has taken the position that preferential credit is available only when such transactions are related to the needs of the market and is unavailable in circumstances solely where the marketmaker desires to minimize the risk in his account. In this regard the staff believes that the use of the "delta model" would not reduce the use of preferential credit in connection with the purchase and sale of the underlying security but, in fact, may tend to increase it as marketmakers attempt to invest in optimal risk-minimizing strategies which may be unrelated to their responsibilities to the public market. This problem would be especially acute in circumstances where the marketmaker held an underlying securities position which had decreased in value. Under such circumstances the marketmaker, might be reluctant to dispose of that position in the event it no longer served as a bona-fide hedge. Rather, in an attempt to minimize his costs, he would prefer to initiate transactions in options to re-establish his hedge without considering fully the needs of the public market. Furthermore, since exchange rules generally restrict a customer's ability to purchase or sell out of the money options, in circumstances where marketmakers initiated transactions in these securities to re-establish a hedge, the use of a "delta model" would have the added drawback of increasing the relative amount of professional trading in an option series with questionable benefits accruing to the investing public.

The staff is also concerned that the use of the "delta model" as a formalized part of Regulation T would sharpen the conflict which the staff believes currently exists between a marketmaker's obligation to the market he serves and his desire to become "delta neutral" in order to minimize his risk. As indicated above the specialist credit provisions of Regulation T were adopted to assist the marketmaker in performing his marketmaking function. We understand that one of the marketmaker's principal obligations in performing his function is to take risks "against the market". Incorporation of the

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<sup>1/</sup> Letter of the Board to Emil Schram, President of the New York Stock Exchange dated March 14, 1949.

Mr. Richard L. Teberg

"delta model" into the specialist credit provisions of Regulation T would appear to discourage a marketmaker from assuming these risks since if he did so, he might break his "delta neutrality" and increase his margin requirement.

In summary it is the staff's view that the application of the "delta model" in the area of specialist's credit would be inconsistent with the overall objectives of Regulation T. The staff recognizes of course that the risk minimizing attributes of the "delta model" make it attractive for purposes of the uniform net capital rule should the Commission staff desire to apply the model in this area.

We appreciate the opportunity to comment on this matter and hope that our comments are useful to you. If you have any further questions, please do not hesitate to call.

Very truly yours,



Robert S. Plotkin  
Assistant Director