

→	8.60	+100	863	+95	2.180	01:00	95	11/11
	8.44	+76	845	+165	2.179	00:50	105	11/11
V 500 SLO (2)	8.79	+209	944	-161	2.152	01:00	125	11/11
	8.61	+98	867	+61	2.186	00:20	150	11/11
7.92	+0.556	05:20	17	July 81	7.75			
7.99	+0.579	04:45	17	July 81	7.81			
8.13	+0.612	03:20	19	July 81				
8.27	+0.615	03:45	20	July 81				
8.17	+0.544	00:10	23	July 81				
	8.76	+193	921	-88	2.178	03:15	24	Aug 81
	8.82	+149	981	-72	2.120	07:25	15	June 81
	8.60	+93	855	+105	—	06:45	16	June 81
	8.91	+248	966	-181	2.147	07:15	30	June 81
	8.42	+90	837	+154	2.182	05:15	26	July 81 (60)
	8.44	+95	926	+134	2.193	03:55	22	Aug 81 (40)
	8.65	+152	990	-837	2.180	03:45	23	Aug 81 (40)
	8.76	+193	921	-88	2.178	03:15	24	Aug 81 (40)

White Sea (2)

30 Aug 31 Aug 5 Sept 16 Sept 27 Sept

~~1 Aug 83~~

6.94 -41 1007 28 - 2.153 05:10 21 July

6.42 -202 927 +6 2.185 05:05 24 July

June

6.62 -119 (1003) -179 (2.167) 03:15 22 Aug 81

6.37 -208 924 +6 2.196 01:30 27 Aug 81

6.45 -194 939 -8 2.176 00:30 10 Sept 81

~~83~~
~~28 May~~

6.70 -93 1006 -204 2.161 09:00 2/May 82

~~1 June~~
~~1 June~~

6.83 -65 1036 -263 2.163 09:10 22 May 82

~~11 June~~

6.60 -150 995 -124 2.184 05:10 30 June 82

~~12 June~~

6.67 -113 1007 -180 2.175 04:55 1 July 82

6.65 -116 996 -173 2.166 00:55 2 July 82

23 July 24 25 26 20 Aug, 21 Aug
 V636 Sec ✓ 17 21 20 -45 36 63-69 65

→ ~~5/28~~ 1481

9/28/87

March 5
 March 20, 1987

14 June
 15 June
 16 June
 17 June
 18 June
 20 June
 21 June
 22 June
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 24 June
 25 June
 26 June
 27 June
 28 June
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 30 June
 1 July
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2.00 -48 1042 -267
 6.68 -143 948 -146
 6.41 -208 927 +14
 6.42 -201 923 +11
 6.57 -148 966 -114
 6.69 -55 992 -207
 6.66 -105 987 -180
~~6.37 -208 929 +6~~

2.143 07:00 29 June 80
 2.152 01:50 24 July 80
 2.180 03:20 25 July 80
 2.164 04:35 22 July 80
 2.165 04:00 23 July 80
 2.144 04:45 31 July 80
 2.151 01:40 3 Sept 80
~~2.196 01:50 1~~

May 4 1984 →
V636500

~~8, 9 July 83~~ ~~15 Aug~~ ~~15 Aug~~ ~~24 Aug~~
~~25 Aug, 7 Sept~~

	6.57 -140	957 -103	2.172	05:30	29 May 83
30 Sept 83	664 -106	995 -153	2.172	05:40	31 July 83
4 Oct 84	661 -130	996 -154	2.161	02:20	19 Aug 83
5 Oct 84	6.40 -208	928 +49	2.189	03:20	24 July 84
	6.50 -156	953 -83	2.175	02:30	30 July 84

28 July
29 July
30 July

11/11/82

~~205508~~

2.9 Aug 84 / 18 Sept 84

SSSut(2) 8.06-121 886-15 2.175 0205

~~220822~~ 8.22 -068 908 -127 2.163 01:35 95483

~~127~~ 8.30 -36 926 -189 2.153 03:10 85483

~~35483~~ 8.05 -111 885 -36 2.176 00:15 30483

~~62483~~ 8.11 -103 896 -46 2.176 04:00 30483

~~911~~ ~~11~~

~~11~~ ~~11~~

~~0205~~ ~~83~~

17 Aug 2010

July 23, 25, 26, 30

55 Set

18 42 40 -7

45

2.97-
8.43 ✓
3.5

17 Aug
18 Aug
19 Aug
20 Aug
21 Aug
22 Aug
23 Aug
24 Aug
25 Aug
26 Aug
27 Aug
28 Aug
29 Aug
30 Aug

7.55	-125	836	+64	2.173	04:35	24 Aug 80
8.47	-28	943	-207	2.154	02:20	17 Oct 80
8.08	-155	985	+39	2.181	03:10	22 Sept 80
8.07	-154	985	-13	2.180	04:30	22 Aug 81
8.48	-48	970	-234	2.150	03:35	5 Sept 81
7.95	-175	992	+45	2.192	03:35	6 Sept 81
8.18	-79	909	-98	2.163	01:45	7 Sept 81
8.15	-105	906	-74	2.186	05:15	1 Jan 82
8.25	-55	925	-131	2.164	01:30	2 Sept 82

April - 9

3.39

RWA

15 17 55 -66 26 6:35 - 7:05 v

6.86 -198 974 -203 2.141 04:10 2 July 80

6.59 -292 920 -51 2.179 01:00 23 July 80

6.81 -202 978 -192 2.149 00:55 25 July 80

6.66 -239 936 -125 2.140 23:25 6 Sept 80

6.82 -200 969 -175 2.149 01:55 22 July 80

6.88 -216 959 -183 2.155 03:00 23 July 80

6.78 -305 926 +9 2.170 02:50 31 July 80

6.78 -304 923 +6 2.186 23:55 25 Sept 80

6.79 -198 966 -157 2.150 00:10 4 Sept 80

6.41 -353 917 +53 2.202 23:40 15 Sept 80

~~22 March~~

25 Mar

26 Mar

26 Mar

82
P.N.H 6.37-3.51 917 +87 2.202 07:35 24 Min
6.58-2.31 952-128 2.104 09:00 30 Min PZ
6.54-2.20 923-64 2.179 05:00 90 Min PZ
6.85-1.98 974-191 2.154 05:15 10 Min PZ

STNA

6.78 -147 1040 -3012 2.148 01:10 18 Aug 80

6.56 -173 1037 -252 2.144 02:05 23 Aug 80

6.49 -214 1019 -196 2.138 04:00 22 July 80

6.69 -163 1062 -274 2.137 04:30 23 July 80

6.53 -237 987 -196 2.150 03:05 31 July 80

6.26 -264 984 -104 2.164 00:50 35 Aug 80

6.37 -260 1011 -133 2.157 23:50 15 Aug 80

(6.28 -284 988 -57 2.147 23:40 21 Aug 80)

RT TWA ✓

16 32 35 -63 06

98-111 195^d

22711 CW?

Ⓧ

9.97 -239 1048 -600

2.129 06:15^{2 July 80}

9.97 -245 1059 -566

2.153 02:50 12 Aug

9.67 -240 1060 -357

2.165 02:30 13 Aug

9.98 -262 10316 -281

2.167 02:25 14 Aug

9.46 -360 949 -4

2.187 00:40 7 Sept 80

10.20 125 1247 -764

2.149 00:45 25 Sept 82

9.57 -331 971 -29

2.193 00:55 3 Sept 82

9.53 -321 990 -90

2.199 00:15 5 Sept 82

9.57 1310 1022 -765

2.195 00:25 7 Sept 82

leO with

Early + Late

7.4

V val ✓✓ 09 21 40 = 558 888 72-72

✓✓ 7.84 -134 951-231 2134 05:20 7m 50

✓✓ 7.77 -180 937-204 2144 04:35 8m 50

✓✓ 7.31 -286 896+99 2181 05:00 9" "

✓✓ 7.78 -187 963/-236 2145 05:45 11" "

✓✓ 7.24 -317 865+150 2195 05:25 13" "

✓✓ 7.51 -207 895-73 2153 05:30 14" "

✓✓ 7.54 -200 932-106 2151 07:45 27m 50

✓✓ 7.76 -144 972-209 2140 07:50 28m 50

✓✓ 7.91 -118 993-271 2141 07:40 29" "

✓✓ 7.31 -306 886+81 2194 07:30 30m 50

07:20 ✓✓

07:11 ✓✓

07:05 ✓✓

07:03 ✓✓

07:02 ✓✓

\overrightarrow{STAA} ✓ ~~2 Aug 23 Aug~~ ✓ β 66681 $\frac{5.2}{6.0}$
 5939 ✓ 15 59 20 -63 44 6.3

Done

6.24 286 984 -51 08:00 26 Mar 78 40"
 6.41 -155 948 -179 08:55 27
 6.73 -125 1049 -266 09:10 5 Apr 78 24"
 6.72 -151 1077 -291 09:15 4 " "
 6.38 228 996 -154 09:15 2 Apr 78 24"
 6.60 -171 1046 -250 07:55 16 Apr 78 16"
 6.60 -228 1011 -224 07:55 18 Apr 78 16"
 6.05 -371 916 +147 07:55 19 Apr 78 16"
 6.22 293 940 +13

Ln 26

10290

18.5

17.2

S. 79

10215

08.40¹ m₂

25

S. 29

10211

08.10 19 m₂

5 TA H(3)

6.14	312	969	-14	2.179	03:20	22 July 87
6.53	185	1035	-237	—	08:25	27 July 87
6.04	-351	902	+125	2.201	09:50	22 Aug 87
6.25	-282	981	-59	2.179	01:10	23 Aug 87
6.40	-223	1015	-182	2.162	01:15	24 Aug 87

-5809344

16

11

20

-54

10.5

8.74 + 78

R2IG

cl (X) (X)
60

8.76 +427 1485 -700 5 Sept 80

8.78 +419 1488 -700 6 Sept 80

8.77 +423 1486 -700

1.161 923 1977.91 +0.599 14 Apr 81

348 0.00 292 +0.603 11 Apr 81

7.87 +0.599 10 Sept 80

7.91 +0.602 8 Sept 80

7.90 +0.604 9"

7.90 +0.603 (5)

R R R
7.5

5307234 16 11 15 -54 05 10.20 +26 .

(X)

-5307467

16

12

16

-54

15

10.59

0511

10.66 568-778-444 2159 10A75

(202)

-13

131 056 459 2185

(98)

(43)

(603)

98
1.1.6
11.

5307424

1164 -502 732 -113 2253 29 May 82

(682)

1.55

197 018 507

2750

1.60

432

10.6

55.0

10.15

-5307347 16 11 20 -54 14.5 10.34+13

10.45 585 743 447 2.190

29

141

2.662

141 025 0.411

(070)

(373)

1.01
1.01
2.01
1.01

425

7398?
8664
-5307402

16 11 40 -54 08 10.23 852
17 11 40 -54 08 10.23 852
18 11 40 -54 08 10.23 852

(X)

1118-464 749-224 2232-55880

885

229 047 657 2476

1821

(446) (147) (226) (923)

10955
10955
10955

15307426

10.74 B7 III

1080 450 752 -120 2.230 10/11/11 ✓
 1080 441 763 -155 2.252 28/11/11 ✓
1080 446 757 = 737 2.241

209 288 041 283 2.735
 120 120 731
 921

14 9.05
 -0.9
10.14

9.55 252 037 800 2.722
 11.5 113 150
10.14 979

5307402

10.23 05 III

(A) 10.30 - 506 767 - 156 2.235 10 APR 22
 10.28 - 503 782 - 185 2.252 24 APR 22
 10.24 - 504 775 - 170 2.248

(243) 195 058 749 2.234
 118 112 950
 950

9.25
 9.25
 9.25

59

(242)

9.25 193 051 763 2.728
 109 24 948
 948

530732

10.92

10.94 535 1793-5313 2.244 23Apr 12

10.55

52117

999 441 64 II

92185

9.54 497 64 II

530223

10.12 452 61 II

530242

9.31 414 67 II

5311

10.83 464 73 II

~~53055~~

~~7.89 470 77 II~~

53101

10.24 466 79 II

53113

9.46 476 85 II

~~53117~~

~~10.54 471 82 II~~

145415

-5309742

16 1155

-54 04

B940

8.62 + 1.15 F9

climbing

136

41
376
024

By 26/2/78

58
 530945- 11 12 10 -54 11 10.36 +02
 10.43-414 3328 -65
 10.42-413 3119 +43 2.230
 2.229 10.41
 2.223

2.219 52450
 2.224 80452
 2.228
 2.226
 2.228
 2.226

290 007-8732717
 518 815
 518 815
 10.40-413 720 -49
 10.37-420 782 -178
 10.42-413 708 -39
 10.40-413 720 -49

10.40-413 720 -49
 10.37-420 782 -178
 10.42-413 708 -39
 10.40-413 720 -49

2.228
 2.226

10.36
 10.33
 10.10

~~-53⁰ 738 814 V 66 11 35 -54 14 10.55 852~~
~~738 814 V 66 11 36 -54 14 10.55 852~~
53⁰ 7690 10.76

10.77 531 734 -32 2090 10 April ✓
10.71 -542 735 -5 2074 8 April ✓
10.74 -541 727 -2 2062 9 April ✓
10.74 538 732 -13 2074 (3)

1185 155 018 920 2650 1000

9.9
2.4
12.
(063) 889
124
1015

5307355

10.55 055

10.65 -502 745 -157 2231 29 May 73
 10.17 -503 758 -153 2.235 10 Apr 72
 10.65 -495 766 -184 2.232 28 Apr 72
 10.66 -500 757 -160 2.234

1989 04 259 2729

(1727)

(9267)

(1060)

(1100)

(922)

10 9.6
 -9.5

 10.55

196 042 -cho 741 2722

966
 10.6
 10.1

(727)

(101)

(926)

1537284

1015101

1015-455 748-21 2207 10 Apr 2
 1017-454-254-777-18 2.200 23 Apr 2
 1018-454-454-762-45 2.215

205 046 878 2.205

240

118 811

1073

9115

287

14145

204 033 902 2091

1050

611

915

12065

14

-5407350 BF 16 11 25 -54 01 8.8-10 RS

(X) (X) (X)

8.86-543	717	-654	2.125	8 Apr 03
8.81-539	722	-673	2.123	6 Sept 00
8.86-544	748	-670	2.133	715 Apr 00
<u>8.84-542</u>	<u>720</u>	<u>-666</u>	<u>2.127</u>	

Exp 253

$$\begin{array}{r} 775 \\ -391 \\ \hline 1170 \end{array}$$

$$\begin{array}{r} 150 \\ 155 \\ \hline 007237 \end{array} \quad 2.599$$

(051) (206)

306 =

145324 F016

4574

-5409226 14 0 05 -54 185 200

(*)

229-444	813	+608	2259	51260
730-435	808	+687	2255	55202

262	297	980	165	2754
			151	
			160	

011

509

119
117

(2)

-53° 7400A 16 11 45 -54 11 8.25 + 1.10 60±5

777 +0.435 1000V	807	977	-132	2.165	55±10
75 +0.451 1000V	824	977	-132	2.165	55±10
75 +0.449 1000V	834	1043	-211	2.11	57±10
71 +0.421 1000V	835	970	-132	2.175	10±10
	832	1013	-795	2.147	26±10

882 +0.205 1000V 345 058 1.478 2.912

9.01 -357	807	+532	2287	26±10
9.04 -352	890	+549	2295	55±10
9.02 -354	888	+537	2325	

5302100

A 9.24 -12 963 -126 2.147 5.580 60^v
5.35-24 970 -132 2.195 11.840

7.34 +5 1040 -124 2.161 5.580
1.72 +8 1013 -155 2.147 26.840 100^v

930 -26 980 -132 2.161 ②

697 247 788 2.640

15/11/11 01:50 58/104 500

430

15/11/11 01:50 15/11/11 11:04 - 11:04

15/11/11 01:50 15/11/11 12:04 - 12:04

15/11/11 01:50 15/11/11 12:04 - 12:04

15/11/11 01:50 15/11/11 12:04 - 12:04

15/11/11 01:50 15/11/11 12:04 - 12:04

4 10/11/11 01:50

112 211
207 200 271

53074074

9.04	-355	752	+549	2.296	80752
9.06	-361	803	+539	2.280	90002
9.07	-355	802	+552	2.299	100002
9.05	-353	805	4994	2.319	230002
9.04	-357	806	+551	2.299	290002
9.08	-365	817	+541	2.302	50002
-356	807	546	2.310		

2.30

-5807400 A

8.30 -31 ⁹⁹⁶~~1079~~ -119 2.191 03:20 2 July 52 ✓

8.26 -35 992 ~~999~~ 2.193 03:20 3 July 52 ✓

↓ 8.33 -3 1027 -197 2.160 05:55 8 July 52 ✓

8.43 +24 1050 -220 2.171 01:40 9 July 52 ✓

8.50 +63 1086 -276 2.152 01:45 10 July 52 ✓

5307400 X

07:00

06:00	8.58	+71	1101-352	2.06	94gr
06:50	8.57	+56	1078-340	2.155	104gr
07:00	8.53	+24	1042-264	2.192	114gr
06:45	8.38	-9	993-206	2.194	244gr
06:35	8.57	+62	1111-358	2.170	17mg
06:20	8.60	+80	1089-352	2.162	2mg
04:15	8.29	-33	966-102	2.183	30mg
05:15	8.29	-23	958-90	2.185	30mg
03:50	8.42	-1	1024-217	2.159	30mg
04:30	8.34	-26	997-148	2.193	19gr

145h1

8.86	-144	898	+34	2.195	06:35	20mg
8.88	-133	918	+19	2.208	06:15	30mg
8.89	-95	948	-63	2.204	02:55	30mg
8.99	-125	954	-71	2.202	04:40	1mg
8.99	-169	911	+70	2.215	04:25	2mg
8.92	-136	913	+23	2.202	03:35	3mg

172

Sept 19 20 (21) (22)

144572

16

09 50

-54 18

+65
8.46 ALI

-540719 ✓

05.00

2 mag 70

X

8.76 -105 912 +65

2.186 17 Aug 70

40

9.01 -97 944 -58

2.185 03.45 15 July

Vuv.

8.76 -116 993 +53

2.190 03.10 12 Aug 70

(X) (X) (X)

8.82 -128 928 -21

2.184 02.40 13 " "

8.85 -117 929 -29

2.164 01.30 17 Aug 70

(X) (X)

9.06 -85⁹⁵ 953 -96

2.156 02.05 18 Aug 70

8.83 -148 924 +7

2.186 02.15 23 Aug 70

8.97 -92 944 -74

2.167 02.10 25 Aug 70

7.35-??

144572(2)

9.02	-26	944	-73	2.178	02:10	26 Aug 70
-	8.80	-159	915	+36	2.190	00:45 27 Aug 70
-	8.82	-155	924	+42	2.184	00:55 28 Aug 70
9.00	-80	936	-27	2.159	00:40 29 Aug 70	
9.00	-81	937	-38	2.159	00:35	6 Sept 70
8.83	-143	899	-27	2.180	01:10	7 Sept 70
8.97	-147	969	-58	2.197	00:25	16 Sept 70
8.95	-118	942	-1	2.160	00:45	24 Sept 70
8.52	-129	949	-74	2.171	05:30	24 Aug 70
9.05	-93	988	-101	2.192	01:45	12 Sept 70

5/23.649

181 68112 846 521 185 284

NW

~~5506802~~

10.88 +52 -0.28 2.684

~~5406791~~

10.41 +56 -0.46 2.615

~~5406846~~

10.36 +43 -0.52 2.596

5507003

10.50 +76 -0.28 2.599

~~5007304~~

200
-5306701 1070989 15 47 10 -54 11 10/24/05
12:

10.41 +0.70 -0.21 2.609 18W

418.0 = b

560 (2nd)

6.50 (2nd)

15.6 = 1A

502
302

Q87 5-

~~104298 514 AS 08 69 51 2009745~~

104298 514 AS 08 69 51 2009745

1073 +027 209 B0512 NW

9-745

941-176

15.0 (M10)

5.8 F 5.11
3.9e 5

-530 6708 15 53 30 -53 5D.5

9.14

2.05
x 54 = 32