

-70
 9.12 - 034 $\overset{304}{724}$ $\overset{197}{952}$ $\overset{254}{2.755}$ 20 Jun 73
 9.17 026 085 583 2.782 ①

9.17 084 041 $\underline{564}$ 2.777 ⑤
 $\overline{915}$ $\overline{000}$ +109 $\overline{906}$ 2.786

-84
 8.43 018 084 $\overset{1184}{920}$ $\overset{143}{2.744}$ ① 20 Jun 73
 8.33 -033 $\overset{306}{122}$ $\overset{52}{938}$ $\overset{130}{2.754}$ ②
 8.44 $\overline{803}$ 644 538 $\overset{113}{2.745}$ ②
 $\overline{840}$ $\overline{255}$ $\overline{160}$ $\overline{939}$ $\overline{2.744}$
 9.29 013 $\overset{24}{104}$ $\overset{90}{1096}$ 2.764 15 Jun 73
 8.36 032 102 1.126 2.753 ①
 8.34 628 043 1.117 2.764 ②
 8.26 604 $\overset{110}{108}$ 1.104 2.770 20 Jun 73

-101
 8.29 013 $\overset{24}{104}$ $\overset{90}{1096}$ 2.764 15 Jun 73
 8.36 032 102 1.126 2.753 ①
 8.34 628 043 1.117 2.764 ②
 8.26 604 $\overset{110}{108}$ 1.104 2.770 20 Jun 73
 103 $\overset{116}{166}$ $\overset{114}{222}$
 9.3 $\overset{130}{113}$

2169-1

6406.8

+13°58' (1960)

Dec 26th 6.96 -0.08 -0.89 (100)

Dec 27th 6.93 -0.07 -0.89 (100)

Dec 28th 6.94 -0.08 -0.90 (100)

Dec 29th 6.94 -0.09 -0.87 (100)

Dec 31st 6.95 -0.10 -0.88 (100)

Jan 28th 6.96 -0.09 -0.89 (100)

10825 18° 18.7 -02' 55"

July 1 '62	3.27	0.93	0.65	(20)	Aug 5 '62	3.25	0.94	0.67	(20)
July 2 '62	3.25	0.93	0.66	(20)	Aug 6 '62	3.25	0.94	0.64	(20)
July 3 '62	3.28	0.94	0.68	(20)	Aug 7 '62	3.25	0.93	0.64	(20)
July 5 '62	3.24	0.95	0.64	(20)	Aug 8 '62	3.27	0.92	0.66	(20)
July 7 '62	3.25	0.99	0.63	(20)	Aug 9 '62	3.28	0.94	0.69	(20)
July 8 '62	3.23	0.94	0.65	(20)	Aug 10 '62	3.25	0.92	0.61	(20)
June 28 '62	3.26	0.94	0.64	(20)	Aug 11 '62	3.27	0.94	0.63	(20)
June 28 '62	3.28	0.95	0.65	(20)	Aug 29 '62	3.23	0.93	0.62	(20)
Aug 2 '62	3.26	0.93	0.65	(20)	Sept 2 '62	3.20	1.01	0.62	(20)
Aug 3 '62	3.25	0.93	0.65	(20)	Aug 18 '62	3.25	0.94	0.68	(20)

W14913

2346.6

+02°08

Oct 24 '62 9.01 1.45 1.06 (100)

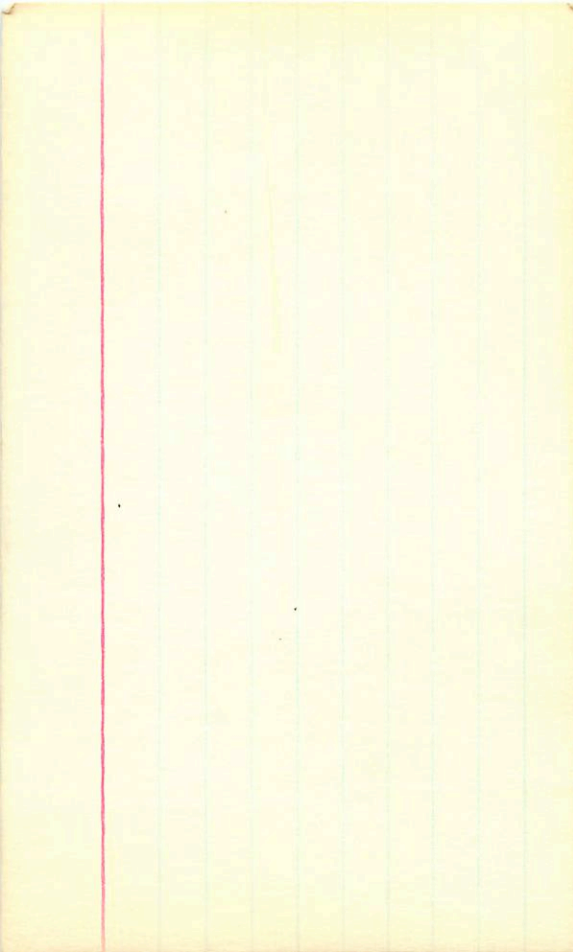
Sept 30 '62 8.98 1.46 1.09 (100)

Oct 25 '62 9.01 1.45 1.05 (100)

Oct 26 '62 8.98 1.48 1.05 (100)

Oct 27 '62 9.03 1.45 1.03 (100)

Oct 28 '62 9.03 1.46 1.07 (100)



-35

~~59.4~~

13.71 +0.625 +0.04 25 Apr 69

MBV

~~14.87~~ ~~16.815~~ ~~10.22~~ 31 May 70

2169-2

$6^{\circ} 06.8$

$+13^{\circ} 58$ (1960)

Dec 26 '62 8.14 0.01 -0.65 (100)

Dec 27 '62 8.12 0.00 -0.63 (100)

Dec 28 '62 8.13 -0.01 -0.65 (100)

Dec 29 '62 8.11 -0.00 -0.64 (100)

Dec 25 '62 8.13 -0.02 -0.64 (100)

Dec 28 '62 8.12 -0.00 -0.65 (100)

W04/896

LFT1586

20 54.1 70 37

-20 -1120 W04
-60 -1150 B PM
-45 -1100 T

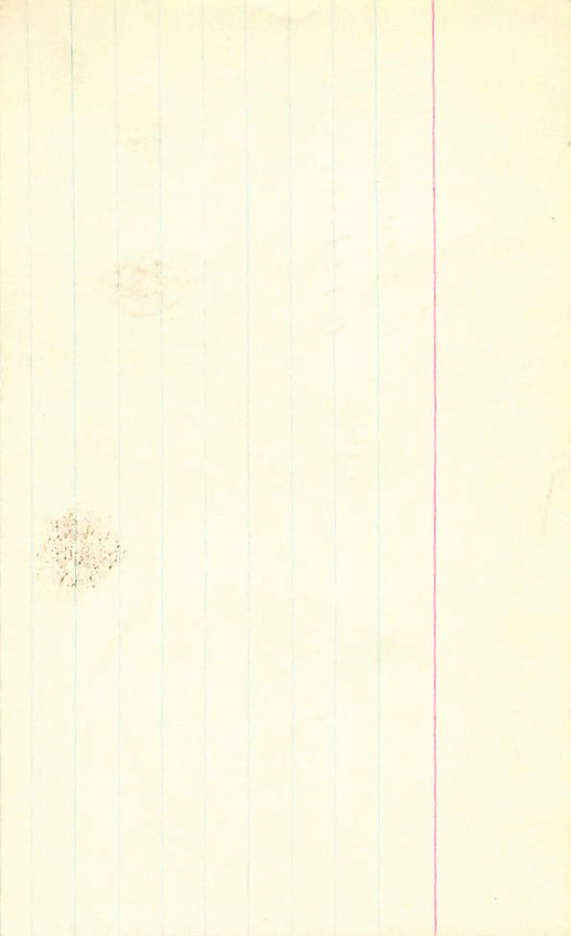
11.43 +149 +107 ①

AM4 +51.0

.040 ②③

10.17 +1035 ③

③③③



12943 20^h 37.3 +15° 44

July 13 '62	3.77	-0.06	-0.22 (20)	July 14 '62	3.77	-0.06	-0.17 (20)
July 14 '62	3.77	-0.06	-0.17 (20)	Aug 5 '62	3.76	-0.06	-0.20 (20)
July 17 '62	3.76	-0.04	-0.18 (20)	Aug 10 '62	3.78	-0.06	-0.17 (20)
July 18 '62	3.76	-0.05	-0.20 (20)	Aug 29 '62	3.75	-0.04	-0.17 (20)
July 11 '62	3.78	-0.06	-0.20 (20)	Sept 2 '62	3.76	-0.07	-0.18 (20)
July 30 '62	3.78	-0.06	-0.18 (20)	Sept 27 '62	3.77	-0.05	-0.24 (20)
Aug 1 '62	3.77	-0.05	-0.18 (20)	Sept 28 '62	3.79	-0.06	-0.17 (20)
Aug 3 '62	3.77	-0.06	-0.18 (20)	Oct 5 '62	3.73	-0.02	-0.24 (20)
July 12 '62	3.76	-0.06	-0.22 (20)	Sept 26 '62	3.78	-0.05	-0.21 (20)
July 13 '62	3.77	-0.06	-0.22 (20)	Oct 16 '62	3.80	-0.04	-0.24 (20)

13022 20^h 44.3

Aug 9 64
+ 61 39

Sept 5 '62	3.45	0.90	0.63 (20)	Aug 16 '63	3.43	0.93	0.63 (20)
Sept 10 '62	3.43	0.92	0.58 (20)	Aug 16 '63	3.48	0.94	0.65 (20)
Aug 15 '63	3.44	0.91	0.62 (20)	June 26 '63	3.41	0.92	0.60 (20)
Aug 23 '63	3.43	0.92	0.59 (20)	June 26 '63	3.41	0.92	0.60 (20)
July 27 '63	3.43	0.92	0.61 (20)	June 27 '63	3.42	0.92	0.61 (20)
July 28 '63	3.43	0.91	0.61 (20)	June 26 '63	3.43	0.92	0.60 (20)
July 28 '63	3.43	0.93	0.62 (20)	June 26 '63	3.43	0.92	0.60 (20)
July 21 '63	3.43	0.91	0.61 (20)	June 27 '63	3.44	0.92	0.61 (20)
July 24 '63	3.42	0.92	0.60 (20)	Oct 2 '62	3.41	0.90	0.56 (20)
July 25 '63	3.42	0.93	0.61 (20)	Oct 7 '62	3.37	0.90	0.57 (20)

13022

20⁶ 44.3

+61° 39

July 16'62	3.41	0.92	0.61 (20)	Aug 9'62	3.43	0.90	0.59 (20)
July 18'62	3.41	0.93	0.61 (20)	Aug 10'62	3.41	0.92	0.59 (20)
July 31'62	3.42	0.91	0.58 (20)	Sept 2'62	3.42	0.89	0.56 (20)
Aug 1'62	3.44	0.91	0.58 (20)	Sept 27'62	3.41	0.92	0.60 (20)
Aug 2'62	3.44	0.91	0.58 (20)	Sept 28'62	3.40	0.91	0.60 (20)
Aug 3'62	3.42	0.91	0.59 (20)	Oct 5'62	3.46	0.91	0.57 (20)
July 12'62	3.44	0.91	0.59 (20)	Oct 6'62	3.43	0.91	0.55 (20)
July 16'62	3.41	0.92	0.61 (20)	Sept 30'62	3.41	0.91	0.57 (20)
Aug 5'62	3.44	0.90	0.59 (20)	July 12'62	3.44	0.91	0.59 (20)
Aug 8'62	3.38	0.91	0.60 (20)	Sept 3'62	3.41	0.92	0.57 (20)

13033

20^h 45.0

-09° 41

Aug 15 '63	3.77	0.01	0.04(20)	11 July 64	3.78	0202(20)
July 27 '63	3.77	0.01	0.04(20)	3 ¹¹ July 64	3.78	0103
July 27 '63	3.77	0.01	0.04(20)	7	382	0104
July 28 '63	3.77	0.01	0.04(20)			
July 21 '63	3.77	0.00	0.05(20)			
July 24 '63	3.76	0.01	0.05(20)			
July 25 '63	3.77	0.00	0.04(20)			
Aug 16 '63	3.78	0.01	0.04(20)			
2 July 64	381	01	06(20)			
"	382	01	03(20)			

5.1 882 2000 1018

B5-33 12 06 42 -44 41

2.00 +0.862 17m₂25
2.03 +0.881 4m₂54

EY-96

9

16 00

-44

54

⑤ 6.86 -0.106

6.85 -0.0913/20

6.89 -0.1003/20

6.86 -0.1034/20

6.93 -0.09020/20

6.89 -0.09121/20

6.90 -0.10226/20

6.92 -0.10627/20

mm

Rv Dr

22

37

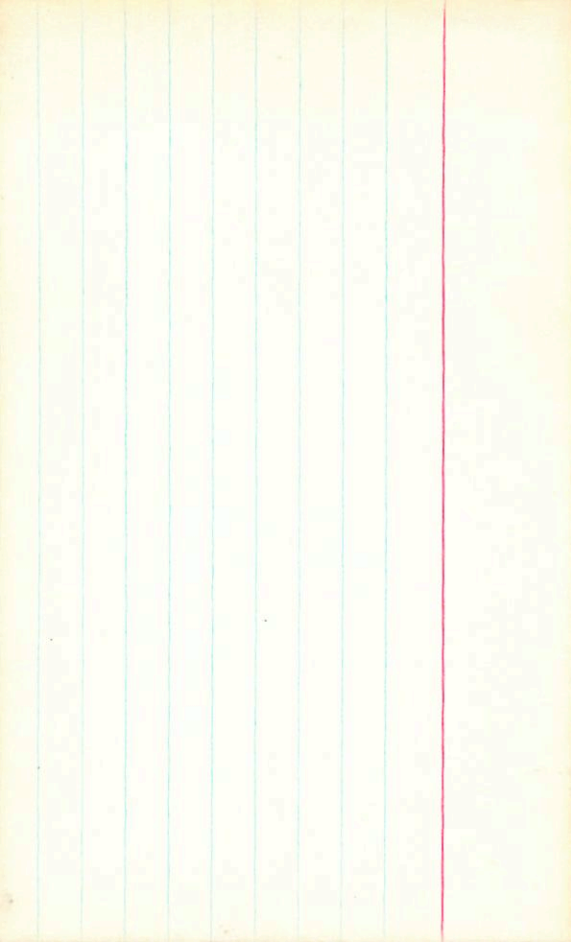
55

-47

0.5

11.1-11.5

d
0.26



not given

VZ (ac)

23

26

30

404

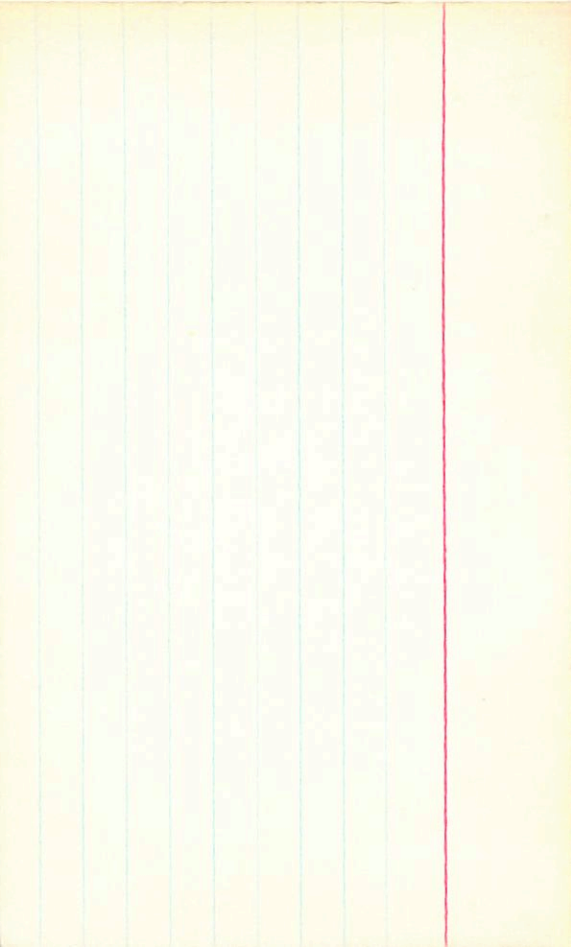
43

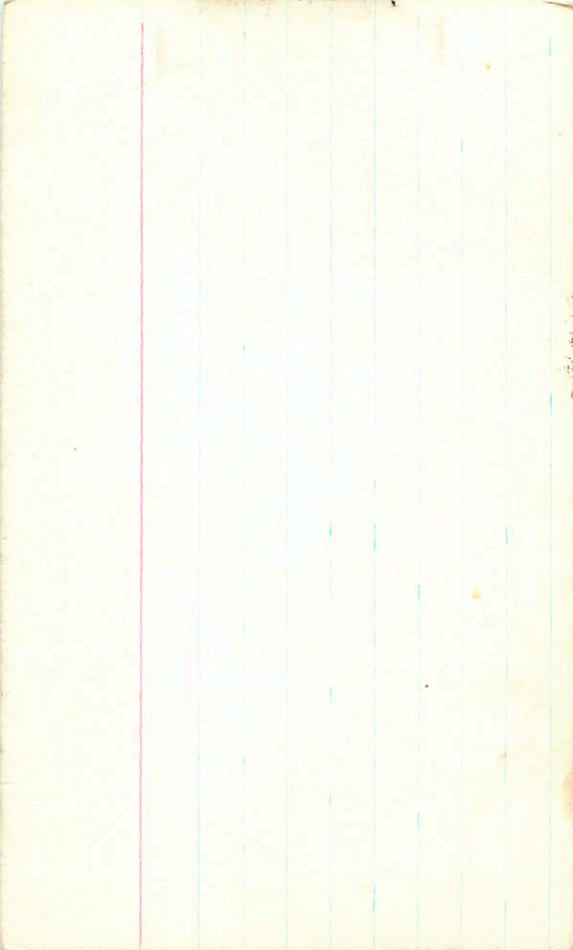
10.2

10.45

0.26

= 6 volm !





4.14 - 358 873 - 439 2144 18

8964

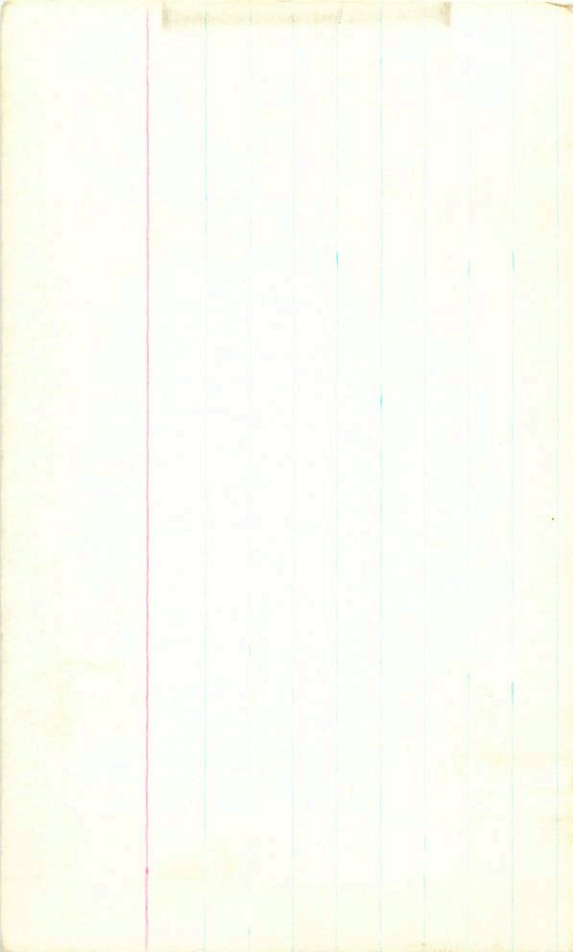
23

35

34

+5

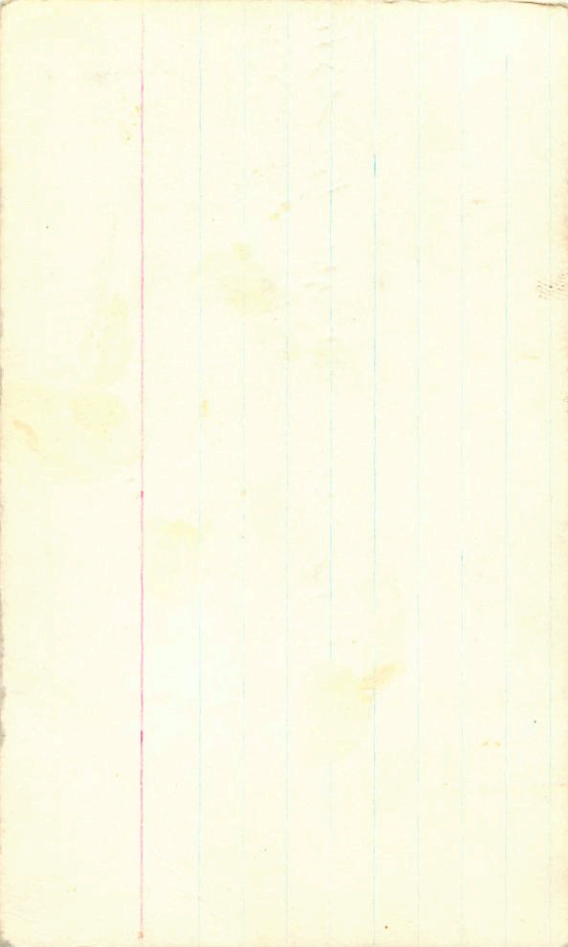
30



450 + 255 1527 - 412 (18)

8795

23 05 46 + 9 16



4.52-717 4425 -25 2230 20

23 58 34 -65 43

9676

4.52-723 840-13 2237 28676

4.52-732 847 ~~493~~ - 12 " "

4.52-744 946+3 2225 28 "

4.51-678 920 136 2358
8481 22 06 50 -33 07
FLC (20)

4.56-652-891 152 2361 11 July 77
4.51-676 894 160 2362 14 July 77

8551

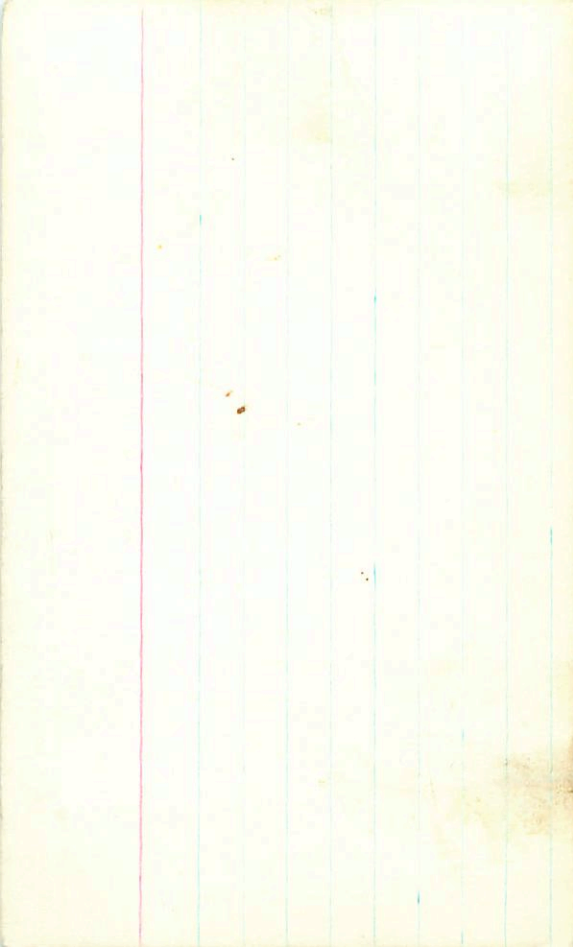
22

24 36

24 34

479 - 83
~~58~~

1149 - 430
F14 F14



4.23 - 386 851 - 520 2.184 (18)

8181 21 24 25 25 30

4.20 - 374 830 - 509 2.128 21 Dec 77

4.24 - 384 835 - 502 2.116 14 Aug 77

5.24 -317 886 -501 8 Jun 77
5.23 -324 888 -532 8 Jun 76

5.23 -334 907 -524 7 " "

~~5.23~~ -320 876 -511 24 " "

5.24 -340 888 -502 25 " "

5.26 -347 880 -514 26 " "

5.26 -320 902 -503 27 "

5.24 -311 979 -507 29 "

5.25 -347 916 -512 2 Jun 77

5.24 -332 913 -548 6 " "
5.26 -320 892 -520 7 " "

5126 - 324 882 - 464
3 11 12
11503

1610 3 17 39 62 85 5.23

5.25 - 330 + 468 - 493 - 507 22 months

5.24 - 322 + 880 - 468 - 142876

5.23 - 333 + 877 - 477 - 511 - 15.11

5.23 - 318 984 - 490 - 528 - 16.11

5.25 - 324 + 496 - 513 11 months

5.26 - 331 + 997 - 526 10.11

5.23 - 332 898 - 511 12.11

5.24 (-305) (768) - 472

5.25 - 328 + 995 - 508 17.11

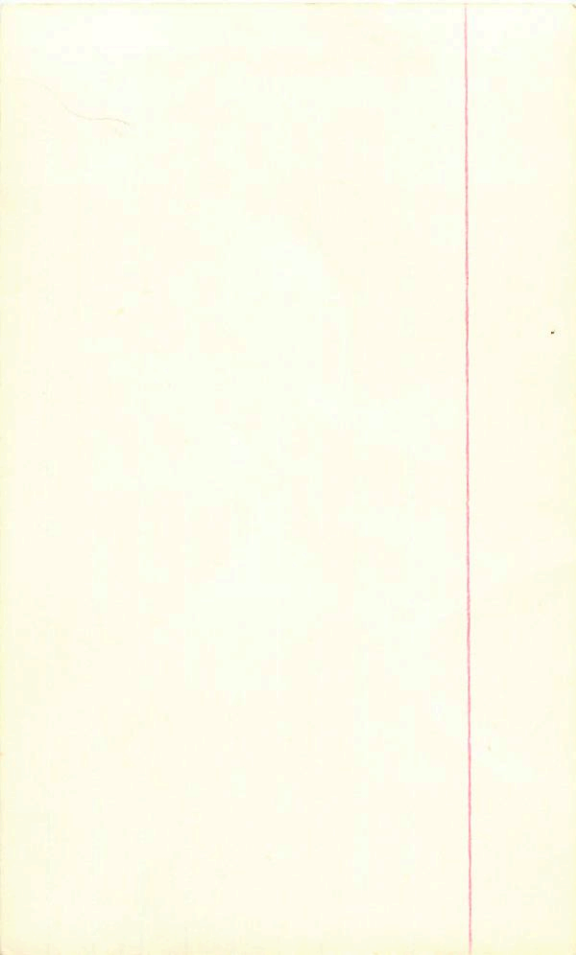
32745 506310 512511

457 (88) 10.39 + 67 + 11 (1) NM

11 84-

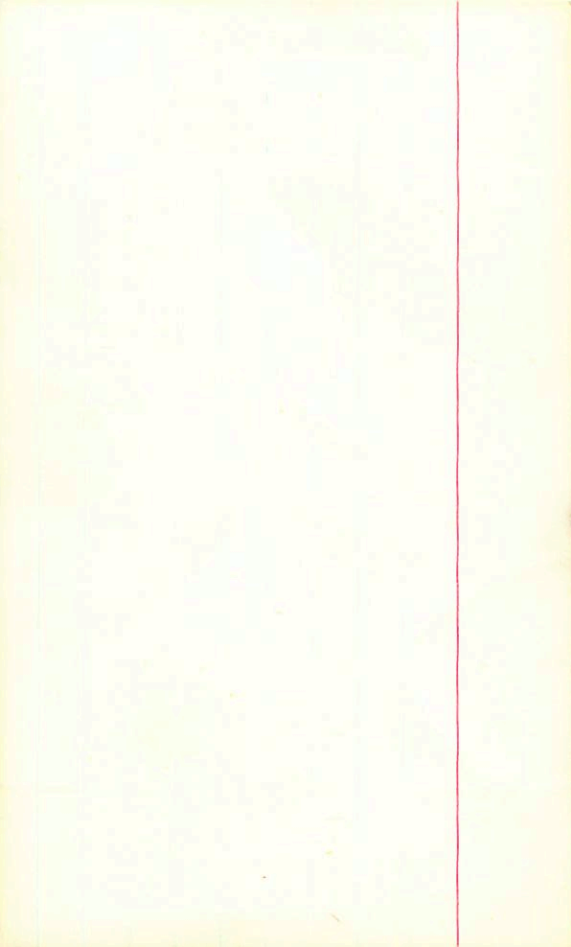
10.60 + 0.56 - 0.015 1420021

	247	21	251
32	043	653	2641 19/23
55	072	664	2686 20
82	<u>092</u>	<u>684</u>	2724 23
9			<u>2694</u>



2516-1016^{6/2}

9.87 +0.575 +0.125 2/27/71



2516-2

15 Apr 71

22 May 71

15.79 +1.10 +0.07

16.01 +0.51 +1.16

?

541 20

11 15

220 11

90 80

2516-7522-2
Dumbarton

1484 + 0.58 + 0.03 2 Jan 71



-54 10.86 +0.07 +0.05 2 Dec 72

101-16 (8) + 0.98 + 0.315 9.38

21 Jan 64 60"

Good

9.98

11 30

69 2

68 4

132 4

11

K3 12-14-48 +26 38 1943 11.4

11.45 +0.70 +0.13 9 Apr 64, 100"

PL4 12-~~14~~-51 +25 40 12.3

13.56 +1.19 +1.17 14Apr 64

N16 12-27-34 +28 35 98

10.69 +1.42 +121 12Apr 64 100"

182-1 12-18-34 +26 02-13.6

15.15 +1.56 - 127769100"

K22 12-18-47 +27 01 13.7

14.50 +1.74 - 12 Apr 64 100"

K24 1279-13 +25 14 8-1

7.33 +0.92 +0.61 14 Apr 64 100'

1025 12-19-54 +28 40 11.4

11.85 +0.69 +0.24 15/ Apr 64

1231 12-21-31 +25 42 136

15.48 +0.80 +0.50 127464¹⁰⁰

1032 12-21-33 +28 08 10.4

12.08 +1.09 +1.08 12 Apr 64 10.4

K35 12-21-51 +27 08

12.86 +1.39 - 14.47 6.4100"

N37
36

12-22-18 +24 46

10.3
11.0

37 · 12-48 +107 +107⁴ 12 Apr 64

36 11-56 +0.94 +0.76 12 Apr 64¹⁰⁰

1557 12-26-55 +26 47 10.2

11.43 +0.74 +0.25 15 Apr 6400"

NSZ 12-26-57 +27 59 10.2

11.38 +0.79 +0.39 12 Apr 64, 100"

1181 12-33-19 +25 30 12.5

1490 +0.84 +0.50 14Apr64 1025

K47 12-35-24 +26 16 11.4

13.04 +1.07 +1.01 14 Apr 64 100^r

1859 12-35-41 +2426 11.7

12.71 +1.38 +1.13 14/8/64100"

1992

12-37 -44 +27 28 12.6

1428 +0.62 -0.07 14 Apr 64 100'

1299 . 12-39-41 +27 14 10.2
6921 10.8

98 \rightarrow

99 11.89 +0.77 +0.22 14 Apr 64^{100'}

85 11.91 +1.28 +1.15 14 Apr 64^{100'}

N93 12-37 -54 +25'2 14.1

14.79 +0.51 -0.12 14 Apr 64 100''

WSP

1184 12-33-36 +24 29 10.8

12-47 +0.74 +0.17 14 Apr 64 100"



3410 8 36 24 45 47.5

Step 4.14 + 008 + 1.53 + 1.091 2.851

① Jan 73 4.15 + 002 + 1.39 + 1.118 2.821

~~② Jan 75 4.16 + 014 + 1.59 + 2.65 2.353~~

~~2 1575 4.16 - 667 982 310 2.344~~

024 161 1.52