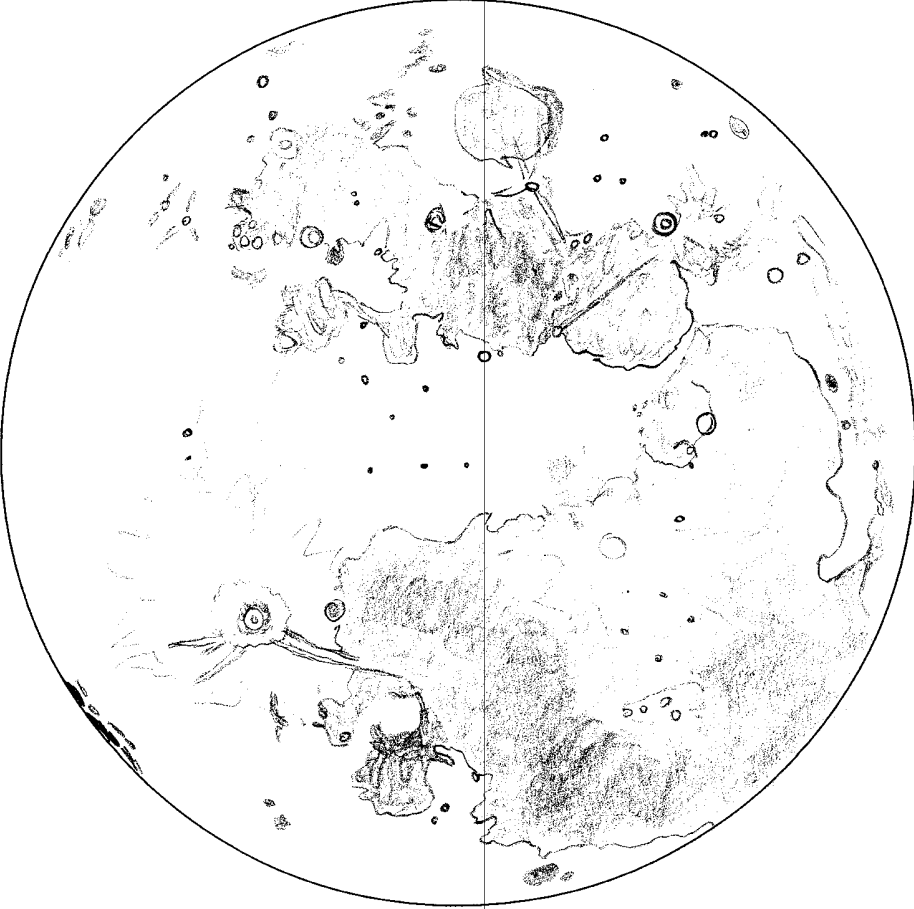


Lunar II Observing Log

L2 #1, #2, #3

SEE NEXT PAGE

Observer's Name:	BRAD YOUNG
Contact (Home or e-mail address, telephone):	212 E 16th St Tulsa OK 74119 allen b - young@yahoo.com 918 607 3701
League Affiliation (Local Club/Society or Member-at-Large):	Astronomy Club of Tulsa

1/2/3	Target:	Sketch of Nearside Prominent Features	
Date & Time:	1/13/06 10:00-10:30 CST	Location:	Home
Phase:	Full (or "Day 14")	Sky:	C=I S=II 39°F light wind
Equipment Used:	ETX-125 40mm VPF (minor-recessed)		
Description/Sketch:			
			

Lunar II Observing Log

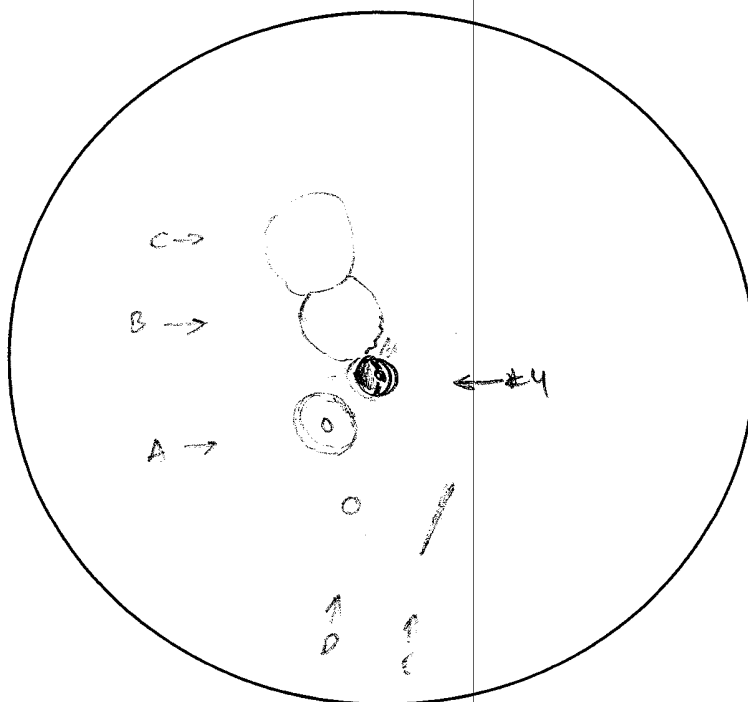
- ① COPENHAGEN
② TYCHO

Observer's Name:	BRAVO YOUNG
Contact (Home or e-mail address, telephone):	515 E 1st St Tulsa OK 74114 allan@young@yahoo.com 918 202 3701
Lunar Affiliation (Local Club/Society or Member-at-Large):	Lunar Club of Tulsa

Target:	Sketch of Nearside Prominent Features
Date & Time:	1/13/00 10:00-10:30
Phase:	Full (or "Day 14")
Equipment Used:	FLX-152 Down V67 (unar-correct)
Description/Sketch:	

L2 #4

DATE 6/4/6 TIME 11:00 CST CDT CLARITY I II III IV V SEEING I II III IV V
 INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
 POWER 38 60 121 150 250 375 10 47 73 153 190 OIP 316 475
 TARGET #4 ALPHONSUS FILTER NO VP NB WB OIII
 PHASE 82 PROGRAM Lunar II LOCATION RMCC RANCH HOME



PERFECT TIME TO SEE IT, CENTRAL PEAK JUST
COMING INTO VIEW W/ITS SMALL BUMP OF PEAK &
SHADOW. FLAT "SPLASH" ON EASTERN SIDE OF
CRATER, WITH FAIRLY BRIGHT WESTERN WALL,
NOT MUCH DETAIL TO IT BUT A FEW HANDS INTO MARGENARIUM
 A = ARZACHEL D = THEODOR
 B = ALPHONSUS E = RUPES RECTA
 C = PTOLEMAEUS

12#5 & #6
#27 #58
#95

DATE 3/5/6 TIME 9:10 CDT CDT CLARITY I II III IV V SEEING I II III IV V

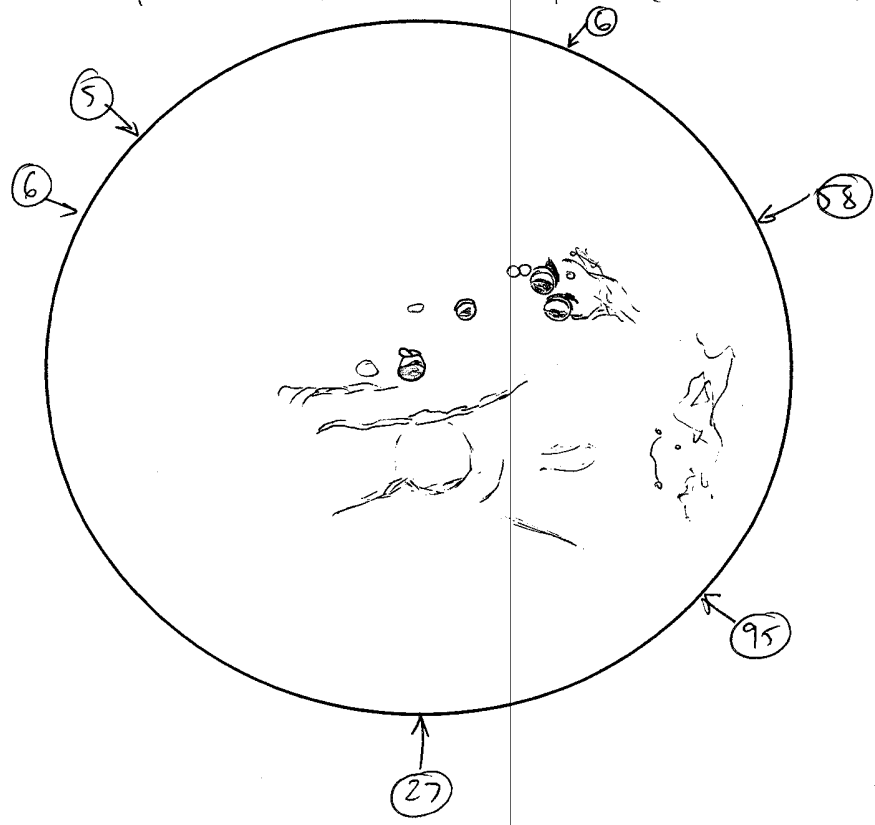
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475

TARGET #586 ARAGO + α & β FILTER NO VP NB WB OIII

PHASE 6d PROGRAM Lunar II LOCATION RMCC RANCH HOME

+ LAMONT #27
+ FILTER & SABBING #58
+ STATION TRANQUILLITATIS #95 (TRANQUILITY BASE)



WHAT A GREAT! ARAGO HAS "PRETZEL" EASTERN WALL

ARAGO α & β LOOK LIKE MOUNDS TO ME. RIDGES & SABBING

TO SE ARE A GREAT PAIR W/ STRANGE SHADOWS OFF WALL

LAMONT LATER (& OTHERS) LAMONT WAS CONNECTED TO

THE RIDGES NOTED W/ ARAGO - + 2nd EXTERIOR CIRCLE TO
IT'S LARGE GROSSLY FORM, TRANQUILITY BASE LIVES
UP TO ITS NAME VERY FAR, SLIGHTLY DARKER AREA

L2 #95

MISSION NAME	
APOLLO 11	
DATE OF EXPLORATION	
LAUNCH 16 JULY 1969	
LANDER SET DOWN 20 JULY 1969	
RETURN TO EARTH 24 JULY 1969	
BRIEF DESCRIPTION OF SIGNIFICANCE	
FIRST MANNED LANDING ON MOON SURFACE	
SUCCESSFUL RETURN TO EARTH	
LUNAR SAMPLES, SEVERAL EXPERIMENTS	
WHILE ON SURFACE	
DESCRIPTION OF LUNAR SURFACE	
VERY FLAT, SLIGHTLY DARKER AREA OF	
SEA OF TRANQUILITY	

#7
#42 L2

DATE 1/11/6 TIME 9:40 CDT CDT CLARITY I II III IV V SEEING I II III IV V

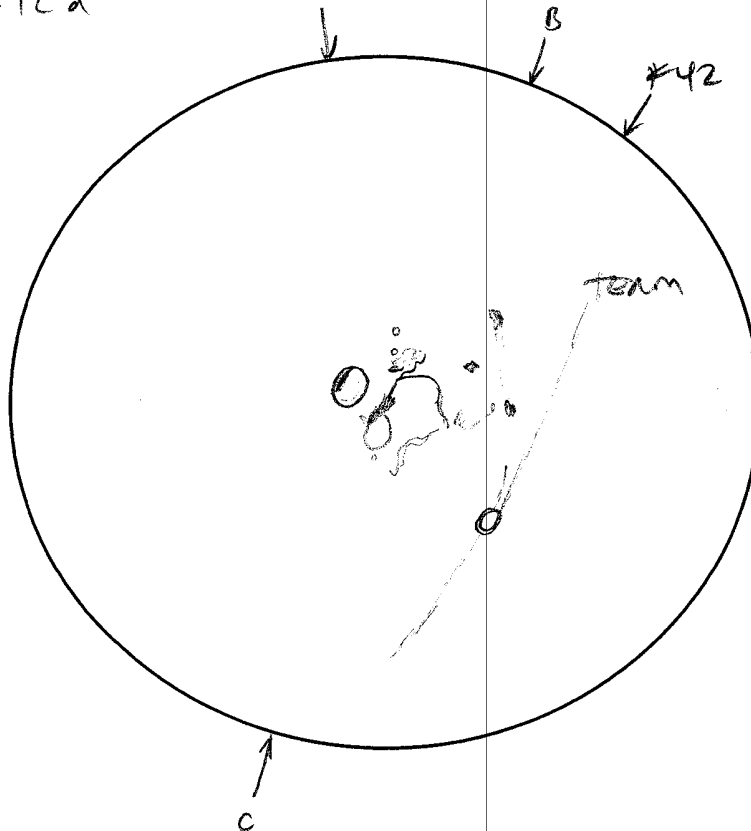
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 316 475 _____

OBJECT #7 ARISTARCHUS PLATEAU #42 MONTES AGRICOLA FILTER NO NB WB OIII _____

OBS. PROGRAM L2 LOC. RMCC RANCH HOME

Phase = 12 d



EXCEPTIONAL STRAIGHT "WALL" WITH DOME-SHAPED

HILL AT EACH END. VALLIS SCHROTERI ETC. FASCINATING

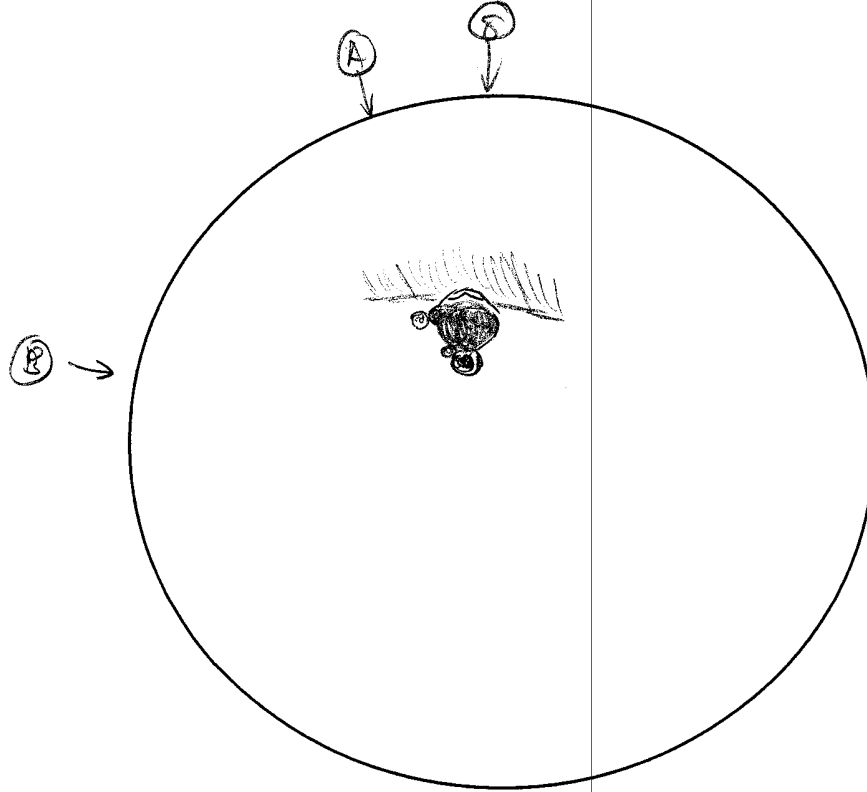
VALLEY / PLATEAU REGION (#7 FOR ARISTARCHUS PLATEAU)

A = ARISTARCHUS O = VALLIS SCHROTERI

C = HILLOPOTIS

L2 #8

DATE 2/3/6 TIME 9:45-9:50 CST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475 ___
TARGET 8 Baco FILTER NO VP NB WB OIII ___
PHASE 5d PROGRAM Lunar II LOCATION RMCC RANCH HOME ___



WEST WALL JUST OVER TERMINATOR & BRILLIANTLY

LIT BUT REST IN SHADOW. (A) = BACOS

(B) EXTENSION TO EAST, WALL LIT

L2
#9

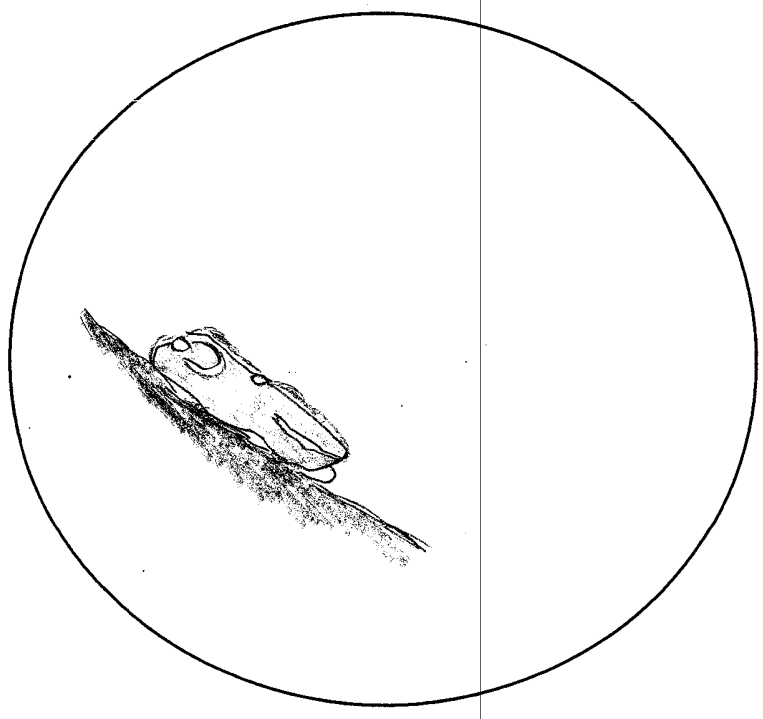
DATE 3/2/6 TIME 9:00 CST CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475

TARGET #9 BALLY FILTER NO VP NB WB OIII

PHASE 13d PROGRAM Lunar II LOCATION RMCC RANCH HOME



RIGHT AFTER A THUNDERSTORM - AMAZING SIGHT
HUGE ELONGATED WAXED PLAIN

#10 L2

DATE 1/7/6 TIME 8:45-9:52 CST CDT CLARITY I II III IV V SEEING I II III IV V

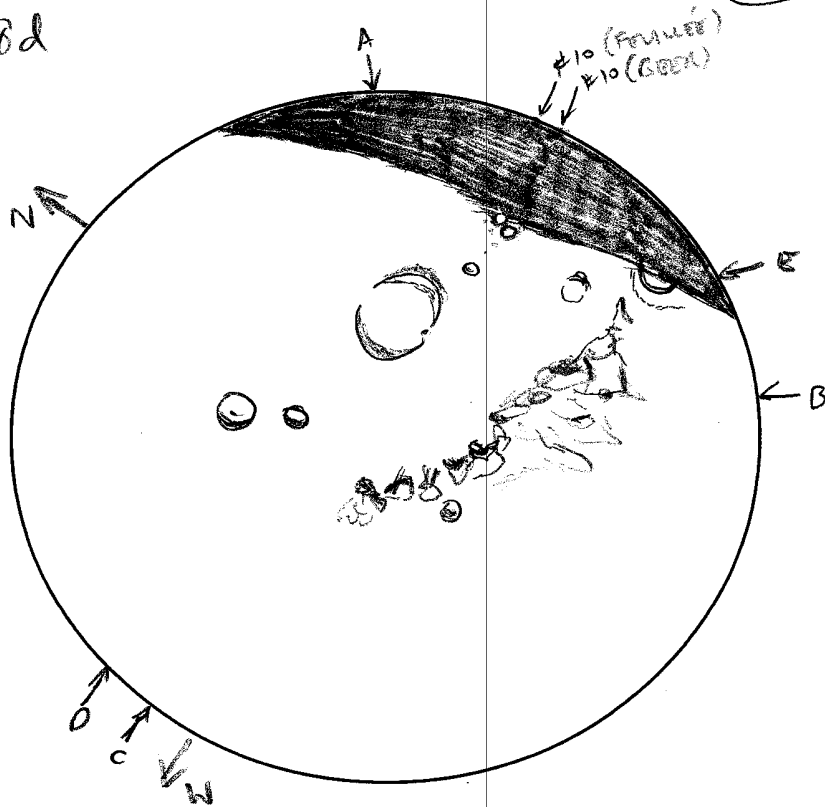
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 316 475 190X 0

OBJECT #10 BEER BOMBIA/FEUILLE FILTER NO NB WB OIII

OBS. PROGRAM L2 LOC. RMCC RANCH HOME

Phase = 8d



CERTAINLY SAW BEER, FEUILLE JUST COMING

INTO VIEW RIGHT ON TERMINATOR "CATENA" VERY SPARSE, SMALL

A ARCHIMEDES O ARISTILUS CRATER LETS TO EAT

B MONTES APENNINUS E ERATOSTHENES

C AUTOLYCUS

L2 #11
#23 #24

DATE 1/8/6 TIME 9:40 CDT CDT CLARITY I II III IV V SEEING I II III IV V

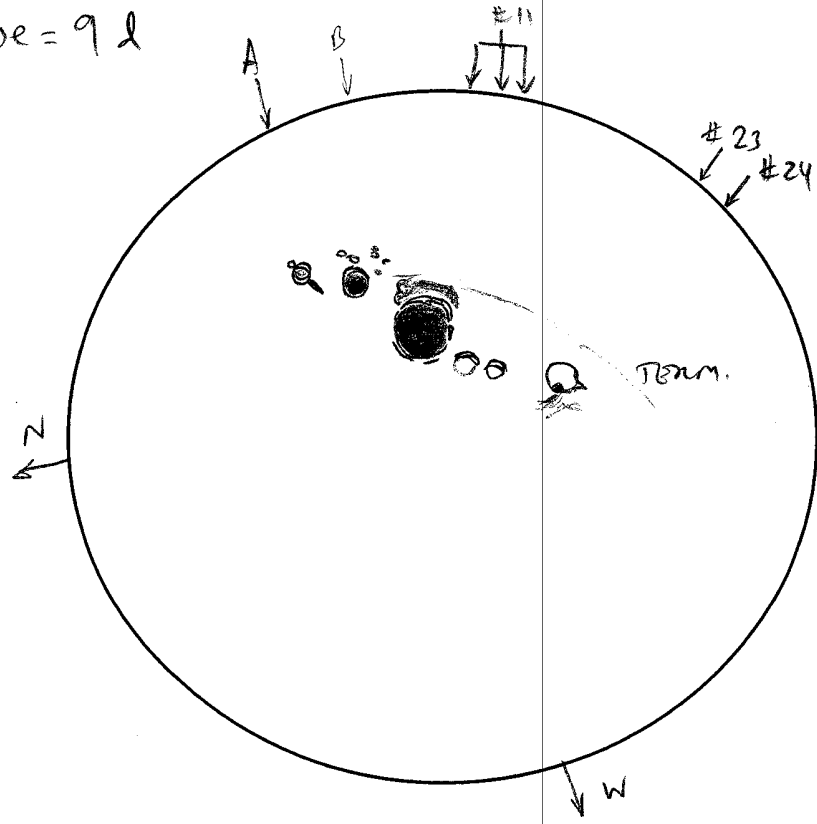
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 316 475 190x 0

OBJECT #11 BULLIARDS
#23 KIES #24 KIES P1 FILTER NO NB WB OIII

OBS. PROGRAM L2 LOC. RMCC RANCH HOME

Phase = 92



#11 BULLIARDS, w/A&B main crater still

BLACK ON FLOOR IN SHADOW w/ AMAZING E RIM

LIGHT UP IN SECTIONS. A&B mostly lit even on floor

#23 KIES A "GHOST" BUT WIDE SHADOW WITH NO FLOOR

WEST & AMAZING #24 KIES P1 FEATURE BRIGHT "SOONIES"

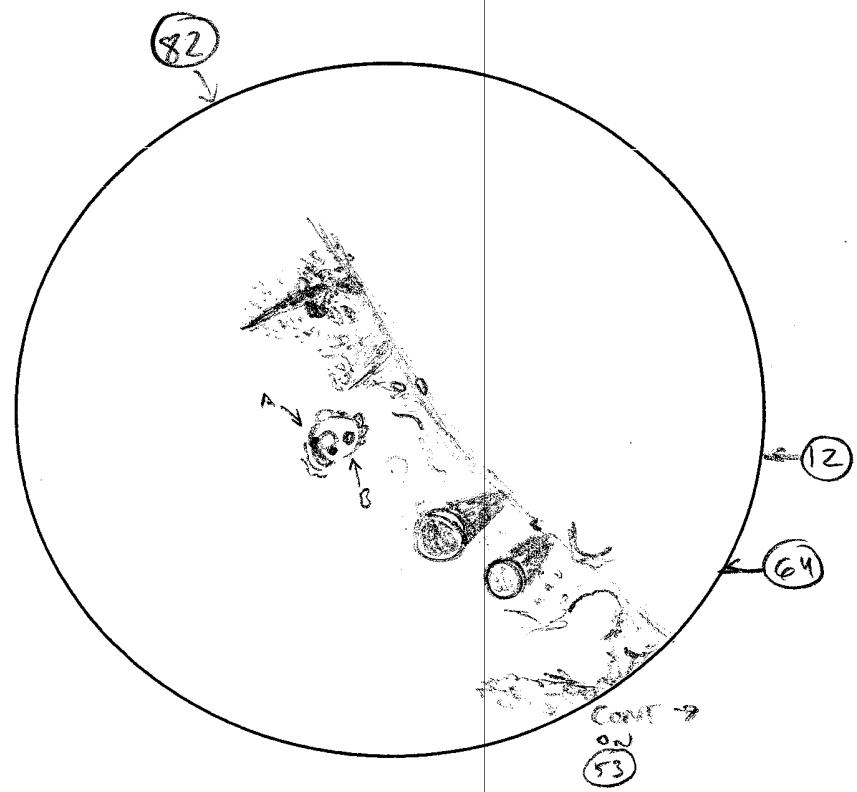
ON THE RING. (A) IS AMAZING LIT RING WITH
AN "ARROW" THROUGH IT - DARNEY

(B) = LUBINIEZY

#12
#64
#82

L2

DATE 4/5/6 TIME 9:00 CST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475
TARGET 82 VALLIS ALPES
12 CASSINI w/A&B FILTER NO VP NB WB OIII
64 SINUS LUNICUS
PHASE 7d PROGRAM Lunar II LOCATION RMCC RANCH HOME



(82) = VALLIS ALPES VERY DISTINCT DARK HORIZONTAL
2 THICK, "FALLING" OUT OF MONTES ALPES
(12) CASSINI INCOMPLETE ON S. SIDE, WITH A & B
INSIDE AND GREAT DETAILS ALL AROUND RIM
(64) SINUS LUNICUS WITH SEVERAL TINY CRATERS
FLAT
LARGE BORDERING CRATER RIM JUST OVER TERMINATOR
HEAVY SHARPED WALLS TO SOUTH INTERESTING

L2 #13

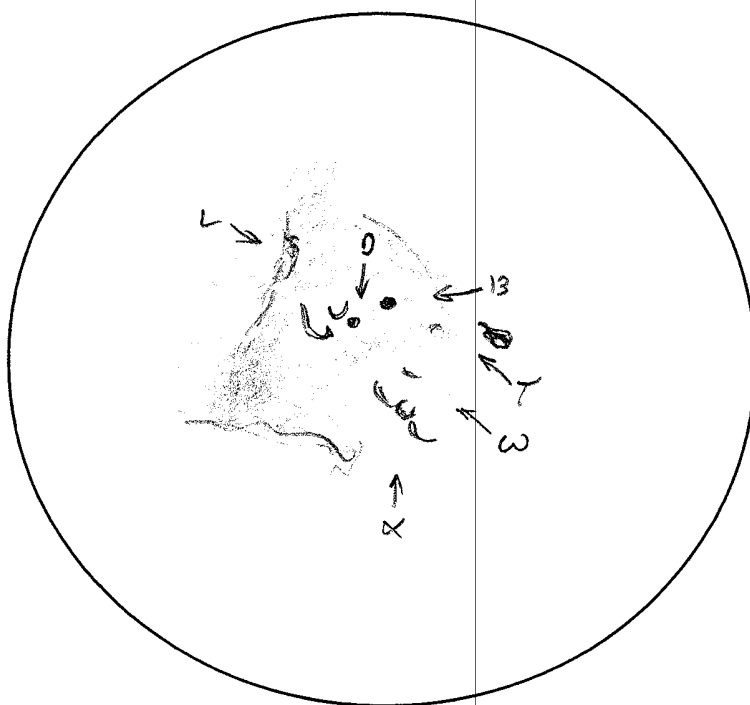
DATE 5/3/6 TIME 9:15 CST CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 190 OP 316 475

TARGET 13 CAVITY + W + T FILTER NO VP NB WB OIII

PHASE 6d PROGRAM Lunar II LOCATION RMCC RANCH HOMB



COOL SMALL FEATURE IN TRANSITION FROM SMUS

CONCORDANT TO LIGHTER MARE TRANS.

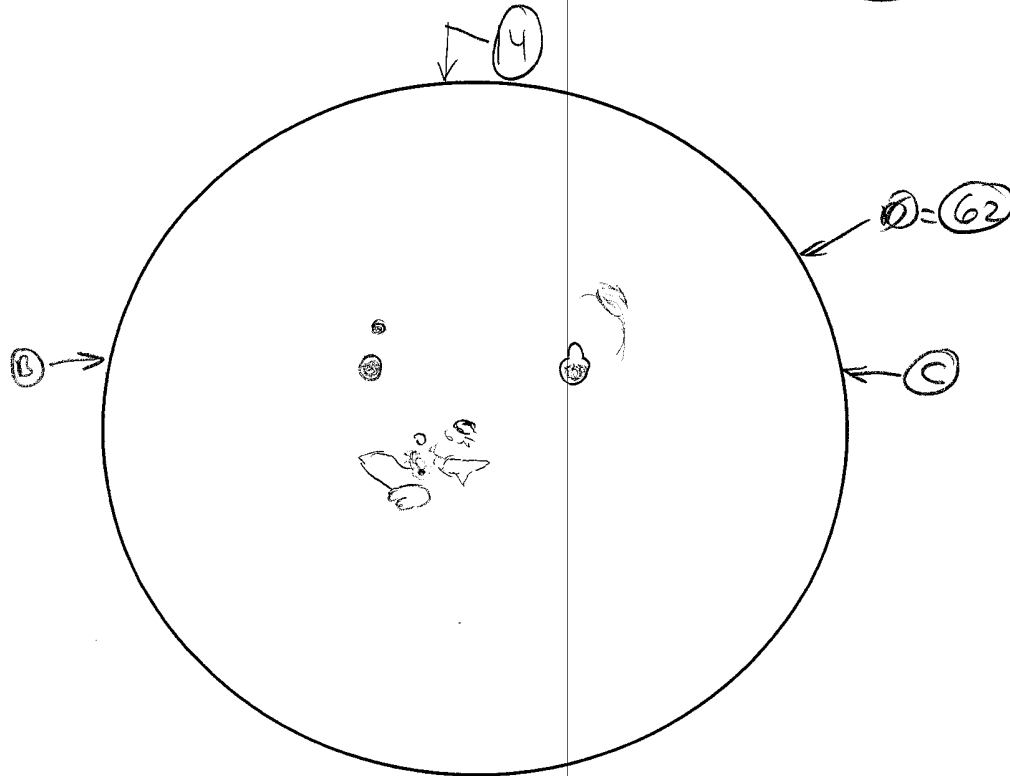
13 = CAVITY D = CAVITY D T, W = CAVITY T, W

WHICH WERE SMALL AND NOT MUCH DETAIL SEEN

L = LYON X = NO NAME BLUFF WITH NICE RIDGES.

L2 #14/#62

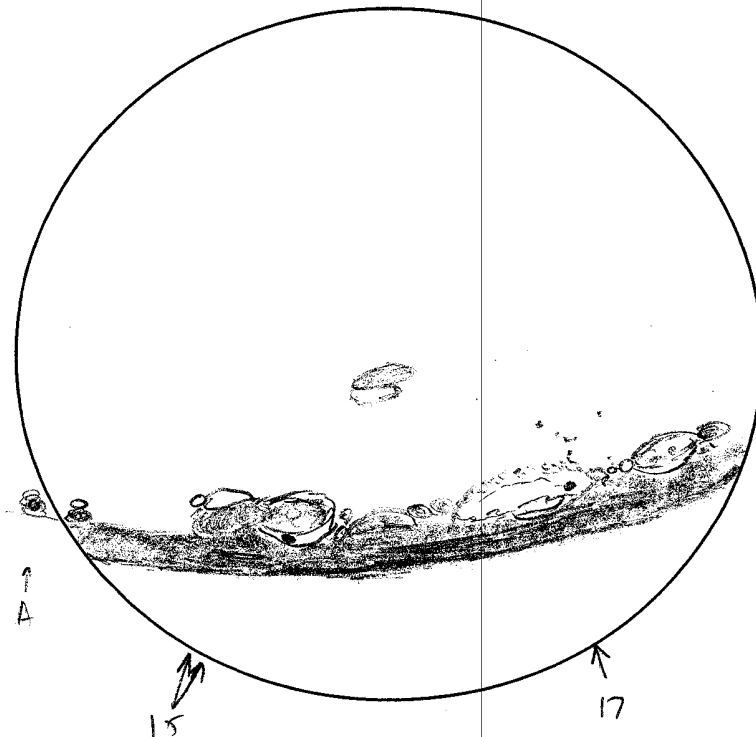
DATE 2/3/6 TIME 9:25-9:35 CST CDT CLARITY I II III IV V SEEING I II III IV V
 INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
 POWER 38 60 121 150 250 375 10 47 73 153 190 OP 316 475
 TARGET 62 Sinus Asperitatus 4 CONSORIUS FILTER NO VP NB WB OIII
 PHASE 5d PROGRAM Lunar II LOCATION RMCC RANCH HOME



(M) VERY DIFFICULT TO DRAW BUT VERY EASY TO SEE
EVEN @ 47x AS A BRIGHT WHITE OVAL IN A
GROUP OF MOUNDS ON "SHORE" OF MALE TRANS.
TINY CRATER ON SOUTH EDGE (A) - MAY BE CONSORIUS A
(B) = MASKELINE (C) = TORRICELLI (D) = (62) AS A MOUND w/
TORNED FEATURES CULMINATING IN GHOST CRATER
AROUND (C)

DATE 3/2/6 TIME 9:15 ^{-9:30} CST CDT CLARITY I II III IV V SEEING I II III IV V
 INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
 POWER 38 60 121 150 250 375 10 47 73 153 190 OP 316 475
 TARGET #15 CRUGER & GEMMA FILTER NO VP NB WB OIII
 PHASE Bd PROGRAM Lunar II LOCATION RMCC RANCH HOME

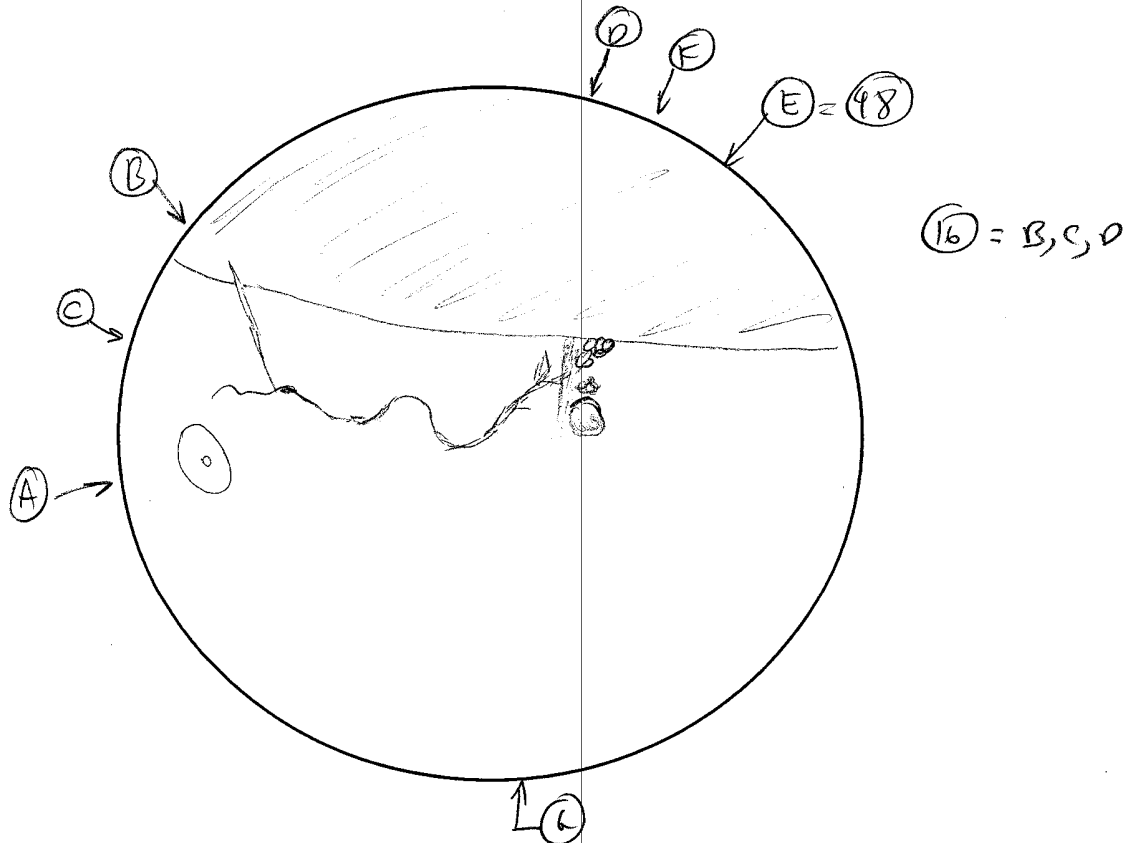
L2
 #15
 #17



PHENOMENAL AREA - CRATER LOOKS LIKE A CRATER WITHIN
A CRATER BUT MUCH DIFFERENT FLOOR COLOR
GEMMA HAD RUBBED OVER WALLS + MORE NOTES
INNER RING SMOOTHER
A = BY THE WAY W/V/V - WHAT A TARGET!

L2 #16/48

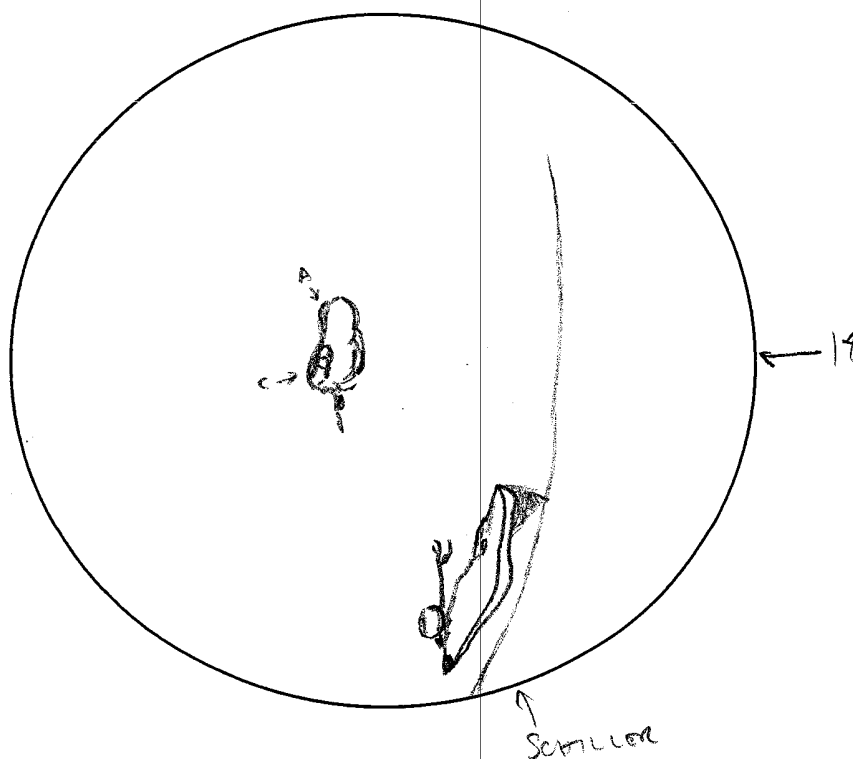
DATE 2/3/6 TIME 9:10-9:25 CST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475
TARGET 16/48 FILTER NO VP NB WB OIII
PHASE 5d PROGRAM Lunar II LOCATION RMCC RANCH HOME



① POSIDONIUS (NO DETAIL) BUT LOTS OF DETAIL W/
"SERPENTINE RIDGE" - EASILY SEEN 47X, 190X
SHOWS GREAT LINES IN ② - DORSAL SMIRNOV/RIDGE
PAST TERMINATOR, ③ POSIDONIUS Y AT JUNCTION, RAMP
CONNECTION OF ③ & ④ DORSAL LITER LEADING TO ⑤
"SNAKE HEAD" OF PROMONTORIUM ARCHERUSIA
+ ⑥ RUMAE PUNIVS EXCELLENT DARK VALLEY OR "WASH"

L2
#18

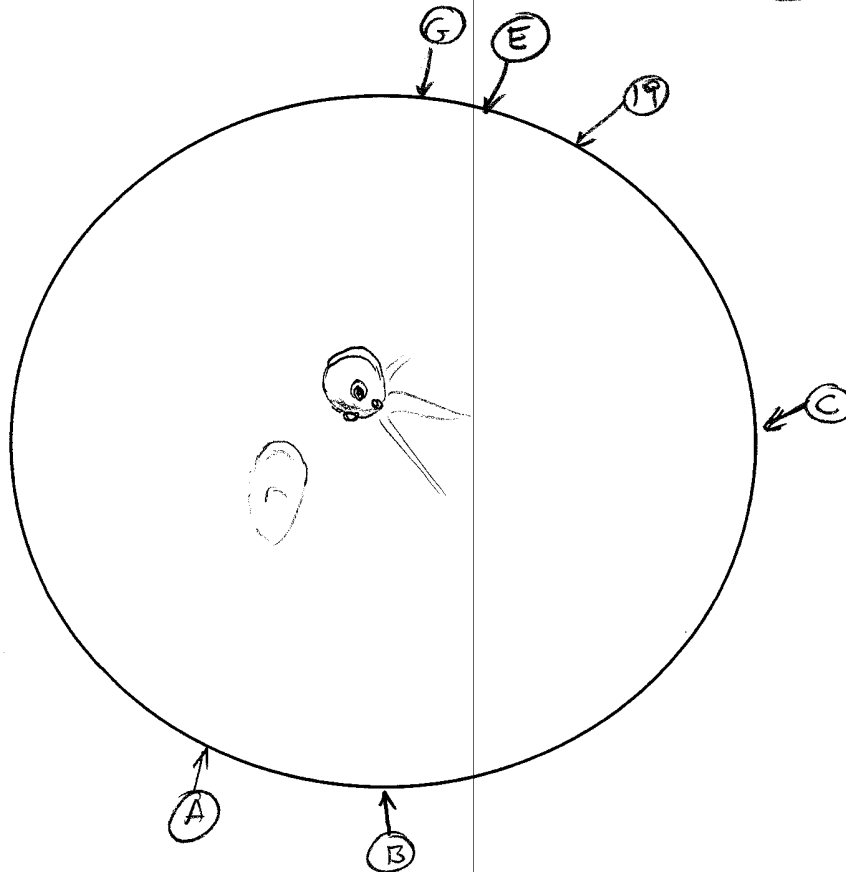
DATE 3/10/16 TIME 11:25 CST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 OP 316 475 ____
TARGET #18 HANZEL + A FILTER NO VP NB WB OIII ____
PHASE 11d PROGRAM Lunar II LOCATION RMCC RANCH HOME ____



I don't see interlocking "rings" but very interesting
none the less. (A ring incomplete in this light)

LZ#19

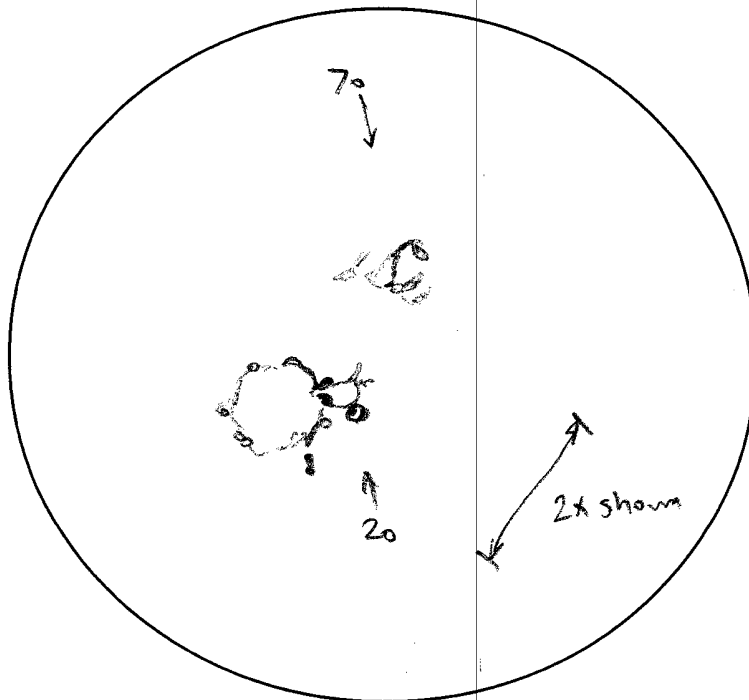
DATE 2/4/6 TIME 7:10-7:15 CST CDT CLARITY I II III IV V SEEING I II III IV V
 INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
 POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475
 TARGET 19 HERCULES, w/G&E FILTER NO VP NB WB OIII
 PHASE 62 PROGRAM Lunar II LOCATION RMCC RANCH HOME



NICE ROUND CRATER W/ BRIGHT WEST WALL, TWO
 CRATERS IN FLOOR (G = LARGE, E = SMALL ON S.D. (E))
 + DIP (B) IN EAST WALL. RAYS EXTEND (C) TO S.
 FROM IT
 (A) = ATLAS

L2 #20

#70

DATE 6/5/6 TIME 9:50 CST CDT CLARITY I II III IV V SEEING I II III IV VINSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYEPOWER 38 60 121 150 250 375 10 47 73 153 190 OAP 316 475TARGET #20 HESIODUS A #70 WOLF FILTER NO VP NB WB OIIIPHASE 92 PROGRAM Lunar II LOCATION RMCC RANCH HOME

#20 HESIODUS A IS A ROUND CRATER ON SW SIDE OF

WRECKED HESIODUS - DCL WALL ON WEST SIDE

#20 UNIQUE FORMATION - MUCH LIKE A CRANE WITH

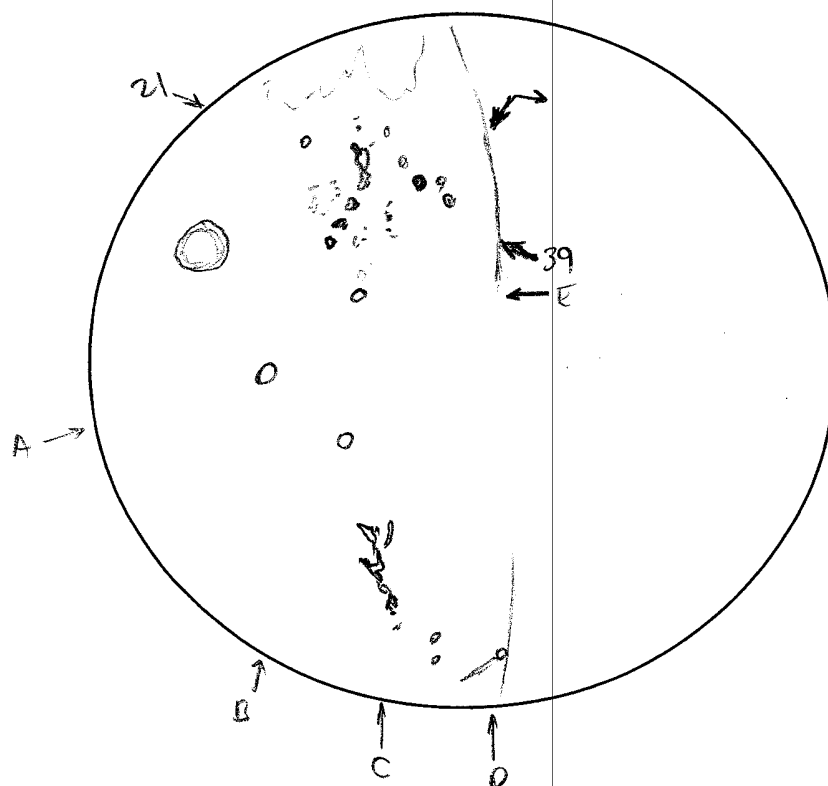
SHADOWED WALL FOR NECK - MOUND BEHIND LIGHT

PLAIN FOR BODY. NOTE SEPARATION IS 2X THAT

SHOWN

L2 #21
#39

DATE 3/9/6 TIME 10:19 ^{-10:35} CDT CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475
TARGET #21 HORRENSIVS DOME FIELD FILTER NOVP NB WB OIII
+MILICHUS P1 #39
PHASE 101 PROGRAM Lunar II LOCATION RMCC RANCH HOME



MILICHUS P1
DETAIL

24 = DOME FIELD, AMAZING MOUNDS w/ LIGHT & SHADOW

RELIEF STRETCHES NORTH TO MONTES CARPATUS, WHICH ARE JAGGED

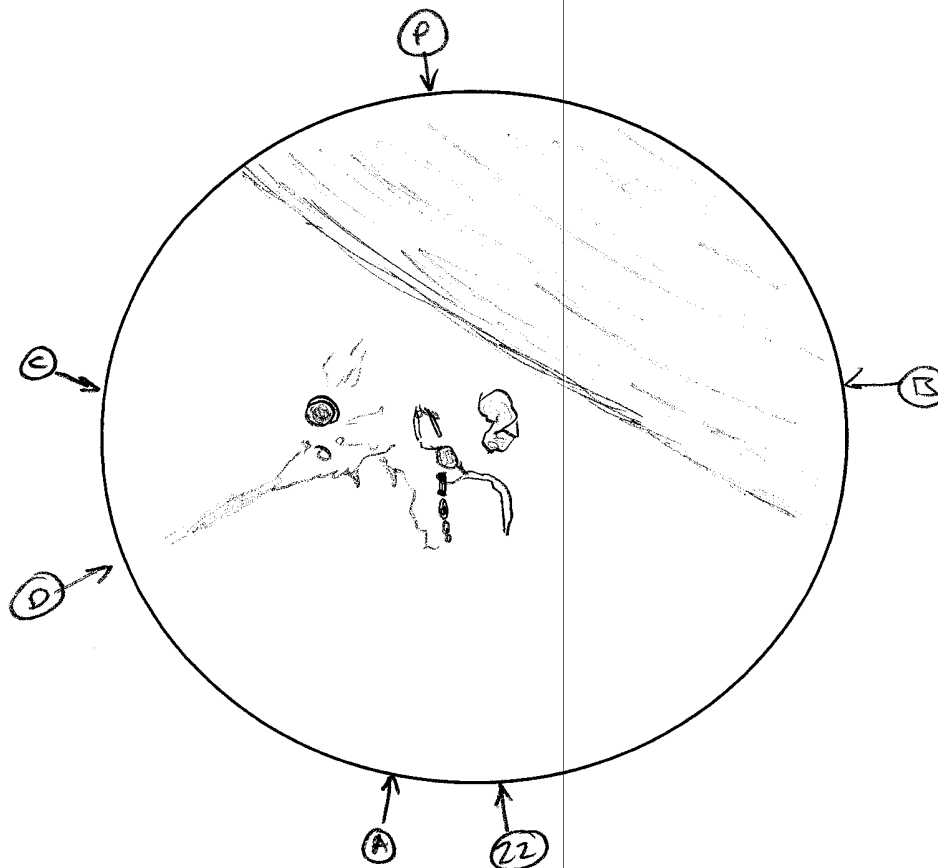
E = HORRENSIVS (CRATER) 39 = DOME MILICHUS & CRATER (SEE DETAIL)

O = AMAZING "COMET-LIKE" DOME CRATER w/ LIGHT ASH TAIL

A = REMAINS B = LHS BENT C = MONTES RIPHAEUS

L2A22

DATE 2/4/6 TIME 7:15 ^{7:25} CSD CDT CLARITY I II III IV V SEEING I II III IV V
 INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
 POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475
 TARGET 22 JULIUS CAESAR FILTER NO VP NB WB OIII
 PHASE 6d PROGRAM Lunar II LOCATION RMCC RANCH HOME



22 WALED VALLEY W/NO NEAR EAST WALL

A = LINE OF CRATERS INCLUDING JULIUS CAESAR &

P = J. C. P + WALLS B = AREA N. OF BOSCOVICH

C = MENELAUS D = RIMATE MINUS

L2 #25

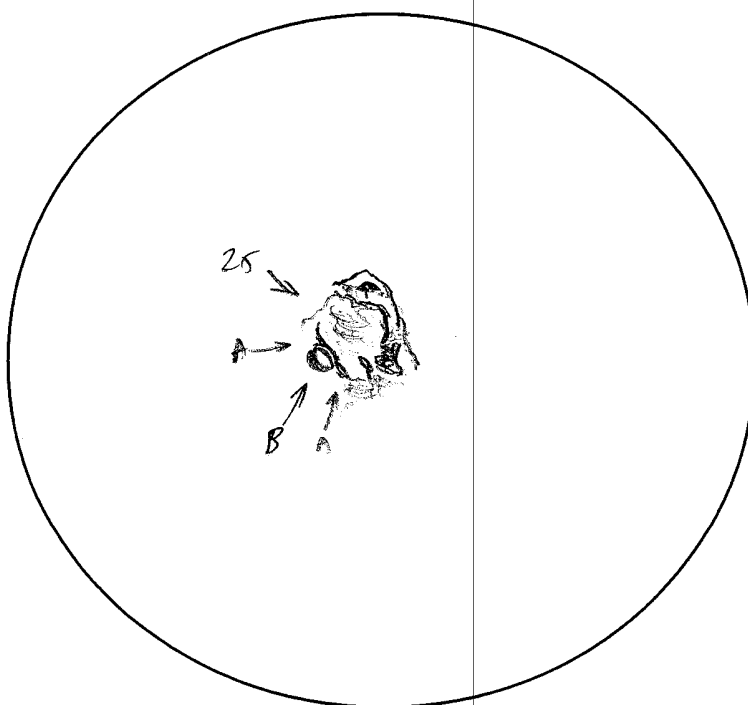
DATE 5/3/6 TIME 9:00 CST CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 190 OP 316 475

TARGET 25 LACUS MORIS FILTER NO VP NB WB OIII

PHASE 62 PROGRAM Lunar II LOCATION RMCC RANCH HOME



VERY INTERESTING DARK LAVA BED WITH 2 DISTINCT

"WRINKLES" ON WEST SIDE & BOUNDED ON EAST BY:

B = BENE A = RIMAE BENE

L2#26

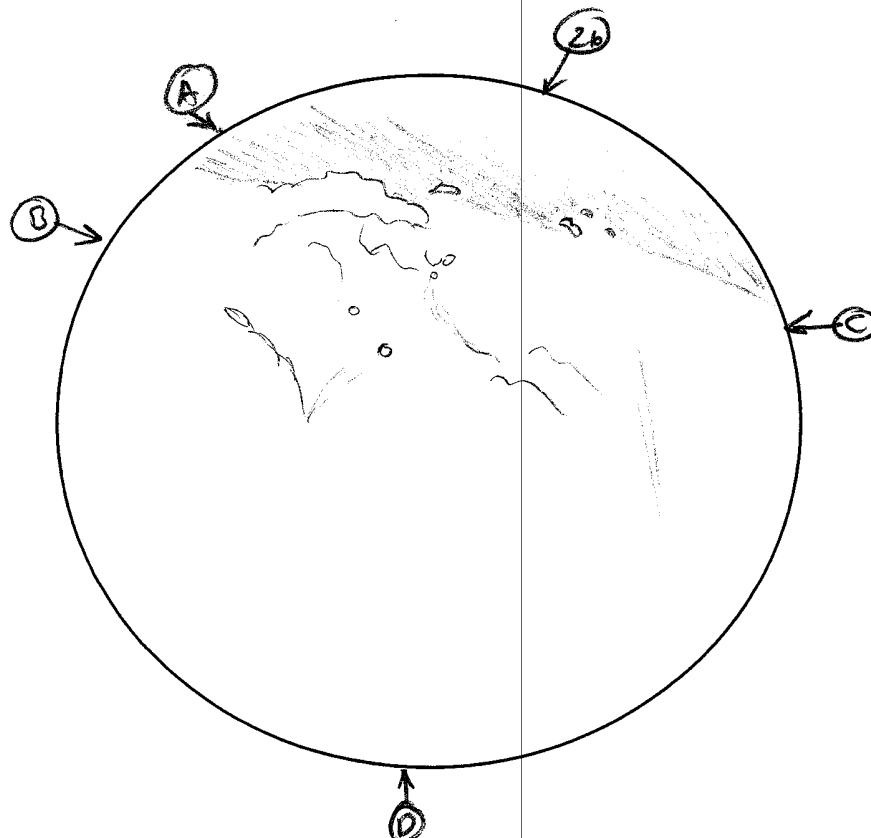
DATE 2/4/6 TIME 7:30-7:40 CST CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475

TARGET 26 LINNE FILTER NO VP NB WB OIII

PHASE 62 PROGRAM Lunar II LOCATION RMCC RANCH HOME



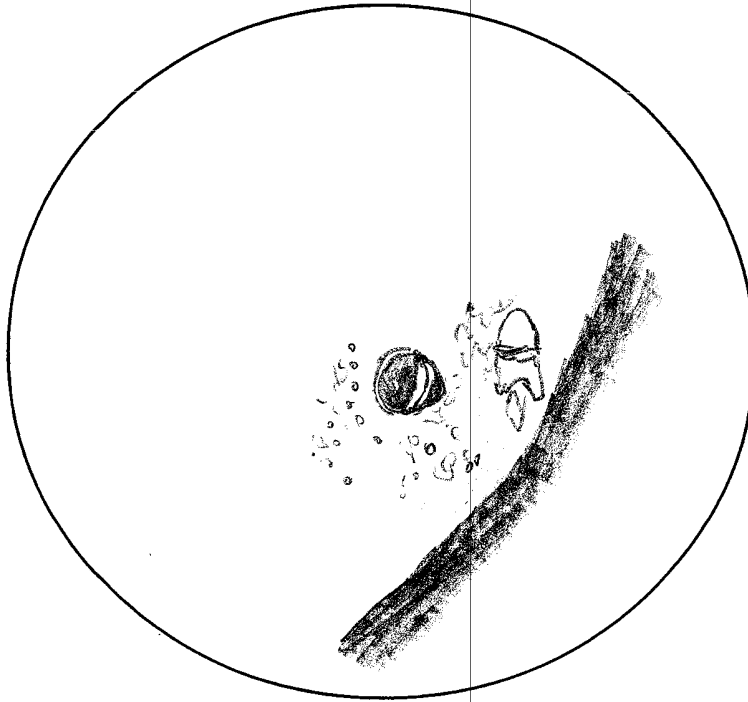
(26) SMALL BOWL w/DEPRESSION TO WEST

(B) = LINNE B (D) = LINNE A (C) = CRUM OVER

(A) MONTES CAUCASUS JUST BEFORE SUNRISE, SEVERAL
PEAKS OVER TERMINATOR

L2 #28

DATE 4/9/6 TIME 8:50^{9:00} CST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 316 475
OBJECT 28 MAIN FILTER NO NB WB OIII
OBS. PROGRAM L2 LOC. RMCC RANCH HOME
PHASE 111



EXCELLENT RANG CRATER WITH VERY HIGH
WALLS - ESP. WEST ONE WHICH HAS CRATERLETS ON
N & S TIPS & CASTS A GREAT SHADOW.

L2 #29

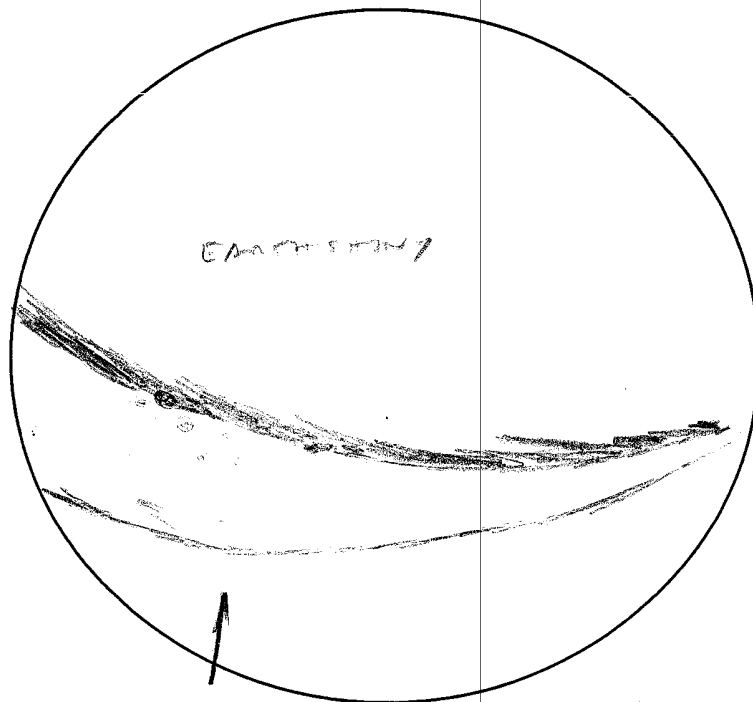
DATE 3/31/6 TIME 8:20 CST CDT CLARITY I II III IV V SEEING III III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475

TARGET #29 MARE AUSTRALIS FILTER NO VP NB WB OIII

PHASE 2d PROGRAM Lunar II LOCATION RMCC RANCH HOME



BASICALLY A FLATTER, SMOOTHER AREA WITH A
FEW CRATERS WITHIN IT AND A SMALL
FEATURE (SHADING NO RESULT) AT EDGE OF LIT
DISK.

L2 #30

DATE 1/8/6 TIME 10:00 CSP CDT CLARITY I II III IV V SEEING I II III IV V

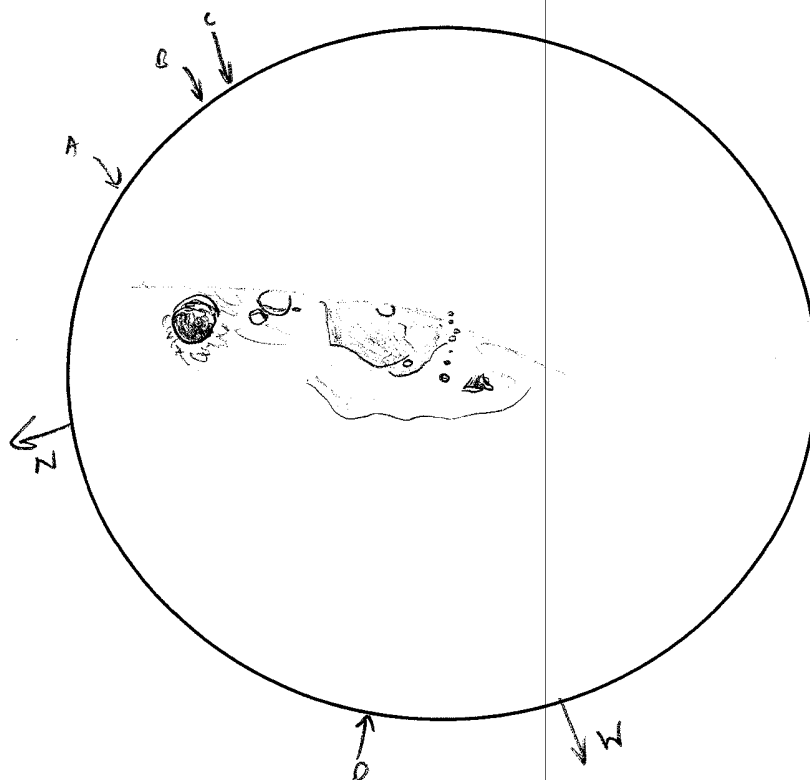
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 316 475 190x 0

OBJECT #30 FILTER NO NB WB OIII

OBS. PROGRAM L2 LOC. RMCC RANCH HOME

Phase = 9d



MARE COGNITUM - D = HIGH LAND ARC SEPARATING

FROM MARE NUBIUM TO SW. NOTE DARKER FLOOR

WITH GREY OUTER ZONE THEN FADED INTO WHITE

A COPERNICUS - ALREADY SHOWING APPARENT TERRACE WALLS

B RIM HOLD B C RIM HOLD

NOTE THAT MARE INSULARUM IS DARK AREA
NOT YET READY TO VIEW

L2#31

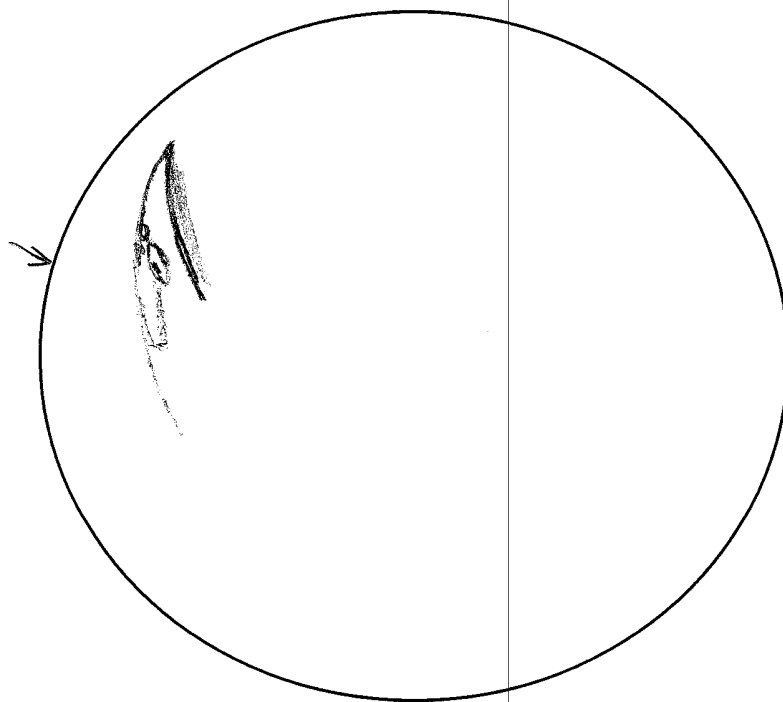
DATE 5/1/6 TIME 9:35 CST CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475

TARGET 31 PAVE HUMBOLDT FORM BASIN FILTER NO VP NB WB OIII

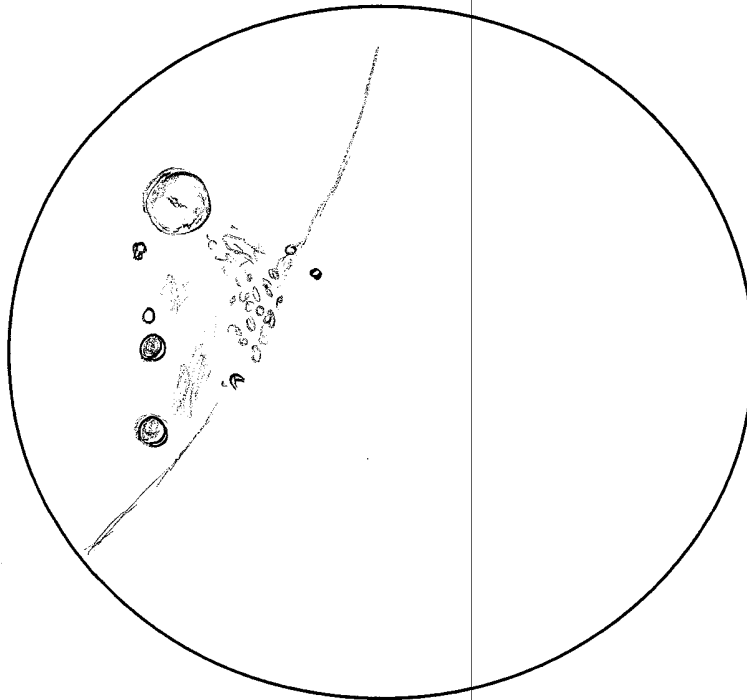
PHASE 42 PROGRAM Lunar II LOCATION RMCC RANCH HOME



OBVIOUS LARGE BASIN JUST AT EDGE OF CRESCENT
MOON. WALLS OF BASIN, CRATER AT N. END, SLOPES
ALMOST WHITE & S. END.

L2 #32

DATE 2/7/6 TIME 8:15-8:30 CST CDT CLARITY I II III IV V SEEING I II III IV V
 INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
 POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475 ____
 TARGET 32 Mare Insularum & Sinus Aestuum FILTER NO VP NB WB OIII ____
 PHASE 9d PROGRAM Lunar II LOCATION RMCC RANCH HOME ____



VERY FLAT AREA WEST OF COPERNICUS. SOME
OF HORTENSIVS DOME FIELD COMING INTO VIEW,
WITH ONE PARTICULARLY NICE CRATER OVER
TERMINATOR. MAKE ITSELF LITTLE DETAIL.

L2 #33

& #76

DATE 1/3/6 TIME 7:30 CSD CDT CLARITY I II III IV V SEEING I II III IV V

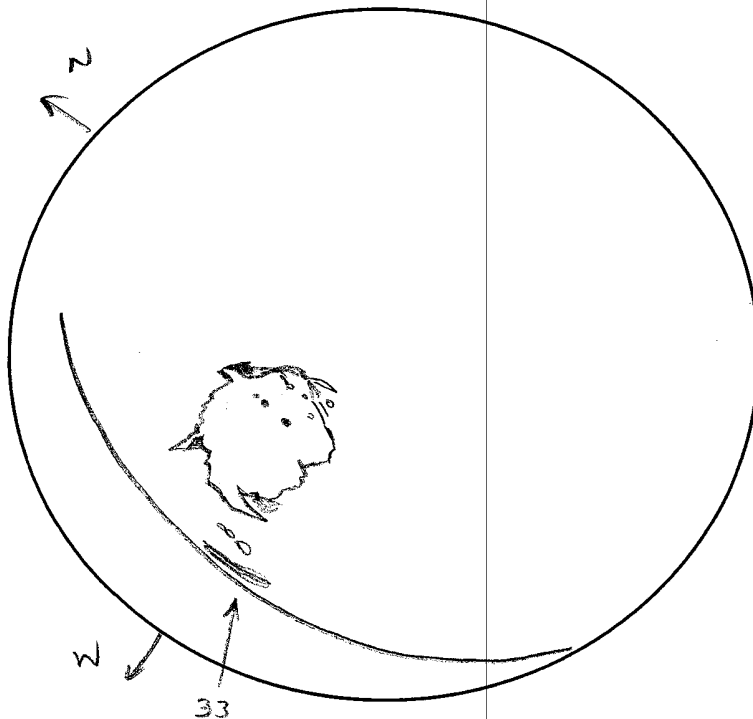
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 (BORDER SEA) 10 47 73 153 316 475 _____
(SEA OF CAISES) MARE MARGINIS

OBJECT MARE CRISIUM & FILTER NO NB WB OIII _____

OBS. PROGRAM L2 LOC. RMCC RANCH HOME _____

Phase = 4 d



#76 WONDERFUL OVAL "SEA" - 3 RAY AREAS SEEM

LIKE BAYS OR INLETS. RUGGED COASTLINE ON

UPPER SIDE () IS INTERESTING SINCE THERE

ARE STILL SHADOW EFFECTS. MARE MARGINIS

SEEN EASILY ON EDGE, HIGHLY FORESHADOWED

L2 #34
#35

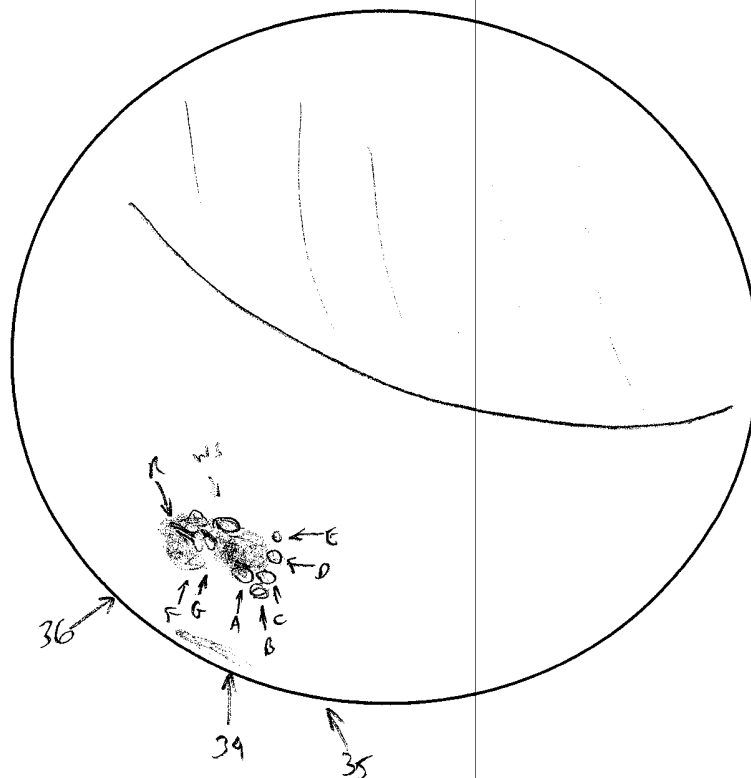
DATE 5/1/6 TIME 7:50 CST CDT CLARITY I II III IV V SEEING I II III IV V #36

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 190 OP 316 475

TARGET 34 MAKE SMITH 36 MAKE UNDAUM FILTER NO VP NB WB OIII

PHASE 4d PROGRAM Lunar II LOCATION RMCC RANCH HOME



#34 = SEA OF SMITH
35 = FRANKLIN SEA
36 = SEA OF WAVES

35 MAKE SPURMAN'S NICE DARK ELLIPTICAL SHAPE FRAMED BY CRATER

36 MAKE UNDAUM LESS REGULAR, & CONTINUED BY RIDGE "R"

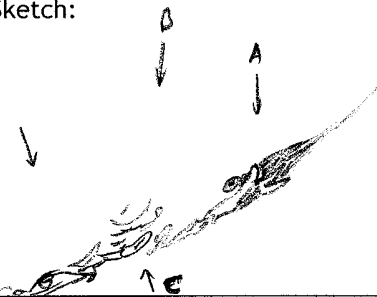
A = MACURIN O B = MACURIN C = MACURIN T

D = WEBB J E = WEBB K WS = FRANKLIN (DARK FLOOR)

F = DUBIAGO G = DUBIAGO B R = RIDGE W/ DUBIAGO VIEW (NOT SEEN)

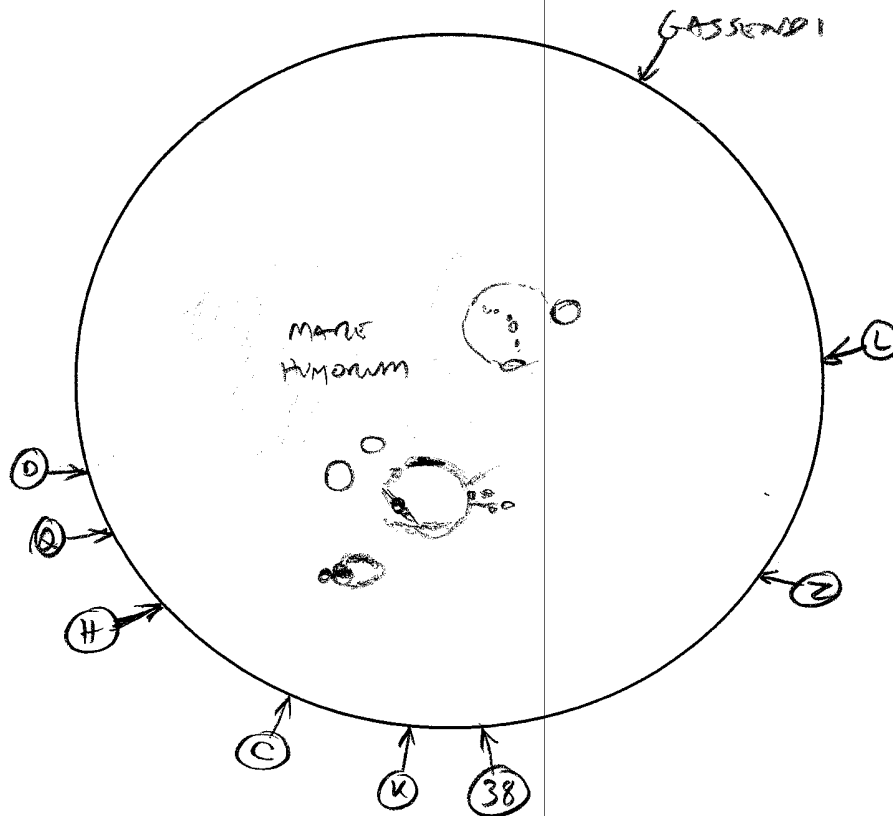
34 MAKE SMITH IS A FLAT BASIN, DARKER THAN SURROUNDING AREA, VERY ELLIPTICAL

Lunar II Observing Log

#37	Target: MARIUS HILLS (ROMUS MARIUS)	
Date & Time: 1/11/6 9:50 pm CST	Location: HOME	
Phase: 12d	Sky: I - clarity III stead.	
Equipment Used: ETX 125 10mm O (190x)		
Description/Sketch:		 VERY LOW "BUMPS" ALONG TERMINATOR - SL. DARKENING IN AREA OF OCEANUS PROCELLARUM
Target:		
Date & Time: 1/11/6 9:55 CST	Location: HOME	
Phase: 12d	Sky: I - clar. III stead.	
Equipment Used: ETX 125 10mm O 190x		
Description/Sketch:		 A = DAVOISEAU B = SINUSUS C = DAVOISEAU BA D = SINUSUS AMAZING "ARM" W/ TWO LONG SHARP FINGERS LAYING ON THE EDGE OF THE MOON!
OPT-E	Target: LOWLANDS W/ COLOR FILTER	
Date & Time: 1/11/6 10:05 CST	Location: HOME	
Phase: 12d	Sky: I - clar. III stead.	
Equipment Used: ETX 125 10mm O (190x) + filters		
Description/Sketch: Generally, using Sinus Iridum & Mare Tranquillitatis as examples, darker filters from yellow-green-blue to red yield better contrast and more "patchiness" to the otherwise flat black and several distinct gradations (layers?) are noted.		

L2 #38

DATE 4/10/6 TIME 8:50 CST CDT CLARITY I II III IV V SEEING I II III IV V
 INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
 POWER 38 60 121 150 250 375 10 47 73 153 190 OP 316 475
 TARGET 38 MERSENIUS FILTER NO VP NB WB OIII
 PHASE 122 PROGRAM Lunar II LOCATION RMCC RANCH HOME



GREAT FLAT BOWL WITH "RAMS" TO N FORMED BY L & Z

D & H = MERSENIUS D & H K = K L = L 2 = Z

Q = LIEBIG

C = CAVENDISH W/ E & F IN ORBIT SOUTH

L2
#40 #44

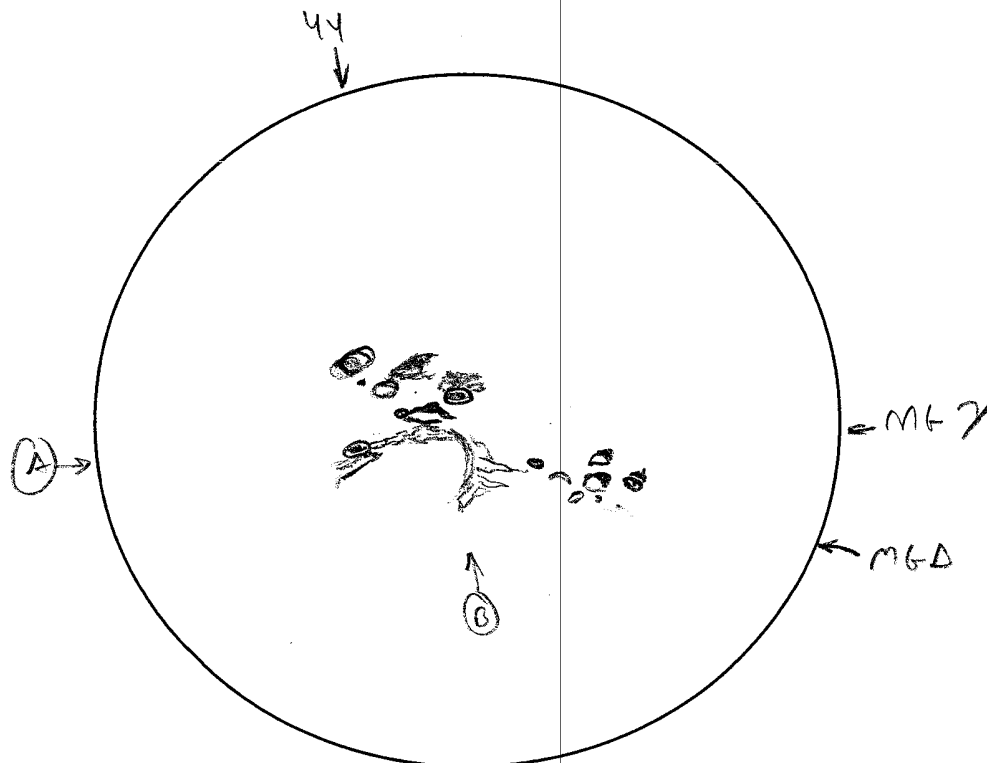
DATE 3/10/6 TIME 11:35-11:50 CDT CDT CLARITY I (II) III IV V SEEING I (II) III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 (190) 316 475

TARGET #40 MONS GRUTHUISEN Δ & γ
#44 & MONTES FOUCALT FILTER (NO) VP NB WB OIII

PHASE 11d PROGRAM Lunar II LOCATION RMCC RANCH (HOME)

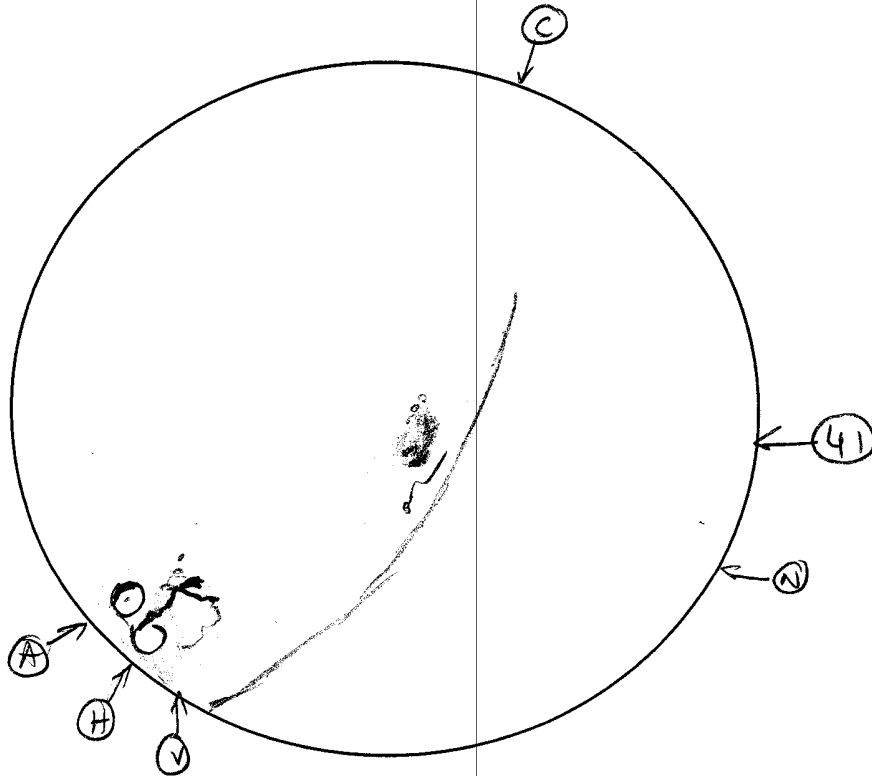


(44) FOUCALT SEEN EASILY, LEADS TO MOUNTAINOUS AREA
THAT FRAMES A DARKER VALLEY

(A) = MONTES LRA (40) MONS GRUTHUISEN Δ & γ
ARE MOUNTS W/ GOOD RELIEF AT SOUTH END OF RIBBON
AREA EXTENDING FROM PROM. HERACLES (B)

L2 #41

DATE 4/10/6 TIME 9:00 ^{9:10} CST CDT CLARITY I II III IV V SEEING I II III IV V
 INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
 POWER 38 60 121 150 250 375 10 47 73 153 190 OP 316 475
 TARGET 41 MONS LUNAR FILTER NO VP NB WB OIII
 PHASE 12 PROGRAM Lunar II LOCATION RMCC RANCH HOME

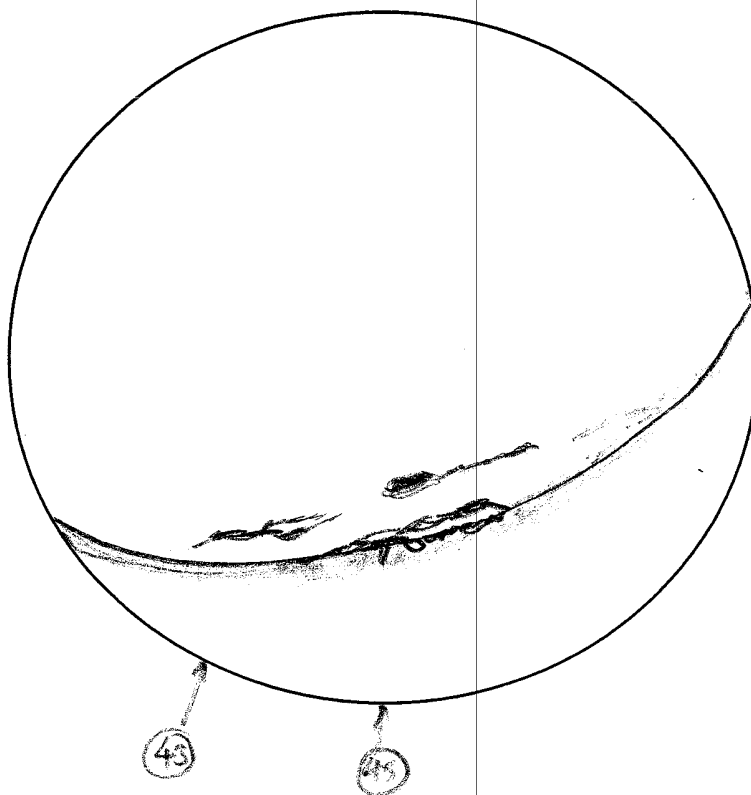


WONDERFUL DARK HILLS W/ CRATER ON N SIDE, LOTS
OF TEXTURED SHADOW. RILLE TO WEST RUNS SOUTH
TO (N) = NAUMANN B.

(A) ARISTARCHUS GREAT BRIGHT WHITE CRATER 4/10 MON
(H) HERCULEUS & THE (V) VALLEY SCHROTER IS AMAZING

L2 #43
#45

DATE 4/11/6 TIME 9:40-9:45 CST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 OP 316 475
TARGET 43 MONTES CORDILLERA FILTER NO VP NB WB OIII
PHASE 142 PROGRAM Lunar II LOCATION RMCC RANCH HOME



HAVING SEEN PICTURES OF MORE ORIENTALS

THESE CHAINS MAKE SENSE AS "RINGS" WITHIN A

LIBRATION = +1°49' LAT -2°45' LONG

L2 #46

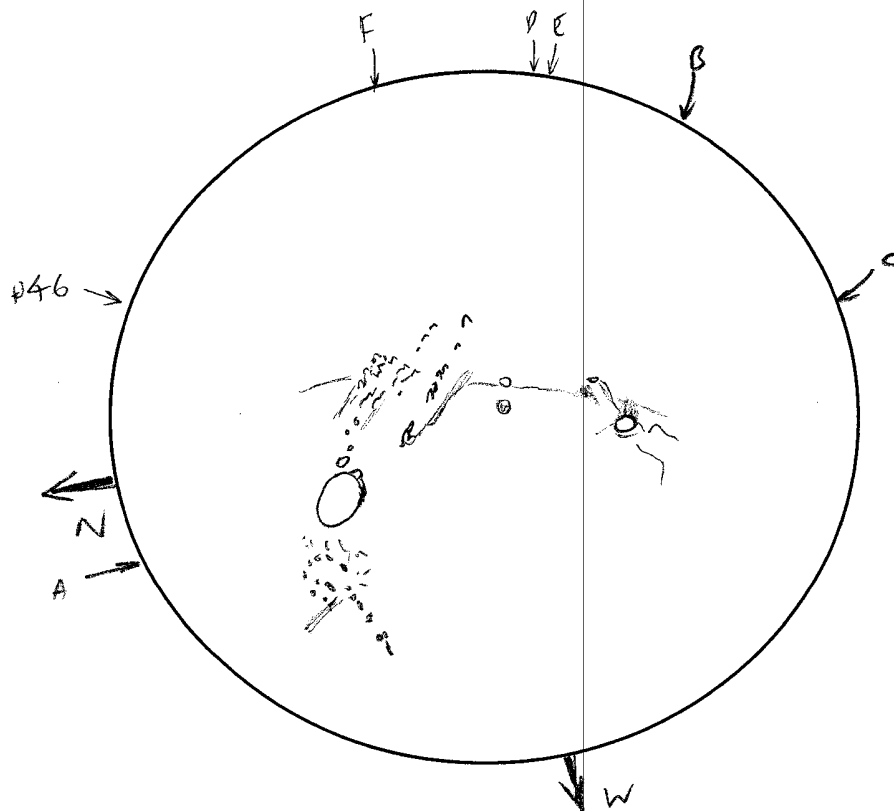
DATE 1/8/16 TIME 10:10 CST CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 316 475 +190X 0

OBJECT Phase = 9d FILTER NO NB WB OIII

OBS. PROGRAM L2 LOC. RMCC RANCH HOME



VERY DIFFICULT TO DRAW THIS AMAZING AREA

MOUNTAINS SEEN WELL INTO DARK SIDE - 4

LINE OF THEM RUNNING E-W AND MANY PEAKS

SEEN WELL INTO DARK SIDE!

#46 → MONTES RECTI

F → MONTES TENERIFFE

A = PLATO B = DORSUM ZINKE (WITH A PEAK C) C = LAMBERT (HIGHT BOWL

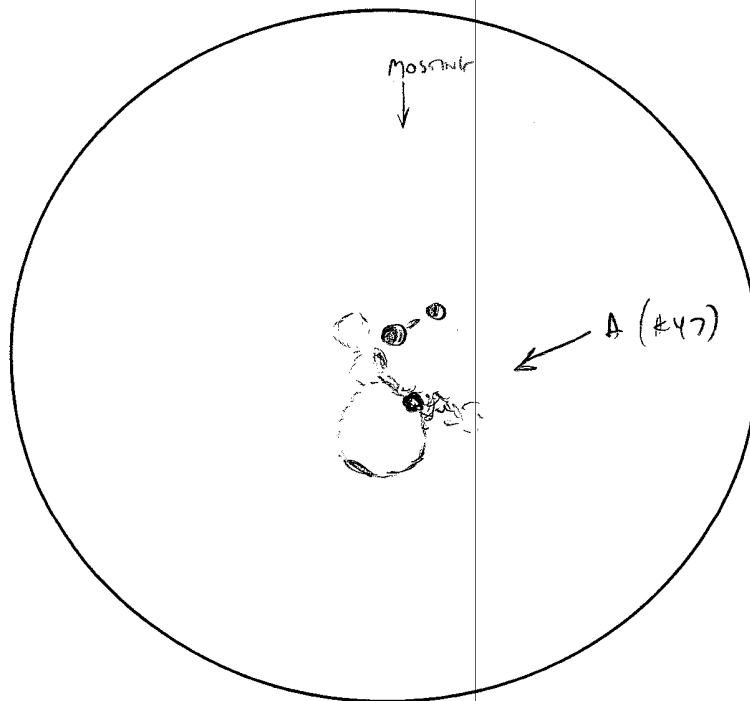
D = HELICON

E = LE VERRIER

w/long shadow)

L2 47

DATE 6/4/6 TIME 9:35 CST CDT CLARITY I II III IV V SEEING I II III IV V
 INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
 POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475 ___
 TARGET 47 MOSTING A FILTER NO VP NB WB OIII ___
 PHASE 82 PROGRAM Lunar II LOCATION RMCC RANCH HOME HOME ___



MOSTING A IS A SMALL CIRCULAR CRATER ON THE NW
WALL OF FLAMMATION. NICE ROUND SHAPE W/ BRIGHT
WALL ON W. SIDE, STILL PARTLY IN SHADOW

#49 #91
#75
#81

L2

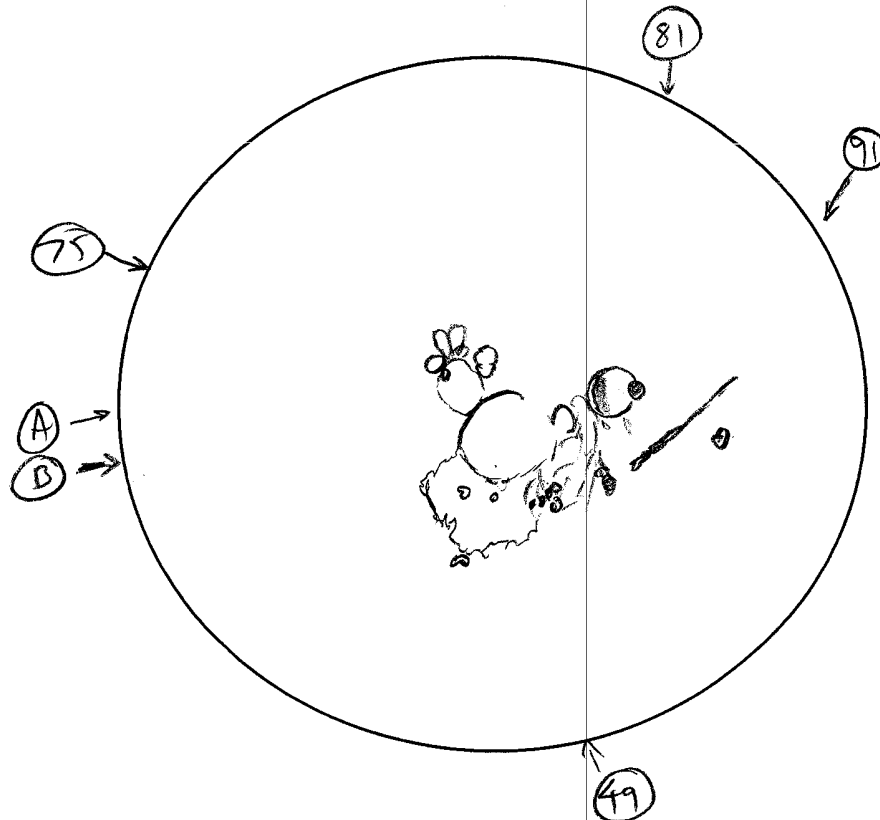
DATE 4/6/6 TIME 8:40 CST CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475

TARGET SEE BELOW FILTER NO VP NB WB OIII

PHASE 8d PROGRAM Lunar II LOCATION RMCC RANCH HOME



(75) DELAUNAY - "BEAK CLAW" WITH MIDDLE TOES (HEART SHAPE)

ESPECIALLY PRONOUNCED & ONE PBL CRATER ALL

NEXT TO (A) LACAILLE. (49) REGIOMONTANUS WRECHED

VALLED FORMATION WITH "A" INSIDE + SMALL PEAK

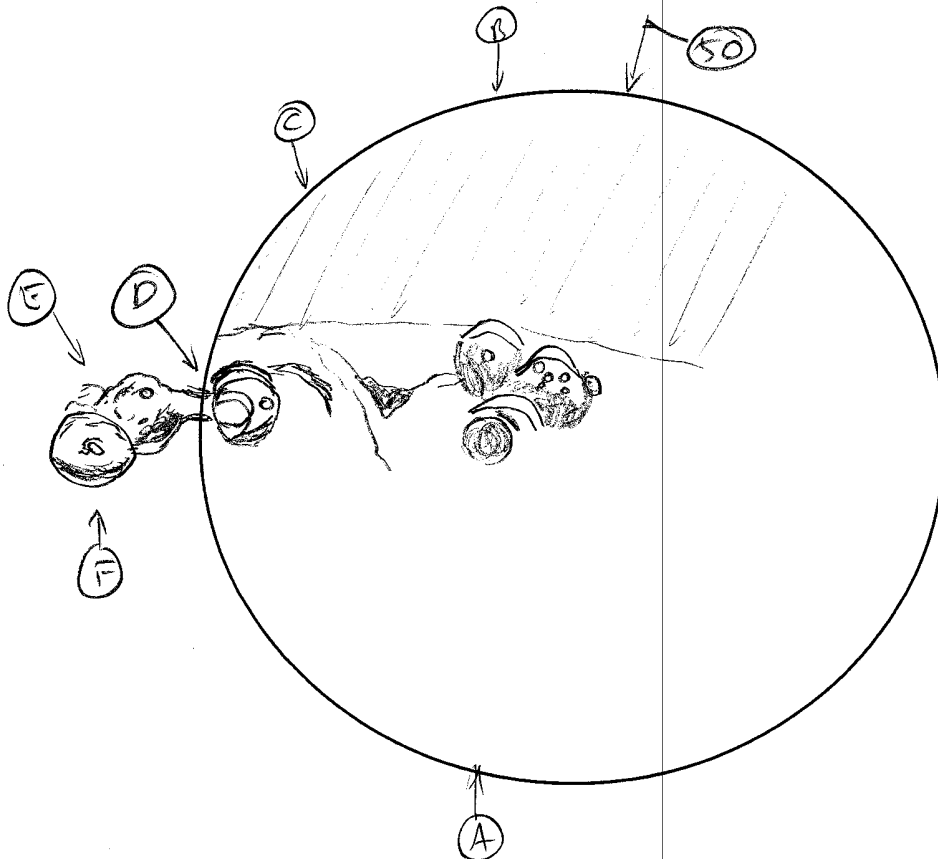
OFF CENTER & (B) PUMBAC TO N. (81) = THEBIT NICE ROUND

CLASER W/ THEBIT A ON W SIDE. THEBIT L TO BE REVISITED

ALSO (91) RUPES RECTA - SEEN BEFORE BUT IMPOSSIBLE TO PASS UP.

L2 #50

DATE 2/3/6 TIME 10:10-10:25 CST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 O/B 316 475
TARGET 50 (AGB) LEVI FILTER NO VP NB WB OIII
PHASE 52 PROGRAM Lunar II LOCATION RMCC RANCH HOME



(50) VERY CLUTTERED CRATER W/5 CRATER CLUSTERS INSIDE
SEEN, BRIGHT WALL TO EAST SEPARATES (A) LINDONAV
(B) ZAGUT INVOLVED TO NORTH, (C) GREAT RIDGE W/LARGE Δ
SHARED SHADOW; (D) IS AMAZING = CASTARINA, 2 OVERLAPPING
RINGS INSIDE WALLS TO N SIDE, GREAT STRUCTURE, THEN
"CONNECTION" TO (E) = CYRILLUS, WHICH IS "CRUSHED"
BY (F) = THEOPHILUS, WITH CENTRAL MOUNTAIN CLUSTER
& GREAT WALL STRUCTURE

L2 #51

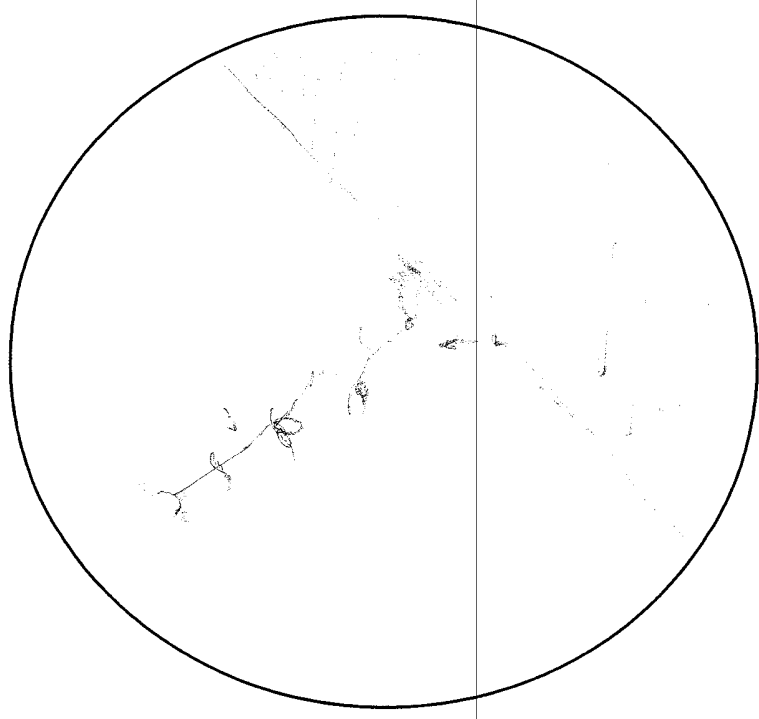
DATE 5/4/6 TIME 9:30 CST CDT CLARITY I II III IV V SEEING II III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 190 OP 316 475

TARGET #51 ALADARUS ^{ALMA} FILTER NO VP NB WB OIII

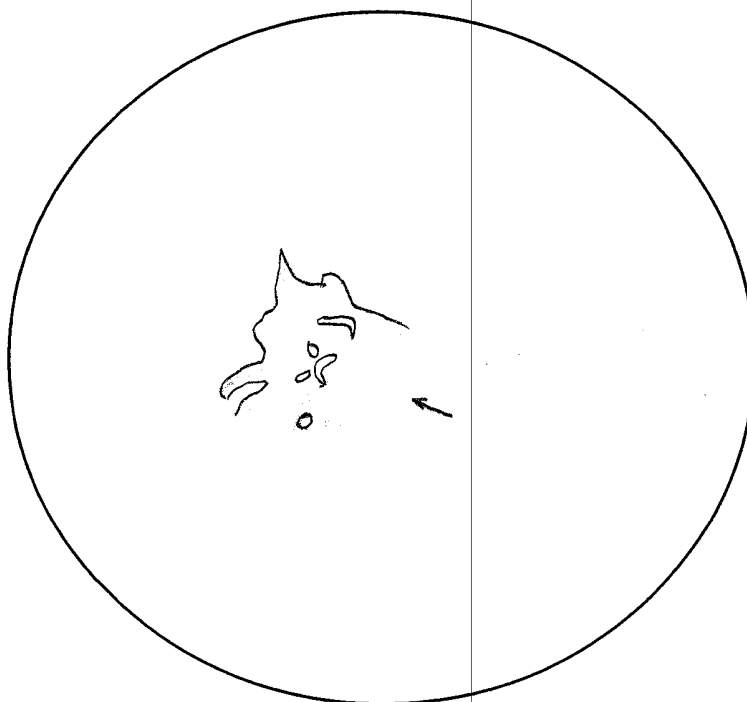
PHASE 7d PROGRAM Lunar II LOCATION RMCC RANCH HOME



AMAZING "RIVER" DOWN THROUGH PLAINS. I DON'T
SEE CONNECTION TO ALMA HADLEY "H". GREAT
EVEN RIVER

L2
#52

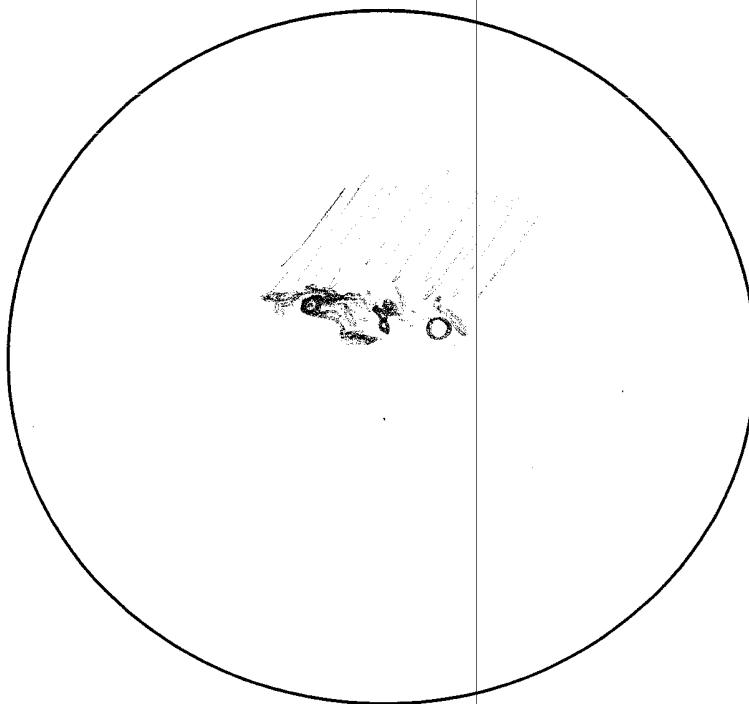
DATE 3/2/6 TIME 9:55 EST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 OP 316 475
TARGET #52 RIMA CAUCHY FILTER NO VP NB WB OIII
PHASE 13d PROGRAM Lunar II LOCATION RMCC RANCH HOME



From "X" then "00" - cool feature - antique
white against light grey of Mare
below it is very bright white!

#53 22

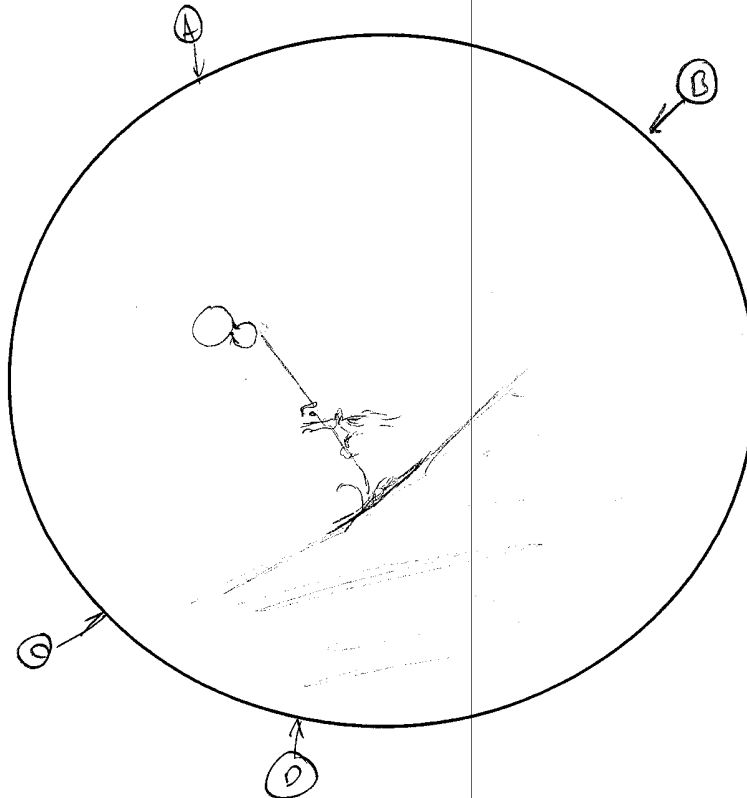
DATE 4/5/6 TIME 9:20 CST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475 ___
TARGET 53 RIMA HARDY FILTER NO VP NB WB OIII ___
PHASE 72 PROGRAM Lunar II LOCATION RMCC RANCH HOME ___



IMPOSSIBLE TO DRAW! SNAKES UP TO RIDGE
AND I SEE THE HALF-LIT CRATER IT RUNS TO

L2 #54

DATE 2/7/6 TIME 8:25-8:35 EST CDT CLARITY I II III IV V SEEING I II III IV V
 INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
 POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475 ___
 OBJECT SY LUNA HESIODUS FILTER NO VP NB WB OIII ___
 OBS. PROGRAM LUNAR II LOC. RMCC RANCH HOME
PHASE 9d



EXCELLENT LONG STRAIGHT "CUT" EXTENDING
FROM (A) HESIODUS THROUGH (B) RUPE'S MOUNTAIN
& EVEN ON THROUGH (C) PALE EPIDEMIAUM
TO END NEAR TEAM WAGON, NORTH OF (D)
CAPWANEUS.

L2 #55

DATE 4/8/6 TIME 9:45 CST CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375

10 47 73 153 316 475

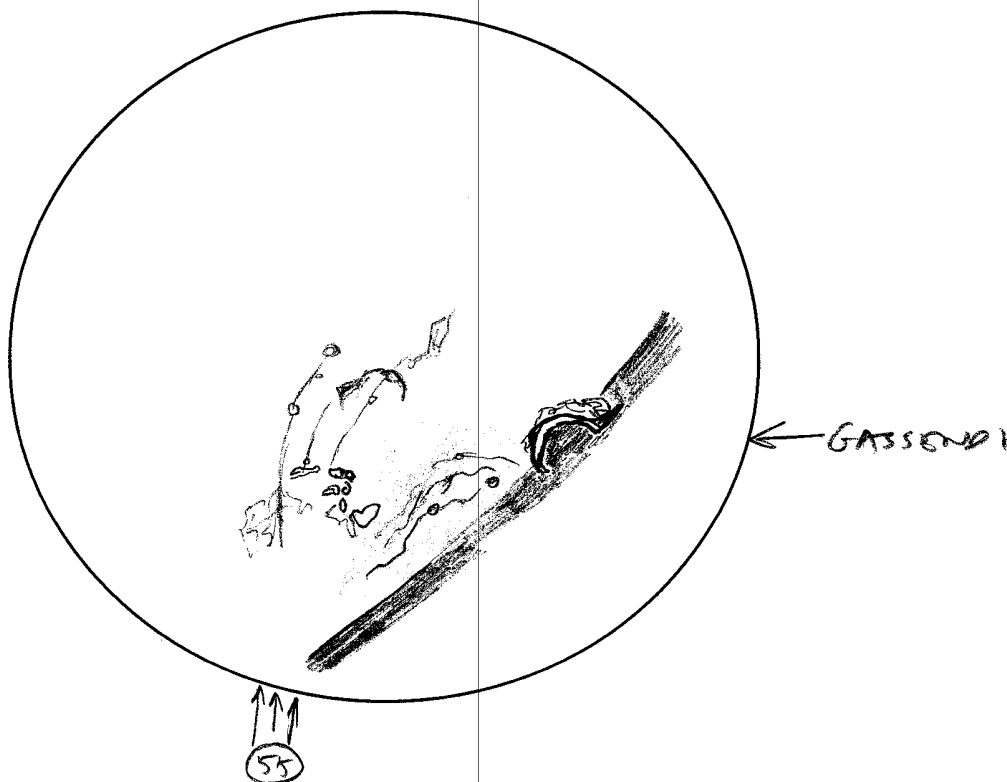
OBJECT SS RIMAE HIPPAUS

FILTER NO NB WB OIII

OBS. PROGRAM L2

LOC. RMCC RANCH HOME

PHASE 10d

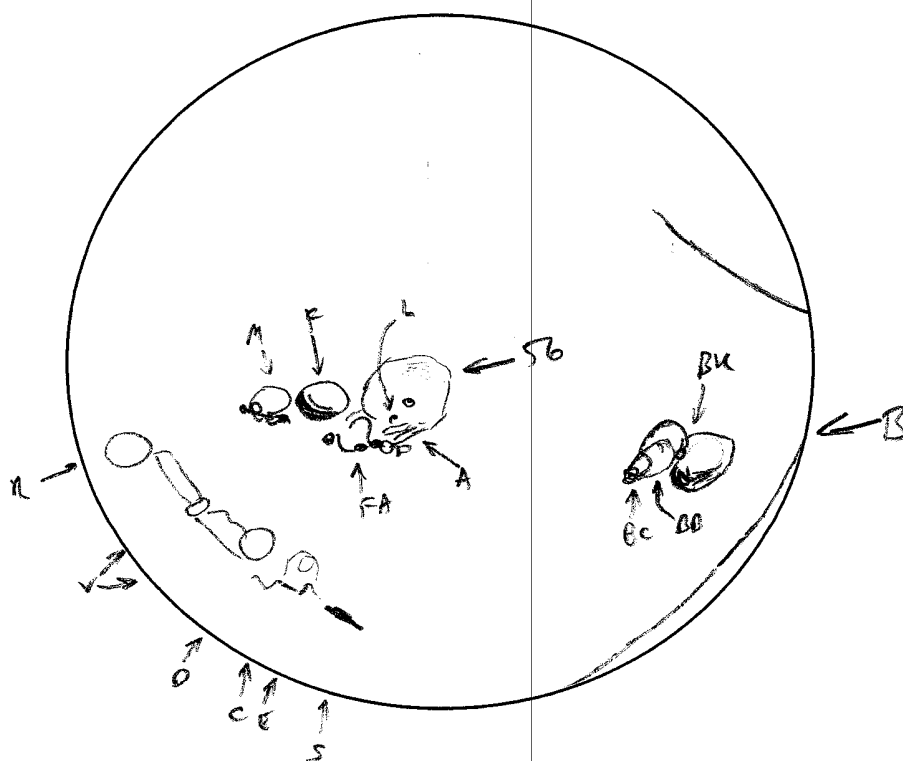


(55) = GREAT "CLAW MARKS" SET OF 3 CROSSING

SEVERAL FEATURES INCLUDING HIPPAUS.

L2 #56

DATE 5/3/6 TIME 9:30 CST CDT CLARITY I II III IV V SEEING I II III IV V
 INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
 POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475
 TARGET 56 RIMAE JANSEN FILTER NO VP NB WB OIII
 PHASE 6d PROGRAM Lunar II LOCATION RMCC RANCH HOMB



56 RIMAE JANSEN ON E SIDE OF LARGE CRATER.

ACTUALLY NOTICED "WRINKLES" ^(=A) SOUTH OF INTERIOR CRATERLET ^(ON WEST SIDE)

JANSEN L (4) MORE EASILY. AREA AS FABRICIUS A (FA) IS EXCELLENT.

WHAT A LINE FROM R=RHEITA, ITS VALLEY RHEITA (V)

DOWN TO YOUNG D = D WITH CONTINUATION TO MAJESTIC E
(CEB) & DARK SHADOW ON MAJESTIC D SOUTHWEST SIDE (S)

F = FABRICIUS M = METEUS. B = AMAZING BOVINGTAL DOUBLE RING
 MAKES ESPECIALLY GREAT SHADOWS ON WEST SIDE BK = BOV K
 BB, BC = BOVS. BBC TO N.W. WOW!

#57 L2

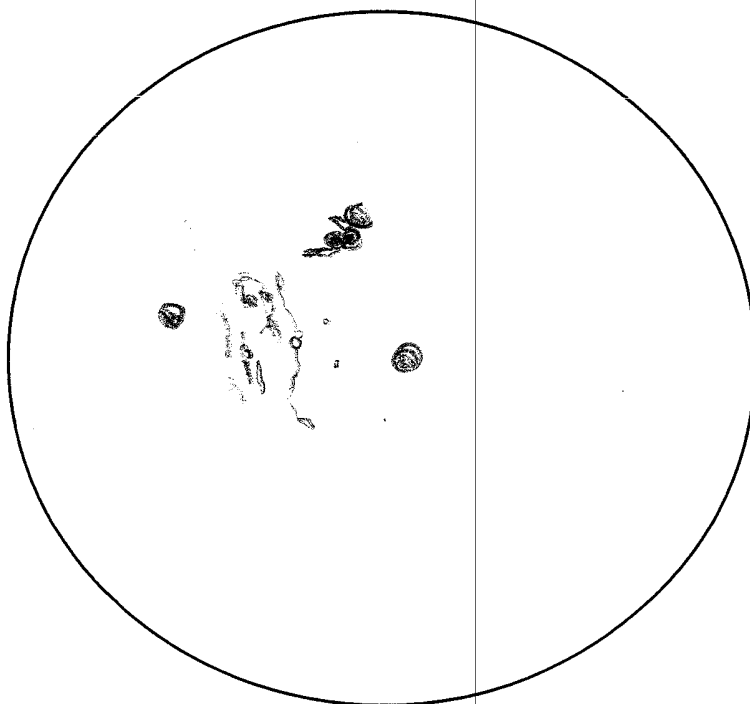
DATE 4/5/6 TIME 9:40 CST CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 190 OP 316 475

TARGET S7 RIMAE TYCHO NECKER FILTER NO VP NB WB OIII

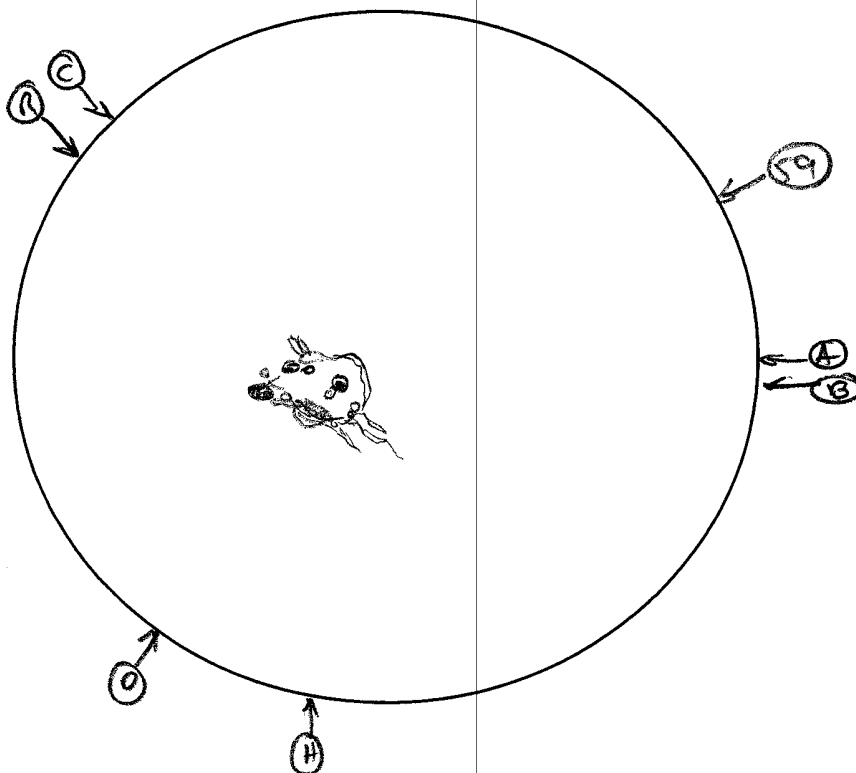
PHASE 72 PROGRAM Lunar II LOCATION RMCC RANCH HOME



AMAZING AREA ! IN "PORID SEA" VERY WELL DEFINED
DARK RIDGES WITH TEXTURE GRABED + 1 LONG
SINUOUS BRIGHT RILLE W/ CRATER IN MIDDLE
OF RUN!

L2 #59

DATE 2/4/6 TIME 7:40-7:45 CDT CDT CLARITY I II III IV V SEEING I II III IV V
 INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
 POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475
 TARGET 59 SACROBOSCO FILTER NO VP NB WB OIII
 PHASE 6d PROGRAM Lunar II LOCATION RMCC RANCH HOME

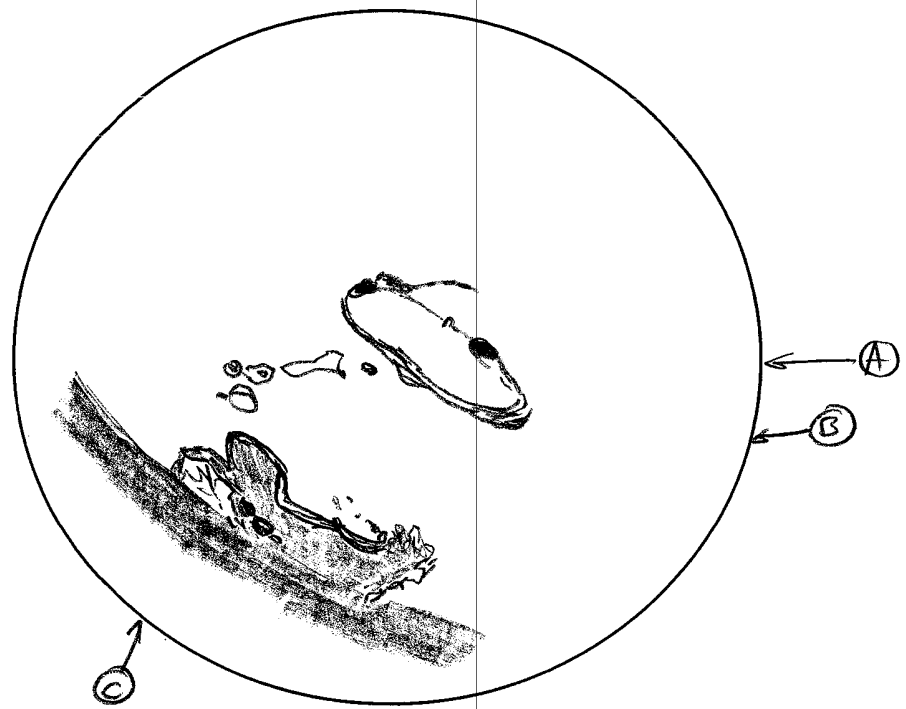


(S9) very irregular walled formation with
several craters inside including SACROBOSCO
A (A), B (B), C (C) & H (H)
(H) = tiny crater on east wall
(C) ≠ SACROBOSCO (C), leads towards it to N.

L2 #60

DATE 4/9/6 TIME 9:00-9:10 CST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 316 475
OBJECT 60 SCHILLER, SEBEN, ZUCCHINI FILTER NO 1900 NB WB OIII
OBS. PROGRAM L2 LOC. RMCC RANCH HOME

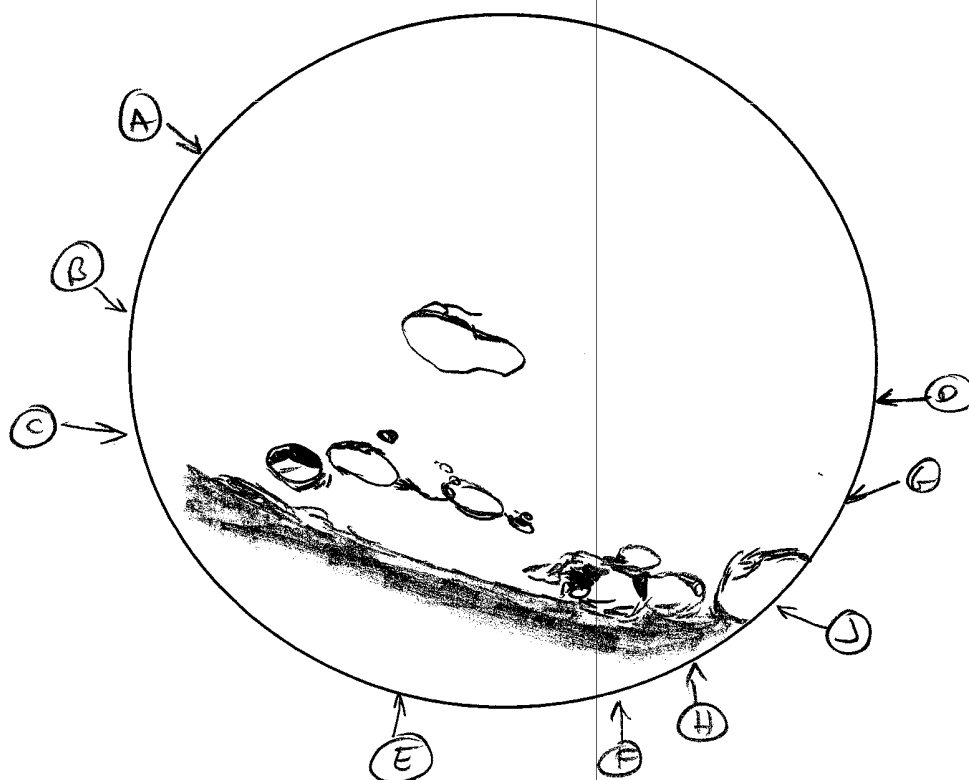
Phase 11d



(A) = SCHILLER - DISTORTED WALLD PLAIN W/
LOTS OF DETAIL TO WALL RIDGES & SPILLAGE
(B) = SEBEN WEST WALL BREAKS OVER INTO BRIGHT
LINE RUNNING NORTH. (C) = ZUCCHINI JUST COMING
INTO VIEW. COMPARE TO NEXT NIGHT (NEXT PAGE)

L2 #60
#69

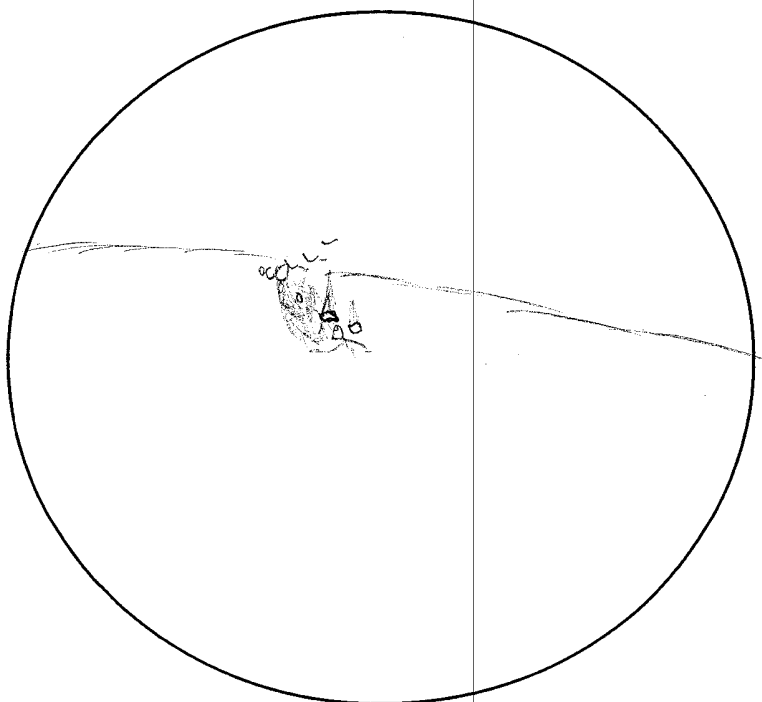
DATE 4/10/6 TIME 9:05-9:15 CST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475
TARGET 60 SCHILLER, SEBNER, ZUCCHUS FILTER (NO) VP NB WB OIII
PHASE 121 69 WARGENTIN PROGRAM Lunar II LOCATION RMCC RANCH HOME



NOW ALL 3 EASILY SEEN ALONG WITH SEBNER C (C)
SEBNER B (E) (F) = PHOCYLIDES (G) = NASYMTA
(H) = WARGENTIN (ALSO #69) SEEN BEFORE
(J) = SCHICKARD - A HUGE VALUED PLAN

L2 #63

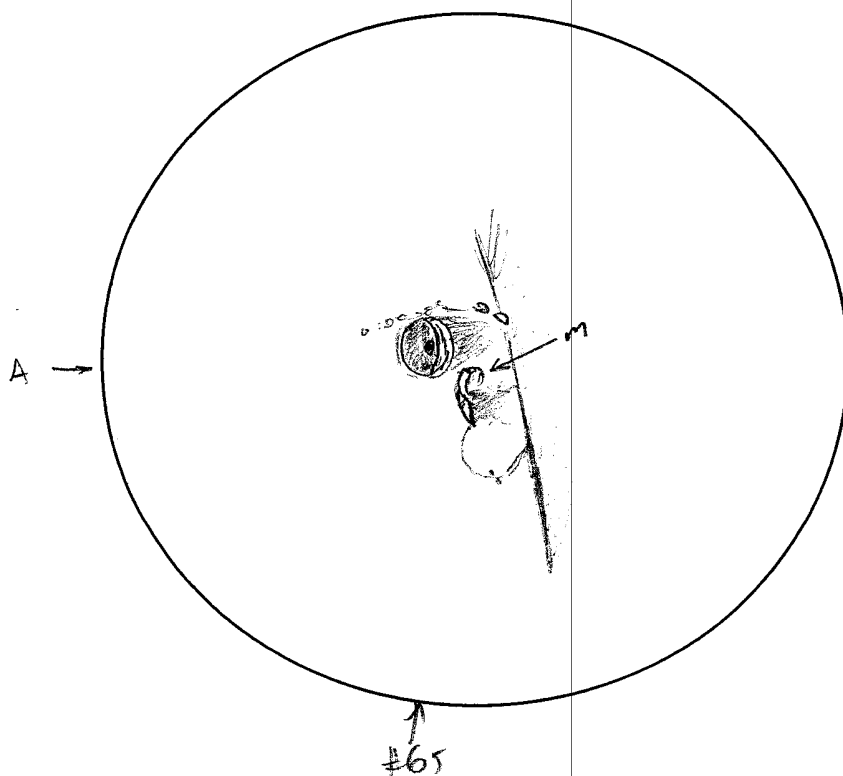
DATE 3/3/6 TIME 8:30 CST CDT CLARITY I (II) III IV V SEEING I (II) III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475 ___
TARGET 63 SINUS CONCORDIAE FILTER (NO) VP NB WB OIII ___
PHASE 48 PROGRAM Lunar II LOCATION RMCC RANCH HOME ___



JUST GETTING DAWN - TWO MOUNTAINS CASTING LONG
CYLINDRICAL SHADOWS - 3 CRESTS PAST TERMINATOR ARE
WILL BE MUCH DARKER THAN "REGULAR" MARE
AREA. (MARE TRANQUILLITATIS)

L2 #65

DATE 6/4/6 TIME 10:35 CST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 OP 316 475
TARGET #65 ~~STADUS~~ ~~CATENAE~~ FILTER NO VP NB WB OIII
PHASE 82 PROGRAM Lunar II LOCATION RMCC RANCH HOME



A = ERATOSTHENES - AMAZING W/C. PEAK JUST EXPOSED

#65 = STADUS WHICH IS FAIRLY UNBUILT GHOST CIRCULAR

FORMATION BUT W/ AMAZING HIGH WALL ON NE SIDE

THAT IS VERY PROMINENT AND SHADOWS THROWN TO

TERMINATE. M = ERAT. M, SEEN UNDER SHEER WALL

DOESN'T INCLUDE CATENAE (CRATER LETS TO WEST - SEEN
6/5/6 - SEE THAT OBS.)

L2 #65

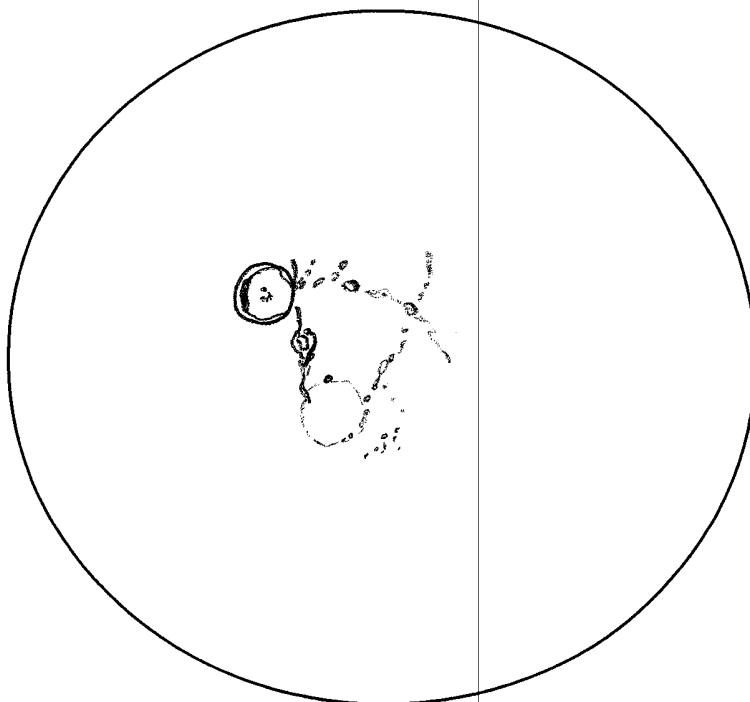
DATE 6/6/6 TIME 9:40 CST CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 190 EXP 316 475

TARGET #65 STADISCHKOWME FILTER NO VP NB WB OIII

PHASE 92 PROGRAM Lunar II LOCATION RMCC RANCH HOMER



NOW, WITH TERMINATOR TO WEST, I CAN SEE THE
CHAINS OF CRATER LOTS RUNNING N-S AND LOSSEN
E-SW.

L2 #66

DATE 1/3/1 TIME 7:15-7:20 CST CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375

10 47 73 153 900 475 190 over

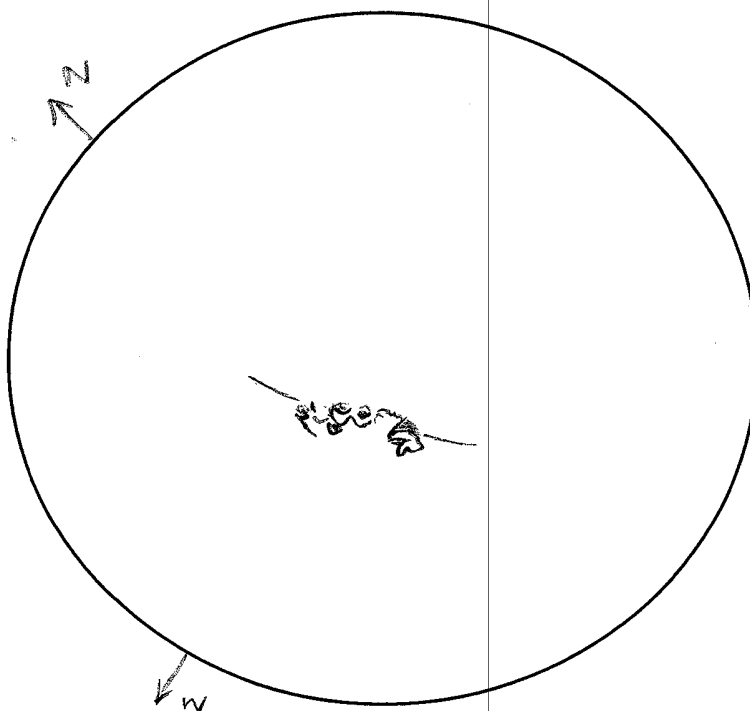
OBJECT #66 TARUNIVS

FILTER NO NB WB OIII

OBS. PROGRAM L2

LOC. RMCC RANCH HOME

Phase = 4 d



MULTILEVEL "TERRACES" THAT PEAKS ARE JUST IN

SUNLIGHT. TO S IS A SHAPED FORMATION

THAT SHADOWS QUITE A BIT "BEHIND" IT

#67 L2

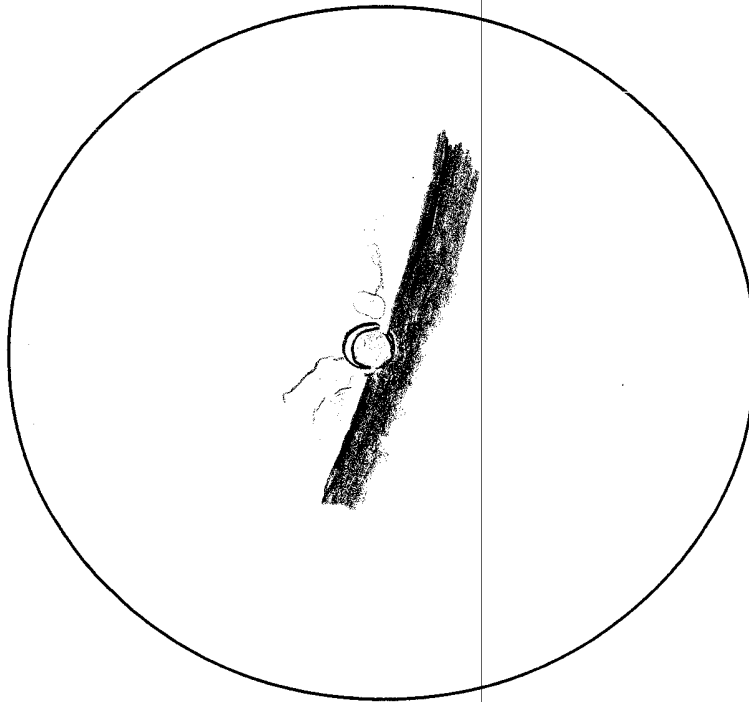
DATE 4/6/6 TIME 9:25 CST CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 190 00 316 475

TARGET 67 TIMOROUS FILTER NO VP NB WB OIII

PHASE 8d PROGRAM Lunar II LOCATION RMCC RANCH HOME



GREAT SPOT RIGHT ON TERMINATOR

WITH HIGH CR WALLS

L2 #68

DATE 1/2/6 TIME 7:35 CST CDT CLARITY I II III IV V SEEING I II III IV V

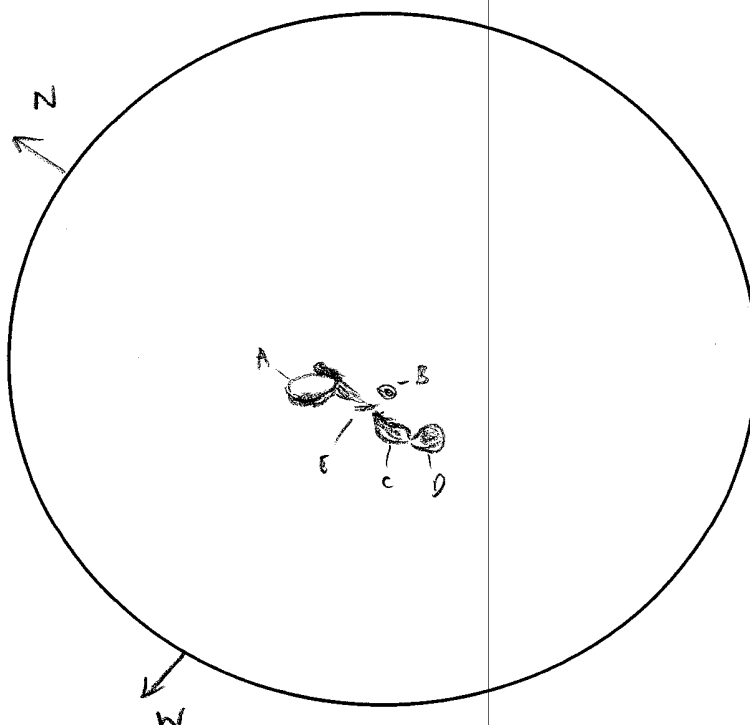
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 190 316 475 190x on the

OBJECT VALLEY RHETA FILTER NO NB WB OIII

OBS. PROGRAM L2 LOC. RMCC RANCH HOME

Phase = 4d



INTERESTING SHADOWED VALLEY WITH A "PINCH"

IN THE MIDDLE.

A = RHETA

D = YOUNG D

B = YOUNG C

E = YOUNG (TO ME IT WAS A "PINCH"

C = YOUNG A

DUE TO FORESHADOWING)

#69 L2

DATE 1/11/6 TIME 9:20 CDT CDT CLARITY I II III IV V SEEING I II III IV V

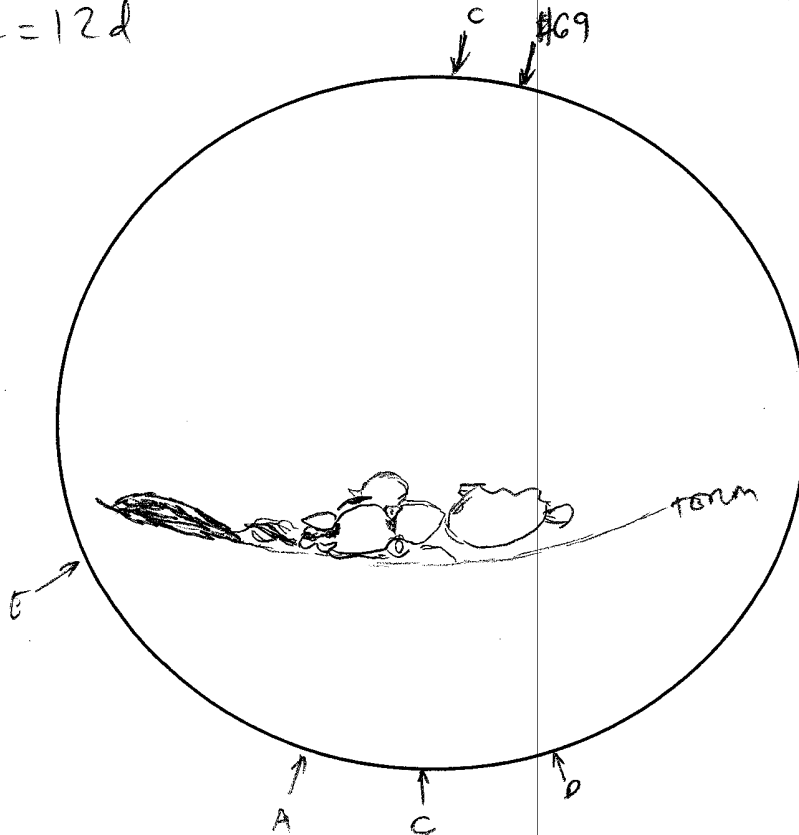
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 316 475 190x P

OBJECT WARGENTON (#69) FILTER NO NB WB OIII

OBS. PROGRAM L2 LOC. RMCC RANCH HOME

Phase = 12d



VERY FLAT VALUED CRATER NEXT TO TWO OBVIOUS

DEEPER ONES - ALL CLOSE & CONNECTED, FORMING A "TOE -

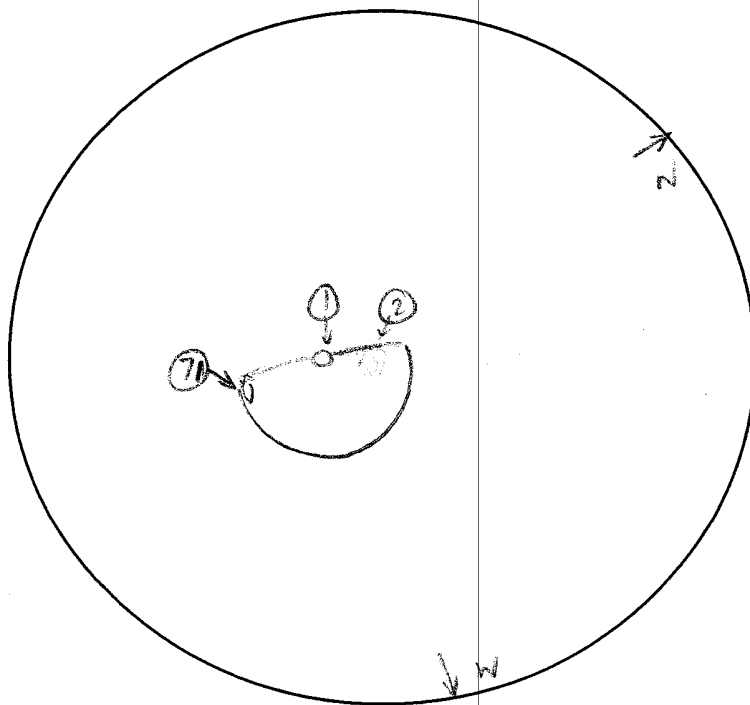
TRACK", SCHICKAND TO N - WALLED PLAIN, BAILLY TO S' "NOSTERS"
TERMINATION

A = PHOCYLIDES B = NASYMP C = INTERESTING BRIGHT
SPOT - NAME ?

D = SCHICKAND E = BAILLY

L2
#71

DATE 3/6/6 TIME 9:00 EST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475 ____
TARGET #71 POLAR CROSSER FILTER NO VP NB WB OIII ____
PHASE 7d PROGRAM Lunar II LOCATION RMCC RANCH HOME ____



FEATURES AND LUNAR SIZE EXAGGERATED - BUT ADMUNDSEN
STANDS OUT NEARLY THE SAME AS CHALKY WHITE COLORED
CIRC. FORM. AGAINST DARK WHITE BACKGROUND AND SOME SHADOWS
WILL BETWEEN IT AND TERMINATOR. ① = ALBATEGNIUS
② MARE VAPORUM

L2 #72
#73

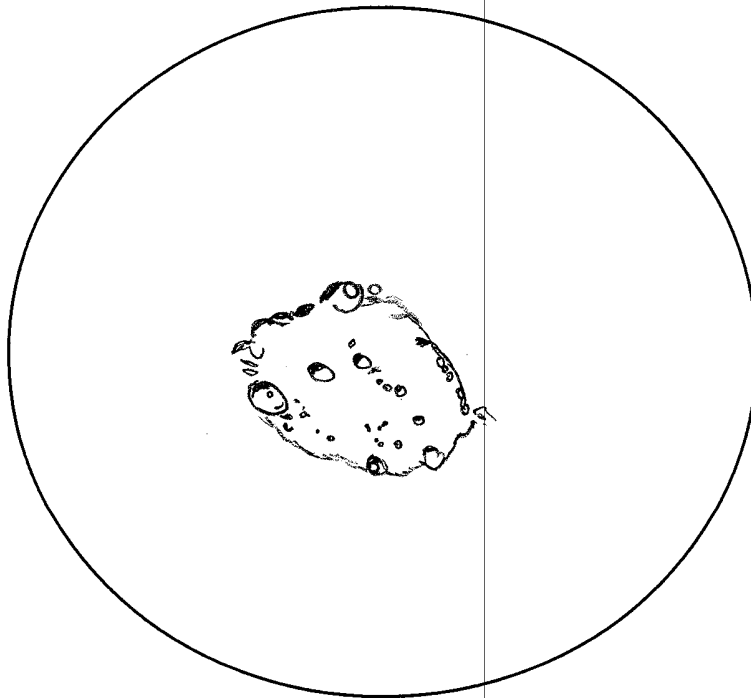
DATE 4/8/6 TIME 9:25-9:40 CST CDT CLARITY I III IV V SEEING I III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475

TARGET 72 CLAVUS + CRATERLOTS FILTER NO VP NB WB OIII

PHASE 10d PROGRAM Lunar II LOCATION RMCC RANCH HOME



UNBELIEVABLE DETAILS. 18 CRATERLOTS + 5 INTERNAL
CRATERS ON FLOOR & 2 SETS OF 3 CRATERLOTS ON
WESTERN WALL.

DATE 1/7/6 TIME 9:45 (CST) CDT CLARITY I II III IV V SEEING I II III IV V
#74 L2
+ #91 (1st)

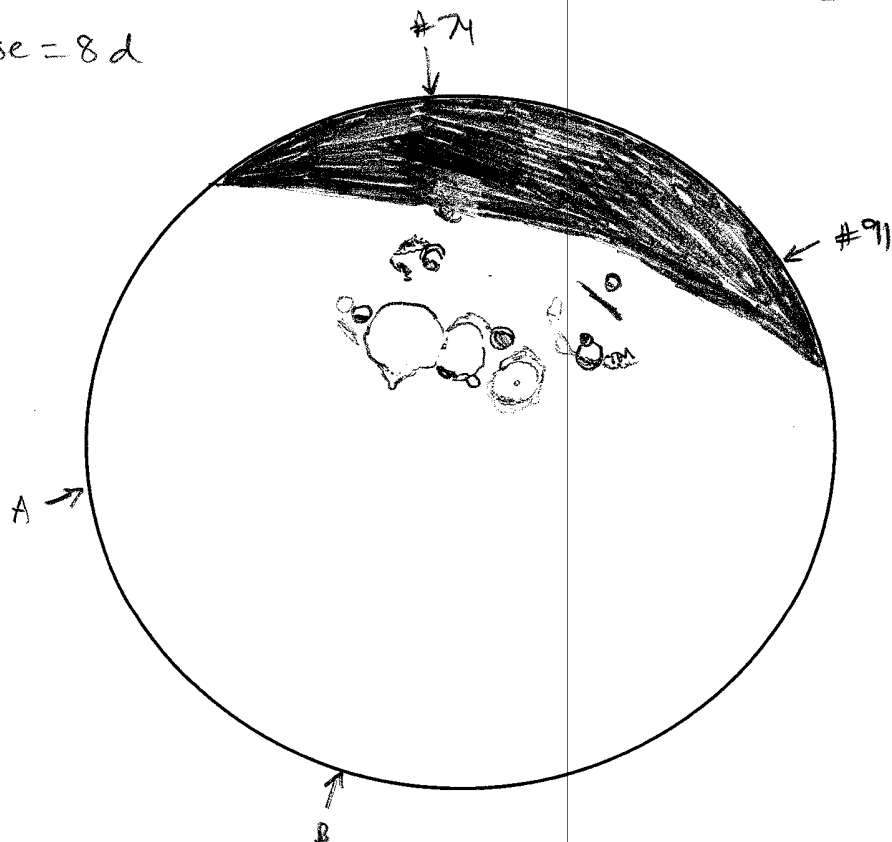
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 316 475 190x 0

OBJECT #74 Perry Y
#91 Rupes Recta FILTER NO NB WB OIII

OBS. PROGRAM L2 LOC. RMCC RANCH HOME

Phase = 8 d



#74 CURIOUS BRIGHT C SHAPE I CAN'T DRAW W/ CORRECT

LIGHT & SHADOW MARKINGS - PERFECT TIMING ON

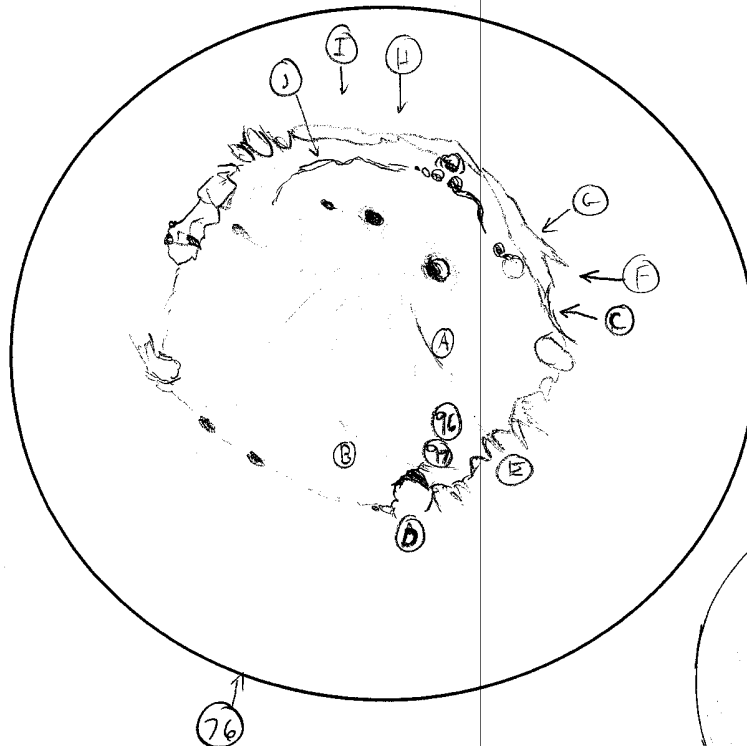
SEEING IT. #91 RUPES RECTA AT SURGE IS A

A PROLEMAEUS | WONDERFUL STRAIGHT BRIGHT BAR

B ALPHONSUS | (THIN) WITH SHADOW BEHIND IT.

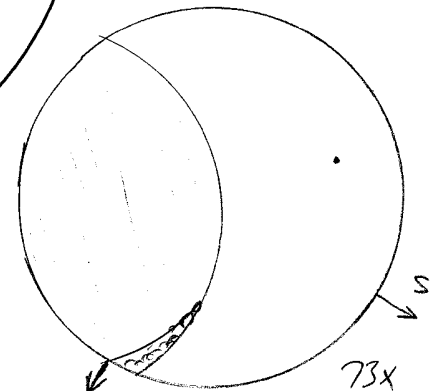
L2 76/96/97

DATE 2/1/6 TIME 7:40 CDT CLARITY I II III IV V SEEING I II III IV V
 INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
 POWER 38 60 121 150 250 375 10 47 73 153 190 Q/P 316 475
 TARGET 76/96/97 FILTER NO VP NB WB OIII
 PHASE 3d PROGRAM Lunar II LOCATION RMCC RANCH HOM



STAR = HR 2 6.3 mag
 SPEC = 9 G 9 0.5 m 0.95
 NOTICED FAIRLY
 BRIGHT ORANGE STAR

1:35 UT



(76) (SEA OF CRUISES)
 MARIS CRUcium

AMAZING DETAILS

ALL AROUND! (A) DORSA MARCEN

(A) begins at

(E) DORSA TERMINER

(C) PICARD (F) LICK (G) GREAVES (H) PIERCE (I) SWIFT (J) DORSA OPPEL

(96) LUNA 15 LANDING SITE - NEXT TO (A) + SEE ATTACHED

(97) LUNA 23 SITE - NEAR (B), ON OTHER SIDE NEAR

(D) - SEE ATTACHED

L2 #96

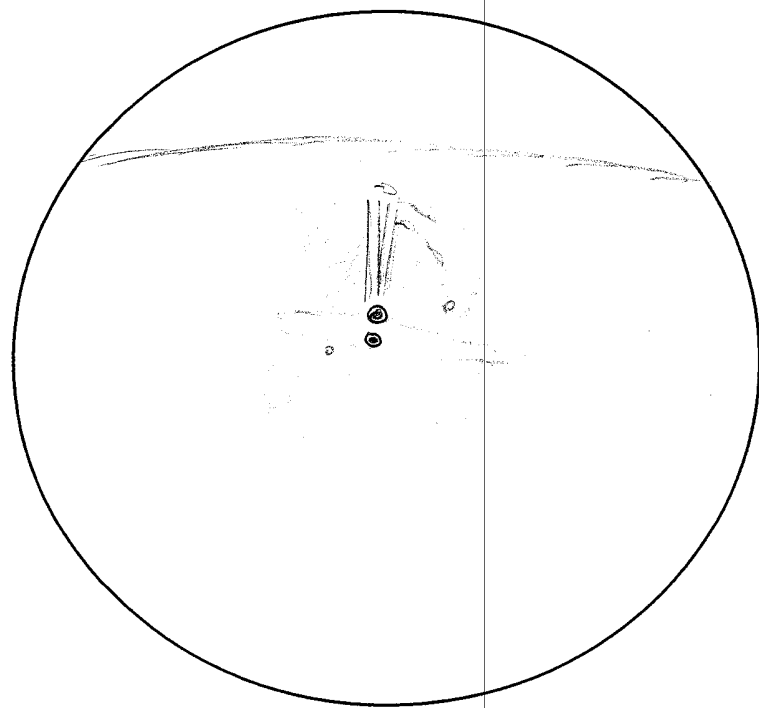
MISSION NAME	
LUNA 15 (USSR)	
DATE OF EXPLORATION	
LAUNCH 13 JULY 1969	
LUNAR ORBIT 17 JULY 1969	
CRASHED ON ATTEMPT AT LANDING AFTER 52 REVS.	
BRIEF DESCRIPTION OF SIGNIFICANCE	
COMPETED WITH APOLLO 11	
HAD ROCK SAMPLE CAPABILITY	
WITH RETURN CHSULE (FAILED)	
DESCRIPTION OF LUNAR SURFACE	
FLAT AREA IN MARE CRISIUM NEAR MINOR RILLE	

L2 #97

[illegible]

L2 #77

DATE 3/3/6 TIME 8:45 EST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 OP 316 475 ____
TARGET #77 MESSIER, MESSIER A, + RMS FILTER NO VP NB WB OIII ____
PHASE 42 PROGRAM Lunar II LOCATION RMCC RANCH HOME ____



← MESSIER A
← MESSIER

EXCELLENT RAYS OF BRIGHT MATERIAL OFF TOWARDS
TERMINATOR - PLUS SUBTLE BAND RUNNING N-S
THROUGH CRATERS AT 20000

L2

#78, #79

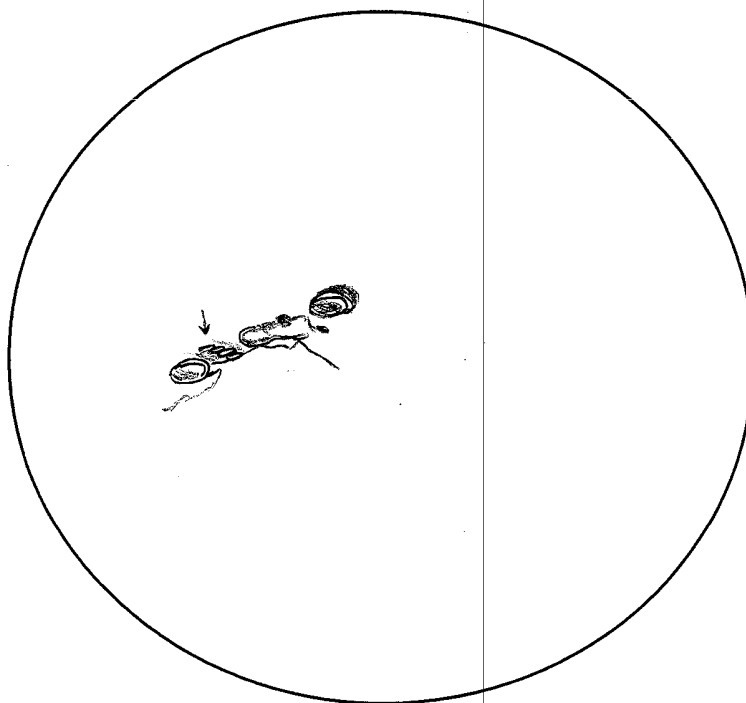
DATE 3/1/6 TIME 12:35 CST CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 16 475

TARGET #78 MONTES JURA FILTER NO VP NB WB OIII

PHASE II PROGRAM Lunar II LOCATION RMCC RANCH HOME



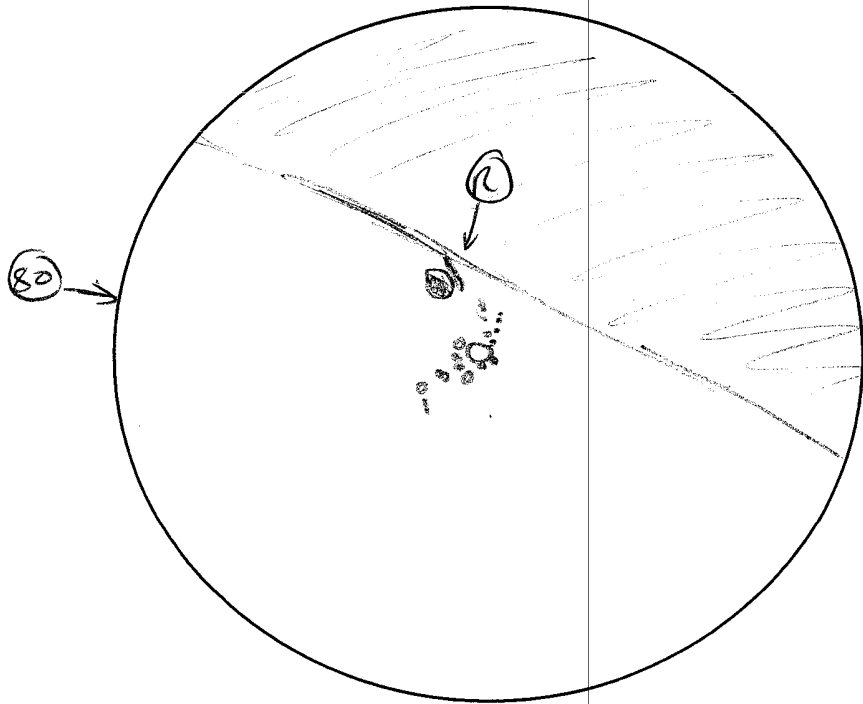
detail
mm

"stage" of 4 rectilinear features just off

SINUS ILLIDUM

#80 12

DATE 4/5/6 TIME 9:55 CST CDT CLARITY I II III IV V SEEING III II IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475 ____
TARGET 80 MILLION + CHAINS CRATER LOT FILTER NO VP NB WB OIII ____
PHASE 72 PROGRAM Lunar II LOCATION RMCC RANCH HOME ____



NICE OVAL MAIN CRATER WITH CHAINS OF TINY

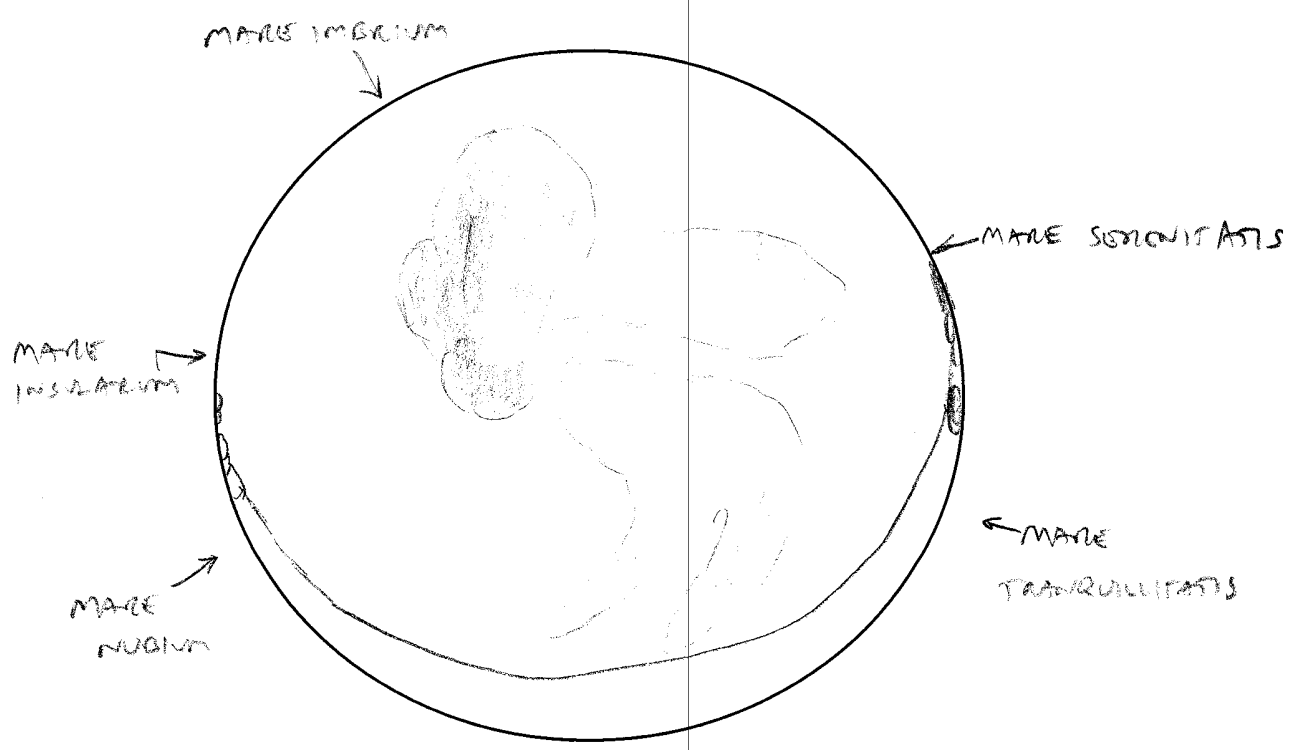
CRATERS RUNNING OFF TOWARDS TERM. ALSO

SOME TO EAST W/ESP. SMALL LINE OF 2 AS SHOWN

NICE STRAIGHT LK "BAR" AT (2)

L2
#83

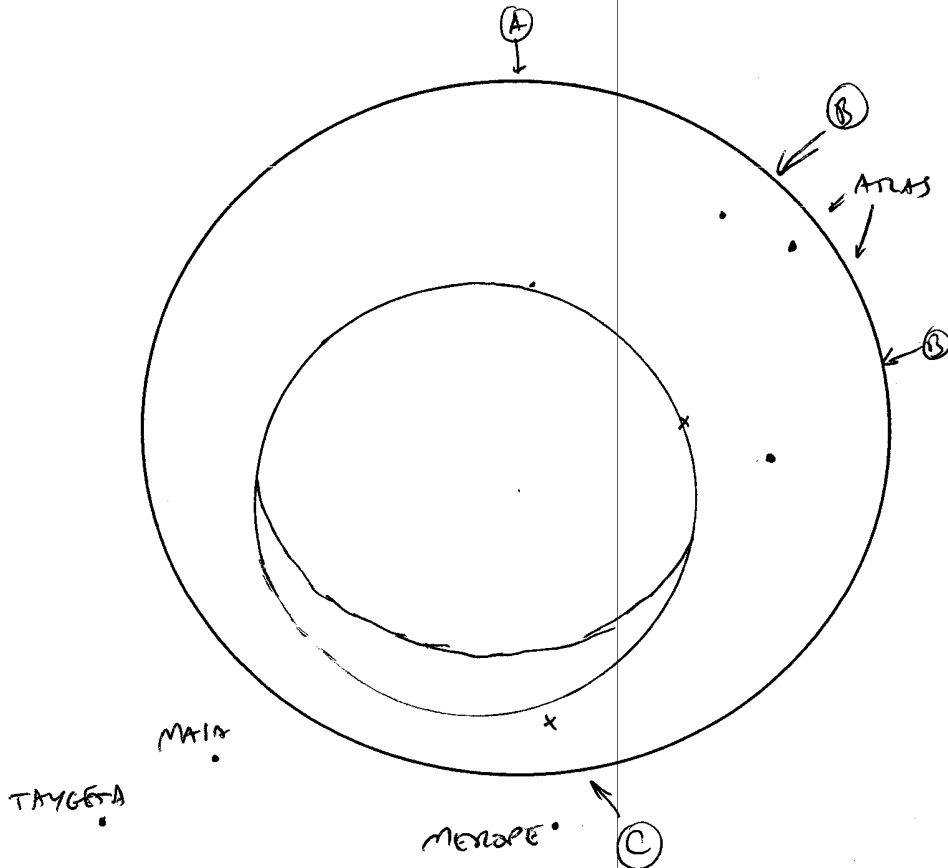
DATE 3/1/6 TIME 7:10 CSD CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475 ____
TARGET #83 EARTH SHINE FILTER NO VP NB WB OIII ____
PHASE 2d PROGRAM Lunar II LOCATION RMCC RANCH HOME ____



STUNNING LEVEL OF EARTH SHINE
ON ONLY SIDE - MOST OF THE MAJOR MARIA SEEN

L2 #86

DATE 4/1/6 TIME 7:12-7:43 CSD CDT CLARITY I II III IV V SEEING I II III IV V
 INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
 POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475
 TARGET 86 Close Conjunction FILTER NO VP NB WB OIII
 PHASE 3d PROGRAM Lunar II LOCATION RMCC RANCH HOME



(A) 7:12:00 ^{thru} → :35 gone! 47x w/dark interference & surprise

. ELECTRA (B) 7:41:25 gone! VP cond

NOTICE (C) had large ~~by~~ shadow @ 7:43:00

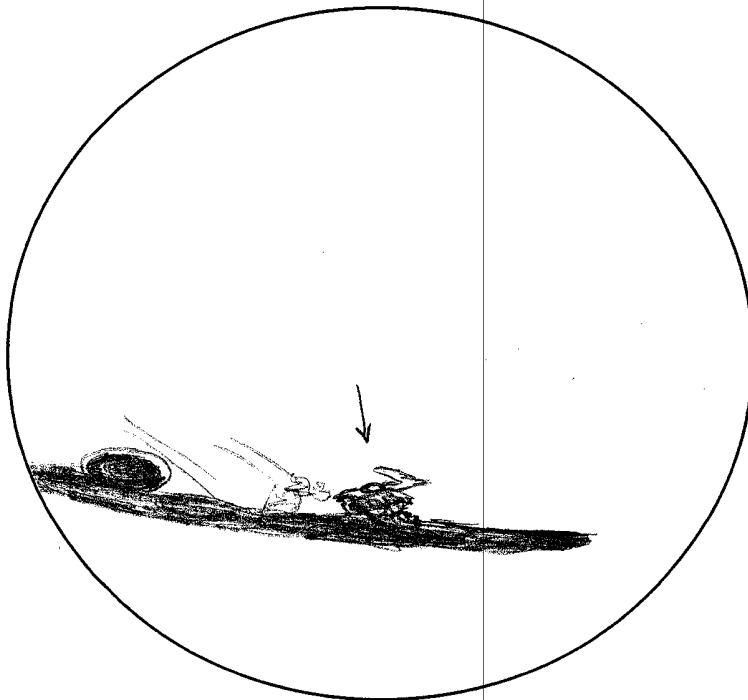
(A) = HIP 17791 7.0 mag

(B) = PLEIONE

(C) = ALCYONE

L2
#87

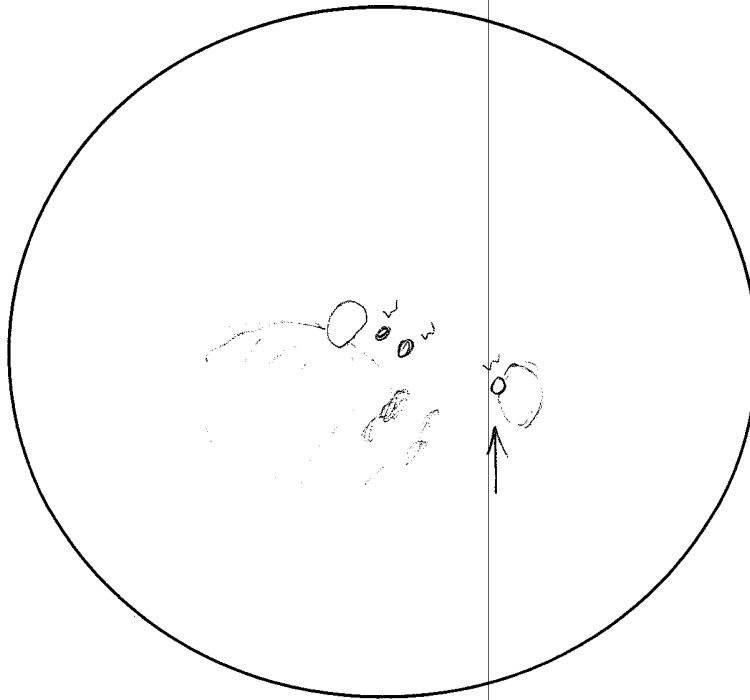
DATE 3/12/6 TIME 9:45 CST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 OP 316 475 ____
TARGET #87 BYRGIVUS A FILTER NO VP NB WB OIII ____
PHASE 13d (SUNRISE) PROGRAM Lunar II LOCATION RMCC RANCH HOME ____



NEAR LITTLE CRATER ON WALL OF BYRGIVUS WITH A
WIDE CONE SHAPED LIGHT AREA OF GREY EXTENDING FROM
IT PARALLEL TO WALL. TWO RAYS SEEN TO SOUTH
AS SHOWN

L2 #88

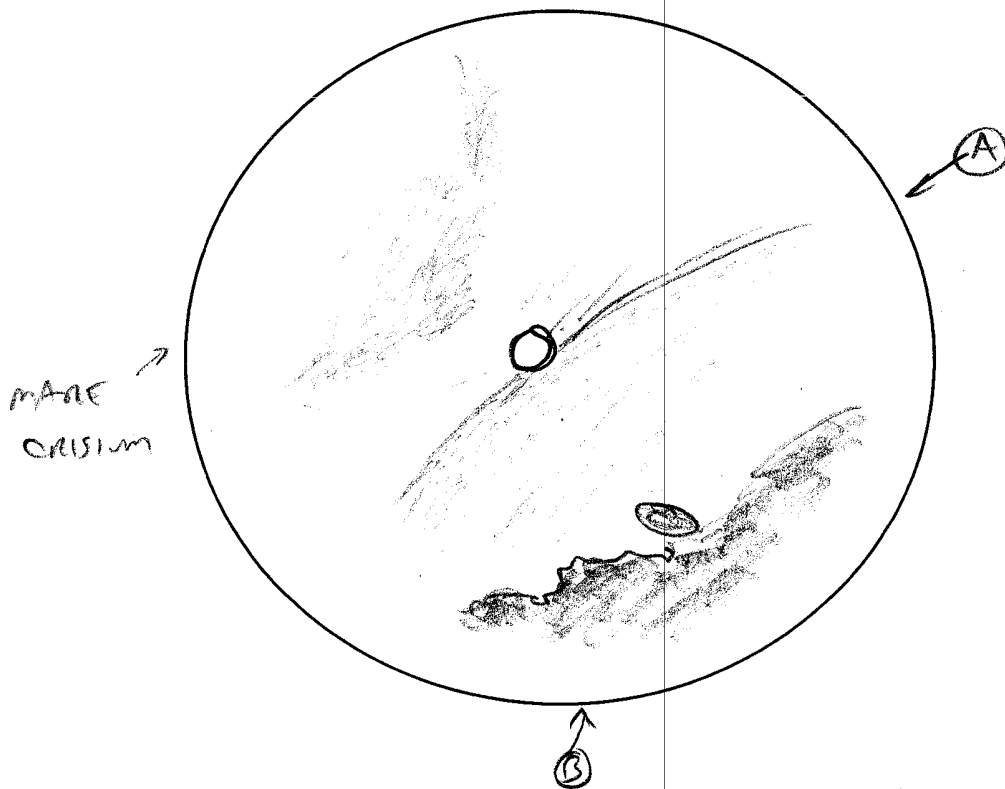
DATE 6/5/6 TIME 1:20 CST CDT CLARITY I II III IV V SEEING I II III IV V
 INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
 POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475 ____
 TARGET BYRGUS A (MIDDAY) FILTER NOVP NB WB OIII ____
 PHASE 19A PROGRAM Lunar II LOCATION RMCC RANCH HOME ____



Easily seen at this phase as a bright white
 walled crater on E wall of large Byrgus. Several
 other bright white formations nearby, with
 Mare Humoris dominating.

#89 C2

DATE 4/6/6 TIME 9:00 CST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 OP 316 475 ____
TARGET 89 Proclus (moon) FILTER NO VP NB WB OIII ____
PHASE 8d PROGRAM Lunar II LOCATION RMCC RANCH HOME ____



STANDS OUT BRILLIANTLY AS SNOW WHITE WALL
AGAINST VERY LIGHT GREY w/ some rays
& OBVIOUS BOUNDARY AGAINST PALLAS SOMNI (A)
ALSO THE BLACK OF (B) SINUS CONCORDIAE TO SW.

L2 #93
(1st)

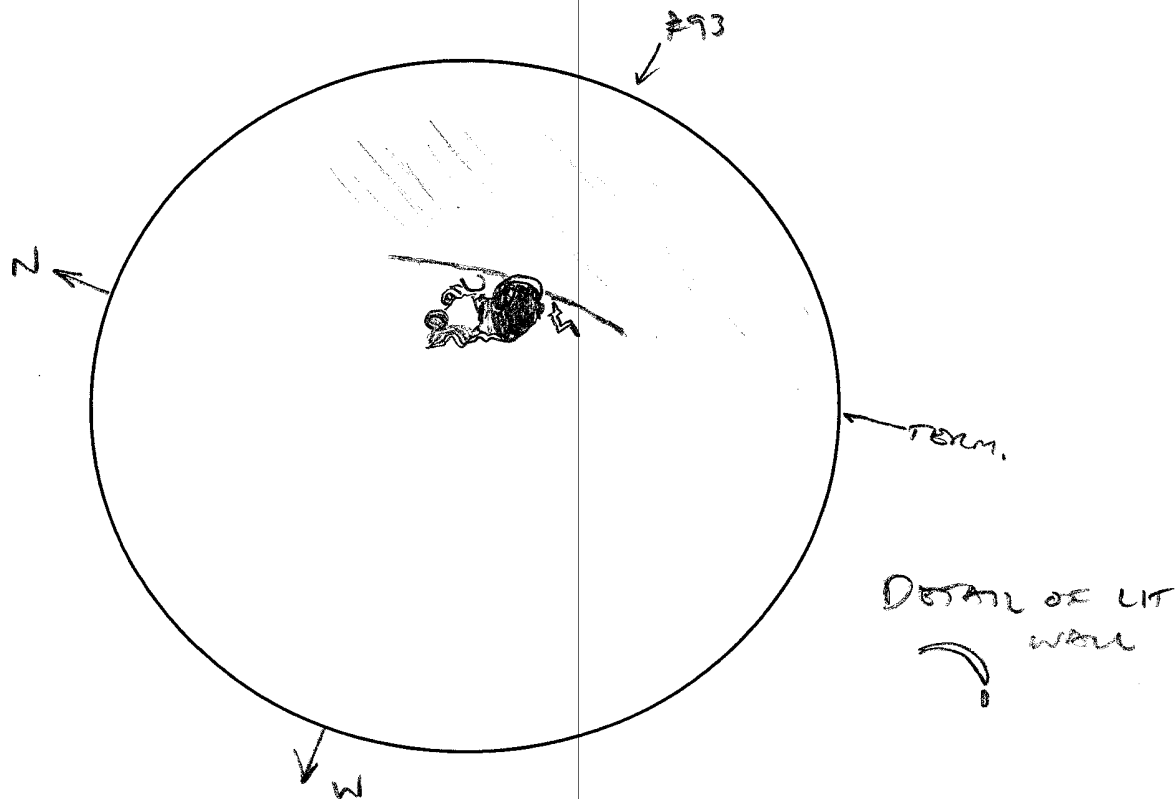
DATE 1/7/6 TIME 9:55 EST CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 316 475 190x 0

OBJECT #93 TYCHO (SUNRISE) FILTER NO NB WB OIII

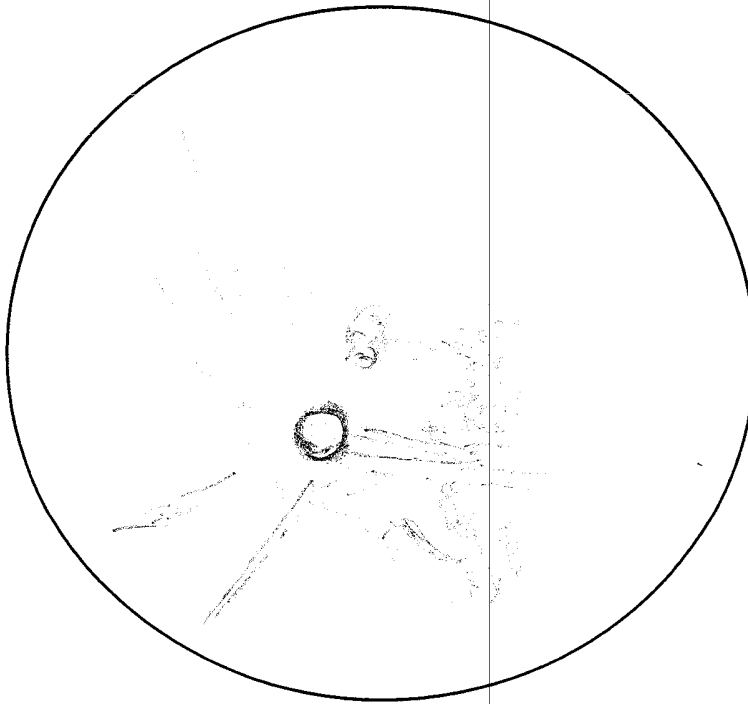
OBS. PROGRAM L2 LOC. RMCC RANCH HOME



VERY INTERESTING VIEW AS EDGE WALL BRIGHTLY
LIT (IN 2 PIECES) AND REST OF CRATER VERY
BLACK IN SHADOW & OBVIOUS ELLIPTICAL. JUST
GETTING SUNRISE ON L WALL!

L2 #94

DATE 4/1/6 TIME 9.50 CST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE
POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475 ____
TARGET 94 TYCHO (MIDWAY) FILTER NO VP NB WB OIII ____
PHASE 142 PROGRAM Lunar II LOCATION RMCC RANCH HOME



AMAZING "CIGARETTE HOLE" LOOK WITH DARKEN
PUNT AROUND EDGES & HORIZONTAL RMS

L2
#98

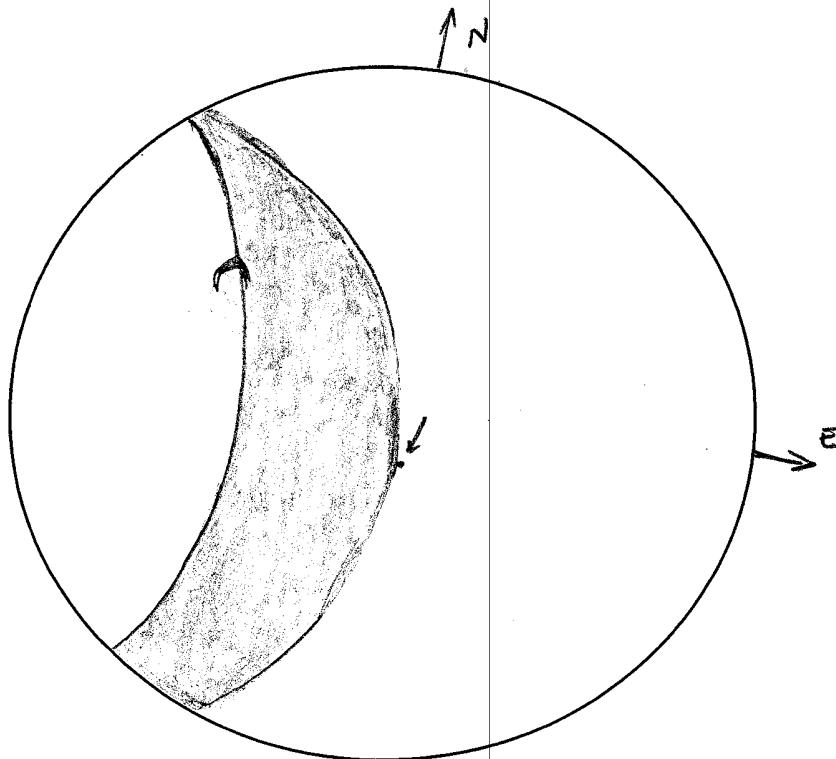
DATE 3/9/6 TIME 9:54 ~~CDT~~ CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 190 O/P 316 475

TARGET #98 occultation (w/cr) FILTER NO VP NB WB OIII

PHASE 10d PROGRAM Lunar II LOCATION RMCC RANCH HOME



also ~6m star

Very easily seen yellowish star disappeared
at 9:54:59 pm (3:54:59 UT) on dark limb

Feature shown is Sinus Iridum - very well placed.
Nearly central - about 10° N latitude (lunar)

Occultation Predictions for 43 Tula OK in March 2006
E.Long. - 95 56 Lat. 36 8 24.0 Alt. 264m. T.dia 1000mm. mag 0.0

day	Time	P	Star	Sp	Mag	%	Elon	Sun	Moon	CA	PA	VA	WA	Libration	A	B	RV	Cct	R.A.	(J2000)	Dec								
y	m	d	h	m	s	No	D	ill	Alt	Az	o	o	o	L	B	m/o	"/sec	o	h	m	s								
06	03	10	1	18	35	d	X 11947	K5	9.4	80+	127	-11	64	106	76S	119	179	109	+5.1	-6.2	+2.1-0.7	.312	-16	7	57	18.4	25	29	51
06	03	10	2	0	0	d	X106300		10.2	80+	127		71	119	67S	128	179	118	+5.0	-6.2	+2.2-1.5	.294	-21	7	58	10.3	25	24	28
06	03	10	3	31	43	d	X106576		10.0	80+	127		78	201	79S	116	98	106	+4.6	-6.1	+2.1-1.4	.317	-4	8	0	19.2	25	17	12
06	03	10	3	44	18	D	79857	F2	9.3	80+	127		77	213	76S	120	90	109	+4.6	-6.1	+2.0-1.6	.319	-6	8	0	34.1	25	14	53
06	03	10	3	55	5	D	1206	G8	5.9	80+	127		76	222	65N	80	43	69	+4.5	-6.1	+2.8+0.3	.268	+34	8	0	55.9	25	23	34
1206 = omega Cancr																													
06	03	10	4	6	40	d	X106662		10.2	80+	127		74	231	35N	50	6	39	+4.5	-6.1	+4.4+3.6	.138	+65	8	0	56.7	25	28	59
06	03	10	4	22	20	D	79855	A0	8.0	80+	128		71	238	15S	181	131	170	+4.4	-6.1	-0.7-6.6	.140	-65	8	0	26.2	25	2	2
06	03	10	4	39	46	d	79862	G5	10.0	81+	128		68	245	20S	175	121	164	+4.4	-6.0	-0.3-5.4	.175	-59	8	0	56.1	24	59	32
06	03	10	4	39	59	D	1211SA1		6.3	81+	128		69	245	68S	127	73	117	+4.4	-6.0	+1.5-2.2	.331	-12	8	1	43.8	25	5	22
1211 is triple : 6.3 11.0 45" 23.0 : 6.3 10.0 108" 295.0																													
06	03	10	4	51	19	D	79876	K0	9.2	81+	128		67	249	50N	65	8	54	+4.3	-6.0	+3.2+0.9	.216	+51	8	2	6.4	25	19	13
06	03	10	5	3	18	d	X106840		10.0	81+	128		64	253	61N	76	17	65	+4.3	-6.0	+2.6-0.1	.264	+41	8	2	27.5	25	14	38
06	03	10	5	5	2	D	79874	K7	8.5v	81+	128		64	253	52S	143	85	132	+4.3	-6.0	+0.9-2.8	.312	-27	8	2	5.4	24	58	35
79874 = FO Cnc, 8.60 to 8.77 Hp, Type LB:																													
06	03	10	5	6	40	r	1206	G8	5.9	81+	128		64	254	-44N	331	272	320	+4.3	-6.0	+0.7-3.2	.288	+145	8	0	55.9	25	23	34
1206 = omega Cancr																													
06	03	10	5	28	27	D	79888	K5	8.2	81+	128		59	258	74S	121	60	110	+4.2	-6.0	+1.3-2.0	.361	-4	8	2	55.7	24	59	3
06	03	10	5	28	40	d	79883	K5	9.1	81+	128		59	258	33S	163	102	152	+4.2	-6.0	+0.1-3.7	.252	-46	8	2	19.2	24	52	27
06	03	10	5	29	55	d	79881	G0	9.7	81+	128		59	258	28S	168	107	157	+4.2	-6.0	-0.2-4.1	.228	-51	8	2	15.5	24	51	55
06	03	10	5	49	15	D	79886	K0	8.6	81+	128		55	262	27S	168	106	157	+4.1	-5.9	-0.3-4.0	.235	-51	8	2	43.2	24	48	38
06	03	10	6	1	13	r	1211SA1		6.3	81+	128		53	265	-89N	286	223	275	+4.1	-5.9	+1.3-1.6	.375	-169	8	1	43.8	25	5	22
1211 is triple : 6.3 11.0 45" 23.0 : 6.3 10.0 108" 295.0																													
06	03	10	6	27	44	d	X106997		9.9	81+	128		48	268	30S	165	102	154	+4.0	-5.8	-0.4-3.5	.266	-48	8	3	45.9	24	42	1
06	03	10	7	35	44	d	79929	G0	9.3	81+	129		34	277	30S	165	103	154	+3.9	-5.7	-0.7-3.1	.291	-49	8	5	39.7	24	29	12

My observation (my ETX-125) was dec D = 3:54:59 UT

PARTIAL LUNAR ECLIPSE L2 #99
#100

DATE 10/17/5 TIME 6:52 CST CDT CLARITY I II III IV V SEEING III III IV V

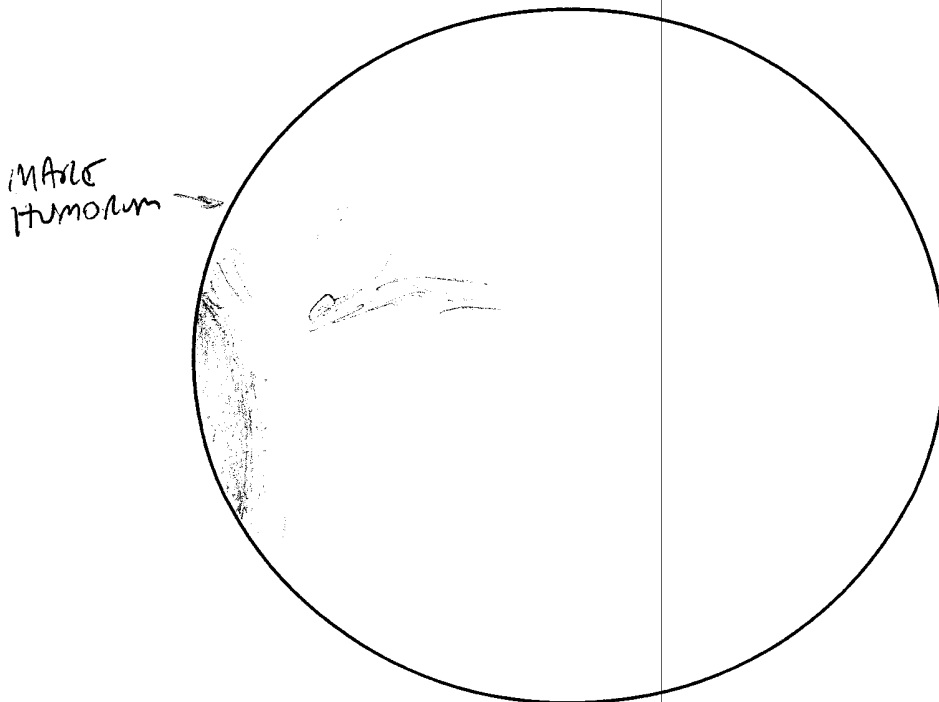
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 316 475

OBJECT LUNAR ECLIPSE FILTER NO NB WB OIII

OBS. PROGRAM L2 LOC. RMCC RANCH HOME

Phase = Full



FIRST SEEN
"BITE" AT
6:40 AM (11:40 AM)

THIS SEEMED TO BE MAX TO ME

MUCH BETTER THAN I EXPECTED - NICE "BITE" (11:50 AM)
OUT @ 1x & very good SIGHTS IN 10x50's WAS
SEEN ON CH. 6 AS LATE AS 7:16 AM BUT TOO ACTUALLY
LOW FOR ME @ 7:18 IN PARKING LOT. GVSL 7mm
HARRIET SAW IT TOO! LATER

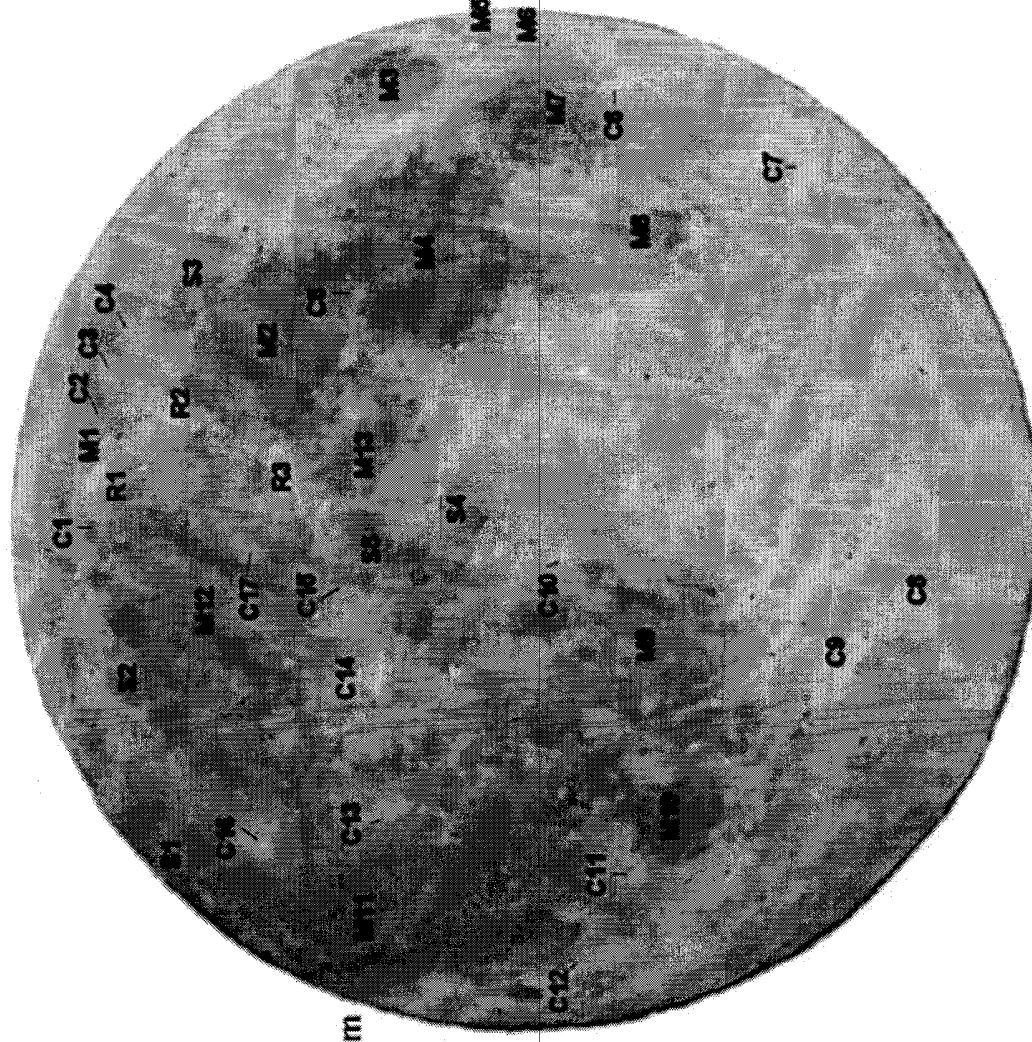
Draco Productions Lunar Map

MARIA - SEAS

- M1 - Mare Frigoris
- M2 - Mare Serenitatis
- M3 - Mare Crisium
- M4 - Mare Tranquillitatis
- M5 - Mare Undarum
- M6 - Mare Spumans
- M7 - Mare Fecunditatis
- M8 - Mare Nectaris
- M9 - Mare Nubium
- M10 - Mare Humorum
- M11 - Oceanus Procellarum
- M12 - Mare Imbrium
- M13 - Mare Vaporum

CRATERS

- C1 - Plato
- C2 - Aristoteles
- C3 - Hercules
- C4 - Atlas
- C5 - Plinius
- C6 - Langrenus
- C7 - Petavius
- C8 - Clavius
- C9 - Tycho
- C10 - Ptolemaeus
- C11 - Gassendi
- C12 - Grimaldi
- C13 - Kepler
- C14 - Copernicus
- C15 - Eratosthenes
- C16 - Aristarchus



SINUS (Bays) & LAKES

MOUNTAIN RANGES

[close window](#)

The October 17th Partial Lunar Eclipse

By Alan M. MacRobert

As lunar eclipses go, it won't be much. On Monday, October 17, 2005, the edge of the Moon will barely skim through Earth's shadow. Even at mid-eclipse, only 7 percent of the Moon's diameter will graze through the north-northwestern edge of the Earth's umbra (the shadow's dark central portion).

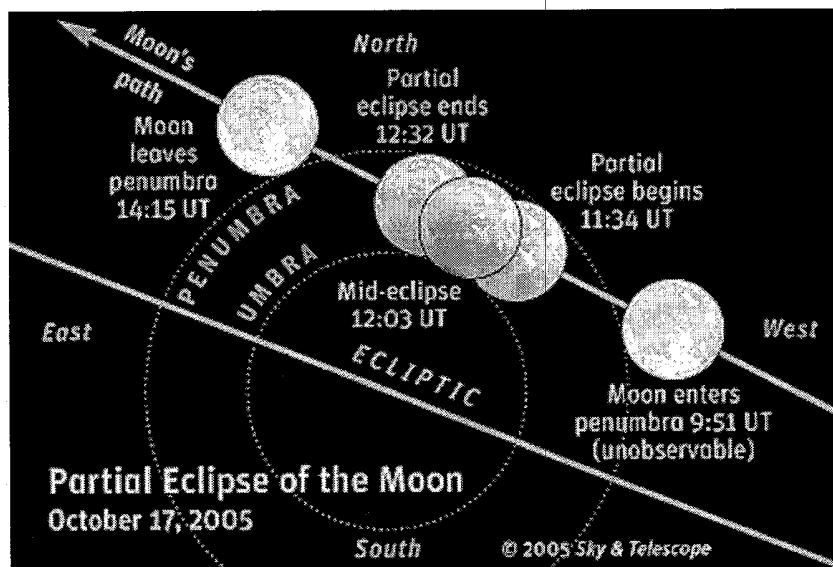
But an eclipse is an eclipse, and if you're correctly placed, you can add this one to your life list.

Western North America and Hawaii get a view of this event before dawn. Maximum eclipse comes at 12:03 Universal Time, which is 5:03 a.m. Pacific Daylight Time and 6:03 a.m. Mountain Daylight Time. For skywatchers farther east, the Moon will be getting quite low in the west and dawn will be growing bright. In the Central time zone you might catch the eclipse's early portion.

The first hint of the oncoming event may be visible as much as 1 hour and 20 minutes before mid-eclipse time. Look for a very weak shading across the Moon's left side; this is the pale outer fringe of Earth's shadow (the shadow's penumbra). The penumbral shading will get stronger for the next 50 minutes.

At that point, 29 minutes before mid-eclipse, the Moon's edge will begin to intrude into the dark umbra for the start of partial eclipse. Nearly an hour later partial eclipse ends, and the show is pretty much over.

The eclipse is also visible in Australia, New Zealand, and throughout the western Pacific Rim, during evening hours on the 17th local date.



This diagram shows the Moon's path (from lower right to upper left) through the edge of Earth's shadow. The dark umbra of the shadow barely nicks the full Moon's south-southeastern edge before dawn on October 17, 2005, for western North America. Be sure to

OPTIONAL A

#1

DATE 1/5/6 TIME 9:00 CST CDT CLARITY I II III IV V SEEING I II III IV V

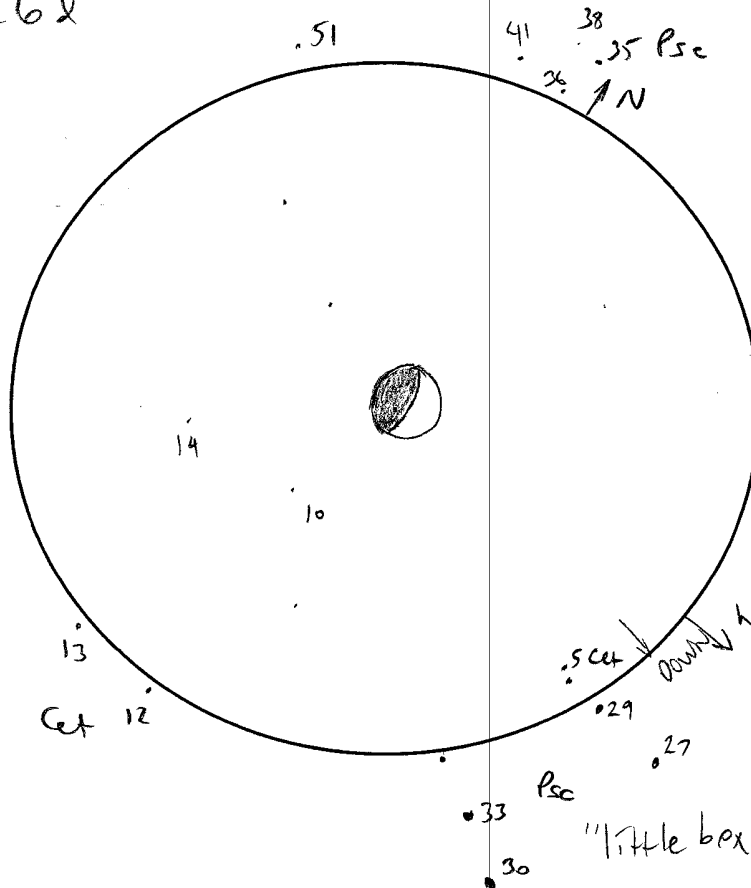
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 316 475

OBJECT MOON FILTER NO NB WB OIII

OBS. PROGRAM L2 LOC. RMCC RANCH HOME

Phase = 62



44 Psc must have been too
close to see near SE edge. Oh 21 +20.5
62 old

OPTIONAL A

#2

DATE 1/6/6 TIME 9115 (CST) CDT CLARITY (I) II III IV V SEEING (I) II III IV V

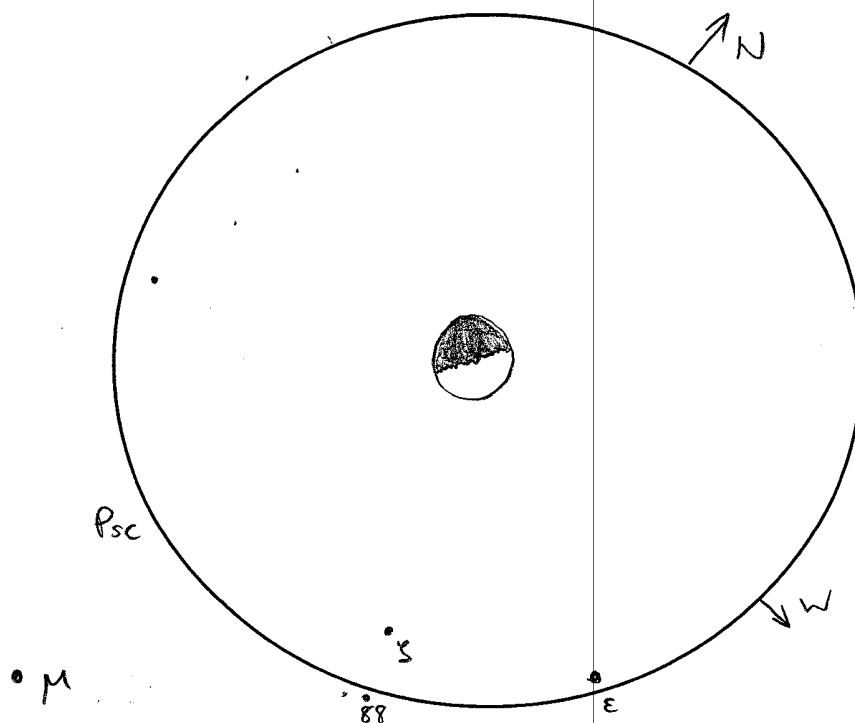
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR (10x50) EYE

POWER 38 60 121 150 250 375 (10) 47 73 153 316 475

OBJECT MOON FILTER (NO) NB WB OIII

OBS. PROGRAM L2 LOC. RMCC RANCH HOME

Phase = 72



NOW AT 1Q PHASE 72 old 1616 +11°

OPTIONAL
A #3

DATE 1/7/6 TIME 9:05 CDT CLARITY I II III IV V SEEING I II III IV V

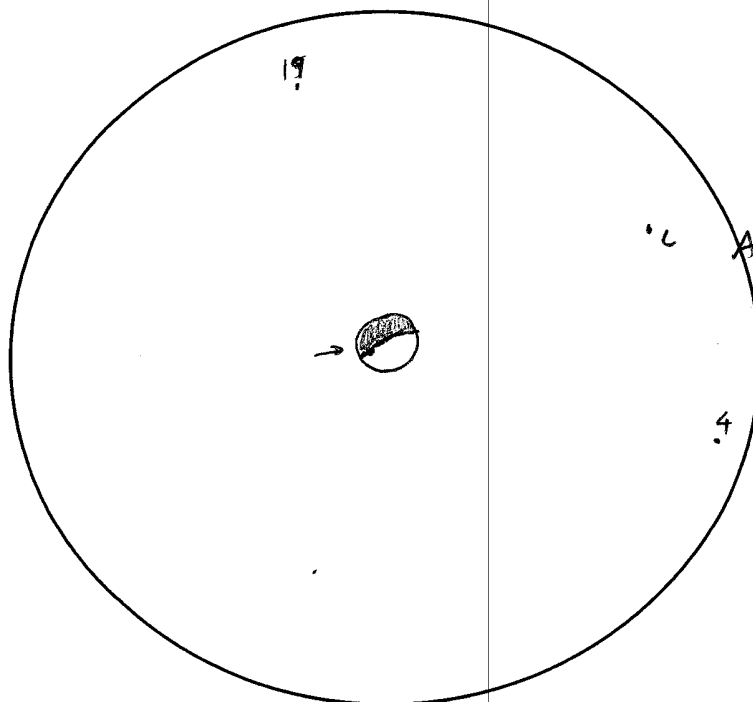
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR 10x50 EYE

POWER 38 60 121 150 250 375 10 47 73 153 316 475

OBJECT Moon FILTER NO NB WB OIII

OBS. PROGRAM L2 LOC. RMCC RANCH HOME

Phase = 8d



8° to E

Psc

Terminator of 8d old moon obviously "cut"

by Walker (?) 260 +14°

OPTIONAL
A
#4

DATE 1/8/6 TIME 9:30 (CST) CDT CLARITY (I) II III IV V SEEING (I) II III IV V

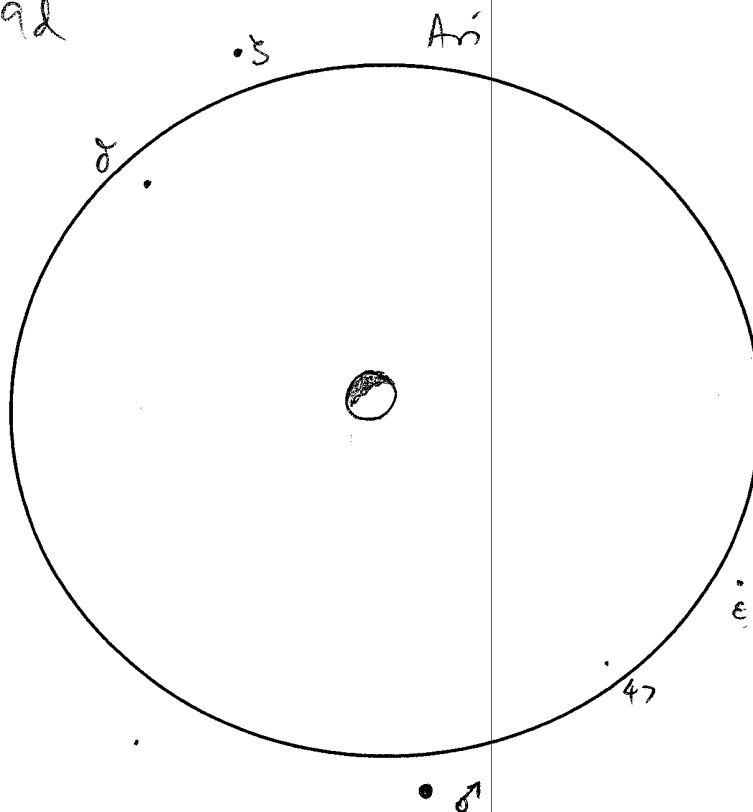
INSTRUMENT XT-12 ETX-125 50 x 800 mm RR (10x50) EYE

POWER 38 60 121 150 250 375 (10) 47 73 153 316 475

OBJECT D FILTER (NO) NB WB OIII

OBS. PROGRAM .65 .63 L2 LOC. RMCC RANCH (HOME)

Phase = 9d



While sunset, ♂ much closer

3h 05 +20 pos. Phase "football"

with terminator obviously interrupted by
3 major features.

OPTIONAL B

#1

DATE 1/7/6 TIME 12:15 ③ CDT CLARITY I II ③ IV V SEEING ① III IV V

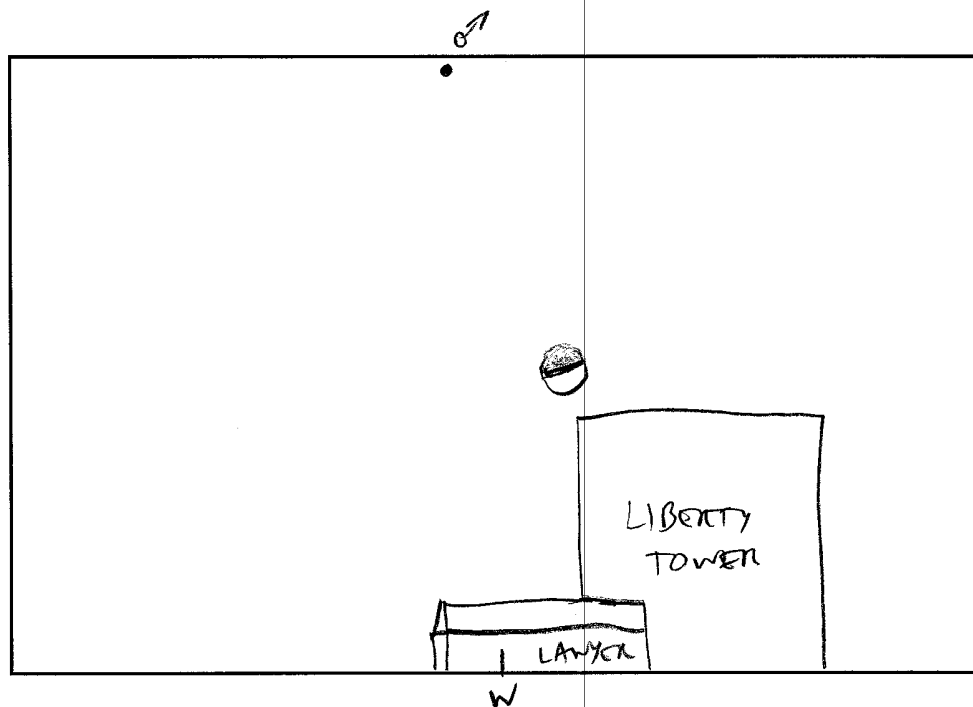
INSTRUMENT ETX-125 10x50 ⑤ EYE POWER 10X 73X 153X 475X ①X

OBJECT D

DESCRIPTION POSITION OF SETTING

Phase = FQ

150° D VS LAMPHOUSE



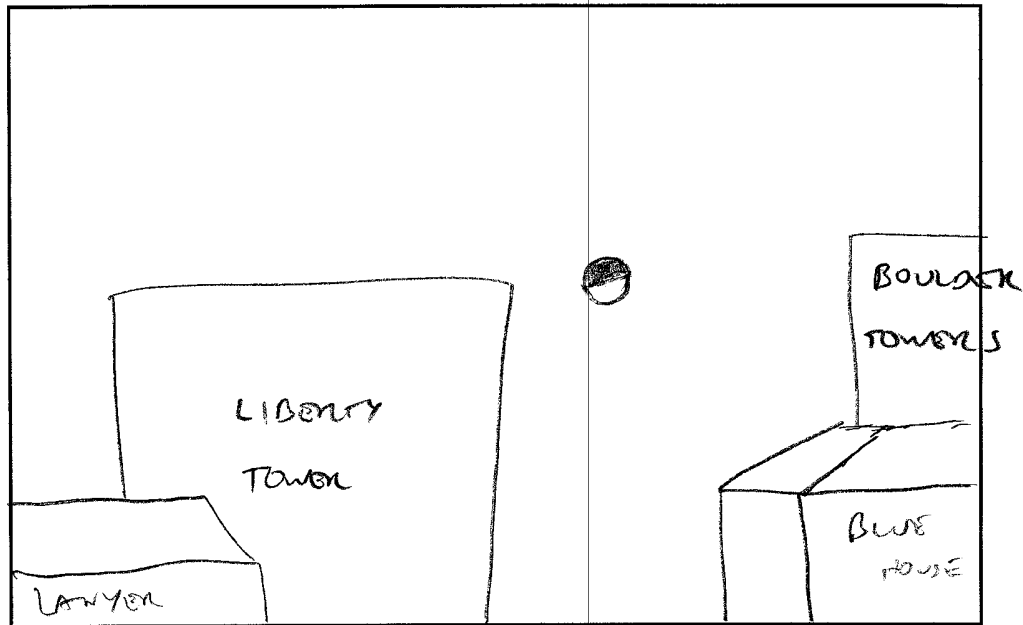
MOON EXAGGERATED TO SHOW PHASE - VERY NEAR

1Q, SETTING OVER BUILDING SL. N OF W,

20° BELOW $\nearrow$ ON 1/7/6

L2 OPT B-2

DATE 2/5/6 TIME 12:15 ☉ CST CDT CLARITY I II III IV V SEEING III III IV V
INSTRUMENT ETX-125 10x50 EYE POWER 10X 73X 153X 475X
OBJECT FQ MOON DESCRIPTION Fq MOON MOVING N



^{quite}
NOT ⁷² yet but FQ - refer to last months

position - SURE WAS A SHARP MONTH!

NOTE: BY NEXT FQ (3/6/7) - IT WAS
STANDING ABOVE LIBERTY TOWER AT 9:30 AM -
3+1/2 HRS FROM SETTING!

RETURN TO SUNSPOTTERS
BOOK

DATE 4/8/5 TIME 4:51 CST CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT ETX-125 50 x 800 mm RR 10x50 EYE

POWER 10 47 73 153 316 475 20 30 64 80 133 200

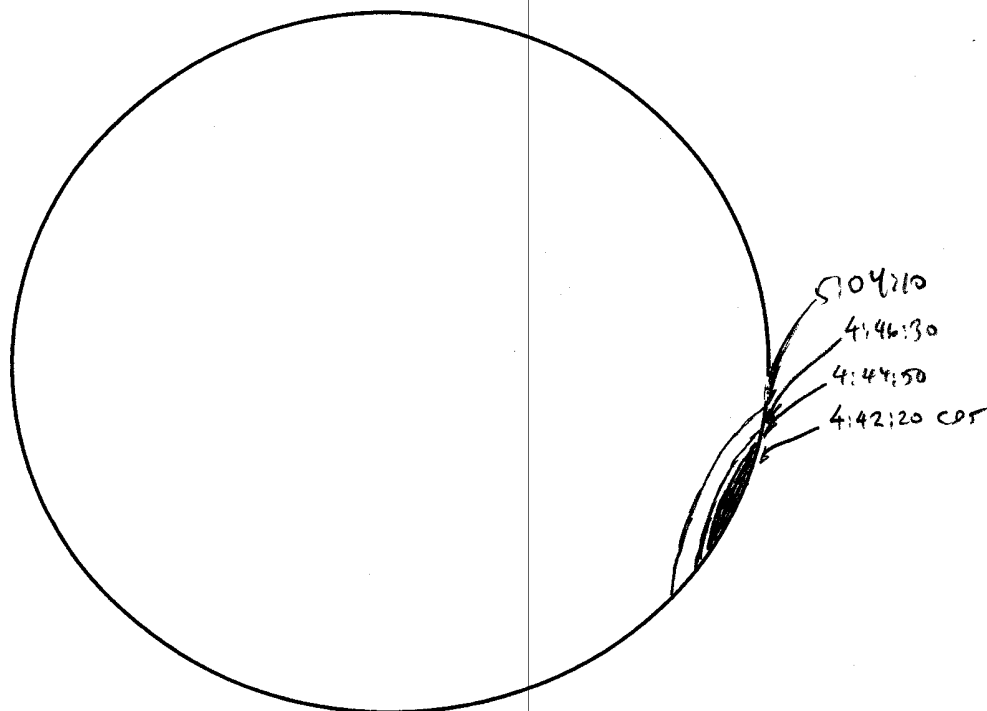
OBJECT SUN

FILTER NO NB WB OIII BANDER

OBS. PROGRAM SUNSPOTTERS

LOCATION RMCC HOME

MOON PHASE = NEW



PARTIAL ECLIPSE - SEE ALSO SUNSPOTTERS FORM TODAY

FOR SPOTS. FIRST NOTICED "BITE" AT 4:40 CDT =

21:40 UT. APPROX. 10% WAS MAXIMUM AT

25:05 CDT = 22:05 UT