

APOLLO 17

FINAL

FLIGHT PLAN

OCTOBER 28, 1972

SUBMITTED BY:


T. W. HOLLOWAY
BOOK MANAGER

APPROVED BY:


JAMES W. BILODEAU, CHIEF
CREW PROCEDURES DIVISION


DONALD K. SLAYTON
DIRECTOR OF FLIGHT CREW OPERATIONS

CONCURRENCE:


OWEN MORRIS, MANAGER
APOLLO SPACECRAFT PROGRAM OFFICE


HOWARD W. TINDALL
DIRECTOR OF FLIGHT OPERATIONS

It is requested that any organization having comments, questions, or suggestions concerning this document contact T. W. Holloway, Flight Planning Branch, CG52, Building 4, room 230, telephone 483-4271.

This document is under the configuration control of the Crew Procedures Control Board (CPCB). All proposed changes should be submitted to the Apollo Flight Data File Manager, T. W. Holloway, CG52, Building 4, room 230, telephone 483-4271.

Distribution of this document is controlled by Flight Data File Manager, T. W. Holloway, Flight Planning Branch, Crew Procedures Division.

ACKNOWLEDGMENTS

Acknowledgment is made to the following for their contributions to the Apollo 17 Flight Plan:

Principal Contributors

Wood Calvert *WC*
Richard Meckley *PCM*
Billy Pinkston *BSP*
Steve Pollock *SP*
Richard Rogers *RR*

Dennis Wammack *DW*
Chuck Stough *CS*
Leon Vick *L*
William Wolf *W.W.*
Elvin Pippert *EP*
Tom Hanchett *TH*

Graphics and Copy Preparation Support

Andy Adams *AA*
Erin Applegate *EA*
Barbara Bolthouse *ZBB*
Mike Cox *MC*
Pat Dewey *PD*
Barbara Forse *BF*
Evelyn Franks *EF*

Netha Mayberry *NM*
Christine Rizzo *CR*
Lela Stewart *LS*
James Wilkinson *JW*
Marcy Kennedy *MK*
Margaret Jones *MJ*
Gary Green *GG*

The CSM and LM Attitude information is taken from the document, "Operational Lunar Orbit Attitude Sequence for Apollo 17".

Consumable Analysis data were prepared by the Consumables Analysis Section of the Mission Planning and Analysis Division.

i
FLIGHT PLAN

LIST OF EFFECTIVE PAGES

FINAL 10/23/72

PAGE	DATE	PAGE	DATE	PAGE	DATE
i	10/23/72	2-14	10/23/72	3-31	10/23/72
ii	10/23/72	2-15	10/23/72	3-32	10/23/72
iii	10/23/72	2-16	10/23/72	3-33	10/23/72
iv	10/23/72	2-17	10/23/72	3-34	10/23/72
v	10/23/72	2-18	10/23/72	3-35	10/23/72
vi	10/23/72	2-19	10/23/72	3-36	10/23/72
vii	10/23/72	2-20	10/23/72	3-37	10/23/72
viii	10/23/72	2-21	10/23/72	3-38	10/23/72
ix	10/23/72	2-22	10/23/72	3-39	10/23/72
x	10/23/72	2-23	10/23/72	3-40	10/23/72
xi	10/23/72	2-24	10/23/72	3-41	10/23/72
xii	10/23/72	2-25	10/23/72	3-42	10/23/72
xiii	10/23/72	2-26	10/23/72	3-43	10/23/72
xiv	10/23/72	2-27	10/23/72	3-44	10/23/72
xv	10/23/72	2-28	10/23/72	3-45	10/23/72
xvi	10/23/72	2-29	10/23/72	3-46	10/23/72
xvii	10/23/72	2-30	10/23/72	3-47	10/23/72
xviii	10/23/72	2-31	10/23/72	3-48	10/23/72
xix	10/23/72	3-1	10/23/72	3-49	10/23/72
xx	10/23/72	3-2	10/23/72	3-50	10/23/72
xxi	10/23/72	3-3	10/23/72	3-51	10/23/72
xxii	10/23/72	3-4	10/23/72	3-52	10/23/72
xxiii	10/23/72	3-5	10/23/72	3-53	10/23/72
xxiv	10/23/72	3-6	10/23/72	3-54	10/23/72
xxv	10/23/72	3-7	10/23/72	3-55	10/23/72
1-1	10/23/72	3-8	10/23/72	3-56	10/23/72
1-2	10/23/72	3-9	10/23/72	3-57	10/23/72
1-3	10/23/72	3-10	10/23/72	3-58	10/23/72
1-4	10/23/72	3-11	10/23/72	3-59	10/23/72
1-5	10/23/72	3-12	10/23/72	3-60	10/23/72
1-6	10/23/72	3-13	10/23/72	3-61	10/23/72
1-7	10/23/72	3-14	10/23/72	3-62	10/23/72
1-8	10/23/72	3-15	10/23/72	3-63	10/23/72
1-9	10/23/72	3-16	10/23/72	3-64	10/23/72
1-10	10/23/72	3-17	10/23/72	3-65	10/23/72
2-1	10/23/72	3-18	10/23/72	3-66	10/23/72
2-2	10/23/72	3-19	10/23/72	3-67	10/23/72
2-3	10/23/72	3-20	10/23/72	3-68	10/23/72
2-4	10/23/72	3-21	10/23/72	3-69	10/23/72
2-5	10/23/72	3-22	10/23/72	3-70	10/23/72
2-6	10/23/72	3-23	10/23/72	3-71	10/23/72
2-7	10/23/72	3-24	10/23/72	3-72	10/23/72
2-8	10/23/72	3-25	10/23/72	3-73	10/23/72
2-9	10/23/72	3-26	10/23/72	3-74	10/23/72
2-10	10/23/72	3-27	10/23/72	3-75	10/23/72
2-11	10/23/72	3-28	10/23/72	3-76	10/23/72
2-12	10/23/72	3-29	10/23/72	3-77	10/23/72
2-13	10/23/72	3-30	10/23/72	3-78	10/23/72

LIST OF EFFECTIVE PAGES (CONT)

PAGE	DATE	PAGE	DATE	PAGE	DATE
3-79 . . .	10/23/72	3-132 . . .	10/23/72	3-185 . . .	10/23/72
3-80 . . .	10/23/72	3-133 . . .	10/23/72	3-186 . . .	10/23/72
3-81 . . .	10/23/72	3-134 . . .	10/23/72	3-187 . . .	10/23/72
3-82 . . .	10/23/72	3-135 . . .	10/23/72	3-188 . . .	10/23/72
3-83 . . .	10/23/72	3-136 . . .	10/23/72	3-189 . . .	10/23/72
3-84 . . .	10/23/72	3-137 . . .	10/23/72	3-190 . . .	10/23/72
3-85 . . .	10/23/72	3-138 . . .	10/23/72	3-191 . . .	10/23/72
3-86 . . .	10/23/72	3-139 . . .	10/23/72	3-192 . . .	10/23/72
3-87 . . .	10/23/72	3-140 . . .	10/23/72	3-193 . . .	10/23/72
3-88 . . .	10/23/72	3-141 . . .	10/23/72	3-194 . . .	10/23/72
3-89 . . .	10/23/72	3-142 . . .	10/23/72	3-195 . . .	10/23/72
3-90 . . .	10/23/72	3-143 . . .	10/23/72	3-196 . . .	10/23/72
3-91 . . .	10/23/72	3-144 . . .	10/23/72	3-197 . . .	10/23/72
3-92 . . .	10/23/72	3-145 . . .	10/23/72	3-198 . . .	10/23/72
3-93 . . .	10/23/72	3-146 . . .	10/23/72	3-199 . . .	10/23/72
3-94 . . .	10/23/72	3-147 . . .	10/23/72	3-200 . . .	10/23/72
3-95 . . .	10/23/72	3-148 . . .	10/23/72	3-201 . . .	10/23/72
3-96 . . .	10/23/72	3-149 . . .	10/23/72	3-202 . . .	10/23/72
3-97 . . .	10/23/72	3-150 . . .	10/23/72	3-203 . . .	10/23/72
3-98 . . .	10/23/72	3-151 . . .	10/23/72	3-204 . . .	10/23/72
3-99 . . .	10/23/72	3-152 . . .	10/23/72	3-205 . . .	10/23/72
3-100 . . .	10/23/72	3-153 . . .	10/23/72	3-206 . . .	10/23/72
3-101 . . .	10/23/72	3-154 . . .	10/23/72	3-207 . . .	10/23/72
3-102 . . .	10/23/72	3-155 . . .	10/23/72	3-208 . . .	10/23/72
3-103 . . .	10/23/72	3-156 . . .	10/23/72	3-209 . . .	10/23/72
3-104 . . .	10/23/72	3-157 . . .	10/23/72	3-210 . . .	10/23/72
3-105 . . .	10/23/72	3-158 . . .	10/23/72	3-211 . . .	10/23/72
3-106 . . .	10/23/72	3-159 . . .	10/23/72	3-212 . . .	10/23/72
3-107 . . .	10/23/72	3-160 . . .	10/23/72	3-213 . . .	10/23/72
3-108 . . .	10/23/72	3-161 . . .	10/23/72	3-214 . . .	10/23/72
3-109 . . .	10/23/72	3-162 . . .	10/23/72	3-215 . . .	10/23/72
3-110 . . .	10/23/72	3-163 . . .	10/23/72	3-216 . . .	10/23/72
3-111 . . .	10/23/72	3-164 . . .	10/23/72	3-217 . . .	10/23/72
3-112 . . .	10/23/72	3-165 . . .	10/23/72	3-218 . . .	10/23/72
3-113 . . .	10/23/72	3-166 . . .	10/23/72	3-219 . . .	10/23/72
3-114 . . .	10/23/72	3-167 . . .	10/23/72	3-220 . . .	10/23/72
3-115 . . .	10/23/72	3-168 . . .	10/23/72	3-221 . . .	10/23/72
3-116 . . .	10/23/72	3-169 . . .	10/23/72	3-222 . . .	10/23/72
3-117 . . .	10/23/72	3-170 . . .	10/23/72	3-223 . . .	10/23/72
3-118 . . .	10/23/72	3-171 . . .	10/23/72	3-224 . . .	10/23/72
3-119 . . .	10/23/72	3-172 . . .	10/23/72	3-225 . . .	10/23/72
3-120 . . .	10/23/72	3-173 . . .	10/23/72	3-226 . . .	10/23/72
3-121 . . .	10/23/72	3-174 . . .	10/23/72	3-227 . . .	10/23/72
3-122 . . .	10/23/72	3-175 . . .	10/23/72	3-228 . . .	10/23/72
3-123 . . .	10/23/72	3-176 . . .	10/23/72	3-229 . . .	10/23/72
3-124 . . .	10/23/72	3-177 . . .	10/23/72	3-230 . . .	10/23/72
3-125 . . .	10/23/72	3-178 . . .	10/23/72	3-231 . . .	10/23/72
3-126 . . .	10/23/72	3-179 . . .	10/23/72	3-232 . . .	10/23/72
3-127 . . .	10/23/72	3-180 . . .	10/23/72	3-233 . . .	10/23/72
3-128 . . .	10/23/72	3-181 . . .	10/23/72	3-234 . . .	10/23/72
3-129 . . .	10/23/72	3-182 . . .	10/23/72	3-235 . . .	10/23/72
3-130 . . .	10/23/72	3-183 . . .	10/23/72	3-236 . . .	10/23/72
3-131 . . .	10/23/72	3-184 . . .	10/23/72	3-237 . . .	10/23/72

LIST OF EFFECTIVE PAGES (CONT)

PAGE	DATE	PAGE	DATE	PAGE	DATE
3-238	10/23/72	3-290	10/23/72	3-342	10/23/72
3-239	10/23/72	3-291	10/23/72	3-343	10/23/72
3-240	10/23/72	3-292	10/23/72	3-344	10/23/72
3-241	10/23/72	3-293	10/23/72	3-345	10/23/72
3-242	10/23/72	3-294	10/23/72	3-346	10/23/72
3-243	10/23/72	3-295	10/23/72	3-347	10/23/72
3-244	10/23/72	3-296	10/23/72	3-348	10/23/72
3-245	10/23/72	3-297	10/23/72	3-349	10/23/72
3-246	10/23/72	3-298	10/23/72	3-350	10/23/72
3-247	10/23/72	3-299	10/23/72	3-351	10/23/72
3-248	10/23/72	3-300	10/23/72	3-352	10/23/72
3-249	10/23/72	3-301	10/23/72	3-353	10/23/72
3-250	10/23/72	3-302	10/23/72	3-354	10/23/72
3-251	10/23/72	3-303	10/23/72	3-355	10/23/72
3-252	10/23/72	3-304	10/23/72	3-356	10/23/72
3-253	10/23/72	3-305	10/23/72	3-357	10/23/72
3-254	10/23/72	3-306	10/23/72	3-358	10/23/72
3-255	10/23/72	3-307	10/23/72	3-359	10/23/72
3-256	10/23/72	3-308	10/23/72	3-360	10/23/72
3-257	10/23/72	3-309	10/23/72	3-361	10/23/72
3-258	10/23/72	3-310	10/23/72	3-362	10/23/72
3-259	10/23/72	3-311	10/23/72	3-363	10/23/72
3-260	10/23/72	3-312	10/23/72	3-364	10/23/72
3-261	10/23/72	3-313	10/23/72	3-365	10/23/72
3-262	10/23/72	3-314	10/23/72	3-366	10/23/72
3-263	10/23/72	3-315	10/23/72	3-367	10/23/72
3-264	10/23/72	3-316	10/23/72	3-368	10/23/72
3-265	10/23/72	3-317	10/23/72	3-369	10/23/72
3-266	10/23/72	3-318	10/23/72	3-370	10/23/72
3-267	10/23/72	3-319	10/23/72	3-371	10/23/72
3-268	10/23/72	3-320	10/23/72	3-372	10/23/72
3-269	10/23/72	3-321	10/23/72	3-373	10/23/72
3-270	10/23/72	3-322	10/23/72	3-374	10/23/72
3-271	10/23/72	3-323	10/23/72	3-375	10/23/72
3-272	10/23/72	3-324	10/23/72	3-376	10/23/72
3-273	10/23/72	3-325	10/23/72	3-377	10/23/72
3-274	10/23/72	3-326	10/23/72	3-378	10/23/72
3-275	10/23/72	3-327	10/23/72	3-379	10/23/72
3-276	10/23/72	3-328	10/23/72	3-380	10/23/72
3-277	10/23/72	3-329	10/23/72	3-381	10/23/72
3-278	10/23/72	3-330	10/23/72	3-382	10/23/72
3-279	10/23/72	3-331	10/23/72	3-383	10/23/72
3-280	10/23/72	3-332	10/23/72	3-384	10/23/72
3-281	10/23/72	3-333	10/23/72	3-385	10/23/72
3-282	10/23/72	3-334	10/23/72	3-386	10/23/72
3-283	10/23/72	3-335	10/23/72	3-387	10/23/72
3-284	10/23/72	3-336	10/23/72	3-388	10/23/72
3-285	10/23/72	3-337	10/23/72	3-389	10/23/72
3-286	10/23/72	3-338	10/23/72	3-390	10/23/72
3-287	10/23/72	3-339	10/23/72	3-391	10/23/72
3-288	10/23/72	3-340	10/23/72	3-392	10/23/72
3-289	10/23/72	3-341	10/23/72	3-393	10/23/72

LIST OF EFFECTIVE PAGES (CONT)

PAGE	DATE	PAGE	DATE	PAGE	DATE
3-394 . . .	10/23/72	4-30 . . .	10/23/72	6-13 . . .	10/23/72
3-395 . . .	10/23/72	4-31 . . .	10/23/72	6-14 . . .	10/23/72
3-396 . . .	10/23/72	4-32 . . .	10/23/72	6-15 . . .	10/23/72
3-397 . . .	10/23/72	4-33 . . .	10/23/72	6-16 . . .	10/23/72
3-398 . . .	10/23/72	4-34 . . .	10/23/72	6-17 . . .	10/23/72
3-399 . . .	10/23/72	4-35 . . .	10/23/72	6-18 . . .	10/23/72
3-400 . . .	10/23/72	4-36 . . .	10/23/72	6-19 . . .	10/23/72
3-401 . . .	10/23/72	4-37 . . .	10/23/72	6-20 . . .	10/23/72
3-402 . . .	10/23/72	5-1 . . .	10/23/72	6-21 . . .	10/23/72
3-403 . . .	10/23/72	5-2 . . .	10/23/72	6-22 . . .	10/23/72
3-404 . . .	10/23/72	5-3 . . .	10/23/72	6-23 . . .	10/23/72
3-405 . . .	10/23/72	5-4 . . .	10/23/72	6-24 . . .	10/23/72
3-406 . . .	10/23/72	5-5 . . .	10/23/72	6-25 . . .	10/23/72
3-407 . . .	10/23/72	5-6 . . .	10/23/72	6-26 . . .	10/23/72
3-408 . . .	10/23/72	5-7 . . .	10/23/72	6-27 . . .	10/23/72
3-409 . . .	10/23/72	5-8 . . .	10/23/72	6-28 . . .	10/23/72
3-410 . . .	10/23/72	5-9 . . .	10/23/72	6-29 . . .	10/23/72
4-1 . . .	10/23/72	5-10 . . .	10/23/72	6-30 . . .	10/23/72
4-2 . . .	10/23/72	5-11 . . .	10/23/72	6-31 . . .	10/23/72
4-3 . . .	10/23/72	5-12 . . .	10/23/72	6-32 . . .	10/23/72
4-4 . . .	10/23/72	5-13 . . .	10/23/72	6-33 . . .	10/23/72
4-5 . . .	10/23/72	5-14 . . .	10/23/72	6-34 . . .	10/23/72
4-6 . . .	10/23/72	5-15 . . .	10/23/72	6-35 . . .	10/23/72
4-7 . . .	10/23/72	5-16 . . .	10/23/72	6-36 . . .	10/23/72
4-8 . . .	10/23/72	5-17 . . .	10/23/72	6-37 . . .	10/23/72
4-9 . . .	10/23/72	5-18 . . .	10/23/72	6-38 . . .	10/23/72
4-10 . . .	10/23/72	5-19 . . .	10/23/72	6-39 . . .	10/23/72
4-11 . . .	10/23/72	5-20 . . .	10/23/72	6-40 . . .	10/23/72
4-12 . . .	10/23/72	5-21 . . .	10/23/72	6-41 . . .	10/23/72
4-13 . . .	10/23/72	5-22 . . .	10/23/72	6-42 . . .	10/23/72
4-14 . . .	10/23/72	5-23 . . .	10/23/72	6-43 . . .	10/23/72
4-15 . . .	10/23/72	5-24 . . .	10/23/72	6-44 . . .	10/23/72
4-16 . . .	10/23/72	5-25 . . .	10/23/72	6-45 . . .	10/23/72
4-17 . . .	10/23/72	5-26 . . .	10/23/72	6-46 . . .	10/23/72
4-18 . . .	10/23/72	6-1 . . .	10/23/72	6-47 . . .	10/23/72
4-19 . . .	10/23/72	6-2 . . .	10/23/72	6-48 . . .	10/23/72
4-20 . . .	10/23/72	6-3 . . .	10/23/72	6-49 . . .	10/23/72
4-21 . . .	10/23/72	6-4 . . .	10/23/72	6-50 . . .	10/23/72
4-22 . . .	10/23/72	6-5 . . .	10/23/72	6-51 . . .	10/23/72
4-23 . . .	10/23/72	6-6 . . .	10/23/72	6-52 . . .	10/23/72
4-24 . . .	10/23/72	6-7 . . .	10/23/72	6-53 . . .	10/23/72
4-25 . . .	10/23/72	6-8 . . .	10/23/72	6-54 . . .	10/23/72
4-26 . . .	10/23/72	6-9 . . .	10/23/72	6-55 . . .	10/23/72
4-27 . . .	10/23/72	6-10 . . .	10/23/72	6-56 . . .	10/23/72
4-28 . . .	10/23/72	6-11 . . .	10/23/72	6-57 . . .	10/23/72
4-29 . . .	10/23/72	6-12 . . .	10/23/72		

10/23/72

v

CONTENTS

Linked Adobe Page No.

	Page	
1. LIST OF TABLES	vii	11
2. ABBREVIATIONS	ix	13
3. PHOTOGRAPHIC NOMENCLATURE	xxii	26
4. SYMBOL NOMENCLATURE	xxiv	28
5. SIM EXPERIMENT STATUS CODE	xxv	29
6. FLIGHT PLAN NOTES	1-1	33
7. CHARTS AND TABLES	2-1	45
8. EARTH ORBIT PHASE	3-1	79
9. TRANSLUNAR INJECTION	3-5	83
10. TRANSLUNAR COAST PHASE		
a. Transposition, Docking, and Ejection	3-6	84
b. Cislunar Navigation	3-18	96
c. LM Housekeeping	3-38	116
d. LM Telemetry and Suit Checks	3-55	133
e. Lunar Orbit Insertion	3-83	161
11. LUNAR ORBIT/DESCENT PHASE		
a. LM Activation and Checkout	3-106	184
b. Undocking and Separation	3-113	191
c. PDI and Touchdown	3-123	201
12. LUNAR ORBIT/LUNAR SURFACE PHASE		
a. First EVA	3-132	210
b. Second EVA	3-178	256
c. Third EVA	3-224	302
d. Lunar Orbit Plane Change	3-267	345
e. LM Lift-off	3-284	362

CONTENTS (CONT)

Linked Adobe Page No.

	Page	
13. RENDEZVOUS/LM JETTISON PHASE		
a. TPI	3-286	364
b. Docking	3-292	370
c. LM Jettison and CSM Separation	3-301	379
14. TEI	3-347	425
15. CSM EVA	3-369	447
16. ENTRY INTERFACE	3-410	488
17. CONSUMABLES ANALYSIS	4-1	491
18. SUMMARY TIMELINE (PRIME MISSION)	5-1	531
19. ALTERNATE MISSION SUMMARIES		
EARTH ORBIT	6-1	559
CSM/LM - NO LANDING	6-25	583
CSM ONLY	6-35	593
LUNAR SURFACE	6-57	616

LIST OF TABLES AND CHARTS

Linked Adobe Page No.

Table	Page
2-1 SUIT WEARING SCHEDULE	2-1 45
2-2 CREW BIOMED HARNESS WEARING SCHEDULE	2-2 46
2-3 SC COVERAGE BY STDN STATIONS USING 85 FT/210 FT DISH ANTENNA	2-3 47
2-4 APOLLO 17 TV SCHEDULE	2-6 50
2-5 FUEL CELL PURGE, URINE DUMP AND WASTE WATER DUMP SCHEDULE	2-7 51
2-6 BATTERY CHARGE SCHEDULE	2-8 52
2-7 LiOH CANISTER CHANGE SCHEDULE	2-9 53
2-8 CSM RCS UNCOUPLED CONFIGURATION PERIODS	2-10 54
2-9 CSM BURN/EVENT SCHEDULE	2-11 55
2-10 APOLLO 17 DSEA SCHEDULE	2-13 57
2-11 LM BURN/EVENT SCHEDULE	2-14 58
2-12 APOLLO 17 RETURN TO EARTH BLOCK DATA SCHEDULE	2-15 59
2-13 LANDMARK AND LANDING SITE DATA	2-17 61
2-14 CRYO MANAGEMENT SCHEDULE	2-18 62
2-15 LUNAR SOUNDER SCHEDULE	2-19 63
2-16 APOLLO 17 FILM BUDGET	2-21 65
2-17 MC, LA, AND PC OPERATIONS	2-25 69
 CHART	
2-1 LUNAR SOUNDER EMI TEST	2-27 71
2-2 LUNAR SOUNDER HF MODE	2-28 72
2-3 LUNAR SOUNDER VHF MODE	2-29 73
2-4 LUNAR SOUNDER - RECEIVE ONLY (SEP ON)	2-30 74
2-5 LUNAR SOUNDER - RECEIVE ONLY (SEP OFF)	2-31 75

LIST OF TABLES AND CHARTS (CONT)

	DETAILED TIMELINE TABLES	Linked Adobe Page No.
TLI BURN TABLE		3-4 82
MCC-2 BURN TABLE		3-32 110
MCC-4 BURN TABLE		3-74 152
LOI BURN TABLE		3-82 160
DOI-1 BURN TABLE		3-89 167
CIRC BURN TABLE		3-119 197
CSM PLANE CHANGE BURN TABLE		3-267 345
TEI BURN TABLE		3-347 425
MCC-5 BURN TABLE		3-364 442
MCC-7 BURN TABLE		3-406 484

10/23/72

ABBREVIATIONS

ix

ABB	abbreviation or abbreviated
AC	alternating current
ACCEL	accelerometer
ACN	Ascension
ACT	activation
ACQ	acquisition or acquire
ADAPT	adapter
AEA	abort electronics assembly
AGS	abort guidance subsystem
AH	ampere hours
ALSCC	Apollo lunar surface close-up camera
ALSD	Apollo lunar surface drill
ALSEP	Apollo lunar surface experiment package
ALT	altitude
ALTM	altimeter
AM	amplitude modulation
AMP or amp	amperes
AMPL	amplifier
ANG	Antigua
ANT	antenna
AOH	Apollo Operations Handbook
AOL	Atlantic Ocean line
AOS	acquisition of signal or acquisition of site
AOT	alignment optical telescope
AP	alpha particle spectrometer
APS	ascent propulsion subsystem
ARIA	Apollo range instrumentation aircraft
ARS	atmosphere revitalization system
ASC	ascent
A/T	alignment technique
ATT	attitude
AUX	auxiliary
AZ	azimuth
BAT	battery
BEF	blunt end forward
BD	band
BDA	Bermuda
BIOMED	bio-medical data
BKWD	backward
BMAG	body mounted attitude gyro
BP	barber pole
BRKT	bracket
BSLSS	buddy secondary life support system
BT	burn time
BU	backup
BUSS	biomedical urine sampling system

BW	black and white (Film 3400)
BW1	black and white (Film 3401)
CAP COM	capsule communicator
CAL	calibration
CAMR or CAM	camera
CARR	carrier
CB or cb	circuit breaker
CCGE	cold cathode gage experiment
CCIG	cold cathode ion gage
CCU	comm carrier umbilical
CCW	counter clockwise
CDH	constant delta altitude
CDR	Commander
CDU	coupling data unit
CEX	color exterior (S0-368)
CIN	color interior (S0-168)
CIRC	circulation
CK	check
CKT	circuit
C/L	centerline or checklist
CM	command module
CMC	command module computer
CMD	command
CMP	Command Module Pilot
CNTL	control
C/O	check out
COAS	crew optical alignment sight
COMM	communications
CONFIG	configuration
COMP	compare or compensate
CONT	continue or contingency
CP	control point
CPLEE	charged particle lunar environment experiment
CRO	Carnarvon, Australia
CRYO	cryogenic
CS	contingency sample
CSI	coelliptic sequence initiation
CSM	command and service modules
CST	central standard time
CSVC	core sample vacuum container
C/S	central station
CTR	center
C&WS	caution and warning system
CW	clockwise
CWEA	caution and warning electronics assembly

CWG	constant wear garment
CYI	Grand Canary Island
DAC	data acquisition camera
DAP	digital auto pilot
DB	deadband
DC	direct current or data camera (70mm)
DC5	500mm data camera/lens
DCA	digital command assembly
DCC	commander's data camera
DCL	Lunar Module Pilot's data camera
DECON	decontamination
DEDA	data entry and display assembly
DEG	degrees
DEPL	depletion
DES	descent
DET	digital event timer
DIFF	difference
DIR	direct
DK	docked
DO	detailed objective
DOI	descent orbit insertion
DPLY	deployment
DPS	descent propulsion system
DR	door
DRT	dome removal tool
DS	documented sample
DSCRM	discriminator
DSE	data storage equipment(CSM)
DSEA	data storage equipment assembly (LM)
DSKY	display and keyboard
DSM	deep space measurement
DTO	detailed test objective
DUA	digital uplink assembly
DWN	down
E	erasable or enter
ECS	environmental control system
ED	explosive device
EDT	eastern daylight time
EFH	earth far horizon
EI	earth (atmosphere) interface and entry interface
EKG	electrocardiogram
EL	electric Hasselblad camera
ELECT	electrical
ELEV	elevation

EMER	emergency
EMS	entry monitor system
EMU	extravehicular mobility unit
ENG	engine
ENH	earth near horizon
ENT	entry
E.O.	earth orbit
EOM	end of mission
EPO	earth parking orbit
EPHEM	Ephemeris
EPS	electrical power subsystem
EQUIP	equipment
ERECT	erectable
ERR	error
EST	eastern standard time
ETB	equipment transfer bag
EV	extravehicular
EVA	extravehicular activity
EVAP	evaporator
EVCS	extravehicular communications system
EVT	extravehicular transfer
EXP	experiment
EXT	external
EXTD	extend
f	f-stop
FAM	familiarize or familiarization
FC	fuel cell
FCS	fecal containment system
FDAI	flight director attitude indicator
FLT	flight
FM	frequency modulated
FOV	field of view
FPS	feet per second
fps	frames per second
FR	frame(s)
FREQ	frequency
FT or ft	feet
FTO	flight test objective
FTP	full throttle position
FTT	fuel transfer tool
FWD	forward
G.A.	gas analysis
GA	gimbal angle
GAL	galactic

GBI	Grand Bahama Islands
GBM	Grand Bahama (STDN)
GDC	gyro display coupler
GDS	Goldstone, California
GET	ground elapsed time
GETI	ground elapsed time of ignition
GETIL	ground elapsed time of landing for TIG time of abort burn
GLY	glycol
GMT	Greenwich mean time
G&C	guidance and control
G&N	guidance and navigation
GNCS	guidance, navigation and control system (CSM)
GR	gamma ray spectrometer
GWM	Guam
GYM	Guaymas, Mexico
H ₂	hydrogen
HA	apogee altitude
HAW	Hawaii
HBR	high bit rate (TLM)
HBW	high speed black and white film
HD	highly desirable
HDC	hasselblad data camera
HFE	heat flow experiment
HGA	high-gain antenna
HI	high (switch position)
HOR	horizon
H ₂ O	water
HP	perigee altitude
HR	hour(s)
HSB	helmet stowage bag
HSK	Honeysuckle (Canberra, Australia)
HTC	hand tool carrier
HTR	heater
HTV	USNS Huntsville
ICDU	inertial coupling data unit
ID	identification
ICG	inflight coverall garment
ICS	intercomm system
IGA	inner gimbal angle
IGN	ignition
IMC	image motion compensation
IMU	inertial measurement unit
INCR	increase
IND	indicator

INIT	initialization
INT	interval
IP	initial point
ISA	interim stowage assembly
ISS	interim stowage shelf
IU	instrumentation unit
IVC	intervehicular communications
IVL	intervalometer
IVT	intravehicular transfer
iR	inclination of the ascending return
IR	infrared scanning radiometer
JETT	jettison
KG	kilogram
KM	kilometer
kwh	kilowatt hour
LA	launch azimuth or laser altimeter
LACE	lunar atmospheric composition experiment
LAT	latitude
LBR	low bit rate (TLM)
LB or lb	pound(s)
LCG	liquid cooled garment
LCRU	lunar communications relay unit
L/D	lift/drag
LD	lunar day (TV lens)
LDG	landing
LDMK	landmark
LEAM	lunar ejecta & meteorite (experiment)
LEB	lower equipment bay
LEC	lunar equipment conveyor
LEVA	lunar extravehicular visor assembly
LFH	lunar far horizon
LGC	LM guidance computer
LH	left-hand
L/H	local horizontal
LHEB	left-hand equipment bay
LHFEB	left-hand forward equipment bay
LHSSC	left-hand side storage container
LiOH	lithium hydroxide
LLM	lunar landing mission
LLOS	landmark line of sight
LM	lunar module
LMP	Lunar Module Pilot
LMS	lunar mass spectrometer

LNH	lunar near horizon
L/O	lift-off
LOD	lunar orbit docked
LOI	lunar orbit insertion
LONG	longitude
LOS	loss of signal or loss of site
LPD	landing point designator
LPO	lunar parking orbit
LPM	lunar portable magnetometer
LR	landing radar
LRRR or LR3	laser ranging retro-reflector
LRV	lunar roving vehicle
L/S or LS	landing site or lunar surface
LS	lunar sounder
LSG	lunar surface gravimeter
LSM	lunar surface magnetometer
LSPE	lunar seismic profile experiment
LT	light
LTG	lighting
LUB	lubrication
LV	launch vehicle
L/V	local vertical
LVPD	launch vehicle pressure display
M	mandatory
MAD	Madrid, Spain
MAG	magazine (camera)
MAN	manual
MAX	maximum
MAX Q	maximum dynamic pressure
MBW	medium black and white film
MC	mapping camera
MCC	midcourse correction
MCC-H	Mission Control Center - Houston
MDC	main display console
MEAS	measurement
MED	medical
MEED	microbial ecology evaluation device
MESA	modular experiment stowage assembly
MET	mission event timer
MGA	middle gimbal angle
M/I	minimum impulse
MIN	minimum or minutes(s)
MIR	mirror
MLA	Merrit Island, Florida, launch area
mm or MM	millimeter

MNA or MNB	main electrical bus A or B
MNVR	maneuver
MON	monitor
MONO	monaural
MPL	mid-Pacific line
MPS	main propulsion system
M/R	mixture ratio (fuel to oxidizer)
MS	mass spectrometer
MSFN	Manned Space Flight Network
MSO	mass spectrometer outgasing
MTN	motion
MTVC	manual thrust vector control
MULT	multiplier
N ₂	nitrogen
NAV	navigation
NEG	negative
NK	Nikon camera
NM	nautical miles
NO.	number
NOM	nominal
NXX	Noun XX
O ₂	oxygen
OBS	observation
O/F	oxidizer to fuel ratio
OGA	outer gimbal angle
OID	octal identifier
OMNI	omnidirectional antenna
OPR	operate
OPS	oxygen purge system
OPT	option
ORB	orbital
ORDEAL	orbit rate display earth and lunar
ORIENT	orientation
OVBD	overboard
OVHD	overhead
P	pitch or program
PAD	voice update
PAN	panoramic
PART	particle
PCM	pulse code modulation
PC	plane change or chamber pressure
PDI	powered descent initiation

PER	Pericynthion
PGA	pressure garment assembly
PGNCS	primary guidance, navigation and control system (LM)
PGNS	primary guidance navigation system (LM)
PHOTO	photograph
PIPA	pulse integrating pendulous accelerometer
PKG	package
PKS	Parks, Australia
PLSS	portable life support system
PM	phase modulated
POL	polarity or polarizing
POS	positive
PRD	personal radiation dosimeter
PRO	proceed
PREF	preferred
PREP	preparation
PRESS	pressure
PRIM	primary
PROP	proportional
PRN	pseudo random noise
PRPLNT	propellant
PSE	passive seismic experiment
PSIA	pounds per square inch absolute
PSID	pounds per square inch differential
PSIG	pounds per square inch gage
PT	point
PTC	passive thermal control
PTT	push to talk
PU	propellant utilization
PUGS	propellant utilization gaging system
PWR	power
PXX	Program XX
PYRO	pyrotechnic
QTY	quantity
QUAD	quadrant
R	roll or range
R&B	red and blue
RAD	radiator, radial, or radiation
RCDR	recorder
RCS	reaction control system
RCU	remote control unit
RCVR	receiver
REACQ	reacquire
REFSMAT	reference stable member matrix

REG	regulator
REL	release
REQD	required
RETR	retract
REV	revolution
RH	right-hand
RHC	rotational hand controller
RING	ringsight
RLS	radius of landing site
RMT	remote
RNDZ	rendezvous
RNG	range or ranging
ROD	rate of descent
RR	rendezvous radar
RSI	roll stability indicator
RSLV	resolver
RT	realtime
RTC	realtime command
RTG	radioisotope thermoelectric generator
RXX	Routine XX
SA	shaft angle
SATT	satellite
S-BD	S-BAND
SC	spacecraft
SCE	signal conditioning equipment
SCS	stabilization control system
SCT	scanning telescope
SE	southeast or subearth
SEC	secondary
SECO	S-IVB engine cutoff
SECS	sequential events control system
SEF	sharp end forward
SEL	select
SEP	separate
SEQ	sequence
SEVA	standup extravehicular activity
SIDE	suprathermal ion detector experiment
SII	Saturn II (second stage)
SIM	scientific instrument module
S-IVB	Saturn IVB(third stage)
SLA	service module LM adapter
SLOS	star line-of-sight
SM	service module
SPECT	spectrometer
SPOT	spot meter

SPS	service propulsion system
SR	sunrise
SRC	sample return container
SRX	S-Band receiver mode no. X
SS	sunset or subsolar
STBY	standby
STDN	Spaceflight Tracking and Data Network (formerly MSFN)
STX	S-Band transmit mode no. X
SUBSAT	subsattellite
S.V.	state vector
SW	switch
SWC	solar wind composition
SWE	solar wind experiment
SXT	sextant
SYS	system
T EPHEM	time of Ephemeris update
TA	trunnion angle
TAN	Tananarive, Madagascar
TB	time base or talkback
TCA	time of closest approach
TD	touchdown
T&D	transposition and docking
TD&E	transposition docking and LM ejection
TDS	thermal degradation sample
TEC	transearth coast
TECH	technique
TEI	transearth injection
TEMP	temperature or temporary
TERM	terminate
TEX	Corpus Christi, Texas
TGE	traverse gravimeter experiment
TGT	target
THC	translation hand controller
TIG	time of ignition
TK	tank
TLC	translunar coast
TLI	translunar injection
TLM or TM	telemetry
TPF	terminal phase final
TPI	terminal phase initiation
TPM	terminal phase midcourse
T/R	transmitter/receiver
TRANS	translation
TRK	track or tracking
TRUN	trunnion

TSB	temporary stowage bag
TV	television
TVC	thrust vector control
TWR	tower
UCTA	urine collection transfer assembly
UHT	universal hand tool
ULL	ullage
UMB	umbilical
UNBAL	unbalance (meter)
UNDK	undock
US	United States
UV	ultraviolet spectrometer
V	velocity
VG _{IMU}	velocity to be gained as related to IMU orientation
VGX	velocity to be gained (X-body axis)
VGY	velocity to be gained (Y-body axis)
VGZ	velocity to be gained (Z-body axis)
VR	resultant velocity
VX	velocity along the X-axis
VY	velocity along the Y-axis
VZ	velocity along the Z-axis
VAN	USNS Vanguard
VHBW	very high speed black and white film (2485)
VHF	very high frequency
VLV	valve
VOX	voice keying
VXX	Verb XX
W	Watts
WRT	with respect to
X	time of closest approach (symbol)
XDOT	rate of change along the X-axis
XFER	transfer
XMIT	transmit or transmitter
XPNDER XPNDR	transponder
Y	yaw
YDOT	rate of change along the Y-axis
ZDOT	rate of change along the Z-axis
ZPN	impedance pneumogram

10/23/72

xxi

ΔAz	azimuth change (difference)
ΔH	altitude change (difference)
ΔP	pressure change (difference)
ΔR	position change (difference)
ΔV	velocity change (difference)
ΔVC	velocity change at engine cutoff
ΔVT	velocity change loaded pre-burn
#	numbers
ϕ	latitude
λ	longitude

PHOTOGRAPHIC NOMENCLATURE

AAA/BBB/CCC/DDD - EEE, EEE, (fGG, HHH, III) JJ fps or JJ FR (KK% MAG)

AAA - Location from which photography is to be accomplished

BBB - Camera

CCC - Lens

DDD - Film Type

EEE - Photography aids (i.e., brackets, intervalometer, mirror, etc.)

fGG - Lens Aperture Setting

HHH - Shutter Speed

III - Focus Distance in Feet

JJ - Number of frames for DC, EL & NK cameras

JJ - Frame Rate for the DAC only

KK - Magazine percent for the DAC only

CODE EXAMPLE:

1. CM4/DAC/18/CEX-BRKT, SPOT (S,1/250,∞) 12 fps (50% MAG)

Meaning: Photos are taken from CM right hand rendezvous window using the DAC with 18mm lens and S0368 film. The camera will be bracket mounted with the following camera settings: f-stop from spotmeter reading, shutter speed 1/250 of a second, focus at infinity, 12 frames per second, 50% MAG.

2. CM4/EL/80/BW-BRKT, IYL 8 (f5.6,1/250,∞) 10 FR

Meaning: Photos are taken from CM right hand rendezvous window using the Electric Hasselblad camera with the 80mm lens and black & white film (3400). The camera will be bracket mounted with the following settings: f-stop (aperture) f5.6, shutter speed 1/250, and focus at infinity. The operation of the shutter will be controlled by the intervalometer; IYL 8 representing 8 sec between frames and IYL 20 representing 20 sec between frames. Ten frames have been allotted for this sequence.

10/23/72

xxiii

CAMERA LOCATIONS

COMMAND MODULE

CM-1	LH Side Window
CM-2	LH Rendezvous Window
CM-3	Hatch Window
CM-4	RH Rendezvous Window
CM-5	RH Side Window

LUNAR MODULE

LM-1	LH Window
LM-2	Docking Window
LM-3	RH Window

CAMERA MOUNTS

CSM

Electric Hasselblad (EL) +X axis +12° (in X-Z plane)

Electric Hasselblad (EL) normal to RH Side Window

Data Acquisition Camera (DAC) with right angle mirror +X axis

Data Acquisition Camera (DAC) with SXT Adapter - same as SXT shaft & trunnion.

Data Acquisition Camera (DAC) with right angle mirror rotated 180° looking aft out RH side window.

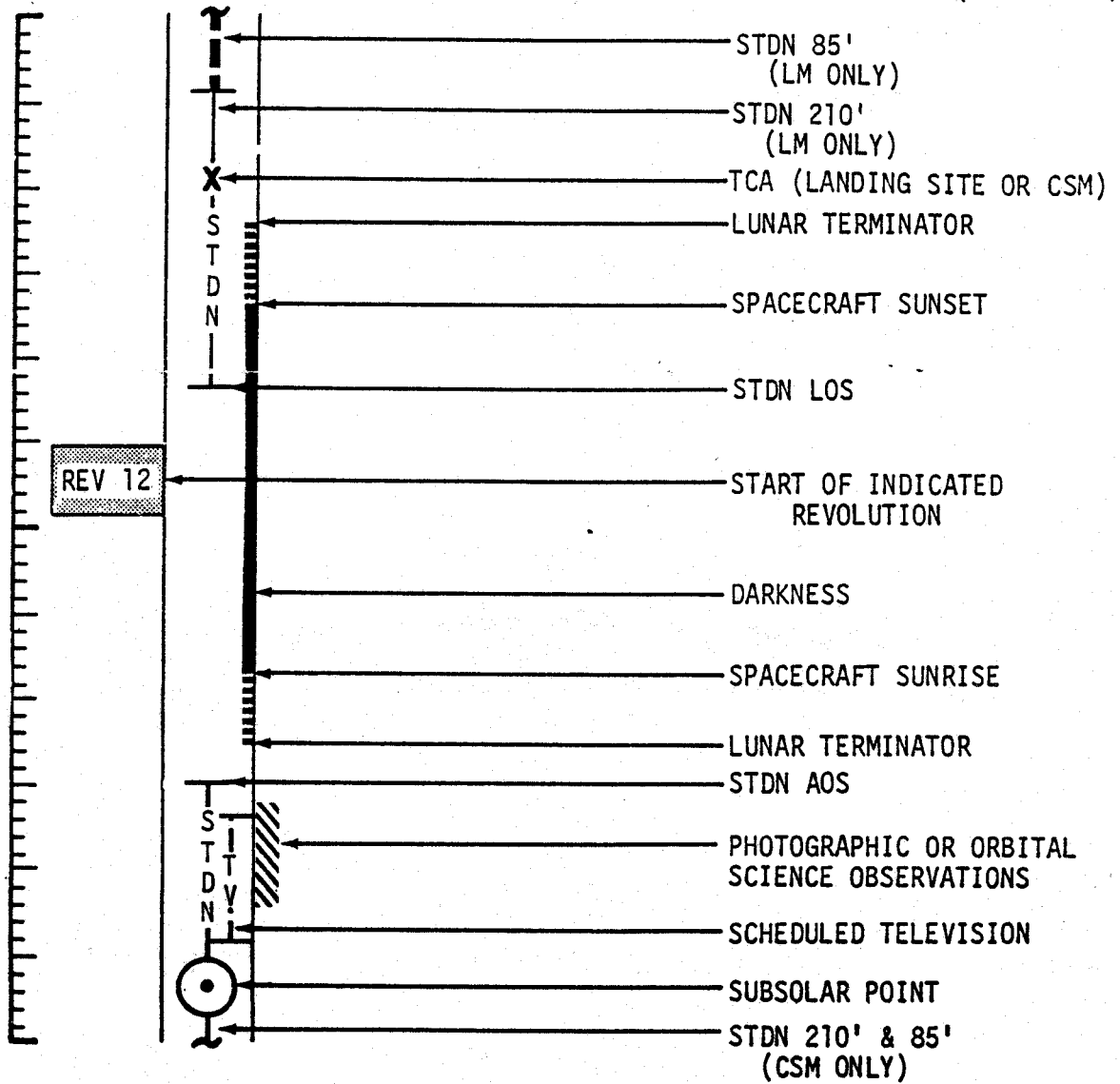
NIKON (NK) Two positions

parallel to +X axis

+X axis +30° (in X-Z plane)

SYMBOL NOMENCLATURE

SIM EXP STATUS
(A B C D E)
(F G H I J)



10/23/72

XXV

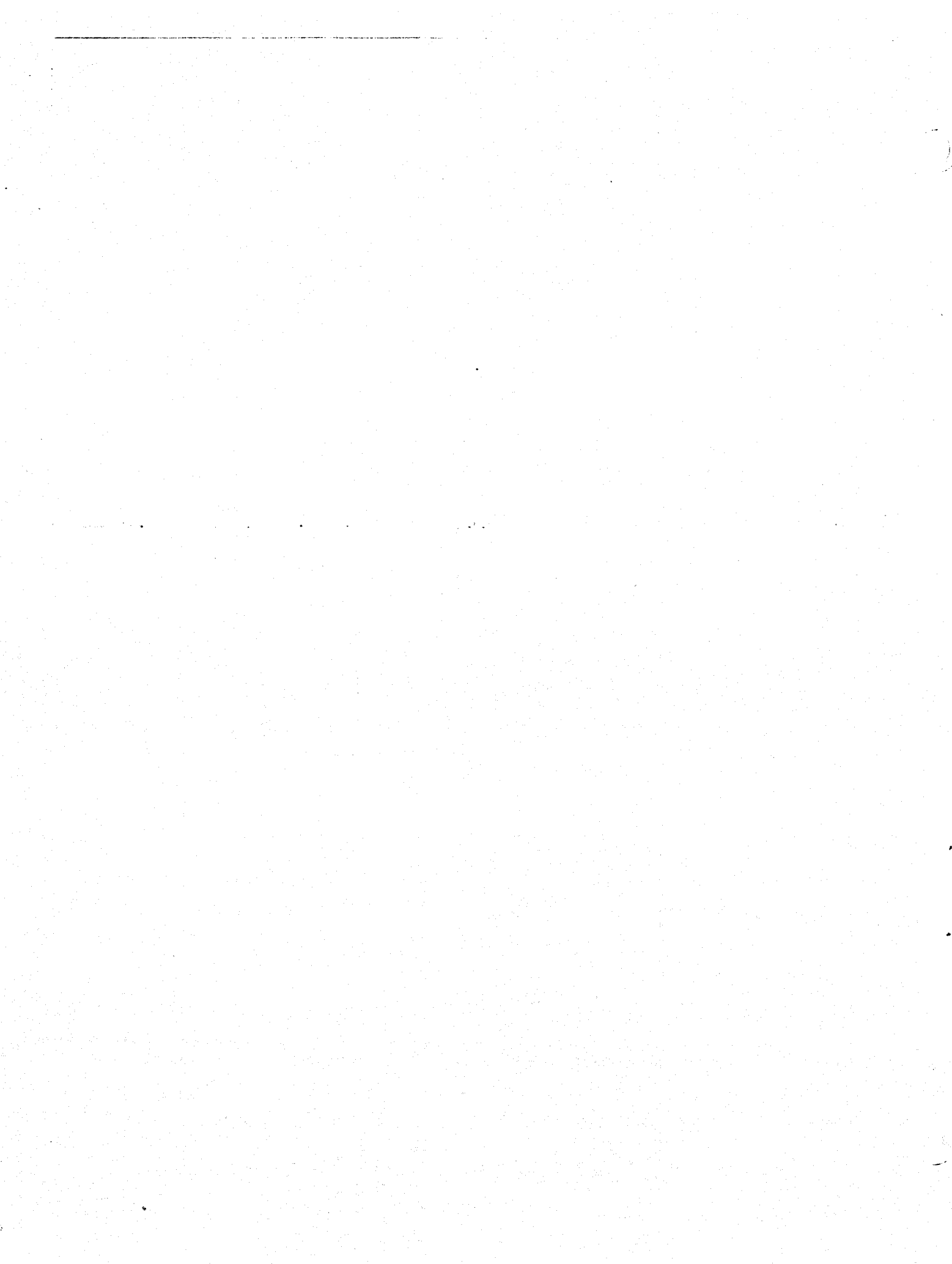
SCIENTIFIC INSTRUMENT MODULE
EXPERIMENT STATUS CODE

L1	A	B	C	D	E
L2	F	G	H	I	J
	SIM ATT	MAP CAM COVER/POS	LS HF ANT	IR COVER	UV COVER
	+ +X FWD - -X FWD * NON SIM	0 CLOSED 1 OPEN/EXTD 2 OPEN/RETR	0 RETR 1 EXTD	0 CLOSED 1 OPEN	0 CLOSED 1 OPEN
	PAN CAM	MAP CAM/LASER ALTM	LS	IR	UV
	0 OFF/STBY 1 PWR/STBY 2 PWR/OPERATE 3 BOOST/STBY	0 OFF/OFF 1 STBY/OFF 2 ON/ON 3 STBY/ON 4 ON/OFF 5 ON(IMC-OFF)/OFF	0 OFF 1 HF MODE 2 VHF MODE 3 RECV ONLY 4 STBY	0 OFF 1 ON	0 OFF 1 ON

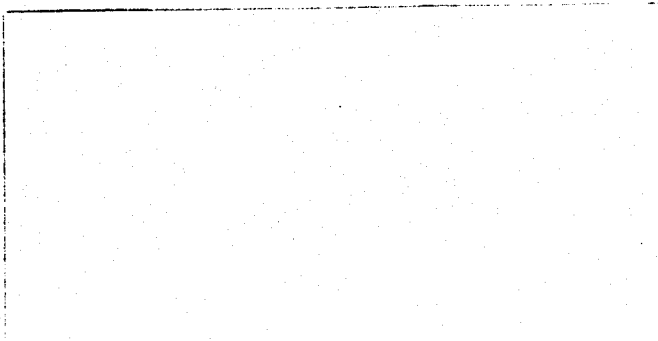
USUAL CONFIGURATIONS

PRE - SPS BURN PREP (*0000) SLEEP (±0011) or (+0111) MIN POWER (0000)
(31000) or (31011) (01011) (00000)

SIM BAY SECURE (0000) or (0001)
(Dumps, Thermal, Thrusters) (01011)



SECTION 1 - FLIGHT PLAN NOTES



5

10/23/72

1-1

FLIGHT PLAN NOTES

I. Crew

A. Crew designations are as follows:

<u>Designation</u>	<u>Prime</u>	<u>Backup</u>
Commander (CDR)	Cernan	Young
Command Module Pilot (CMP)	Evans	Roosa
Lunar Module Pilot (LMP)	Schmitt	Duke

B. The nominal CM couch positions are:

<u>Activity</u>	<u>Left</u>	<u>Center</u>	<u>Right</u>
Launch thru TLI	CDR	CMP	LMP
T&D thru Entry	CMP	CDR	LMP

C. The PGA's are worn as shown in Table 2-1.

D. The crew biomedical harness and sensor wearing schedule is shown in Table 2-2.

E. A crew status report for each crewman is voiced to MCC-H after each crew sleep period.

F. Negative reporting is used in reporting completion of each checklist.

G. All onboard gauge readings are read directly from the gauges with no calibration bias applied.

II. CSM Systems

A. Communications

1. The preferred S-Band communication modes are:
 - (a) Uplink Mode 6 (Voice, PRN, and Udata)
 - (b) Downlink Mode 2 (Voice, PRN, TLM-HBR)
2. VHF Duplex B is used for launch, and Simplex A is used for earth-orbit operations.
3. Table 2-3 summarizes the STDN coverage available for the CSM.
4. Table 2-4 contains a summary of the scheduled CSM & LM TV transmissions.
5. MCC-H switches OMNI antennas during TLC PTC periods, OMNI and HGA during TEC PTC periods. The crew manages antenna operations during all other TLC and TEC periods.
6. The HGA will be managed by the crew and MCC-H in order to minimize SIM bay experiment data loss at AOS and LOS while in lunar orbit during awake periods.

B. DSE

1. During the earth-orbit phase, the CSM LBR data is recorded when the CSM is not within STDN coverage. The DSE is dumped during the pass over the US prior to TLI.
2. CSM LBR data will be recorded during all P24 landmark tracking.
3. CSM HBR will be recorded during Launch, TLI, SIVB/CSM SEP, TD&E, all CSM SPS maneuvers (except LOPC), Sim Door Jettison, docking, undocking, and LM Final Separation.
4. LM LBR data will be recorded during STDN LOS periods between LM comm activation and PDI.
5. All entry data will be recorded in HBR during the black-out.
6. Lunar Sounder data will be managed per Table 2-15.

C. Electrical Power

1. The CSM normally remains powered up throughout the mission.
2. Table 2-5 lists the fuel cell purges.
3. Based on cryo purity and performance, the time between fuel cell O_2 purges may be increased to coincide with water dump times. The first O_2 purge allows a judgement to be made on the defined purge schedule.
4. The cryogenic heaters are managed such that the planned usage is obtained out of each O_2 tank. The H_2 fans are cycled prior to each sleep period.
5. Table 2-6 contains the battery charge schedule.

D. ECS and Water Management

1. Potable water is chlorinated once a day after the eat period prior to each sleep period.
2. Waste water dump, fuel cell purge, and urine collection scheduling criteria:
 - (a) Table 2-5 contains the scheduled fuel cell purges, urine dumps and waste water dumps
 - (1) Approximately once during each 24 hours following the initial dump and purge when three crewmen are in the CSM. Reduce interval to 22 hours when one crewman is in the CSM.
 - (2) H_2 fuel cell purges are scheduled at every other O_2 fuel cell purge after the first O_2 fuel cell purge
 - (b) The most opportune times to perform waste water dumps and fuel cell purges are as follows:
 - (1) Immediately after the sextant star check in maneuver preparation or cislunar navigation

- (2) Behind the moon, with completion of dump or purge before AOS
 - (3) At least three hours prior to SIM Bay photography and laser altimeter operation
 - (c) If possible, dumps and purges are not scheduled during the following periods, except just prior to the burn.
 - (1) Ten hours before MCC-2
 - (2) Eight hours before MCC-5
 - (d) Dumps and purges are not scheduled during the following STDN tracking periods:
 - (1) Between MCC-4 and LOI
 - (2) Ten hours before MCC-7 until entry, except urine is dumped just prior to MCC-7.
 - (e) All waste water dumps are manual.
3. Only one CO₂ absorber filter (LiOH canister) is changed at a time. Table 2-7 lists the LiOH canister change schedule. There are 26 filters on board.
 4. At lift-off, the cabin contains 60% O₂ and 40% N₂. The CM is purged after launch. The purge is terminated prior to LM pressurization after TLI. After the LM is configured for ejection, it is isolated and the CM is purged for eight more hours. The purge is stopped for a sleep period and reinitiated after sleep.
 5. CSM O₂ pressurizes the LM after transposition and docking; and repressurizes the LM before TLC LM entry(s), MCC-4 and LM activation.

E. Guidance and Navigation

1. REFSMMAT Definitions

- (a) The "Launch Pad" REFSMMAT is used for launch, TLI, and TD&E. This REFSMMAT places the IMU X-axis along the launch azimuth at the pad and the Z-axis along the negative radius vector.
- (b) The "PTC" REFSMMAT is used for all midcourse maneuvers (except MCC-7) and for other operations during TLC and TEC. This REFSMMAT places the X-axis in the ecliptic plane and perpendicular to the earth-moon line projection in the ecliptic plane at the average time of transearth injection for the monthly launch window and azimuth range. The Z-axis is perpendicular to the ecliptic and directed south. At the beginning of the PTC Mode the spacecraft maneuvers to an FDAI display of pitch 90° or 270° .
- (c) A "Preferred" REFSMMAT is used by the CSM for LOI, Lunar-Orbit Plane Change, and TEI. The CSM IMU X-axis aligns normally with the spacecraft X-body axis (except LOPC) at the vehicle attitude for ignition with the thrust directed through the center of gravity. At burn ignition, the FDAI displays roll 0° , pitch 0° , and yaw 0° , except roll 180° for TEI. A yaw of 315° is used for LOPC, which places the X-axis 45° from the IMU X-axis.
- (d) The "Landing Site" REFSMMAT is used for DOI, PDI, landing, and CSM lunar orbit activities up to the first plane change. This REFSMMAT places the CSM and LM IMU X-axis along the positive lunar radius vector at the landing site at the predicted landing time and places the Z-axis in the direction of flight parallel to the CSM orbital plane. At nominal touchdown, the LM FDAI displays roll 0° , pitch 0° , and yaw 0° .
- (e) The "Lift-Off" REFSMMAT is used for all lunar activities after Plane Change, until transearth injection. This REFSMMAT places the CSM and LM IMU X-axis along the positive lunar radius vector at the landing site at predicted lift-off time, with the Z-axis down range parallel to the CSM orbital plane. At nominal lift-off time, the LM FDAI displays roll 0° , pitch 0° , and yaw 0° with slight differences reflecting actual touchdown yaw and slope tilt angles.

- (f) The "Entry" REFSMMAT aligns the IMU X-axis in the local horizontal plane in the direction of flight at entry interface. The entry REFSMMAT is used for MCC-7 and all remaining activities. The Z-axis is down along the negative radius at entry interface. At entry interface, with wings level, local horizontal, heat shield forward inplane, lift up, heads down, the FDAI displays roll 0°, pitch 180°, and yaw 0°.
2. The CSM external lighting is operated during the rendezvous from lift-off to docking. The running lights only are on from CSM/LM separation through PDI.
 3. The time tags on attitude maneuvers in Section 3 indicate the be-there-by time unless otherwise stated. All maneuver angles are the angles read on the FDAI after the maneuver has been completed.
 4. CSM/LM and CSM attitude maneuvers are normally performed at the rate of 0.2°/sec unless other rates are required. LM maneuvers are normally performed at 2°/sec unless otherwise specified.
 5. The SIM Bay RCS configuration provides single jet control authority in each axis to eliminate contamination of the SIM experiments. Table 2-8 identifies the periods when the CSM RCS is in an uncoupled configuration.
 6. Undocking is done radially, CSM below, using the soft undocking procedure. The probe is extended its full length with the LM held on by the capture latches. When the rates are nulled, the CSM releases the LM. The separation maneuver is then performed immediately.
 7. LM jettison is done radially, CSM below, with final sep pyros providing approximately 0.4 foot per second radial thrust. The separation burn is performed five minutes after jettison, providing 2 foot per second posigrade thrust.
 8. The standard register load for nouns 78 and 70 for SIM bay experiment pointing using the Universal Tracking Program P20, option 5 is:
 N78 (+090.00)
 (+052.25)
 (+180.00) +X-axis forward
 or (+000.00) -X-axis forward
 N70 (00050)

10/23/72

1-7

9. The SC RCS configuration and maneuver control is shown as a DAP LOAD code in the time column where applicable in Section 3. During passive thermal control the code is shown as a note indicating the status of the DAP.

F. Propulsion Systems

1. In order to conserve SM RCS, the SPS engine is used to "back-up" all LM rendezvous burns requiring a ΔV greater than 12 FPS. The SPS gimbal motors are not turned on during the normal maneuver preparation.
2. The SPS always is started using a single bank, however, the other bank will be opened 2 to 5 seconds after ignition for burns longer than 10 seconds. DOI will be performed on a single bank.
3. Table 2-9 lists the CSM propulsion burns.

G. Scientific Instruments Module

1. The panoramic and mapping cameras will be placed in the boost and standby modes, respectively, during launch through TD&E, rendezvous, and all SPS thrusting maneuvers.
2. The following switches may be left in their command position between uses in order to keep track of SIM Bay experiment status:
 - a) Mapping Camera Track
 - b) Mapping Camera/Laser Cover
 - c) IR Cover
 - d) UV Cover

The logic power will be in the OFF (center) position during SPS burns and all other events that may induce vibration or shock, i.e., undocking and rendezvous through LM jettison.

3. The SIM experiment status will be indicated in the upper righthand corner of each page, or half page in the CSM flight plan, of Section 3. The first line will indicate the CSM attitude and experiments positions at the beginning of each hour or half-hour as applicable. The second line indicates the experiments' functional modes as previously set up. Page xxv defines the SIM experiment position and mode status code.

III. LM Systems

A. Communications

1. The preferred S-Band communications are:
 - (a) Uplink Mode 7 (Voice, Udata)
 - (b) Downlink Mode 2 (Voice, TLM-HBR, PRN, BIOMED)
2. The LM DSEA schedule is shown in Table 2-10.

B. ECS

1. The LM contains ambient air at lift-off. During launch the pressure bleeds to zero psia. CSM O₂ pressurizes the LM after T&D. The LM is isolated after T&D and after each entry and allowed to bleed down via leakage. Before the first entry into the LM, the LM is vented to at least 2.7 PSID and repressurized with CSM O₂ in order to enrich the LM atmosphere. CSM O₂ is used to repressurize the LM for the second and third entries.
2. LM O₂ is used to pressurize the LM five times; after EVA-1, EVA-2, EVA-3, and two equipment jettison periods.
3. Table 2-7 lists the LiOH canister change schedule.

C. Guidance Systems

1. The LGC and CMC use the same landing site and lift-off REFSMMATS.
2. The AGS is placed in standby after the "GO" is given for lunar stay for T3.

3. The IMU platform is oriented so that all PIPA output axes are normal to the gravity vector, then powered down and the LGC placed in standby approximately 1 hour after TD until approximately 5 hours prior to lift-off. The LGC is placed in OPERATE several times to update the computer clock.
4. To prevent overheating of the antenna, the rendezvous radar is pointed away from the sun and turned off when no functional use is required.
5. The LM tracking light is operated continuously during rendezvous.

D. Propulsion Systems

1. The APS/RCS interconnect is used during the lunar lift-off and ascent only.
2. Table 2-11 lists the LM propulsion burns.

E. Electrical Power System

1. The LM is powered down to a minimum level to conserve battery consumables on the lunar surface from PDI +1:00 to lift-off -5:00 hours.
2. LM battery management is scheduled on the lunar surface to equalize the usage of the five descent stage batteries. Table 2-6 contains the LM battery management schedule.

IV. Procedures

- A. CSM - Crew procedures called out in the flight plan may be found in the referenced crew checklist.
- B. LM - Crew procedures called out in the flight plan may be found in the referenced crew checklist.

V. Synchronization of Ground Elapsed Time (GET)

The realtime GET is synchronized with the Flight Plan GET. In TLC, the GET is synchronized at 67:30 if the time propagated ahead to start of Rev 2 is more than +1 minute from the flight plan GET. In lunar orbit the GET is synchronized at 95:40 and at 209:40 if the time propagated ahead to start of Rev 26 and Rev 66 respectively is more than +2 minutes from the flight plan GET. The synchronization is performed by a V70 uplink from the ground followed by the crew synchronizing the mission timer to the CMC clock.

VI. Miscellaneous

- A. Table 2-12 contains a schedule of the return to earth block data updates.
- B. Table 2-13 is the landmark tracking and landing site data.
- C. Table 2-14 contains the cryo management schedule.
- D. Table 2-15 contains the Lunar Sounder Schedule.
- E. Table 2-16 contains the Apollo 17 Film Budget.
- F. Table 2-17 contains MC, LA and PC schedules.
- G. Charts 2-1,2,3,4 & 5 identify principal LUNAR SOUNDER Rev activities.

SECTION 2 - CHARTS & TABLES

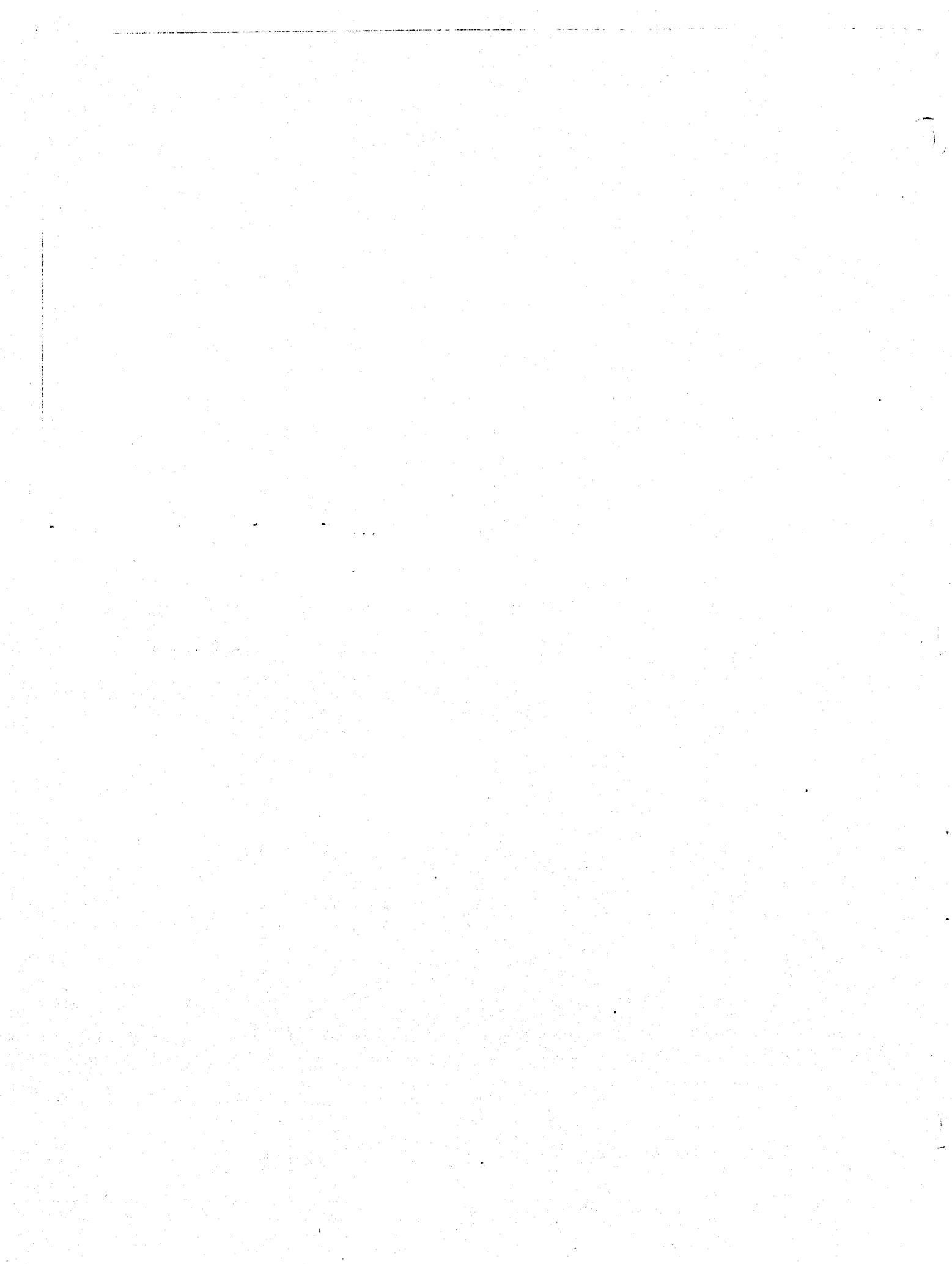


TABLE 2-1
(12/6)

SUIT WEARING SCHEDULE

ACTIVITY	PRESSURIZED (HARD SUIT)	SUITED (SOFT SUIT)	PARTIAL SUIT WITH- OUT HELMET & GLOVES	SHIRTSLEEVES (ICG)
LAUNCH		ALL		
EARTH ORBIT THRU S-IVB EVASIVE MNVR			ALL	
TLC & TEC EXCEPT TEC EVA				ALL
PGA TEST			ALL	
LM ACTIVATION			ALL	
UNDOCKING		CDR & LMP	CMP*	
UNDOCK +5 MIN THRU CIRC			ALL	
PDI thru TD		CDR & LMP	CMP	
LUNAR STAY EXCEPT EVA				ALL
LUNAR SURFACE EVA'S & EQUIP JETT	CDR & LMP			CMP
LIFT-OFF PREP			ALL	
LIFT-OFF THRU DOCKING		CDR & LMP	CMP	
DOCKING TO LM JETT			ALL	
LM JETT		ALL		
POST LM JETT THRU TEI				ALL
TEC EVA	ALL			
ENTRY				ALL

*CMP DON HELMET & GLOVES FOR DOCKING LATCHES RELEASE.

TABLE 2-2
(12/6)

CREW BIOMED HARNESS WEARING SCHEDULE*

<u>GET (HR:MIN)</u>	<u>CDR</u>	<u>CMP</u>	<u>LMP</u>
LAUNCH	ON	ON	ON
05:50		OFF	OFF
19:00	OFF		ON
36:00		ON	OFF
47:00	ON	OFF	
59:00	OFF		ON
69:35		ON	OFF
85:10	ON	OFF	
95:10	OFF		ON
107:25	ON		
107:50		ON	
125:00	OFF**		
147:30	ON		OFF**
171:00	OFF**		ON
184:25	ON		
194:30	OFF	OFF	
210:43		ON	OFF
217:30	ON	OFF	
230:40	OFF		ON
238:30		ON	OFF
253:55	ON		ON
258:55		OFF	OFF
279:05	OFF		ON
286:55		ON	OFF
300:25	ON		ON

*In the event of an inflight medical problem or illness the Flight Surgeon has the option to revise this schedule.

**Crew option - the crewman not on BIOMED data downlink may elect to remove his BIOMED Harness during the lunar surface rest periods.

TABLE 2-3
(12/6)

CSM COVERAGE BY STDN STATIONS USING 85 FT/210 FT DISH ANTENNA

	GOLDSTONE (GDS)		*PARKS (PKS)		HONEYSUCKLE (HSK)		MADRID (MAD)		*GOLDSTONE (MAR)	
	AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS
EARTH ORBIT	01:29	01:33			01:00	01:05				
TEL (3:21)	03:00	03:06			04:05	08:26			03:01	03:05
	15:17	25:09			19:35	33:27	07:54	16:59	15:52	24:34
TRANSLUNAR COAST			22:15	30:58			22:15	30:58		
	39:28	49:41	46:40	55:08	44:06	57:35	32:07	41:52	40:00	49:08
LOI (88:56)	63:30	73:54	70:50	79:11	68:18	81:36	56:09	66:10	64:02	73:22
	87:28	88:44			242:38	252:30	80:08	88:44	87:59	88:44
TEL (236:40)			245:42	249:33					236:52	247:40
TRANSEARTH COAST	258:25	272:24	270:22	272:53	266:52	276:17	250:45	265:01	258:56	271:52
							274:34	289:38		
EI (304:18)	282:17	297:25			291:48	299:12			282:50	296:43
							298:15	303:49		

* 210 FT DISH ANTENNA

TABLE 2-3 (CONT)

REF	GET AT START OF REV	GOLDSTONE (GDS)		*PARKS (PKS)		HONEYBUCKLE (HSK)		MADRID (MAD)		*GOLDSTONE (MAR)	
		AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS
101	88:56	89:17	90:41					89:17	90:16	89:17	90:41
1	88:56	91:25	92:49			92:27	92:49			91:25	92:49
2	90:59	93:35	94:41			93:35	94:41			93:35	94:41
3	93:07	95:29	96:35			95:29	96:35			95:29	96:35
4	95:01	97:23	98:15			97:23	98:29			97:23	98:15
5	96:55					99:17	100:23				
6	98:49					101:11	102:17				
7	100:43					103:05	103:26				
8	102:37										
9	104:31										
10	106:25							104:59	106:05		
11	108:19							106:53	107:59		
12	110:13							108:47	109:54		
13	112:07	112:34	113:46					110:42	111:48		
14	114:06	114:32	115:45					112:34	113:47	112:34	113:46
15	116:04	116:31	117:44					114:33	115:20	114:32	115:45
16	118:01	118:30	119:42			117:28	117:43			116:31	117:44
17	120:02	120:28	121:41			118:29	119:42			118:30	119:42
18	122:00	122:27	123:16			120:28	121:41			120:28	121:41
19	123:59					122:27	123:39				
20	125:57					124:25	125:38				
21	127:56					126:24	127:37				
22	129:55					128:23	129:36				
23	131:53							128:45	129:35		
24	133:52							130:21	131:34		
25	135:50	136:21	137:30					132:20	133:33		
26	137:49	138:15	139:28					134:18	135:31		
27	139:48	140:14	141:27					136:17	137:30	136:51	137:30
28	141:46	142:13	143:26					138:15	139:29	138:15	139:28
29	143:45	144:11	145:24					140:14	140:23	140:14	141:27
30	145:43	146:10	147:23			142:27	143:25			142:13	143:26
31	147:42	148:08	148:16			144:11	145:24			144:11	145:24
32	149:41					146:09	147:23			146:10	147:23
33	151:39					148:08	149:21				
34	153:38					150:06	151:20				
35	155:37					152:05	153:19				
36	157:35					154:04	154:50				
37	159:34	160:50	161:12					153:11	153:18		
38	161:32	161:58	163:11					154:04	155:17		
39	163:31	163:56	165:10					156:02	157:15		
40	165:30	165:55	167:08					158:01	159:14		
41	167:28	167:54	169:07					159:59	161:13		
								161:58	163:12	161:58	163:11
								163:57	165:10	163:56	165:10
										165:55	167:08
										167:54	169:07

* 210 FT ANTENNA

TABLE 2-3 (CONT)

REF	GET AT START OF REV	GOLDSTONE (GDS)		*PARKS (PKS)		HONEYSUCKLE (HSK)		MADRID (MAD)		*GOLDSTONE (MAR)	
		AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS	AOS	LOS
LO1	88:56										
42	169:27	169:52	171:06	170:08	171:05	169:52	171:05			169:52	171:06
43	171:25	171:51	173:04	171:50	173:04	171:50	173:04			171:51	172:51
44	173:24			173:49	175:03	173:49	175:03				
45	175:23					175:48	176:50				
46	177:21					177:46	179:00	177:46	179:00		
47	179:20							179:45	180:58		
48	181:18							181:43	182:57		
49	183:17							183:42	184:56		
50	185:16	185:40	186:54					185:41	186:55	185:49	186:54
51	187:14	187:39	188:53					187:39	188:53	187:39	188:53
52	189:13	189:38	190:52					189:38	190:41	189:38	190:52
53	191:12	191:36	192:50			192:39	192:50			191:36	192:50
54	193:10	193:35	194:49			193:34	194:48			193:35	194:49
55	195:09	195:34	196:48	195:33	196:47	195:33	196:47			195:34	196:48
56	197:08	197:32	198:28	197:32	198:46	197:32	198:46			197:32	198:48
57	199:06			199:31	200:45	199:31	200:45				197:54
58	201:05					201:29	202:44	202:04	202:43		
59	203:04					203:28	203:49	203:28	204:42		
60	205:03							205:27	206:41		
61	207:01							207:25	208:34		
62	209:00	209:52	210:38					209:24	210:38	210:24	210:38
63	210:59	211:22	212:36					211:23	212:37	211:22	212:36
64	212:58	213:21	214:35					213:21	214:36	213:21	214:35
65	214:56	215:20	216:34					215:20	215:51	215:20	216:34
66	216:55	217:19	218:33			217:46	218:32			217:19	218:33
67	218:54	219:17	220:32			219:17	220:31			219:17	220:32
68	220:53	221:16	222:30	221:15	222:30	221:15	222:30				
69	222:51	223:15	223:35	223:14	224:29	223:14	224:29			221:16	222:30
70	224:50			225:13	225:34	225:13	226:27				
71	226:49					227:12	228:26	227:12	228:25		
72	228:48							229:10	230:24		
73	230:46							231:09	232:23		
74	232:45							233:08	234:22		
75	234:44	235:06	236:20					235:07	236:21	235:06	236:20
TEL	236:43	236:53	248:11					236:53	240:51	236:52	247:40

* 210 FT ANTENNA

TABLE 2-4
(12/6)

APOLLO 17 TV SCHEDULE

<u>DAY</u>	<u>DATE</u>	<u>CS</u>	<u>GET (HR:MIN)</u>	<u>DURATION (HR:MIN)</u>	<u>ACTIVITY SUBJECT</u>	<u>VEHICLE</u>	<u>STATION</u>
THURSDAY	7 DEC	01:05AM	4:12	0:20	TRANSPOSITION & DOCKING	CSM	HSK
MONDAY	11 DEC	6:48PM	117:55	5:19	LUNAR SURFACE EVA-1*	LRV	GDS/HSK/PKS
TUESDAY	12 DEC	4:21PM	139:38	6:21	LUNAR SURFACE EVA-2*	LRV	GDS
WEDNESDAY	13 DEC	3:58PM	163:05	6:35	LUNAR SURFACE EVA-3*	LRV	GDS
THURSDAY	14 DEC	4:41PM	187:48	0:25	LM LIFT-OFF	LRV	GDS/MAD
THURSDAY	14 DEC	6:31PM	189:38	0:06	RENDEZVOUS	CSM	GDS/MAD
THURSDAY	14 DEC	6:54PM	190:01	0:05	DOCKING	CSM	GDS/MAD
SATURDAY	16 DEC	5:46PM	236:53	0:32	VIEW OF MOON AFTER TEI	CSM	GDS/MAD
SUNDAY	17 DEC	2:19PM	257:26	1:04	TRANSEARTH EVA	CSM	MAD
MONDAY	18 DEC	5:00PM	284:07	0:30	TEC PRESS CONFERENCE	CSM	GDS/MAD

*TV WILL NOT BE USED WHILE LRV IS IN MOTION

TABLE 2-5
(12/6)

FUEL CELL PURGE, URINE DUMP AND WASTE WATER DUMP SCHEDULE

GET (HR:MIN)	O ₂ FC PURGE		H ₂ FC PURGE		WASTE H ₂ O DUMP		URINE COLLECTION PERIODS			URINE DUMP	
	NO	ΔT (HR:MIN)	NO	ΔT (HR:MIN)	NO	ΔT (HR:MIN)	GET START	GET STOP	ΔT	NO	ΔT (HR:MIN)
*18:30	1	18:30			1	18:30	07:00	18:30	11:30	1	18:30
*35:00	2	16:30	1	35:00	2	16:30	18:30	35:00	16:30	2	16:30
*58:45	3	23:45			3	23:45	35:00	58:45	23:45	3	23:45
*83:30	4	24:45	2	48:30	4	24:45	58:45	83:30	24:45	4	24:45
94:13	5	10:43			5	10:43					
*117:45	6	23:32	3	34:15	6	23:32	83:30	107:00	23:30	5	34:15 & UTCA
**137:45	7	20:00			7	20:00	114:30	133:00	18:30	6	20:00
**159:40	8	21:55	4	41:55	8	21:55	133:00	156:10	23:10	7	21:55
**180:45	9	21:05			9	21:05	156:10	180:45	24:35	8	21:05
194:20											DUMP UCTA'S POST RNDZ
196:50	10	16:05	5	37:10	10	16:05					
**208:20							180:45	208:00	27:15		DUMP UTS
218:30	11	21:40			11	21:40					
*230:30	12	12:00	6	33:40	12	12:00	208:00	230:25	22:30	9	22:10
*252:50	13	22:20			13	22:20	230:25	252:50	22:25	10	22:20
*276:50	14	24:00	7	46:20	14	24:00	252:50	276:50	24:00	11	24:00
*300:30							276:50	300:30	23:40	12	23:40
*303:30							300:30	303:30	03:00		NO DUMP

*DUMP URINE FROM BUSS'S (3)

**DUMP URINE FROM BUSS (1)

DUMP LAUNCH UTCA'S 06:30

TRANSFER TO LM - 108:00

TRANSFER TO CM - 193:00

TABLE 2-6
(12/6)

CSM BATTERY CHARGE AND LM BATTERY MANAGEMENT SCHEDULES

CSM BATTERY CHARGE SCHEDULE

GET (HR:MIN)	BATTERY
09:00	B
18:40	A
35:55	A
59:55	B
114:35	B
140:22	A
208:02	B
277:00	A
283:57	B

LM BATTERY MANAGEMENT SCHEDULE

GET (HR:MIN)	BATTERY						
	1	2	3	4	5	6	L
108:18	ON	ON	ON	ON	OFF	OFF	OFF
112:20					ON	ON	
113:17					OFF	OFF	
113:37	OFF	OFF					LMP
127:30	ON	ON	OFF	OFF			CDR
137:45			ON	ON			OFF
147:10			OFF	OFF			CDR
161:15	OFF	OFF	ON	ON			LMP
170:50	ON	ON					OFF
187:27	OFF		OFF		ON	ON	
187:49		OFF		OFF			

L - LUNAR BATTERY MAY BE USED ON EITHER CDR OR LMP BUS

TABLE 2-7
(12/6)

L10H CANISTER CHANGE SCHEDULE

CSM L10H CANISTER CHANGE

CHANGE NO	APPROX GET (HR:MIN)	APPROX ΔT (HR)	INSTALL		REMOVE & STOW		TOTAL TIME INSTALLED
			CANISTER NO.	POSITION	CANISTER NO.	STOWAGE LOCATION	
1	08:50	15	3	A	1	B5	*08:50
2	23:00	10	4	B	2	B5	*23:00
3	33:00	14	5	A	3	B5	24:10
4	47:00	10	6	B	4	B5	24:00
5	57:30	14	7	A	5	B6	24:30
6	71:00	12	8	B	6	B6	24:00
7	83:00	12	9	A	7	B6	25:30
8	95:00	13	10	B	8	B6	24:00
9	108:10	24	11	A	9	A9	25:10
10	132:00	11	12	B	10	A9	37:00
11	143:15	25	13	A	11	A9	35:05
12	167:45	14	14	B	12	A9	35:45
13	181:00	14	15	A	13	A3	37:45
14	195:25	13	16	B	14	A3	27:40
15	208:35	10	17	A	15	A3	27:35
16	218:12	13	18	B	16	A3	22:47
17	231:00	10	19	A	17	A4	22:25
18	240:30	12	20	B	18	A4	22:18
19	252:15	12	21	A	19	A4	21:15
20	264:30	16	22	B	20	A4	24:00
21	281:00	8	23	A	21	A5	28:45
22	287:50		24	B	22	A5	23:20

LM L10H CANISTER CHANGE: GET (HR:MIN) 137:30 AND 172:55

TOTAL CM L10H CANISTERS AVAILABLE 26
*GET FROM LIFTOFF

TABLE 2-8
(12/6)

CSM RCS UNCOUPLED CONFIGURATION

FROM (HR:MIN)	TO (HR:MIN)	REASON
8:35	8:55	RATE DAMPING FOR PTC
19:20	19:40	RATE DAMPING FOR PTC
42:35	43:50	RATE DAMPING FOR PTC & HEAT FLOW EXP
63:50	64:10	RATE DAMPING FOR PTC
90:39	91:22	SIM EXP
94:29	106:52	SIM EXP
113:18	182:16	SIM EXP
183:12	184:30	ROLL AXIS ONLY FOR MC/PC
194:14	233:05	SIM EXP
233:05	234:23	ROLL AXIS ONLY FOR MC/PC
236:48	240:45	SIM EXP
240:50	241:10	RATE DAMPING FOR PTC
256:45	259:20	CSM EVA
259:20	263:40	SIM EXP
263:40	264:00	RATE DAMPING FOR PTC
265:00	265:20	RATE DAMPING FOR PTC
276:30	285:30	SIM EXP
285:30	285:35	RATE DAMPING FOR PTC
286:15	287:20	SIM EXP
288:15	288:40	RATE DAMPING FOR PTC

10/23/72

2-11

TABLE 2-9
(12/6)

CSM BURN/EVENT SCHEDULE

BURN/ EVENT	GET I(HR:MIN)/ BURN TIME	Δ VT (FPS)	ULLAGE BT	REFSMMAT	RESULTANT HA/HP(NM)	DATE/ CST
LAUNCH SATURN	00:00 11 MIN 51.5 SEC	24,263	--	LAUNCH	93.4 89.7	DEC 6 20:53
S-IVB TLI	03:21:19.3 5 MIN 45.7 SEC	10,346.8	--	LAUNCH	--	DEC 7 00:14
CSM/LM EJECTION	05:07:00.0 3.0 SEC	1.2	--	LAUNCH	--	DEC 7 1:54
MCC-1	08:45	Nom Zero	--	PTC	--	DEC 7 05:38
MCC-2	35:30	Nom Zero	--	PTC	--	DEC 8 08:23
MCC-3	66:55	Nom Zero	--	PTC	--	DEC 9 15:48
MCC-4	83:55	Nom Zero	--	PTC	--	DEC 10 8:48
LOI SPS	88:55:37.5 06 MIN 35.4 SEC	2979.9	--	LOI	170.8 51.4	DEC 10 13:48
DOI SPS	93:13:08.5 22.9 SEC	198.7	4 JETS 15 SEC	LDG SITE	59.00 15.00	DEC 10 18:06
BAILOUT SPS	93:48:16.8 11.05 SEC	100	4 JETS 17 SEC	LDG SITE	61.5 5.0	DEC 10 18:41
DOI TRIM SPS	AS REQD			LS OR LOPC-1 AS REQD		
UNDOCK & SEP(RCS)	110:27:55.2 3.3 SEC	1.0	--	LDG SITE	60.33 13.6	DEC 11 11:20
CSM CIRC SPS	111:55:22.7 4.0 SEC	70.1	4 JETS 12 SEC	LDG SITE	70.3 54.3	DEC 11 12:48
LOPC SPS	182:35:45.3 18.7 SEC	336.7	4 JETS 12 SEC	LOPC-1	63.0 61.3	DEC 14 11:29
LM JETT	193:58:30.0	2.5	--	LIFT-OFF	62.2 60.3	DEC 14 22:51
CSM SEP RCS	194:03:30.0 12.6 SEC	2.0	--	LIFT-OFF	63.9 62.3	DEC 14 22:56

TABLE 2-9 (CONT)

CSM BURN/EVENT SCHEDULE

BURN/ EVENT	GET I(HR:MIN) BURN TIME	Δ VT (FPS)	ULLAGE BT	REFSMMAT	RESULTANT HA/HP(NM)	DATE/ CST
TEI SPS	236:39:51.1 2 MIN 22.2 SEC	3045.7	4 JETS 12 SEC	TEI	--	DEC 16 17:33
MCC-5	253:40	Nom Zero	--	PTC	--	DEC 17 10:33
MCC-6	282:18	Nom Zero	--	PTC	--	DEC 18 15:11
MCC-7	301:18	Nom Zero	--	ENTRY	--	DEC 19 10:11
EI	304:18:0.5	NO BURN	--	ENTRY	--	DEC 19 13:11
SPLASH- DOWN	304:31:10.5	NO BURN	--	ENTRY	--	DEC 19 13:24

TABLE 2-10

APOLLO 17 LM DSEA

<u>ACTIVITY</u>	<u>MODE</u>	<u>GET (HR:MIN)</u>	<u>TAPE USED* (HR:MIN)</u>	<u>ACCUM. TAPE USED (HR:MIN)</u>
COMM ACTIVATION	ICS/PTT	108:37	3:58 X 100%	
PDI PREP	VOX	112:35	= 3:58	3:58
PDI PREP	VOX	112:35	0:37 X 63%	
POST TOUCHDOWN (T2)	OFF	113:12	= 0:23.3	4:21
EVA-1 PLSS COMM CK	VOX	116:10	0:50 X 63%	
EVA-1 LMP EGRESS	OFF	117:00	= 0:31.5	4:53
EVA-2 PLSS COMM CK	VOX	138:40	0:50 X 63%	
EVA-2 LMP EGRESS	OFF	139:30	= 0:31.5	5:24
EVA-3 PLSS COMM CK	VOX	162:10	0:50 X 63%	
EVA-3 LMP EGRESS	OFF	163:00	= 0:31.5	5:56
JETTISON #1 PREP	VOX	170:40	0:20 X 63%	
JETTISON #1 POST	OFF	171:00	= 0:12.3	6:08
JETTISON #2 PREP	VOX	185:13	0:17 X 63%	
JETTISON #2 POST	OFF	185:30	= 0:10.7	6:19
ASCENT COMM (L/O -17 MIN)	ICS/PTT	187:46	0:17 X 100%	
LIFT-OFF -2 MIN	VOX	188:01	= 0:17	6:36
LIFT-OFF -2 MIN	VOX	188:01	0:10 X 63%	
INSERTION	ICS/PTT	188:11	= 0:6.3	6:42
INSERTION	ICS/PTT	188:11	1:59 X 100%	
POST DOCKING	OFF	190:10	= 1:59	8:41

*TAPE USED = RECORD TIME X DUTY CYCLE

**REMAINING TAPE (1:19) MAY BE USED AT CREW DISCRETION.

TABLE 2-11
(12/6)

LM BURN/EVENT SCHEDULE

BURN/ EVENT	GETI(HR:MIN) BURN TIME	Δ VT (FPS)	ULLAGE BT	REFSMMAT	RESULTANT HA/HP(NM)	DATE/ CST
DOI-2	112:00:33.7 26.9 SEC	9.4	--	LDG SITE	60.0 7.2	DEC 11 12:53
PDI	112:49:37.7 12 MIN 00 SEC	6701.8	4 JET 7.5SEC	LDG SITE	--	DEC 11 13:42
LANDING	113:01:38.1	NO BURN	--	--	LUNAR SURFACE	DEC 11 13:54
EVA-1	116:40	NO BURN	--	--	--	DEC 11 17:33
EVA-2	139:10	NO BURN	--	--	--	DEC 12 16:03
EVA-3	162:40	NO BURN	--	--	--	DEC 13 15:33
ASCENT	188:03:14.6 7 MIN 17.7 SEC	6062.2	None	LIFTOFF	47.85 9.06	DEC 14 16:56
ORBIT INSERTION	188:10:32.3	NO BURN	--	--		DEC 14 17:03
TPI	188:57:32.3 2.7 SEC	76.6	4 JET 10 SEC	LIFTOFF	64.4 46.7	DEC 14 17:50
BRAKING GATES	189:36:35.0 to 189:43:10.5		--	--	62.4 61.8	DEC 14 18:29
DOCKING	190:05:00.0	NO BURN	--	--	62.4 61.8	DEC 14 19:53
LM DEORBIT	195:39:13.0 1 MIN 56.4 SEC	281.8	--	LIFTOFF	64.9 -141.8	DEC 15 01:34

TABLE 2-12
(12/6)
APOLLO 17 RETURN TO EARTH BLOCK DATA SCHEDULE

<u>DATA</u>	<u>GET UPDATE (HR:MIN)</u>	<u>GETI (HR:MIN)</u>	<u>PAD TYPE</u>
TLI+90	01:30	04:50	COMPLETE P-30
L/O+9	01:30	09:00	P37
L/O+15	08:30	15:00	P37
L/O+25	08:30	25:00	P37
L/O+35	16:30	35:00	P37
L/O+45	16:30	45:00	P37
L/O+55	16:30	55:00	P37
L/O+65	16:30	65:00	P37
*FLYBY	40:55	83:56	P30
*PER+2	82:40	90:56	ABB P-30
TEI 4	85:10	97:22	ABB P-30
TEI 5	91:45	98:41	ABB P-30
TEI 12	95:30	111:56	ABB P-30
TEI 19	95:30	125:49	ABB P-30
TEI 26	118:37	139:43	ABB P-30
TEI 38	137:00	163:24	ABB P-30
TEI 49	144:15	185:17	ABB P-30
TEI 55	170:30	197:01	ABB P-30
TEI 65	195:47	216:43	ABB P-30
TEI 72	213:37	230:39	ABB P-30
<u>PREL</u>			
TEI 75	229:58	236:41	COMPLETE P-30
<u>NOM</u>			
TEI 75	235:32	236:41	COMPLETE P30
<u>ONE REV LATE</u>			
TEI 76	235:32	238:37	ABB P-30

*ASSUMES DOCKED CONFIGURATION

TABLE 2-12 (CONT)
(12/6)

APOLLO 17 RETURN TO EARTH BLOCK DATA SCHEDULE

NOTES:

1. All block data maneuvers are to the MPL line except
 - a. TLI +90 abort is to the AOL
 - b. Nominal TEI 75 and backup Rev TEI 76 is to the EOM target ($\lambda=166^\circ\text{W}$)
2. Pass FLYBY early if pericyynthion is not clear of moon
3. The FLYBY and PER+2 maneuvers are docked. All other aborts are undocked.
4. TEI 4 assumes no DOI.
5. TEI 5 assumes DOI.
6. TEI 12 assumes no CIRC.
7. TEI 19 assumes CIRC.
8. TEI 49 assumes no LOPC.
9. TEI 55 assumes LOPC.

10/23/72

2-17

TABLE 2-13
(12/6)

LANDMARK AND LANDING SITE DATA

SITE	REV	LATITUDE (DEG)	LONGITUDE (DEG)	ALTITUDE* (NM)
TAURUS LITTROW		20.164	30.750	-1.95
J-3	3	19.948	40.102	0.0
17-1	12,13,50	20.160	30.809	-1.96
17-2	12**	20.020	30.804	-1.97
17-3	12**	20.272	30.700	-1.89
RP-3	13	-3.694	131.912	0.0
F-1	50	1.863	88.250	0.0

*Difference between landmark radius vector and 938.4935 NM
(mean Lunar Radius)

**Rev 12 Alternates for Perigee < 10 NM

TABLE 2-14
(12/6)

CRYO MANAGEMENT SCHEDULE

GET HRS:MIN	O ₂ HTRS 1,2,&3		H ₂ HTRS 1&2		H ₂ FANS 1,2,&3		
	AUTO	OFF	AUTO	OFF	AUTO	ON	OFF
00:00	1,2	3	1,2			3	1,2
04:17	1,2,3						
05:05	1,2	3					
08:40	3	1,2			3		
15:10				1,2			
39:05	1,2,3						
39:55	3	1,2					
60:10*	1,2,3						
60:30*	3	1,2					
65:00			1,2			3	
81:15*	1,2,3						
82:50*	3	1,2					
84:40**	1,2	3					
234:18***							
256:50	1,2,3						
259:50	1,2	3					

*If LM/CM $\Delta P > 2.4$ PSID, these actions are required.

**Open 100W cb in oxygen tanks 1 & 2 at 84:40

***Close 100W cb in O₂ tanks 1 & 2

***Open 50W cb in O₂ tanks 1, 2, & 3.

10/23/72

2-19

TABLE 2-15
(12/6)

LUNAR SOUNDER SCHEDULE

REV	TARGET	GET		LONGITUDE		FILM HR:MIN
		START	STOP	START	STOP	
14	LS EMI TEST	115:10	115:59			0:08
16,17,18	HF MODE	118:54	122:59	28°E	3°E	4:05
24-26	GROUND TRACK VHF MODE	135:10	139:15	57°W	64°W	4:05
35	REINER γ & MARE RIDGE VHF MODE	156:51	156:56	49°W	64°W	0:05
36	REINER γ & MARE RIDGE HF MODE	158:50	158:55	49°W	64°W	0:05
39,40	*RCV-ONLY SEP-ON	163:56	167:23	104°E	165°W	N/A
40	MARIUS HILLS HF MODE	166:43	166:48	45°W	60°W	0:05
55	CRISIUM, SERENI- TATIS, FRA MAURO APENNINE BENCH EULER HILLS HF MODE	195:33	196:20	99°E	36°W	0:47
63,64	LS RCV ONLY SEP-OFF HF MODE	211:20	213:19	113°E	110°E	N/A
64	PASTEUR HF MODE	213:19	213:23	110°E	98°E	0:04
64	LS RCV ONLY SEP-OFF HF MODE	213:23	213:41	98°E	49°E	N/A

*REV 40 - "REC-ONLY SEP-ON" IS TERMINATED FOR 5 MIN FOR
"MARIUS HILLS HF MODE".

TABLE 2-15 (CONT)
(12/6)

LUNAR SOUNDER SCHEDULE

REV	TARGET	GET		LONGITUDE		FILM HR:MIN
		START	STOP	START	STOP	
64	TRANQUILITATIS- SERENITATIS HF MODE	213:41	213:59	49°E	8°W	0:18
64	LS RCV ONLY SEP OFF HF MODE	213:59	214:47	8°W	152°W	N/A
73	TSIOLKOVSKY FERMI HF MODE	231:00	231:06	135°E	117°E	0:06
73	APOLLONIUS VOLCANICS HF MODE	231:26	231:48	58°E	8°W	0:22
73	HERTZSPRUNG HF MODE	232:24	232:33	117°W	144°W	0:09
						TOTAL FILM 10:19

APOLLO 17 FILM BUDGET

CSM									
CAMERA: DAC		FILM: VIBW	MAGAZINE: JJ	CAPACITY: 100%	FILM REMAINING		REF		
GET	REV	TARGET	FILM USED	0%	100%				
0:00		UNSCHEDULED							
CAMERA: EL		FILM: CEX	MAGAZINE: KK	CAPACITY: 160 FR	FILM REMAINING		REF		
19:35	TL	EARTH	4 FR	156 FR	OPS				
90:51	01	AITKEN	58 FR	98 FR	OS				
110:27	12	UNDOCKING	10 FR	88 FR	OPS				
118:04	16	AITKEN	73 FR	15 FR	OS				
CAMERA: EL		FILM: CEX	MAGAZINE: LL	CAPACITY: 160 FR	FILM REMAINING		REF		
119:57	17	SNIARDECKI	46 FR	114 FR	OS				
136:39	25	LDG SITE	24 FR	90 FR	OS				
142:26	28	PICARD	36 FR	54 FR	OS				
144:02	29	ARABIA	21 FR	33 FR	OS				
CSM									
CAMERA: EL		FILM: CEX	MAGAZINE: MM	CAPACITY: 160 FR	FILM REMAINING		REF		
144:24	2%	PIERCE	88 FR	72 FR	OS				
157:35	36	MARE INGENIUM	34 FR	38 FR	OS				
164:26	39	D-CALDERA	19 FR	19 FR	OS				
CAMERA: EL		FILM: CEX	MAGAZINE: NN	CAPACITY: 160 FR	FILM REMAINING		REF		
4:20	TL	UNDOCK S4BLM	10 FR	150 FR	OPS				
5:07	TL	LM EJECTION	5 FR	145 FR	OPS				
190:01	5%	DOCKING	10 FR	135 FR	OPS				
215:56	6%	IMBRIUM(S)	28 FR	107 FR	OS				
CAMERA: EL		FILM: CEX	MAGAZINE: OO	CAPACITY: 160 FR	FILM REMAINING		REF		
0:00	LC	SCHMITT OPT	160 FR	0 FR	OPT				
CAMERA: EL		FILM: CEX	MAGAZINE: PP	CAPACITY: 160 FR	FILM REMAINING		REF		
0:00	LC	EVANS OPT	160 FR	0 FR	OPT				

TABLE 2-16

APOLLO 17 FILM BUDGET

CSM										
CAMERA:		EL	FILM:	VHBM	MAGAZINE:	QQ	FILM USED	FILM REMAINING	CAPACITY:	115 FR
GET	REV	REV	TARGET	TARGET	USED	USED	USED	REMAINING	REMAINING	REF
0:00		01	LDG SITE (NORTH)		12 FR	12 FR	103 FR		115 FR	NST
		17			12 FR	12 FR	91 FR			NST
		25	SR CORONA (SOUTH)		9 FR	9 FR	82 FR			X9
		29			24 FR	24 FR	58 FR			NST
		37	AITKEN		12 FR	12 FR	46 FR			FST
		61	SS CORONA		9 FR	9 FR	37 FR			X7
208:17										
CAMERA:		EL	FILM:	VHBM	MAGAZINE:	RR	FILM USED	FILM REMAINING	CAPACITY:	115 FR
GET	REV	REV	TARGET	TARGET	USED	USED	REMAINING	REMAINING	REMAINING	REF
209:09		62	GAGARIN (N)		18 FR	18 FR	97 FR			FST
210:09		62	(NORTH)		24 FR	24 FR	73 FR			NST
218:08		66	(SOUTH)		24 FR	24 FR	49 FR			NST
233:58		74	(SOUTH)		12 FR	12 FR	37 FR			NST
CAMERA:		NK	FILM:	CTN	MAGAZINE:	SS	FILM USED	FILM REMAINING	CAPACITY:	70 FR
GET	REV	REV	TARGET	TARGET	USED	USED	REMAINING	REMAINING	REMAINING	REF
68:00		TL	ALFMED		6 FR	6 FR	64 FR			X1
CAMERA:		NK	FILM:	CTN	MAGAZINE:	TT	FILM USED	FILM REMAINING	CAPACITY:	70 FR
GET	REV	REV	TARGET	TARGET	USED	USED	REMAINING	REMAINING	REMAINING	REF
0:00			UNSCHEMULED		0 FR	0 FR	70 FR			
CAMERA:		NK	FILM:	VHBM	MAGAZINE:	UU	FILM USED	FILM REMAINING	CAPACITY:	40 FR
GET	REV	REV	TARGET	TARGET	USED	USED	REMAINING	REMAINING	REMAINING	REF
0:00			PREFLT CAL		40 FR	40 FR	0 FR			CAL

CSM										
CAMERA:		NK	FILM:	VHBM	MAGAZINE:	VV	FILM USED	FILM REMAINING	CAPACITY:	40 FR
GET	REV	REV	TARGET	TARGET	USED	USED	REMAINING	REMAINING	REMAINING	REF
0:00			DIM LT BU		40 FR	40 FR	0 FR			CAL
CAMERA:		NK	FILM:	VHBM	MAGAZINE:	MM	FILM USED	FILM REMAINING	CAPACITY:	40 FR
GET	REV	REV	TARGET	TARGET	USED <td>USED <td>REMAINING <td>REMAINING <td>REMAINING <td>REF</td> </td></td></td></td>	USED <td>REMAINING <td>REMAINING <td>REMAINING <td>REF</td> </td></td></td>	REMAINING <td>REMAINING <td>REMAINING <td>REF</td> </td></td>	REMAINING <td>REMAINING <td>REF</td> </td>	REMAINING <td>REF</td>	REF
121:06		17	EARTHSHINE		40 FR	40 FR	0 FR			X17
CAMERA:		NK	FILM:	VHBM	MAGAZINE:	XX	FILM USED	FILM REMAINING	CAPACITY:	40 FR
GET	REV	REV	TARGET	TARGET	USED <td>USED <td>REMAINING <td>REMAINING <td>REMAINING <td>REF</td> </td></td></td></td>	USED <td>REMAINING <td>REMAINING <td>REMAINING <td>REF</td> </td></td></td>	REMAINING <td>REMAINING <td>REMAINING <td>REF</td> </td></td>	REMAINING <td>REMAINING <td>REF</td> </td>	REMAINING <td>REF</td>	REF
133:29		23	ZOD LT RED		13 FR	13 FR	27 FR			X13
163:12		38	ZOD LT BLUE		13 FR	13 FR	14 FR			X13
CAMERA:		NK	FILM:	VHBM	MAGAZINE:	YY	FILM USED	FILM REMAINING	CAPACITY:	40 FR
GET	REV	REV	TARGET	TARGET	USED <td>USED <td>REMAINING <td>REMAINING <td>REMAINING <td>REF</td> </td></td></td></td>	USED <td>REMAINING <td>REMAINING <td>REMAINING <td>REF</td> </td></td></td>	REMAINING <td>REMAINING <td>REMAINING <td>REF</td> </td></td>	REMAINING <td>REMAINING <td>REF</td> </td>	REMAINING <td>REF</td>	REF
185:00		49	ZOD LT POL		24 FR	24 FR	16 FR			X11
CAMERA:		NK	FILM:	VHBM	MAGAZINE:	ZZ	FILM USED	FILM REMAINING	CAPACITY:	40 FR
GET	REV	REV	TARGET	TARGET	USED <td>USED <td>REMAINING <td>REMAINING <td>REMAINING <td>REF</td> </td></td></td></td>	USED <td>REMAINING <td>REMAINING <td>REMAINING <td>REF</td> </td></td></td>	REMAINING <td>REMAINING <td>REMAINING <td>REF</td> </td></td>	REMAINING <td>REMAINING <td>REF</td> </td>	REMAINING <td>REF</td>	REF
0:00			UNSCHEMULED		0 FR	0 FR	40 FR			

APOLLO 17 FILM BUDGET

LM										
GET	REV	DCL	FILM:	HBW	TARGET	FILM USED	MAGAZINE:	FILM REMAINING	CAPACITY:	REF
			CAMERA:	DCL	FILM:	HBW	MAGAZINE:	J	CAPACITY:	170 FR
139:20	LS	EVA-2				161 FR			9 FR	
			CAMERA:	DCL	FILM:	HBW	MAGAZINE:	K	CAPACITY:	170 FR
GET	REV	TARGET				FILM USED		FILM REMAINING		REF
139:20	LS	EVA-2				135 FR		35 FR		
			CAMERA:	DCL	FILM:	HBW	MAGAZINE:	L	CAPACITY:	170 FR
GET	REV	TARGET				FILM USED		FILM REMAINING		REF
163:40	LS	EVA-3				154 FR		16 FR		
			CAMERA:	DCL	FILM:	HBW	MAGAZINE:	M	CAPACITY:	170 FR
GET	REV	TARGET				FILM USED		FILM REMAINING		REF
163:40	LS	EVA-3				165 FR		5 FR		
			CAMERA:	DCL	FILM:	HBW	MAGAZINE:	N	CAPACITY:	170 FR
GET	REV	TARGET				FILM USED		FILM REMAINING		REF
163:40	LS	EVA-3				127 FR		43 FR		
			CAMERA:	DCL	FILM:	CEX	MAGAZINE:	O	CAPACITY:	100%
GET	REV	TARGET				FILM USED		FILM REMAINING		REF
110:30	LS	EVA-3				6%		94%		OPS
110:35	LS	LM/CM SEP				13%		81%		OPS
111:00	LS	CABIN (OPT)				6%		75%		OPS
112:50	LS	LDG SITE				75%		0%		OPS
			CAMERA:	DCL	FILM:	CEX	MAGAZINE:	P	CAPACITY:	100%
GET	REV	TARGET				FILM USED		FILM REMAINING		REF
113:02	LS	SURFACE OPT				100%		0%		
			CAMERA:	DCL	FILM:	CEX	MAGAZINE:	Q	CAPACITY:	100%
GET	REV	TARGET				FILM USED		FILM REMAINING		REF
188:03	LS	ASCENT				100%		0%		
			CAMERA:	DCL	FILM:	HBW	MAGAZINE:	R	CAPACITY:	170 FR
GET	REV	TARGET				FILM USED		FILM REMAINING		REF
163:40	LS	EVA 3				50 FR		120 FR		

LM										
GET	REV	DCL	FILM:	CEX	TARGET	FILM USED	MAGAZINE:	FILM REMAINING	CAPACITY:	REF
			CAMERA:	DCL	FILM:	CEX <td>MAGAZINE:</td> <td>A</td> <td>CAPACITY:</td> <td>160 FR</td>	MAGAZINE:	A	CAPACITY:	160 FR
110:30	LS	LM/CH SEP				10 FR		150 FR		OPS
110:35	LS	CABIN (OPT)				5 FR		145 FR		OPS
111:00	LS	LDG SITE				5 FR		140 FR		OPS
112:35	LS	EARTHRISE				5 FR		135 FR		OPS
116:40	LS	EVA-1				95 FR		40 FR		
			CAMERA:	DCL	FILM:	CEX <td>MAGAZINE:</td> <td>B</td> <td>CAPACITY:</td> <td>160 FR</td>	MAGAZINE:	B	CAPACITY:	160 FR
GET	REV	TARGET				FILM USED		FILM REMAINING		REF
116:40	LS	EVA-1				94 FR		66 FR		
			CAMERA:	DCL	FILM:	CEX <td>MAGAZINE:</td> <td>C</td> <td>CAPACITY:</td> <td>160 FR</td>	MAGAZINE:	C	CAPACITY:	160 FR
GET	REV	TARGET				FILM USED		FILM REMAINING		REF
139:20	LS	EVA-2				155 FR		5 FR		
			CAMERA:	DCL	FILM:	CEX <td>MAGAZINE:</td> <td>D</td> <td>CAPACITY:</td> <td>160 FR</td>	MAGAZINE:	D	CAPACITY:	160 FR
GET	REV	TARGET				FILM USED		FILM REMAINING		REF
139:20	LS	EVA-2				94 FR		66 FR		
			CAMERA:	DCL	FILM:	CEX <td>MAGAZINE:</td> <td>E</td> <td>CAPACITY:</td> <td>160 FR</td>	MAGAZINE:	E	CAPACITY:	160 FR
GET	REV	TARGET				FILM USED		FILM REMAINING		REF
163:40	LS	EVA-3				151 FR		9 FR		
			CAMERA:	DCL	FILM:	CEX <td>MAGAZINE:</td> <td>F</td> <td>CAPACITY:</td> <td>160 FR</td>	MAGAZINE:	F	CAPACITY:	160 FR
GET	REV	TARGET				FILM USED		FILM REMAINING		REF
163:40	LS	EVA-3				99 FR		61 FR		
			CAMERA:	DCL	FILM:	HBW <td>MAGAZINE:</td> <td>G</td> <td>CAPACITY:</td> <td>170 FR</td>	MAGAZINE:	G	CAPACITY:	170 FR
GET	REV	TARGET				FILM USED		FILM REMAINING		REF
116:40	LS	EVA-1				130 FR		40 FR		
			CAMERA:	DCL	FILM:	HBW <td>MAGAZINE:</td> <td>H</td> <td>CAPACITY:</td> <td>170 FR</td>	MAGAZINE:	H	CAPACITY:	170 FR
GET	REV	TARGET				FILM USED		FILM REMAINING		REF
139:20	LS	EVA-2				128 FR		42 FR		
			CAMERA:	DCL	FILM:	HBW <td>MAGAZINE:</td> <td>I</td> <td>CAPACITY:</td> <td>170 FR</td>	MAGAZINE:	I	CAPACITY:	170 FR
GET	REV	TARGET				FILM USED		FILM REMAINING		REF
139:20	LS	EVA-2				162 FR		8 FR		

TABLE 2-16

10/23/72

2-25

TABLE 2-17

MC/LA OPERATIONSNOTE: BECAUSE OF ABUNDANT MC FILM, ALL MC/LA START/STOP TIMES ARE \pm 2 MIN/6°

REV	T START	T STOP	TYPE	LONG(START)	LONG(STOP)	DEG	HR/MIN
1/2	90:48	91:51*	VERT	144°W	26°E	190°	1:03
13/14	114:00	115:03	VERT	162°W	7°E	191°	1:03
14/15	115:59	117:25	VERT	164°W	63°W	259°	1:26
23/24	133:48	134:52	VERT	168°W	2°W	194°	1:04
26/27	139:44	140:46	N.OBL	168°W	4°E	188°	1:03
27/29	140:46	144:46	VERT	4°E	6°W	730°	4:00
35/36	157:25	158:39	S.OBL	147°W	14°W	227°	1:14
38	161:38	163:32	VERT	162°E	177°E	345°	1:54
49	183:21	184:25	VERT	167°E	28°W	195°	1:04
62/63	209:05	211:08	VERT	163°E	150°E	373°	2:03
65	215:05	215:30	N.OBL	152°E	77°E	75°	0:25
65	215:30	215:35	MNVR	77°E	62°E	15°	0:05
65	215:35	216:10	S.OBL	62°E	47°W	109°	0:35
66	216:10	218:07	VERT	47°W	41°W	354°	1:57
73/74	232:39	235:47**	VERT	161°W	13°W	572°	3:08

POST TEI

*LA OFF AT 91:28 TO AVOID ALTITUDE PROBLEMS

**RETR, CLOSE COVER AT 234:05

TOTAL	4017°	22:24
VERTICAL	3082°	17:15
OBLIQUE	614°	3:22
RUNOUT	321°	1:47

PC OPERATIONS

REV	T START	T STOP	TYPE	LONG(START)	LONG(STOP)	DEG	HR/MIN
1/2	90:51	91:11	STEREO	152°W	144°E	58°	0:20
2	91:18	91:28	STEREO	123°E	95°E	28°	0:10
13/14	114:03	114:33	STEREO	172°W	100°E	88°	0:30
15	116:31	117:00	STEREO	102°E	14°E	88°	0:29
28	141:54	142:19	STEREO	155°E	85°E	70°	0:25
49	183:50	184:09	STEREO	80°E	26°E	54°	0:19
62	209:14	209:29	STEREO	133°E	90°E	43°	0:15
62	209:49	209:51	MONO	33°E	27°E	6°	0:02
74	233:21	233:36	STEREO	67°E	25°E	42°	0:15
74	233:45	233:58	STEREO	5°W	45°W	40°	0:13

514° 2:57

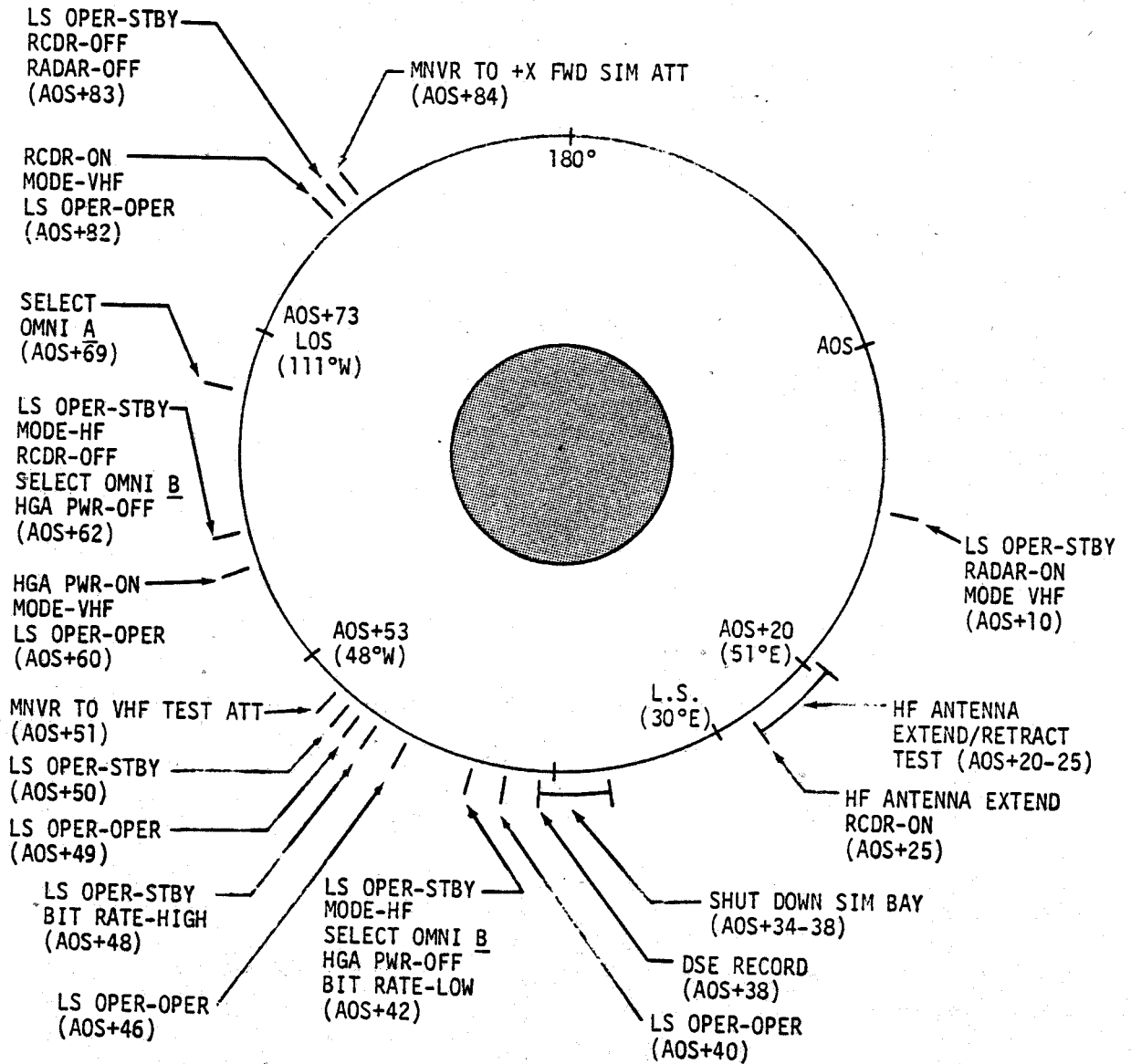
2-26

10/23/72

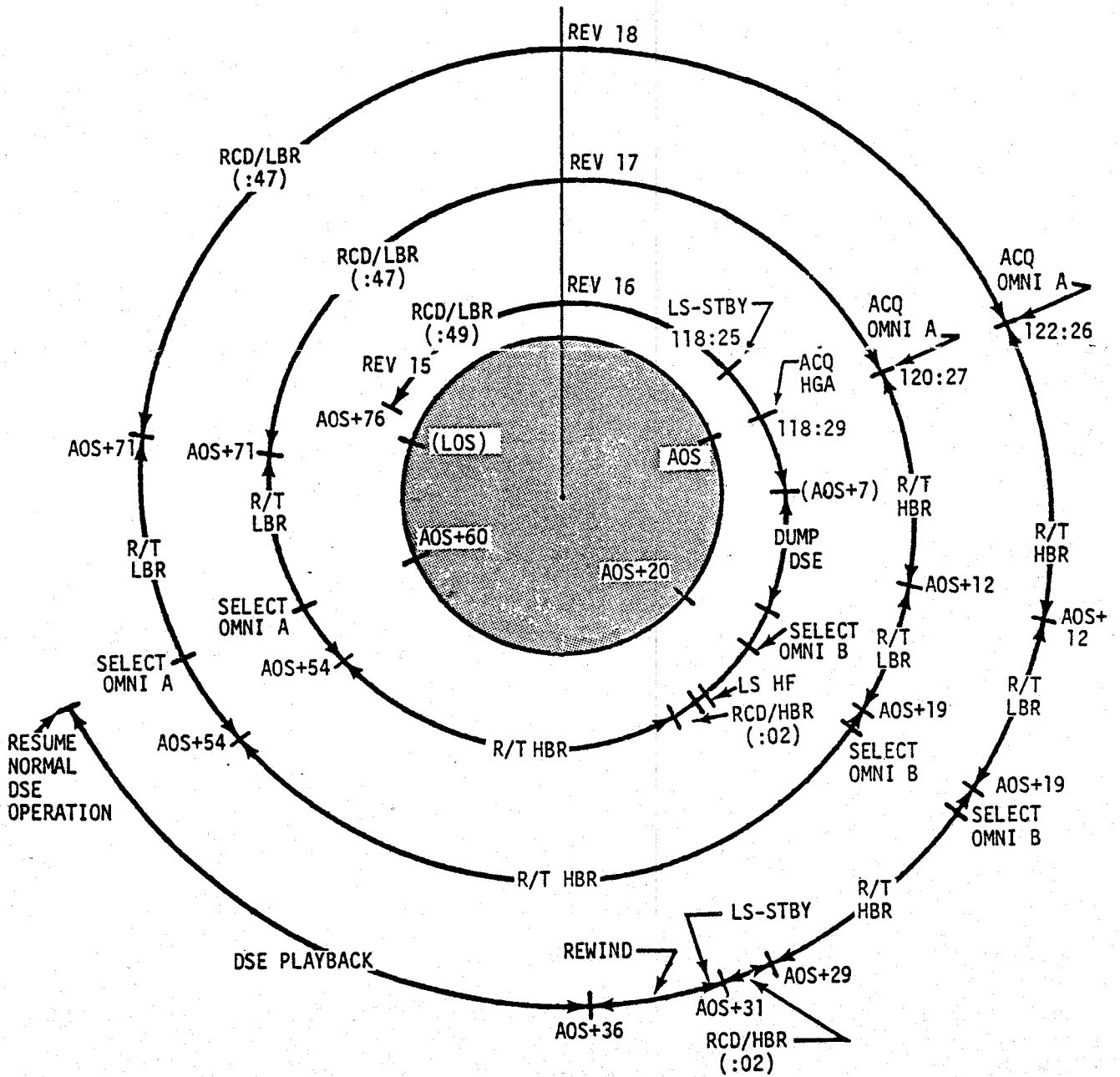
THIS PAGE INTENTIONALLY BLANK

CHART 2-1
(12/6)

LUNAR SOUNDER EMI TEST
REV 14
FILM USED: 5 MIN



LUNAR SOUNDER HF MODE
REVS 16, 17, 18
FILM USED - 245 MIN



10/23/72

CHART 2-3
(12/6)

2-29

LUNAR SOUNDER VHF MODE
REVS 24, 25, 26, 27
FILM USED - 245 MIN

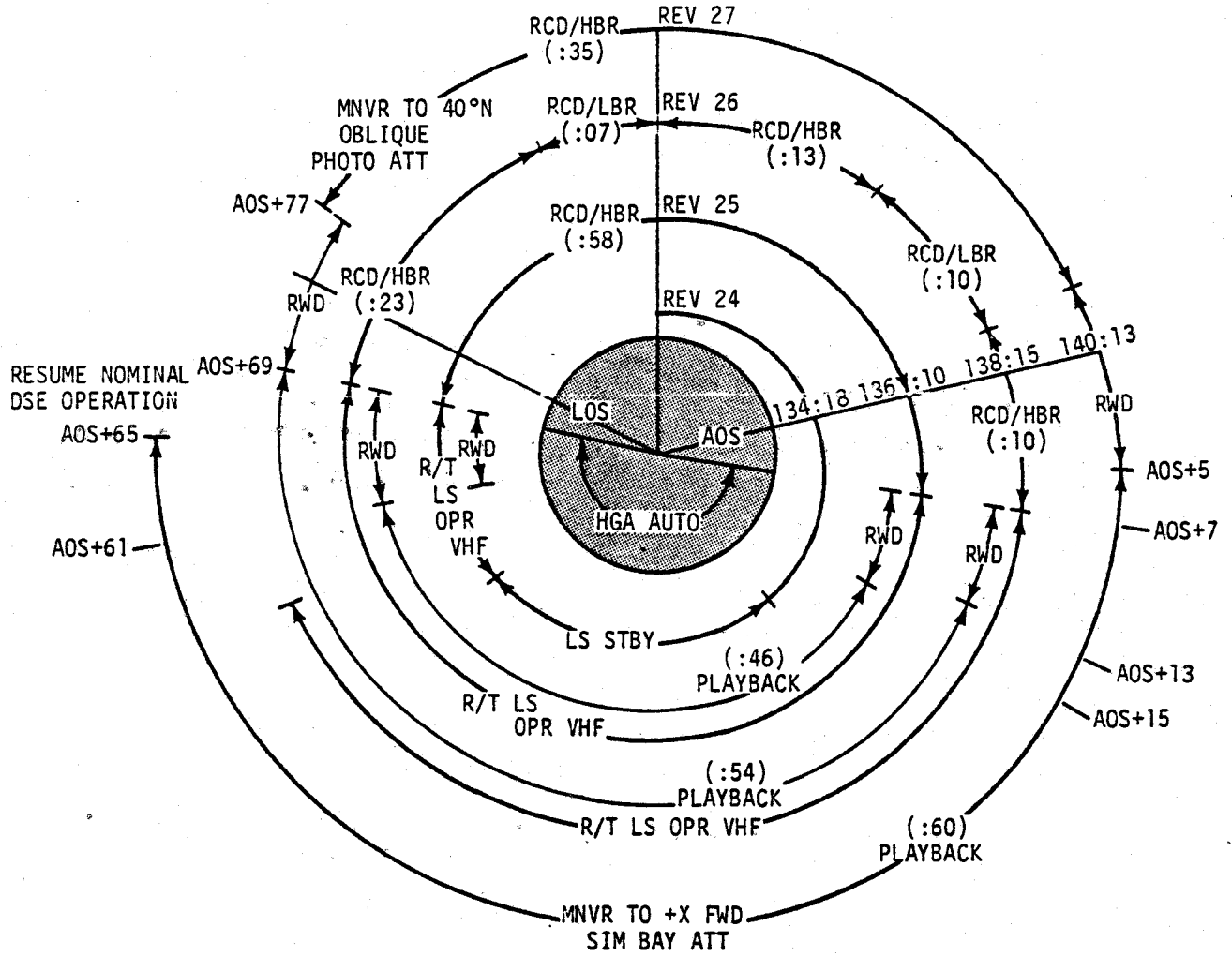


CHART 2-4
(12/6)
LUNAR SOUNDER RECEIVE ONLY (SEP-ON)
REVS 39, 40, 41

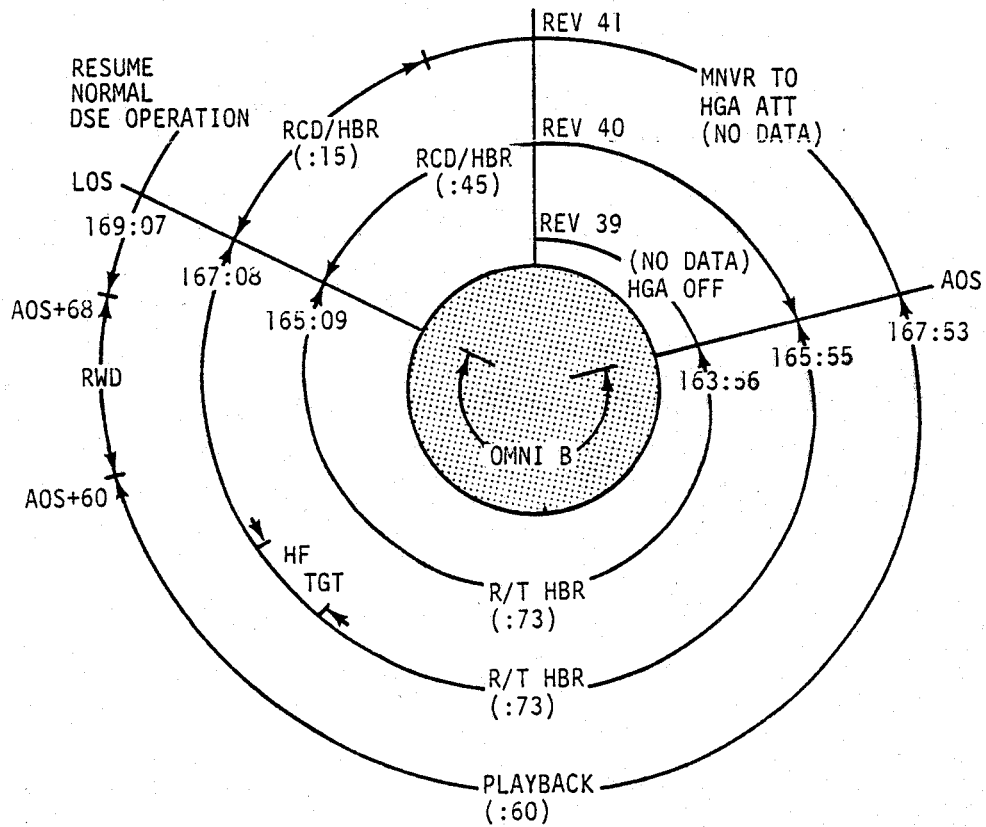
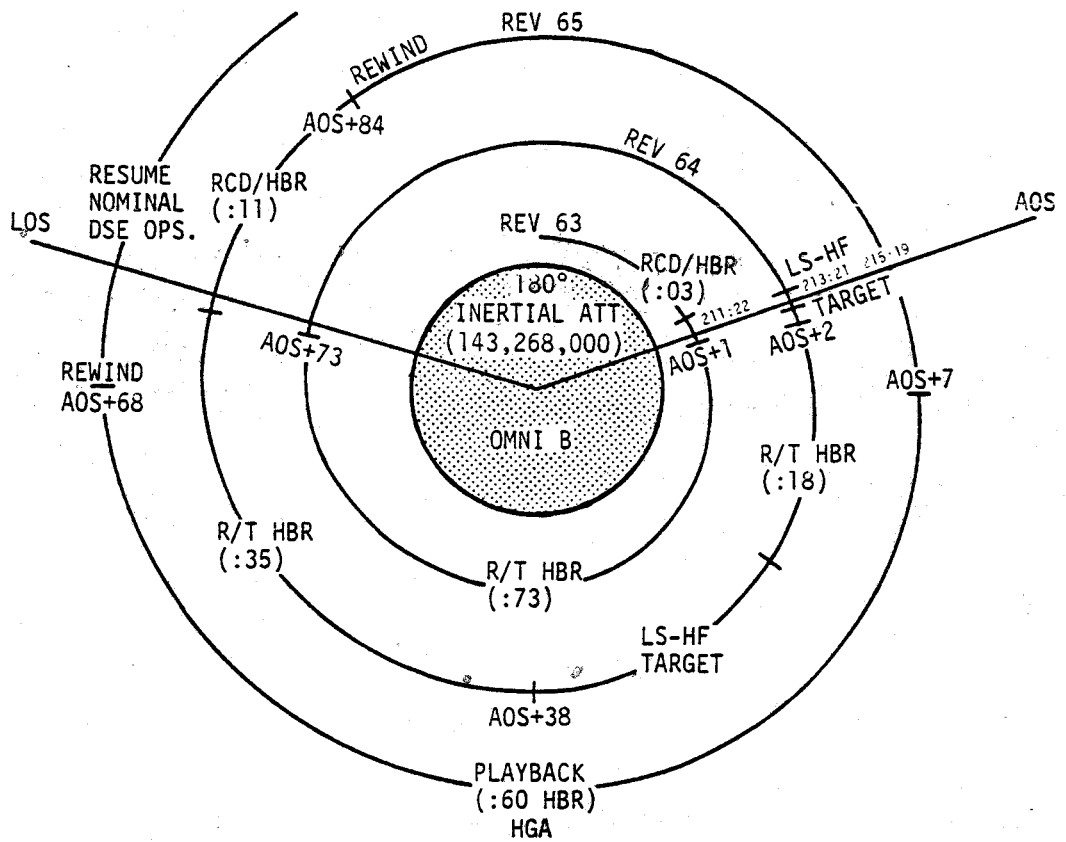
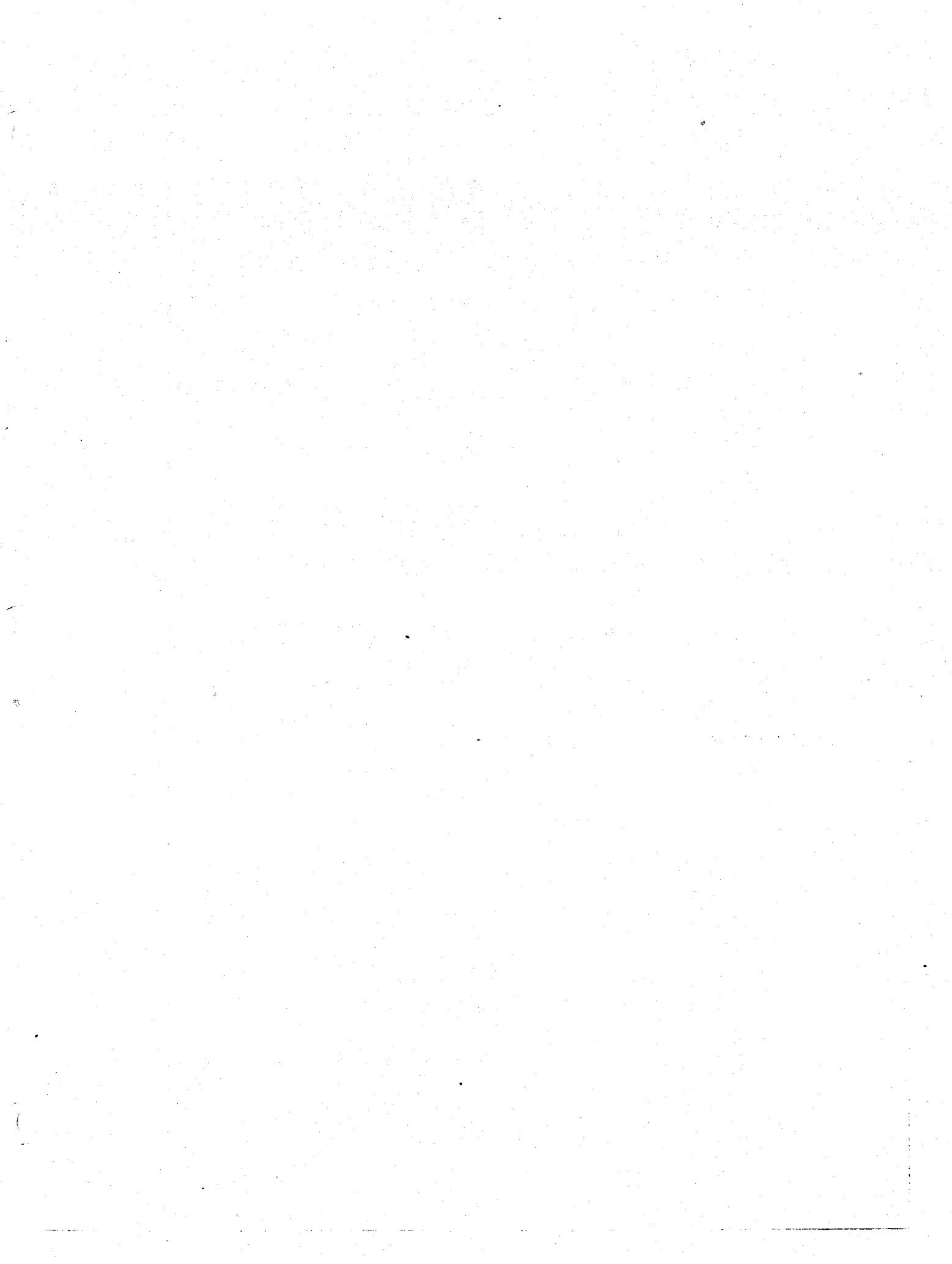


CHART 2-5
(12/6)
LUNAR SOUNDER - RECEIVE ONLY (SEP-OFF)
REVS 63, 64, 65



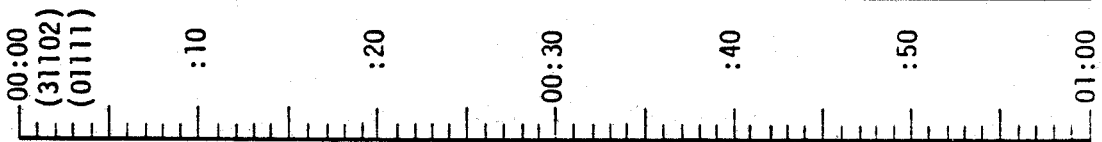


SECTION 3 - DETAILED TIMELINE



FLIGHT PLAN

MCC-H 2053 CST



LIFT-OFF DEC 6, 1972 CSM LAUNCH CHECKLIST

BOOST PAGE L/2-7 - C-1

SECO

INSERTION AND SYSTEM CHECKS PAGE L/2-11 C-3

OPTICS DUST COVER JETT L/2-16 - C-6

P52 (OPTION 3)
(LAUNCH ORIENT)

GDC ALIGN

REPORT: GYRO TORQUING ANGLES
TWO WAY S-BAND VOICE CHECK
SCS ATT REF COMPARISON CHECK PAGE L/2-17 - 2-4

NOTES

AT SECO+20 SEC, S-IVB
MNVRS TO LH AND
INITIATES ORB RATE
(HEADS DOWN)

UPDATE
Z TORQUING ANGLE

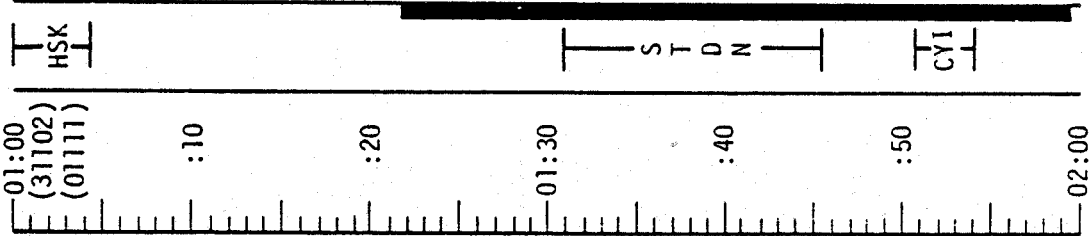
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	00:00 - 01:00	1/LAUNCH-E.O.	3-1

FLIGHT PLAN/CSM CHECKLIST

FLIGHT PLAN

MCC-H

2153 CST



CMD
DUMP DSE
UP-DATE
TLI +90 MIN ABORT
PAD
P37 (L/0+9) PAD

EXTEND DOCKING PROBE PAGE L/2-18

P52 (OPTION 3)
(LAUNCH ORIENT)

GDC ALIGN
REPORT: GYRO TORQUING ANGLES

NOTES

P52 IMU REALIGN
N71:
N05:
N93:
X
Y
Z
GET

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	01:00 - 02:00	1/E.O.	3-2

FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

2253 CST

MCC-H



(31102)
(01111)

:10

:20

02:30

:40

:50

03:00

CRO

HAW

TLI PREPARATION PAGE L/2-27
GO/NO-GO FOR PYRO ARM (CUE STDN)
LOGIC ON
TLI NOMINAL & MANUAL PAGE L/2-28

UPDATE
GO/NO-GO FOR PYRO
ARM
TLI PAD

UPLINK
CSM S.V. & V66

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	02:00 - 03:00	1/E.O.	3-3

TLI
BURN TABLE

ROLL RATES	P OR Y RATES	P OR Y ATT DEVIATION	SHUTDOWN TIME	RESIDUALS
>20°/SEC TERMINATE	>10°/SEC TERMINATE	+45° TERMINATE	CMC T _{GO} = 0 PLUS 1 SECOND	NO TRIM

APOLLO 17 FINAL (12/6)

10/23/72

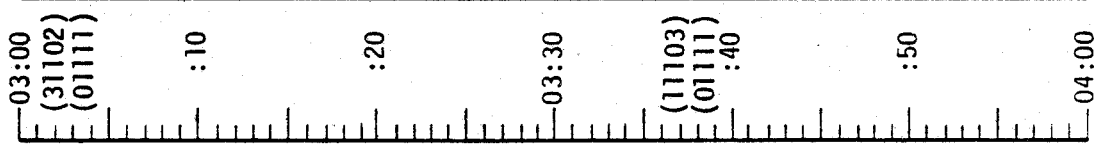
E.O./TLC

3-4

FLIGHT PLAN

NOTES

MCC-H 2353 CST



TB6 3:11:41
GO/NO-GO FOR TLI

OMNI C

TLI

OMNI D
POO
V66 SET CSM S.V. INTO LM.S.V.

TLI BURN STATUS REPORT
CDR - TRANS TO CENTER COUCH, CMP - LEFT COUCH
NORMAL SC/BOOSTER SEPARATIONS PAGE L/3-1
DIRECT 02 VLV - OPEN, UNTIL CABIN IS 5.7 PSI, THEN CLOSE
V48 (11103)(01111)

S-IVB MNVRS TO SEP ATT 03:42:05
(002,310,041) OMNI D

GO/NO-GO FOR TRANSPOSITION AND DOCKING
CSM SEPARATION PREP PAGE L/3-1 - ()

TIG: 03:21:19.3
BT: 5 MIN 45.7 SEC
ΔVC: 10,346.8 FPS

AT SECO: S-IVB INERTIAL
AT SECO +2 MIN 31 SEC:
S-IVB TO LOCAL
HORIZONTAL, ORB RATE
HEADS DOWN

T&D MNVR
+X FOR 3 SEC (ΔV ~0.5 FPS)
AFTER 15 SEC PITCH UP AT
0.5°/SEC. V49 AUTO MNVR
TO DOCKING ATT. NULL
TRANSLATION AND RATES,
+X FOR 4 SEC (ΔV ~0.7 FPS)

UPDATE
GO/NO-GO FOR TLI

UPDATE
GO/NO-GO FOR T&D

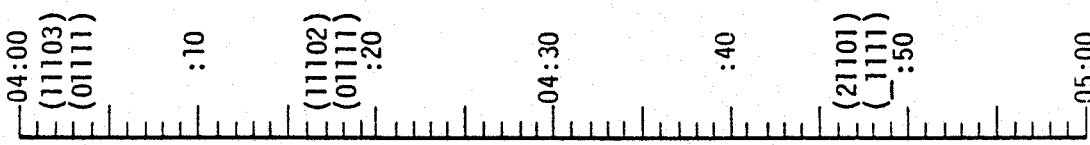
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	03:00 - 04:00	E.O./TLC	3-5

FLIGHT PLAN

NOTES

MCC-H

0053 CST



CSM/S-IVB SEP 04:12

CSM MNVR TO DOCK ATT (298,130,319) (04:18)
 V48 (11102)(01111)
 TV (HSK) 04:12 TO 04:32 CM4-BRKT (F22, MONITOR)
 VISUALLY INSPECT AND PHOTOGRAPH S-IVB AND LM, MAG (AA,NN)

DOCK 04:22

CM/LM PRESSURE EQUALIZATION (DECAL) PAGE L/3-5
 S-IVB NON-PROPULSIVE VENT START 4:27:05
 TUNNEL HATCH REMOVAL (DECAL)
 DOCKING LATCH VERIFICATION (DECAL)
 LM UMBILICAL CONNECTIONS (DECAL)
 HATCH INSTALLATION (DECAL)

S-IVB NON-PROPULSIVE VENT COMPLETE 4:42:05
 PRE LM SEP & EJECTION

V48 (21101)(1111)
 GO/NO-GO FOR PYRO ARM (CUE STDN)
 LOGIC ON
 PYRO ARM

CMD
 DUMP DSE

UPDATE
 GO/NO-GO FOR
 PYRO ARM AND
 CSM/LM EJECTION

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	04:00 - 05:00	1/TLC	3-6

FLIGHT PLANNING BRANCH

THIS PAGE INTENTIONALLY BLANK

APOLLO 17

FINAL(12/6)

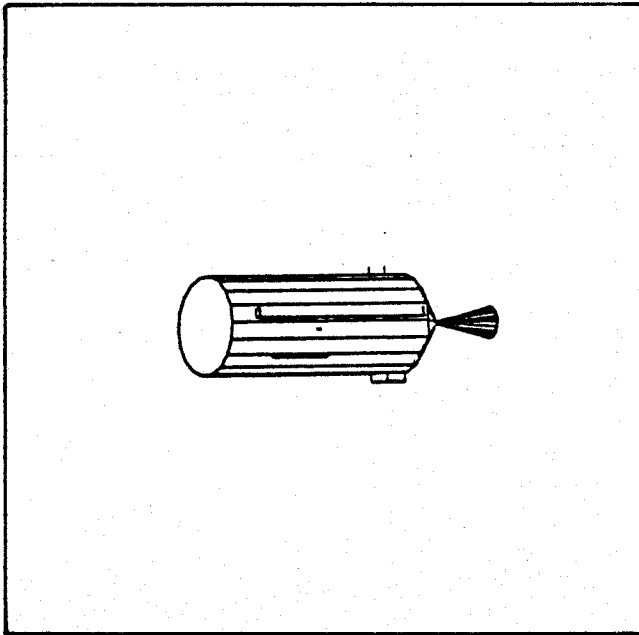
10/23/72

3-7

FLIGHT PLAN

GET 05:10

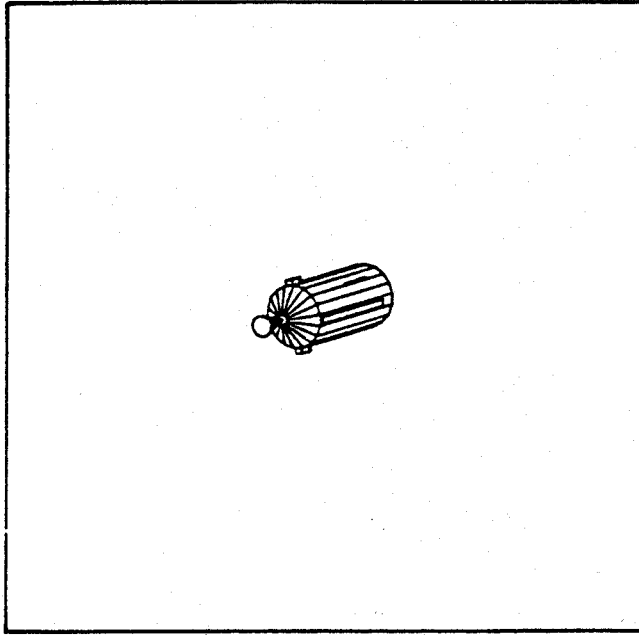
FOV 5°



S-IVB APS EVASIVE INITIATION

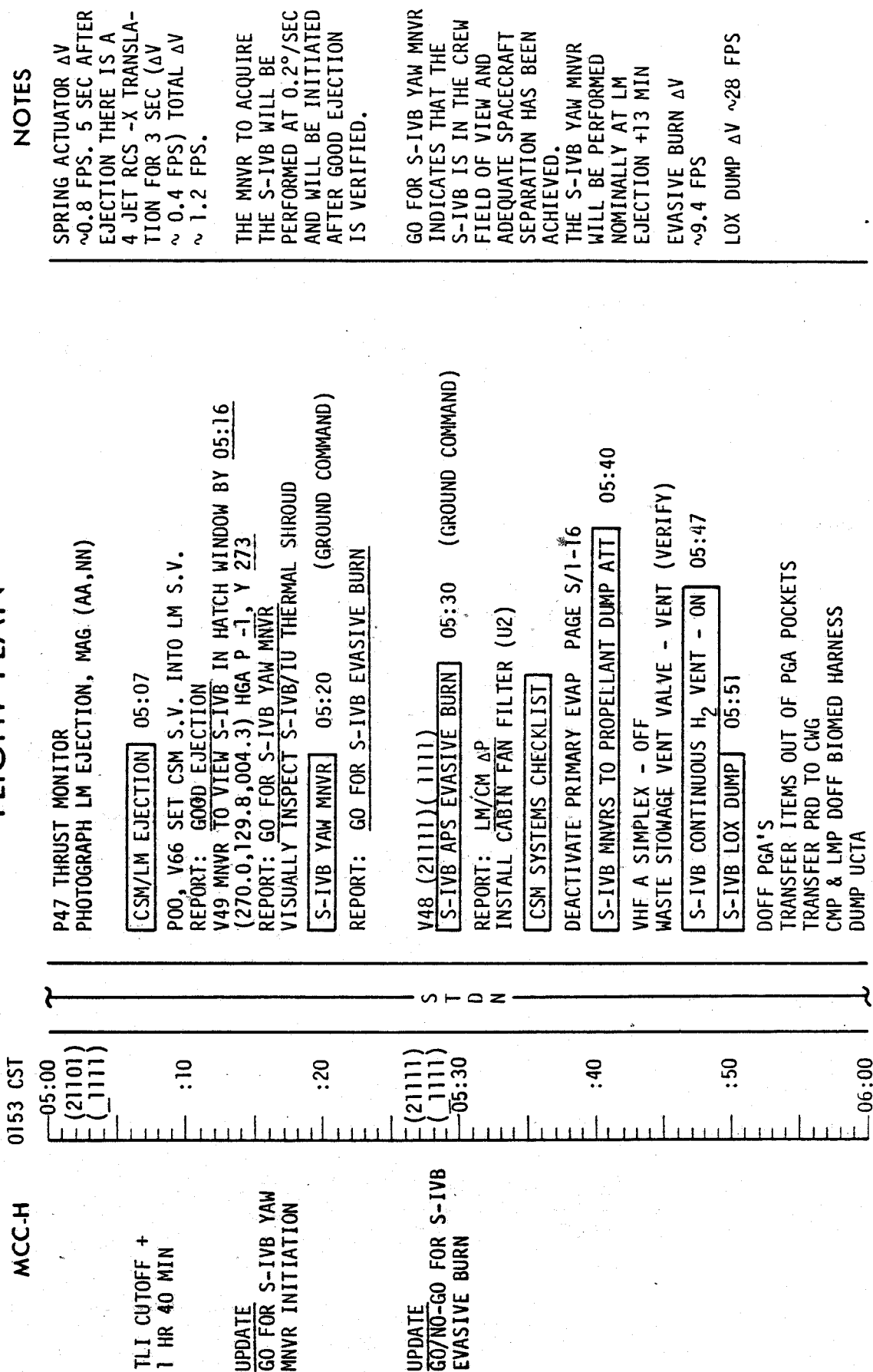
GET 05:31

FOV 1°



S-IVB LOX DUMP INITIATION

FLIGHT PLAN



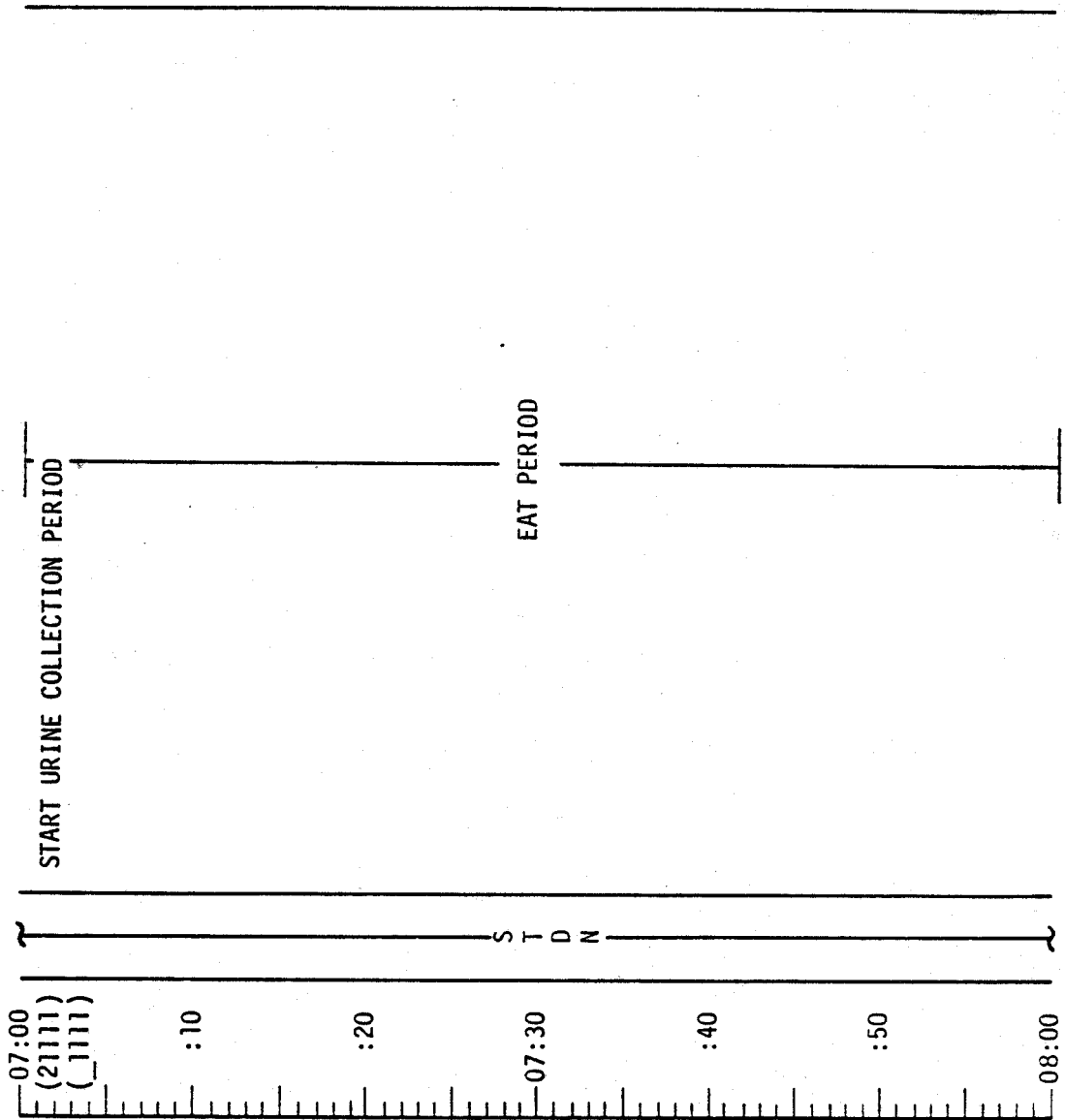
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	05:00 - 06:00	1/TLC	3-9

FLIGHT PLANNING PANICH

FLIGHT PLAN

NOTES

MCC-H 0353 CST



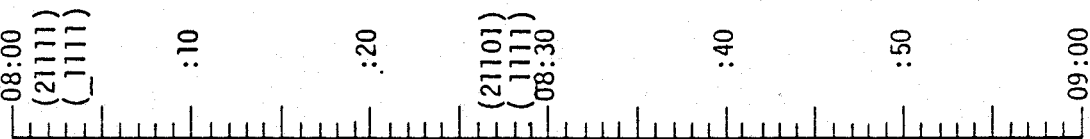
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	07:00 - 08:00	1/TLC	3-11

FLIGHT PLAN

MCC-H

0453 CST

UPLINK
ZERO TRUNNION BIAS
DESIRED ORIENT (PTC)



WASTE STORAGE VENT VALVE - CLOSE

LIMIT CYCLE - ON

ATT DEADBAND - MIN

RATE - LOW

BMAG (3) - ATT 1/RATE 2

SC CONT - SCS

P52 (OPTION 3)

(LAUNCH ORIENT)

STARS

SA

TA

REPORT: GYRO TORQUING ANGLES

P52 (OPTION 1)

(PTC ORIENT)

GDC ALIGN

SC CONT - CMC

BMAG (3) - RATE 2

CYCLE CMC MODE - FREE/AUTO

V48 (21101)(1111)

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N) PAGE G/8-2

V49 MNVR TO PTC ATTITUDE

(N20,90,000)

H2 HEATERS 1 & 2 - AUTO (VERIFY)

H2 FANS 3 - AUTO

O2 HEATERS 1 & 2 - OFF

O2 HEATERS 3 - AUTO

P20 OPT 2, X-AXIS

N78 (0,0,0)

N79 (-0.4200, +000.50)

N34 (0,0,0)

LiOH CANISTER CHANGE

(3 INTO A, STOW 1 in B5)

CSM SYSTEMS CHECKLIST

PRE-SLEEP CHECKLIST PAGE S/1-29

COMM - OMNI

S T D N

NOTES

SC INTERIOR PHOTOGRAPHY AT CREW OPTION
CM/DAC/10/CIN- SPOT
(T2.8,1/60,3) 6 fps

MAG (11) __, FR # __

PTC REFSMMAT ATT
R 196, P 169, Y 055

P52 IMU REALIGN

N71: __, __, __

N05: __, __, __

N93: __, __, __

X __, __, __

Y __, __, __

Z __, __, __

GET __, __, __

IF MCC-1 IS REQUIRED
PERFORM AT GET 08:45

DAP LOAD STATUS
(21101)(1111)

PTC

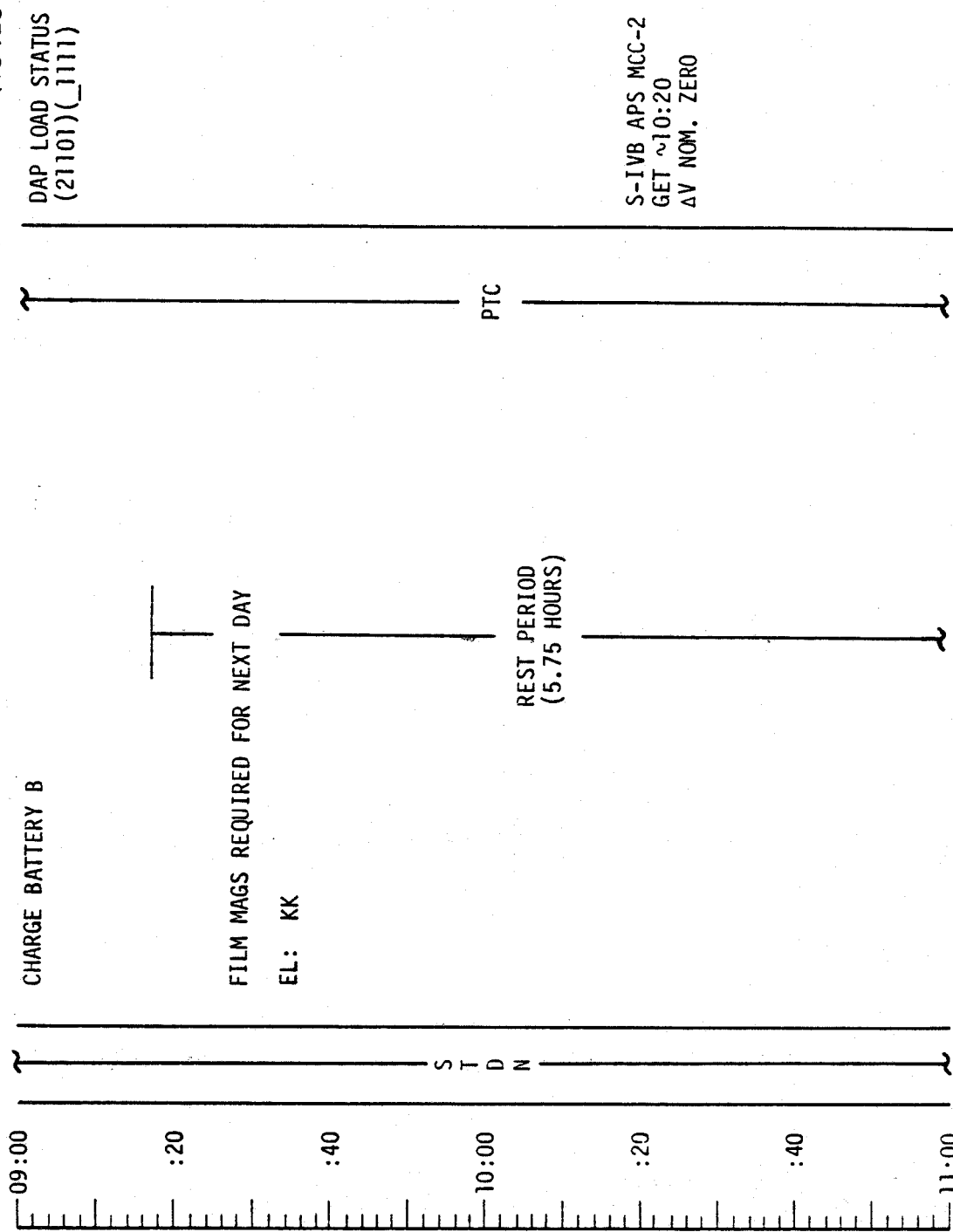
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	08:00 - 09:00	1/TLC	3-12

FLIGHT PLANNING BRANCH

MCC-H

FLIGHT PLAN

0553 CST



NOTES

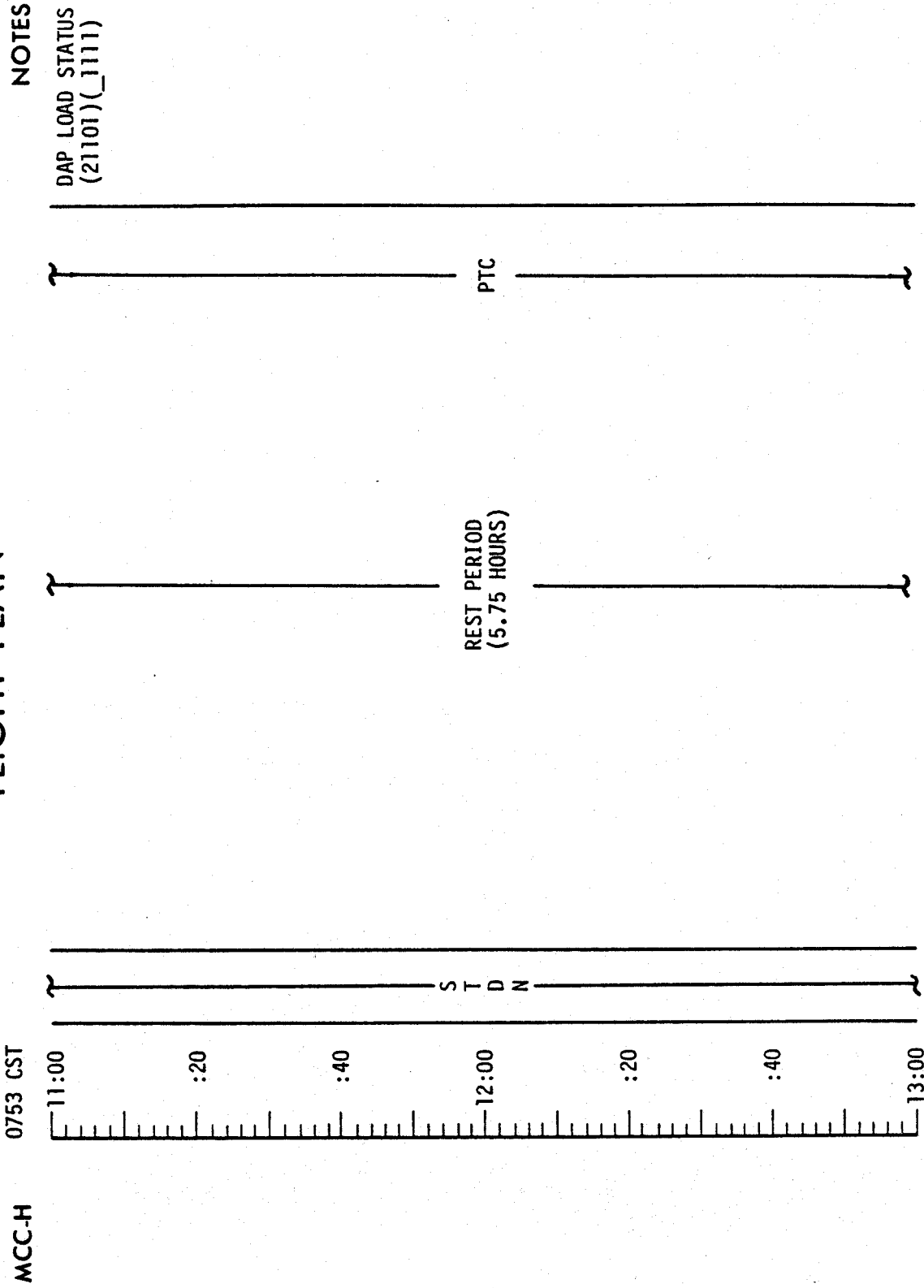
DAP LOAD STATUS
(21101)(J111)

S-IVB APS MCC-2
GET ~10:20
ΔV NOM. ZERO

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	09:00 - 11:00	1/TLC	3-13

FLIGHT PLANNING BRANCH

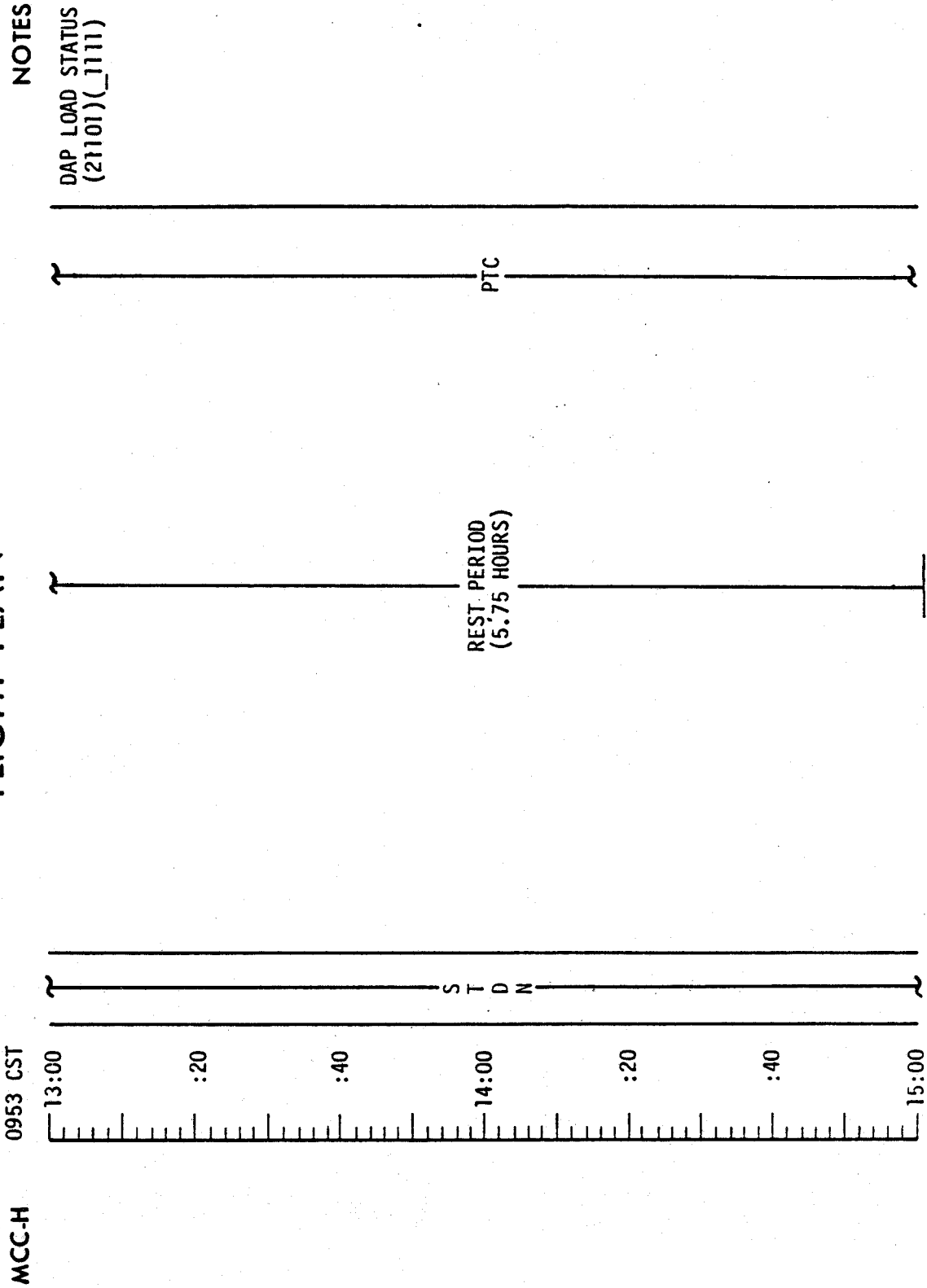
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	11:00 - 13:00	1/TLC	3-14

FLIGHT PLANNING BRANCH

FLIGHT PLAN

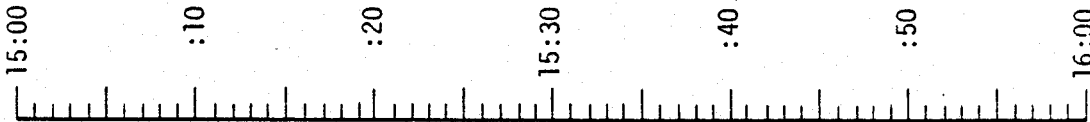


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	13:00 - 15:00	1/TLC	3-15

FLIGHT PLAN

1153 CST

MCC-H



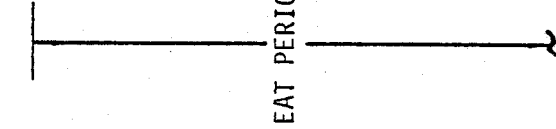
CSM SYSTEMS CHECKLIST

POST-SLEEP CHECKLIST

PAGE S/1-29

H₂ HEATERS 1&2 - OFF

S T D N



NOTES

DAP LOAD STATUS
(21101)(J1111)

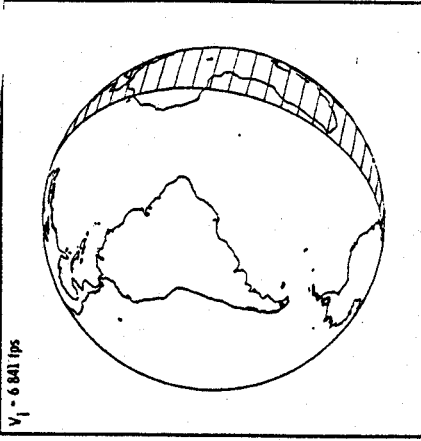
EARTH DISTANCE
~66,783 NM

PTC

GET=15:00

V₁ = 6.841 fps

FOV=7°



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	15:00 - 16:00	2/TLC	3-16

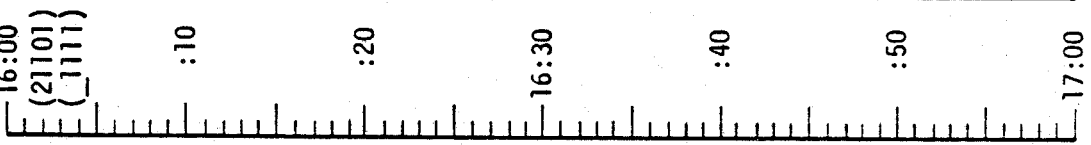
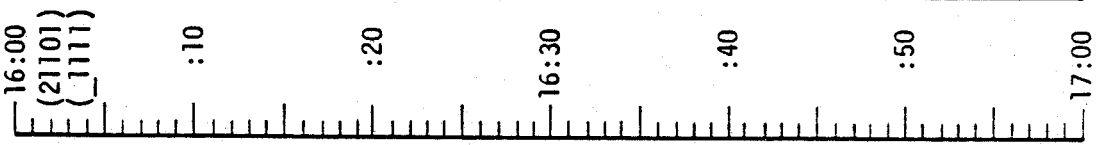
FLIGHT PLANNING BRANCH

MCC-H

1253 CST

FLIGHT PLAN

NOTES



UPDATE
 P37 PADS (LAUNCH
 +35,45,55, & 65)
 FLIGHT PLAN

P52 (OPTION 3)
 (PTC ORIENT)

REPORT: GYRO TORQUING ANGLES
 GDC ALIGN

CSM G&C CHECKLIST

EXIT G&N PTC PAGE G/8-3
 WASTE STORAGE VENT VLV - OPEN

P52	IMU REALIGN
N71:	---
N05:	---
N93:	---
X	---
Y	---
Z	---
GET	---

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	16:00 - 17:00	2/TLC	3-17

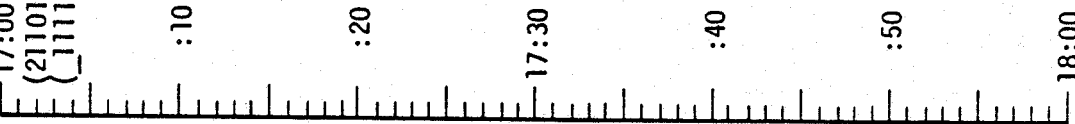
FLIGHT PLAN/MISSION/DATE

FLIGHT PLAN

NOTES

MCC-H

1353 CST
17:00
(21101)
(1111)



V49 MNVR TO OPTICS CALIBRATION ATTITUDE (17:13)
(175,298,330) HGA P -58, Y 307

P23 CISLUNAR NAVIGATION
OPTICS CALIBRATION STAR N70 (00022)
P00

V49 MNVR TO SIGHTING ATTITUDE (17:17)
(204,313,340) HGA P -55, Y 357
V67 (+80000) (+00070) (+00003)

P23 CISLUNAR NAVIGATION
5 MARKS ON EACH STAR, UPDATE STATE VECTOR
1. N70 (00000) (00000) (00110)
N88 (-53277) (+14235) (+83420)

113 MERAK
(ENH)

2. N70 (00000) (00000) (00120)
N88 (+02745) (+99128) (+12885)

55 BETELGEUSE
(EFH)

3. N70 (00000) (00000) (00110)
N88 (-84900) (+40299) (+34176)

151 GAMMA PRIME
LEONIS
(ENH)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	17:00 - 18:00	2/TLC	3-18

FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

106 MENKALINAN
(EFH)

- 4. N70 (00000) (00000) (00120)
- N88 (+00780)(+70773)(+70644)

POO
V49 MNVR TO OPTICS CALIBRATION ATTITUDE (18:22)
(175,298,330) HGA P -58, Y 307
P23 CISELUNAR NAVIGATION
OPTICS CALIBRATION STAR N70 (00022)
CONFIGURE FOR URINE DUMP

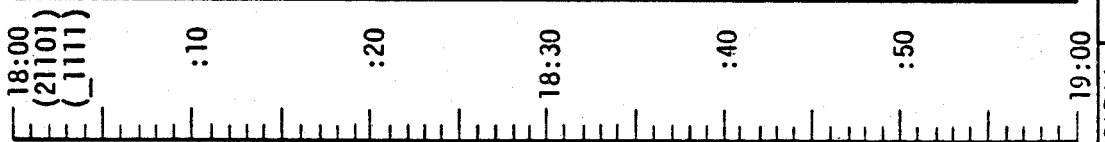
O₂ FUEL CELL PURGE
SAMPLE BUSS's (3) - STOW SAMPLES (3)
DUMP URINE FROM BUSS's (3) - STOW
START NEW URINE COLLECTION PERIOD
WASTE WATER DUMP TO 10 PERCENT
CHARGE BATTERY A

CSM EXP/EVA CHECKLIST

PC & MC FILM CYCLING PAGE X/1-17

ON STDN CUE: CYCLE FILM

MCC-H 1453 CST



CMD DATA SYS - OFF

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	18:00 - 19:00	2/TLC	3-19

FLIGHT PLANNING BOARD

FLIGHT PLAN

NOTES

MCC.H

1553 CST

19:00
(21101)
(11111)

:10

:20

19:30

:40

:50

20:00

UPDATE
QUADS TO ENABLE
FOR PTC SPINUP
FLIGHT PLAN

LMP DON BIOMED HARNESS

OMNI B

SECURE HGA: MAN, WIDE P -52, Y 270

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL PAGE G/8-2

V49 MNVR TO PTC ATTITUDE
(N20,090,000)

P20 OPT 2, X-AXIS

N78 (0,0,0)

N79 (-0.4200, +000.50)

N34 (0,0,0)

CHECK LMP BIOMED

CDR DOFF BIOMED HARNESS

EARTH PHOTOS

CM/EL/250-CEX(f8,1/250,∞) 4 FR

MAG (KK) _____, FR # _____

S T D N

PTC

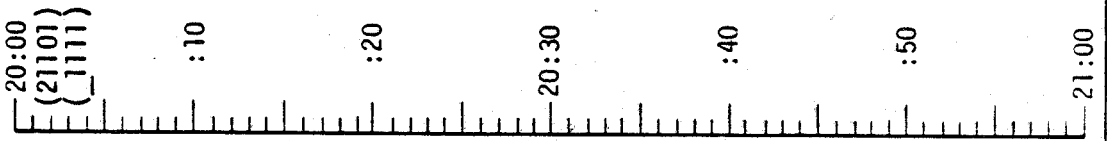
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	19:00 - 20:00	2/TLC	3-20

FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

MCC-H 1653 CST



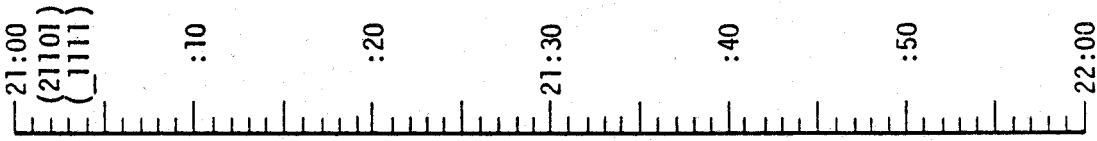
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	20:00 - 21:00	2/TLC	3-21

FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

MCC-H 1753 CST



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	21:00 - 22:00	2/TLC	3-22

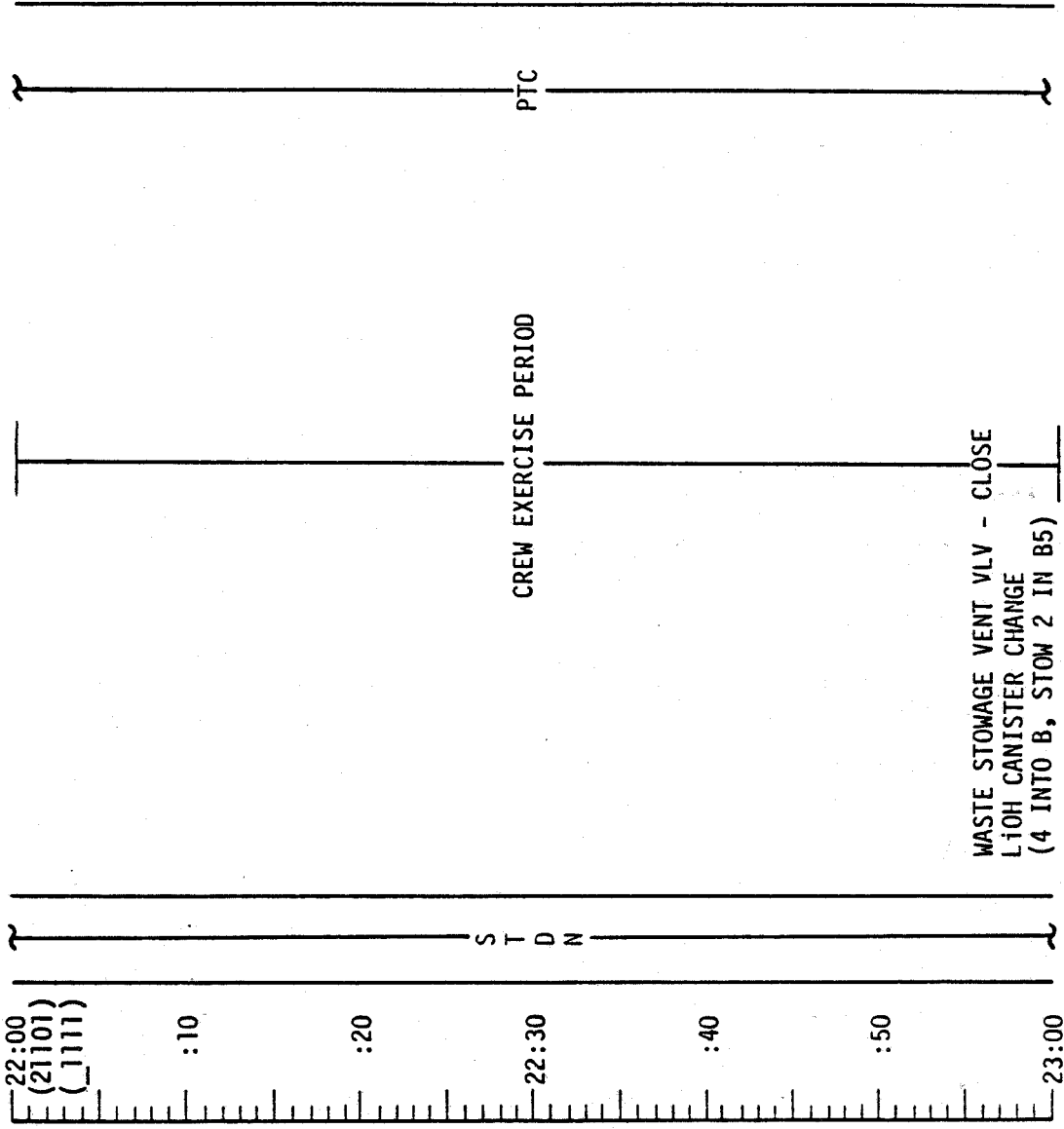
FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

1853 CST

MCC-H



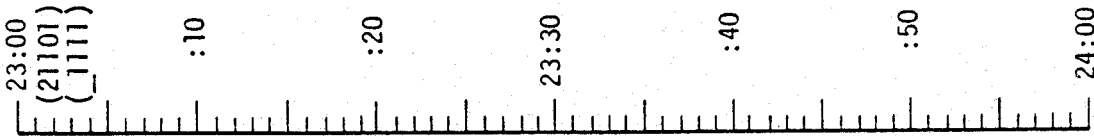
UPDATE
FLIGHT PLAN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	22:00 - 23:00	2/TLC	3-23

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H 1953 CST



P52 OPTION 3
(PTC ORIENT)

REPORT: GYRO TORQUING ANGLES
GDC ALIGN

S T D N

PTC

EAT PERIOD

NOTES

P52	IMU REALIGN
N71:	---
N05:	---
N93:	---
X	---
Y	---
Z	---
GET	---

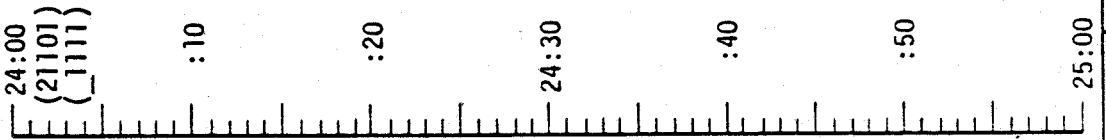
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	23:00 - 24:00	2/TLC	3-24

FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

MCC-H 2053 CST



EAT PERIOD

CSM SYSTEMS CHECKLIST

PRE-SLEEP CHECKLIST PAGE S/1-29
COMM - OMNI
FILM MAGS REQUIRED FOR NEXT DAY

DAC: 1HH

PTC

ONBOARD READOUT	
BAT C	_____
PYRO BAT A	_____
PYRO BAT B	_____
RCS A	_____
B	_____
C	_____
D	_____
DC IND SEL - MNA OR B	

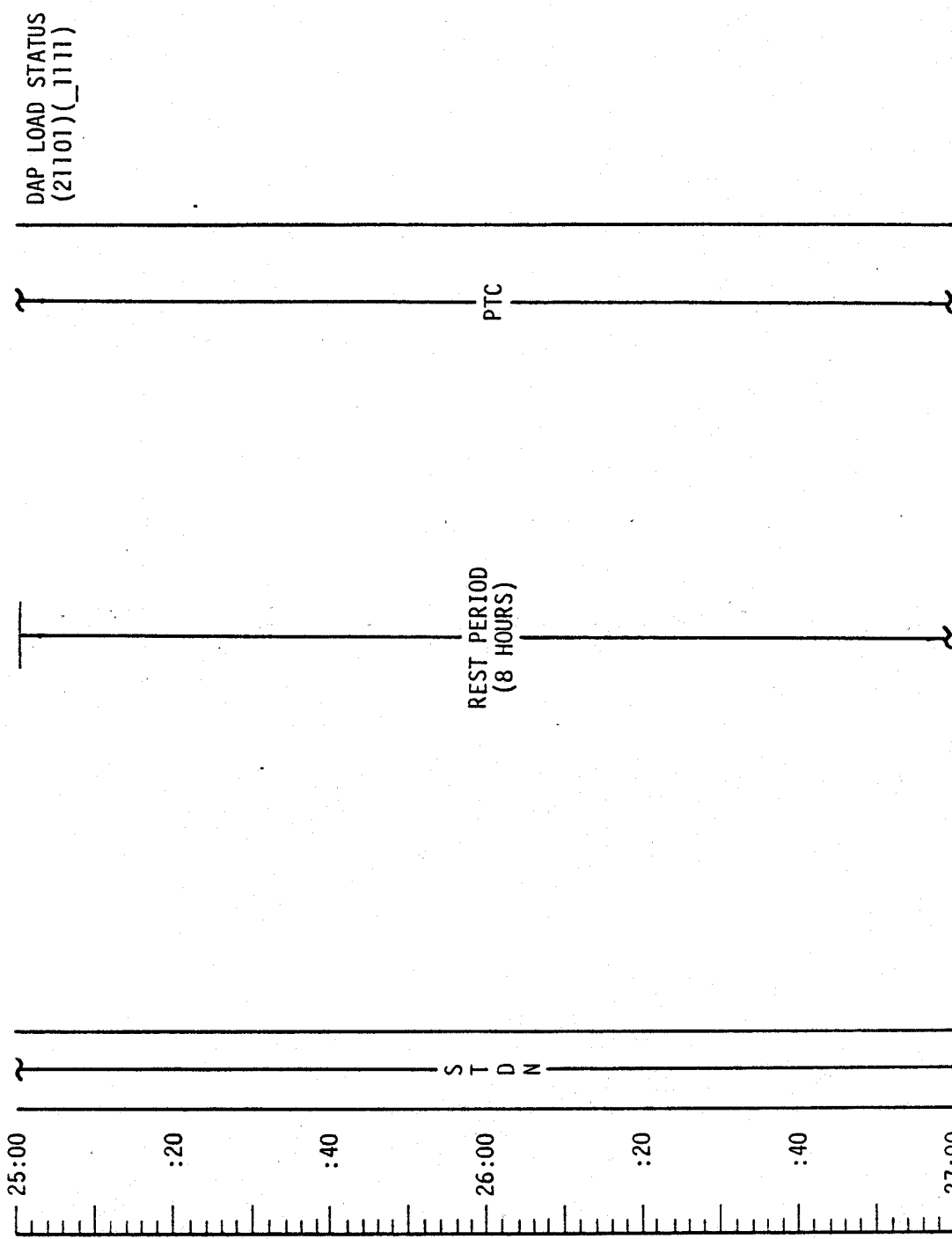
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	24:00 - 25:00	2/TLC	3-25

FLIGHT PLAN/MISSION/ISSUE

FLIGHT PLAN

MCC-H

2153 CST



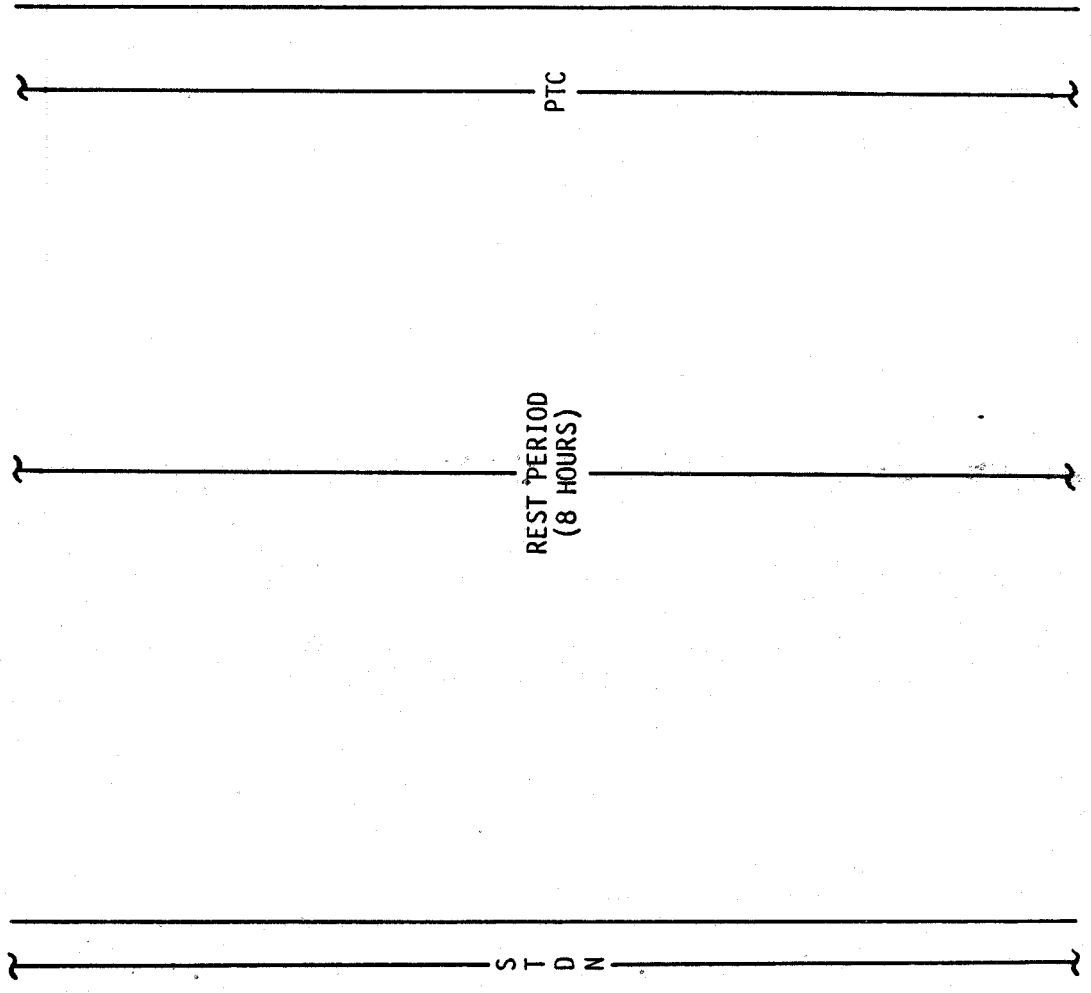
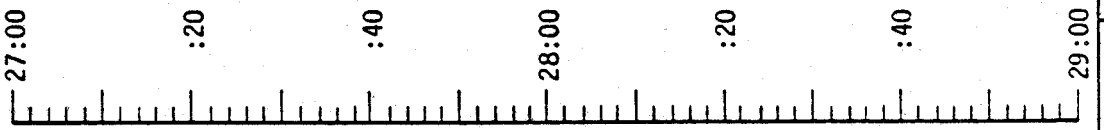
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	25:00 - 27:00	2/TLC	3-26

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H 2353 CST

MCC-H



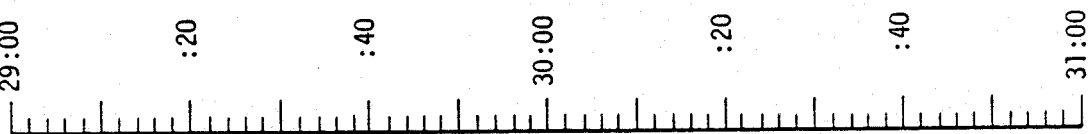
NOTES
DAP LOAD STATUS
(21101)(1111)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	27:00 - 29:00	2/TLC	3-27

FLIGHT PLAN

MCC-H

0153 CST



STDN

REST PERIOD
(8 HOURS)

PTC

NOTES

DAP LOAD STATUS
(21101)(1111)

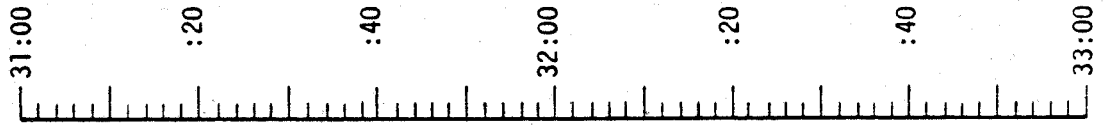
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	29:00 - 31:00	2/TLC	3-28

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0353 CST



STDN

REST PERIOD (8 HOURS)

PTC

NOTES

DAP LOAD STATUS
(21101)(1111)

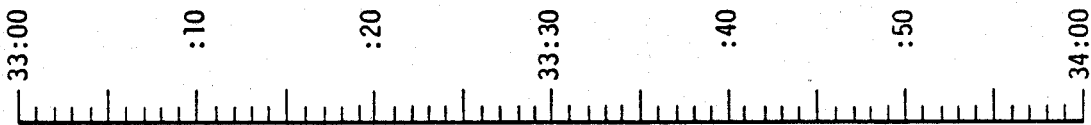
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	31:00 - 33:00	2/TLC	3-29

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0553 CST



CSM SYSTEMS CHECKLIST
 POST-SLEEP CHECKLIST PAGE S/1-29
 L10H CANISTER CHANGE
 (5 INTO A, STOW 3 IN B5)

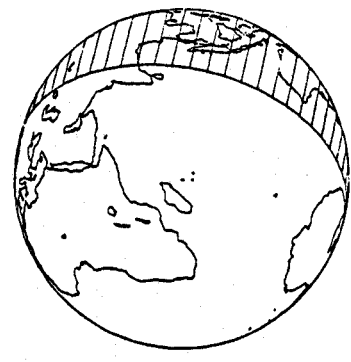
NOTES
 DAP LOAD STATUS
 (21101)(1111)
 EARTH DISTANCE
 ~121,497 NM

CSM G&C CHECKLIST
 *EMS ΔV TEST & NULL BIAS CHECK PAGE G/2-5
 *REPORT: BIAS

*PERFORM IF MCC-2
 IS REQUIRED

PTC

GET=33:00
 V₁ = 4.238 fps
 FOV=4°



EAT PERIOD

S T D N

UPDATE
 GO/NO-GO FOR MCC-2

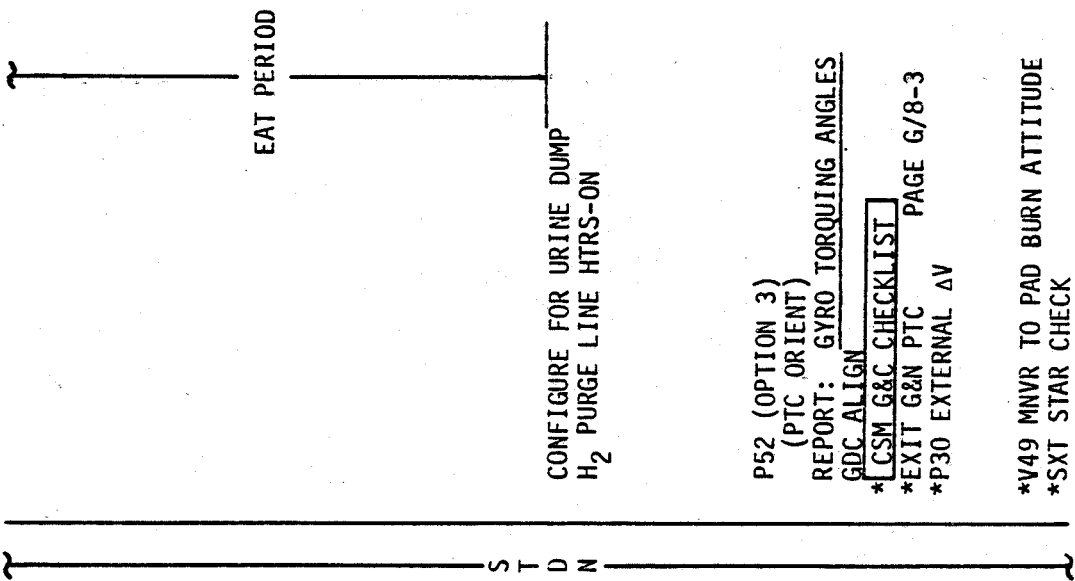
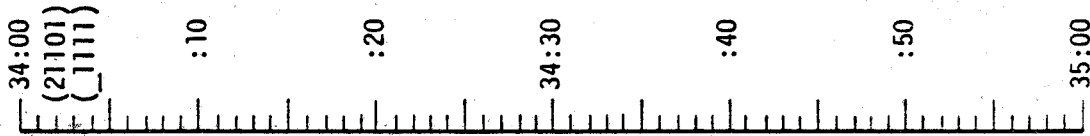
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	33:00 - 34:00	3/TLC	3-30

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0653 CST



P52	IMU REALIGN
N71:	---
N05:	---
N93:	---
X	---
Y	---
Z	---
GET	---

UPLINK
CSM S.V. & V66
MCC-2 TGT LOAD

UPDATE
MCC-2 MNVR PAD
FLIGHT PLAN

CONFIGURE FOR URINE DUMP
H₂ PURGE LINE HTRS-ON

P52 (OPTION 3)
(PTC ORIENT)
REPORT: GYRO TORQUING ANGLES
GDC ALIGN
*CSM G&C CHECKLIST
*EXIT G&N PTC PAGE G/8-3
*P30 EXTERNAL ΔV

*V49 MNVR TO PAD BURN ATTITUDE
*SXT STAR CHECK

*PERFORM IF MCC-2
IS REQUIRED

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	34:00 - 35:00	3/TLC	3-31

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-2
BURN TABLE

SPS LIMITS	P OR Y RATES	ATT DEVIATION	MANUAL START ACTION	OVERBURN SHUTDOWN CRITERIA	RCS TRIM GUIDELINES
TIGHT	10°/SEC TERMINATE	+10° TERMINATE	NO MANUAL STARTS NO RESTART	BT + 1 SEC	IF < 2 FPS, TRIM X-AXIS TO 0.2 FPS IF > 2 FPS, NO TRIM

BALL VLV FAILURE - START ON SUSPECT BANK
Shut down good bank to verify; reenable

APOLLO 17

FINAL (12/6)

10/23/72

3/TLC

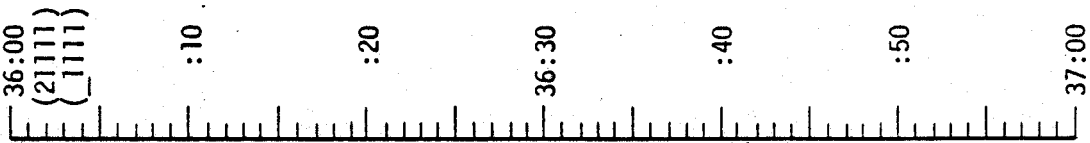
3-32

FLIGHT PLAN

MCC-H

0853 CST

NOTES



CMP DON BIOMED HARNESS

CHECK CMP BIOMED
LMP DOFF BIOMED HARNESS

S T D N

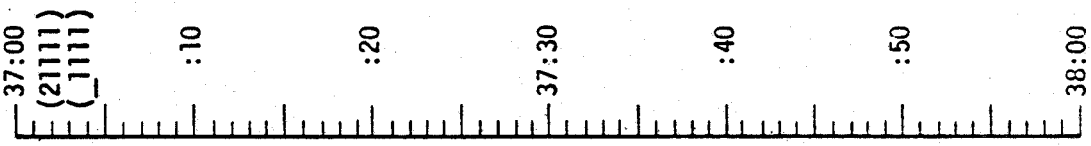
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	36:00 - 37:00	3/TLC	3-34

FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

MCC-H 0953 CST



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	37:00 - 38:00	3/TLC	3-35

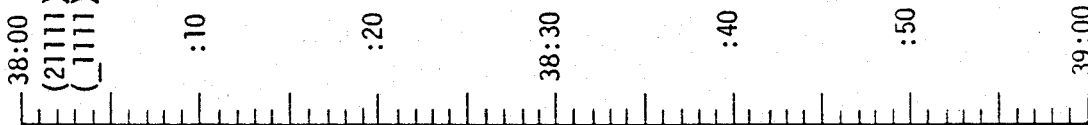
UPDATE
FLIGHT PLAN

FLIGHT PLANNING RPN/CH

FLIGHT PLAN

NOTES

MCC-H 1053 CST



38:00
(21111)
(1111)

EAT PERIOD

STDN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	38:00 - 39:00	3/TLC	3-36

FLIGHT PLANNING BRANCH

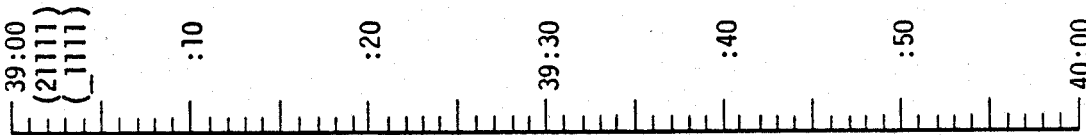
CSM TO LM TRANSFER LIST (TLC)

<u>CSM LOCATION</u>	<u>ITEM</u>	<u>LM LOCATION</u>
A2	JETTISON BAG	TEMP STOW
ICG	SCISSORS (1)	DATA FILE
CCU CABLE	CWG ELECT ADAPT W/CAP (2)	ON COMM CARRIER
ON CREW	COMM CARR (2)	ON CREW
R5	INFLIGHT STRAPS (4)	ON O2 UMP
R5	UTILITY STRAPS (3)	LHSSC
R13	70MM MAG (4) IN BAG	AFT RHSSC (BW-L, HCEX-A, E & F)
R13	70MM MAG (3) IN BAG	AFT ENG COVER (BW-H&I, HCEX-D)
R13	70MM MAG (3) IN BAG	FWD RHSSC
R13	16MM MAG (3) IN BAG	(BW-G, HCEX-B&C)
		2-W/BAG IN ISA (P,Q)
		1-WINDOW SEQ
		CAMR (0)
A8	70MM MAG (3) IN BAG W/DOS	AFT ENG COVER(BW-J, K, R)
A8	70MM MAG (2) IN BAG	RHSSC (BW-M, N)
R3	LM ACTIVATION C/L (2)	DATA FILE
A8	LGT WGT HEADSETS	LHSSC
A8	CWG'S (2)	AFT ENG COVER
A7	APK	AFT BLKHD

FLIGHT PLAN

NOTES

MCC-H 1153 CST



PREPARE ITEMS PER CSM TO LM TRANSFER LIST

O₂ HEATERS 1,2 - AUTO

V49 MNVR TO LM
CHECKOUT ATTITUDE
(39:30)

(299,089,000)
HGA: P -30, Y 270

DIRECT O₂ VLV - OPEN
UNTIL CABIN PRESS
=5.7 PSIA, then CLOSE

REMOVE TSB FROM
TUNNEL AND TEMP
STOW
COUCHES: CDR - 0°, CMP - 0°, LMP - 80°
TUNNEL LIGHTS - ON
CM/LM PRESSURE EQUALIZATION (DECAL)
TUNNEL HATCH REMOVAL (DECAL)
PROBE REMOVAL (DECAL)
DROGUE REMOVAL (DECAL)
O₂ HEATERS 1,2 - OFF
O₂ HEATERS 3 - AUTO

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	39:00 - 40:00	3/TLC	3-38

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

LM

LMP

CDR

LM ACTIVATION CHECKLIST PAGE 1-3
IVT TO LM

ENTRY STATUS CHECK

IVT TO LM

HOUSEKEEPING

CSM

CMP

REPORT: DOCKING
TUNNEL INDEX ANGLE
OPEN LM HATCH
LMP TRANSFER TO LM
TRANSFER ITEMS PER
LM ACTIVATION
CHECKLIST

1253 CST

40:00

(21111)

(11111)

:10

:20

40:30

:40

:50

41:00

UPDATE TO CSM
LOI -5 HR FLYBY
FLIGHT PLAN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	40:00 - 41:00	3/TLC	3-39

FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM

CMP

LM

LMP

MCC-H

1353 CST

41:00
(21111)
(1111)

HOUSEKEEPING

CDR

:10

COMM ACTIVATION

:20

41:30

S-BAND/VHF SIMPLEX VOICE TEST

:40

OPS PRESSURE C/O

:50

COMM DEACTIVATION

42:00

LMP & CDR IVT TO CSM PAGE 1-21

LM PWR - RESET/OFF
(AT LMP REQUEST)
REPORT: GET (: :)

SYS TEST - 7D
SYS TEST IND = 0 VOLTS

CSM/LM VHF VOICE CHECK
(SIMPLEX A&B)

LM PWR - ON
(AT LMP REQUEST)
REPORT: GET (: :)
SYS TEST - 7D
SYS TEST IND = 0.5-3.2
VOLTS

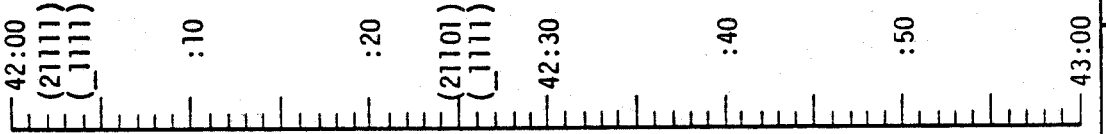
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	41:00 - 42:00	3/TLC	3-40

FLIGHT ANNUNCIATING BRANCH

FLIGHT PLAN

NOTES

MCC-H 1453 CST



CLOSE LM HATCH
 INSTALL DROGUE (DECAL)
 INSTALL PROBE (DECAL)
 HATCH INSTALLATION (DECAL)
 LM TUNNEL VENT VALVE - LM/CM ΔP
 TUNNEL LIGHTS - OFF

CYCLE CMC MODE - FREE/AUTO
 V48 (21101)(1111)

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N) PAGE G/8-2
 V49 MNVR TO PTC ATTITUDE HGA: P -59, Y 90 REACQ, NARROW
 (029,090,000)

WAIT FOR RATES TO DAMP FOR HEAT FLOW PERFORMANCE

CSM EXP/EVA CHECKLIST

HEAT FLOW & CONVECTION PREPARATION PAGE X/2-4
 MAG (HH)

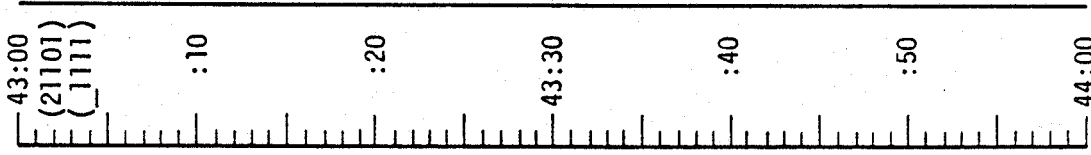
LM TO CM TRANSFER LIST (TLC)		
LM LOCATION	ITEM	CM LOCATION
ON CREW	COMM CARR (2)	ON CREW
ON CREW	CMG ADPTR W/CAP(2)	CCU CABLE
TEMP. STG.	LM ACT C/L (1)	R3
TEMP. STG.	JETTISON BAG	A2
JETT BAG	DRINK BAG (2)	TEMP STOWAGE
JETT BAG	FOOD STICK (2)	TEMP STOWAGE

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	42:00 - 43:00	3/TLC	3-41

FLIGHT PLAN

NOTES

1553 CST



43:00
(21101)
(1111)

:10

UPDATE
QUADS TO ENABLE
FOR PTC SPINUP

*PERFORM HEAT FLOW AND
CONVECTION DEMONSTRATION

43:30

S T D N

:40

CSM EXP/EVA CHECKLIST

PC & MC FILM CYCLING PAGE X/1-17
ON STDN CUE: CYCLE FILM

CMD
DATA SYS - ON

:50

OMNI A
SECURE HGA: MAN, WIDE P -52, Y 270
P20 OPT 2, X-AXIS (G&C PAGE G/8-2)
N78 (0,0,0)
N79 (-0.4200, +000.50)
N34 (0,0,0)

CMD
DATA SYS - OFF

44:00

*REPEAT AT 45:20

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	43:00 - 44:00	3/TLC	3-42

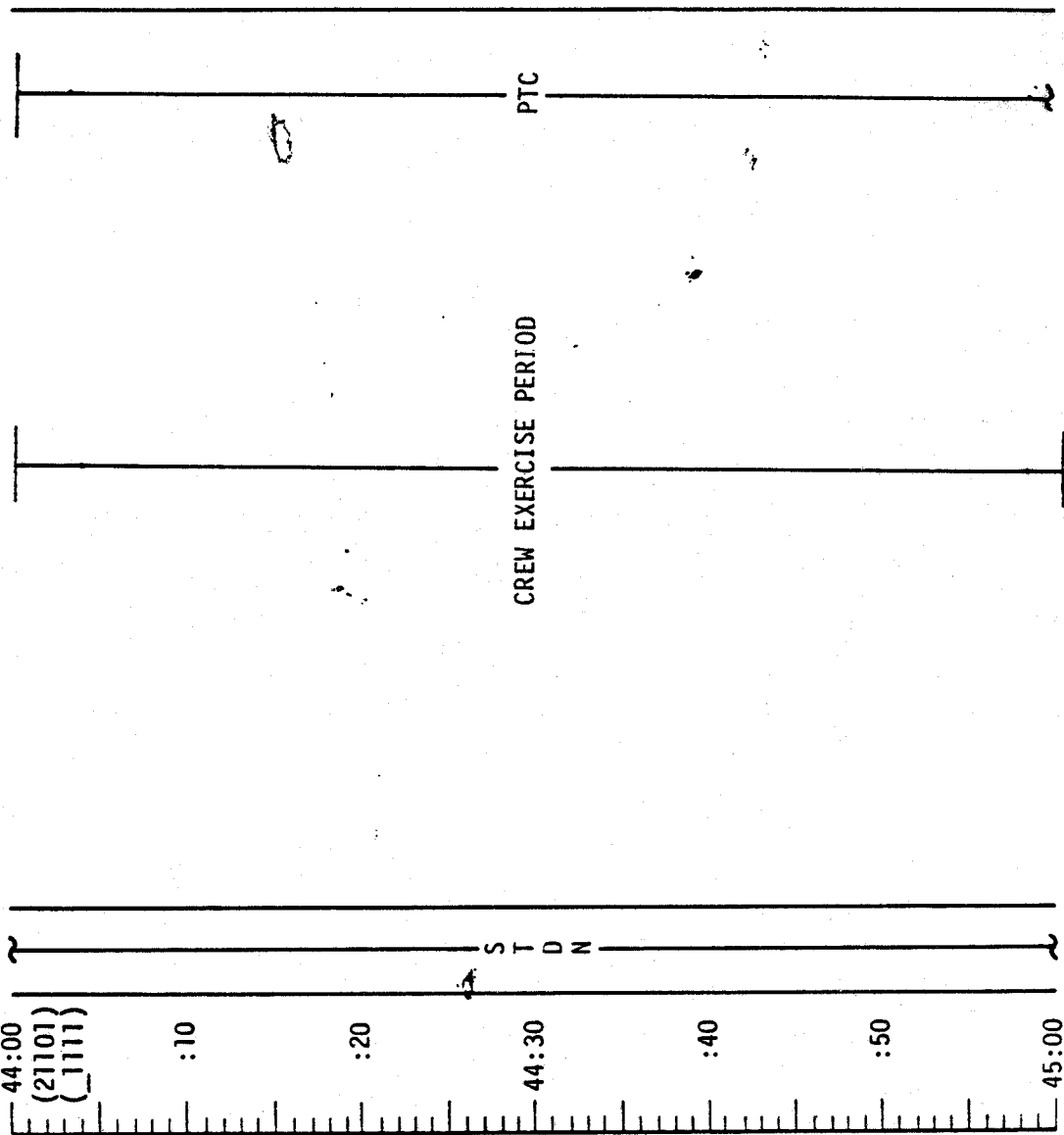
FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

1653 CST

MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	44:00 - 45:00	3/TLC	3-43

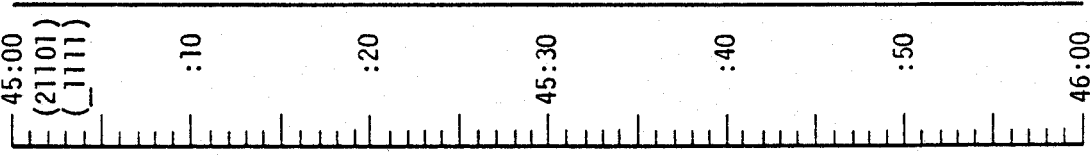
FLIGHT PLAN IN PROGRESS

FLIGHT PLAN

NOTES

MCC-H

1753 CST



45:00
(21101)
(1111)

STDN

PTC

PERFORM HEAT FLOW AND
CONVECTION DEMONSTRATION

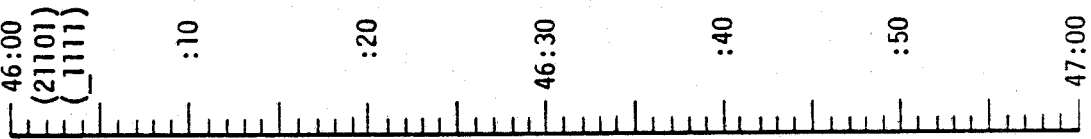
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	45:00 - 46:00	3/TLC	3-44

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1853 CST



STOW HEAT FLOW EQUIPMENT

P52 OPT 3
(PTC ORIENT)

REPORT: GYRO TORQUING ANGLES
GDC ALIGN

L10H CANISTER CHANGE
(6 INTO B, STOW 4 IN B5)

S T D N

UPDATE
FLIGHT PLAN

NOTES

ENTER LUNAR
PENUMBRA

P52 IMU REALIGN

N71: _____
N05: _____
N93: _____
X _____
Y _____
Z _____
GET _____

PTC

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	46:00 - 47:00	3/TLC	3-45

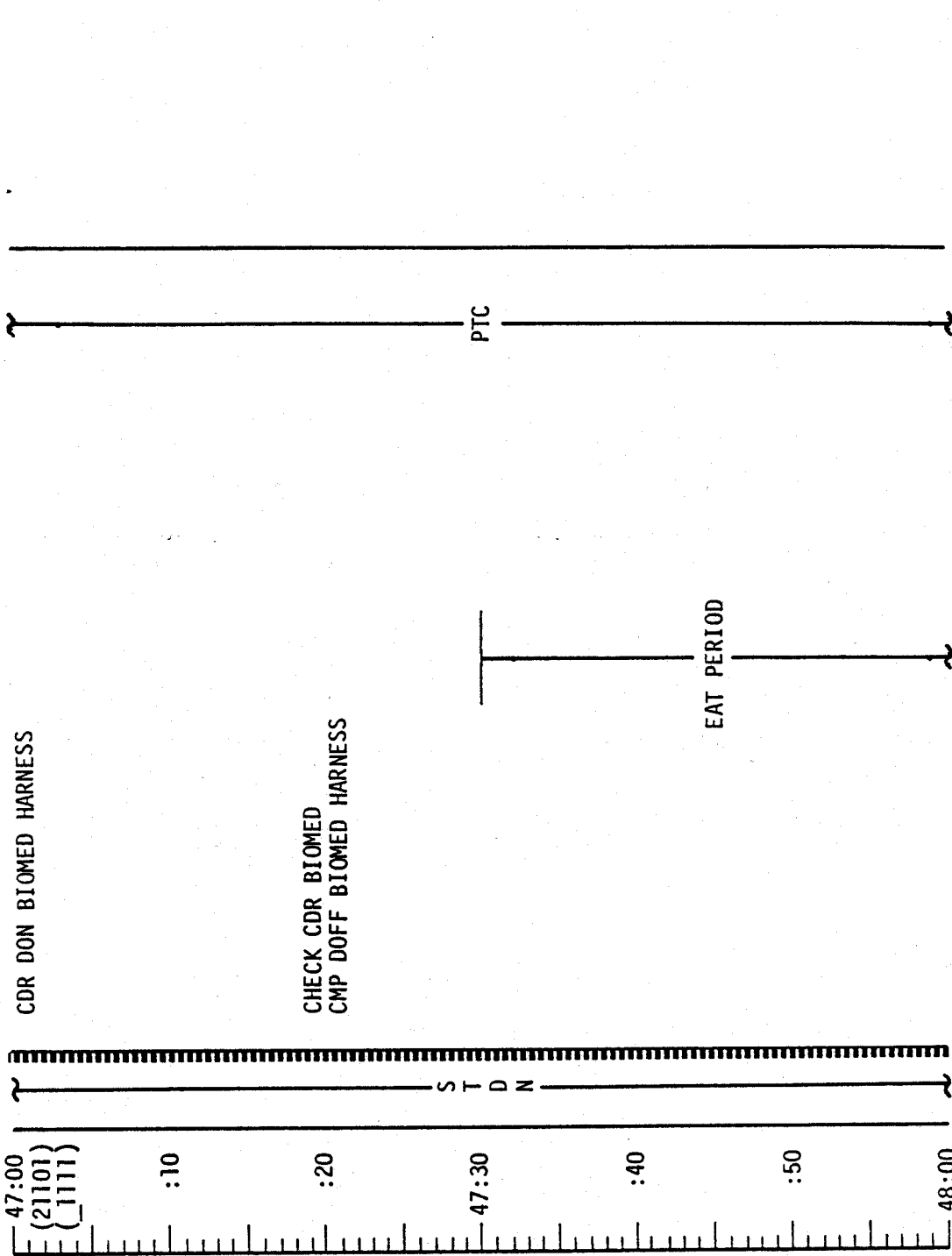
FLIGHT PLANNING BOARD

FLIGHT PLAN

NOTES

MCC-H

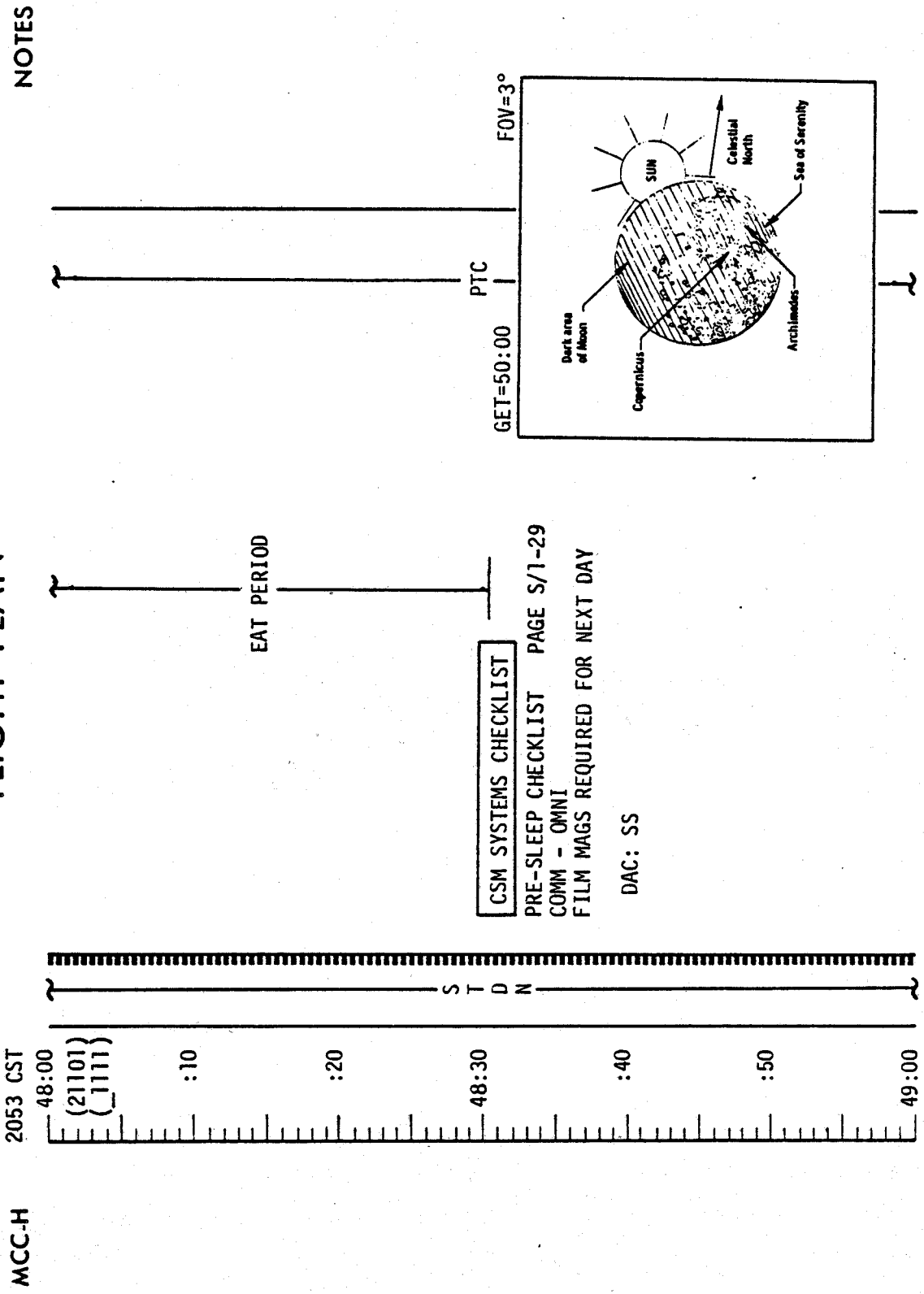
1953 CST



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	47:00 - 48:00	3/TLC	3-46

FLIGHT PLANNING BRANCH

FLIGHT PLAN



NOTES

CSM SYSTEMS CHECKLIST
 PRE-SLEEP CHECKLIST PAGE S/1-29
 COMM - OMNI
 FILM MAGS REQUIRED FOR NEXT DAY
 DAC: SS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	48:00 - 49:00	3/TLC	3-47

FLIGHT PLANNING BRANCH

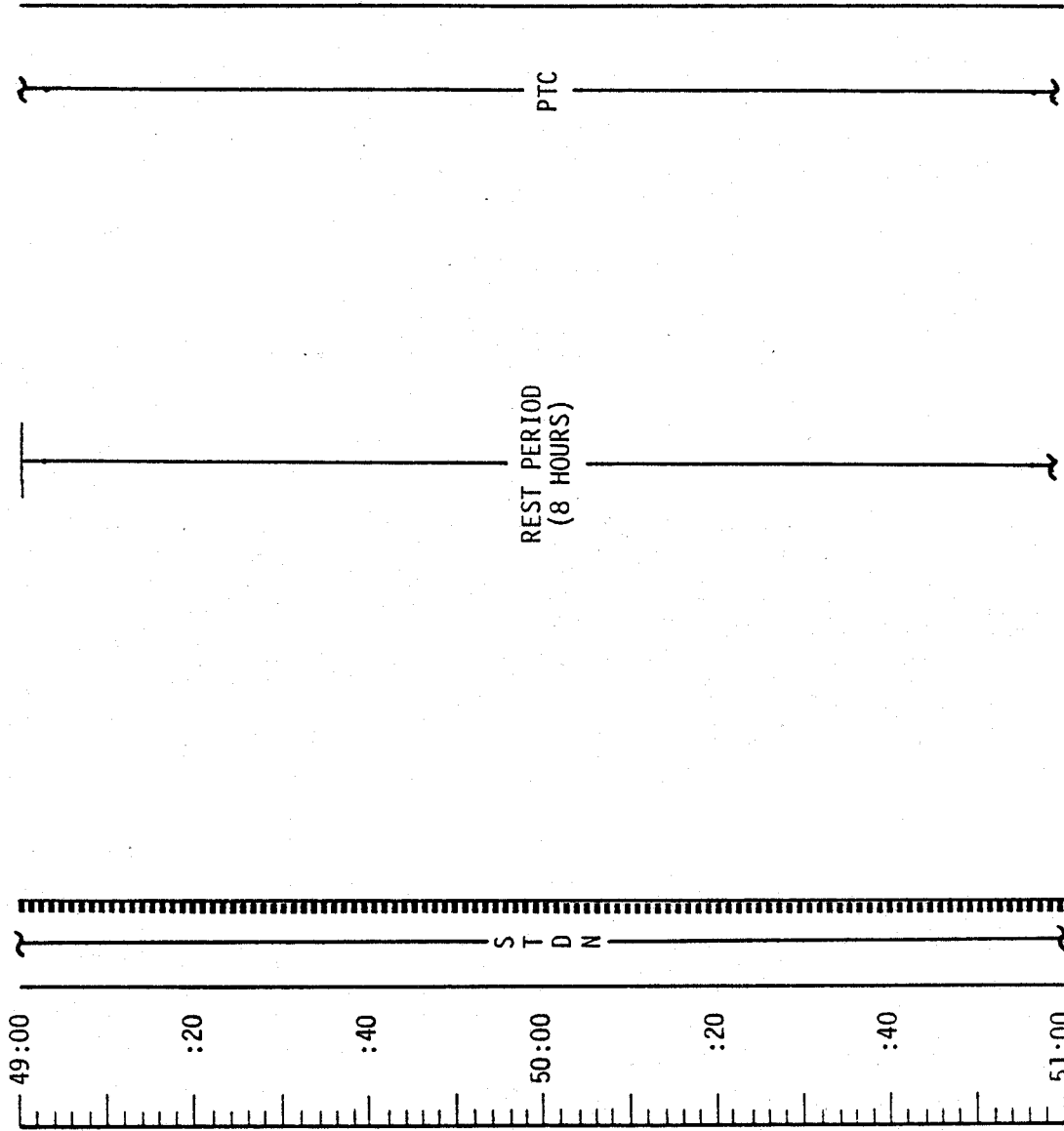
FLIGHT PLAN

MCC-H

2153 CST

NOTES

DAP LOAD STATUS
(21101)(J1111)



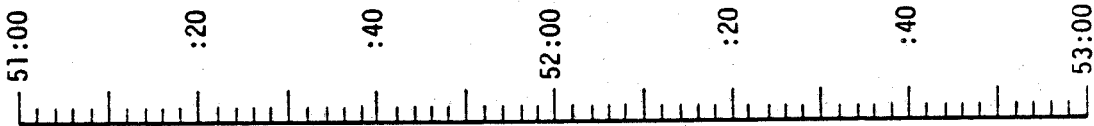
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	49:00 - 51:00	3/TLC	3-48

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

2353 CST



STDN

REST PERIOD (8 HOURS)

PTC

NOTES

DAP LOAD STATUS
(21101)(1111)

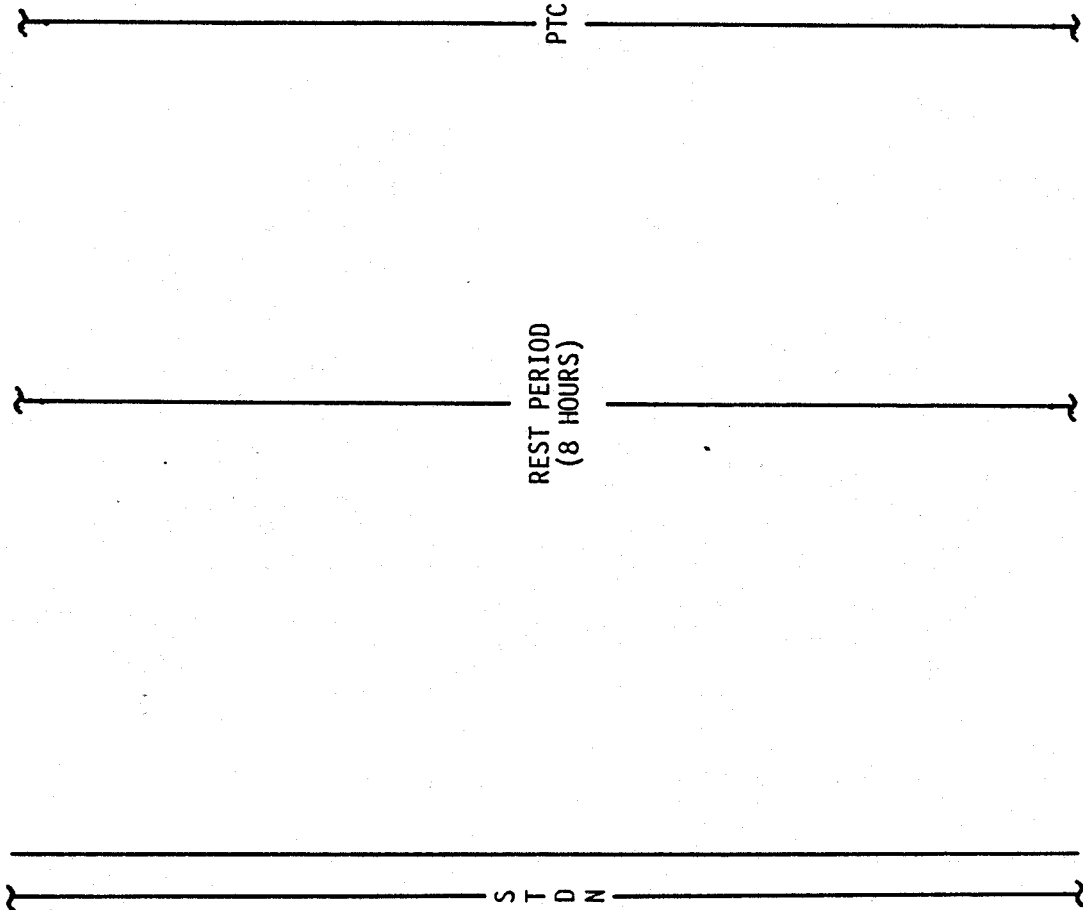
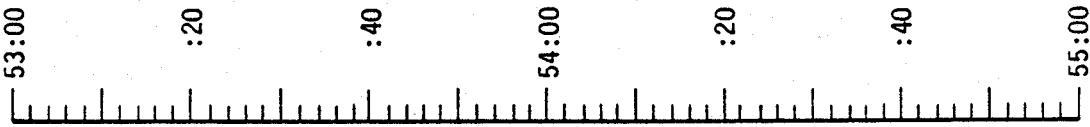
EXIT LUNAR PENUMBRA

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	51:00 - 53:00	3/TLC	3-49

FLIGHT PLAN

MCC-H

0153 CST



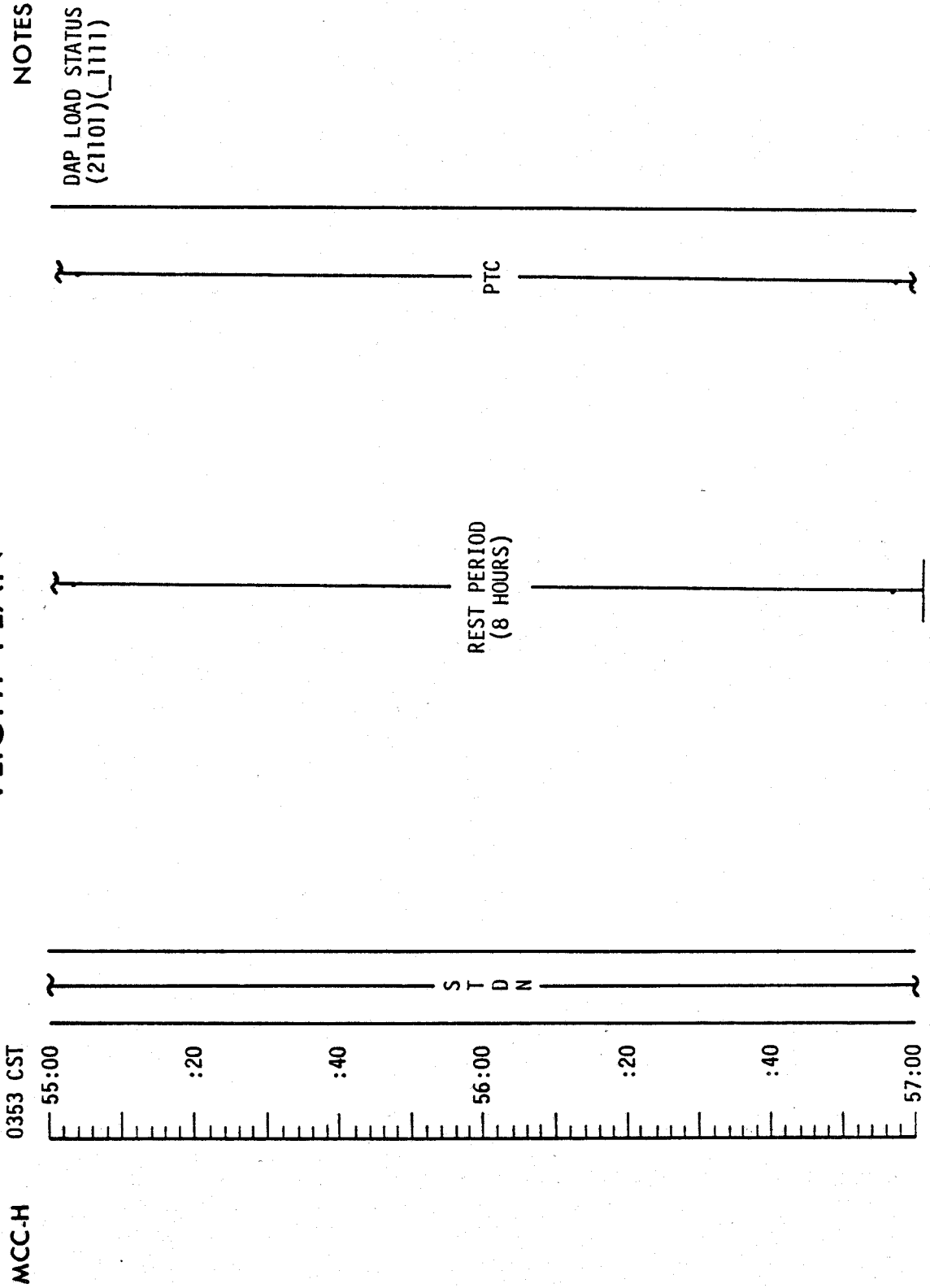
NOTES

DAP LOAD STATUS
(21101)(1111)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	53:00 - 55:00	3/TLC	3-50

FLIGHT PLANNING BRANCH

FLIGHT PLAN

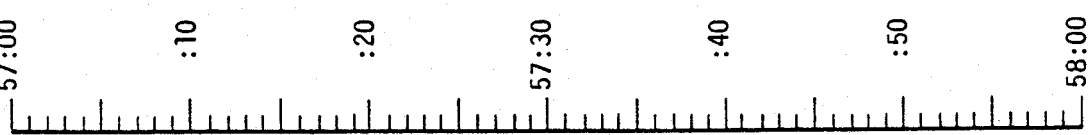


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	55:00 - 57:00	3/TLC	3-51

FLIGHT PLAN

MCC-H

0553 CST



CSM CHECKLIST

POST-SLEEP CHECKLIST PAGE S/1-29

LiOH CANISTER CHANGE
(7 INTO A, STOW 5 IN B6)

S T D N

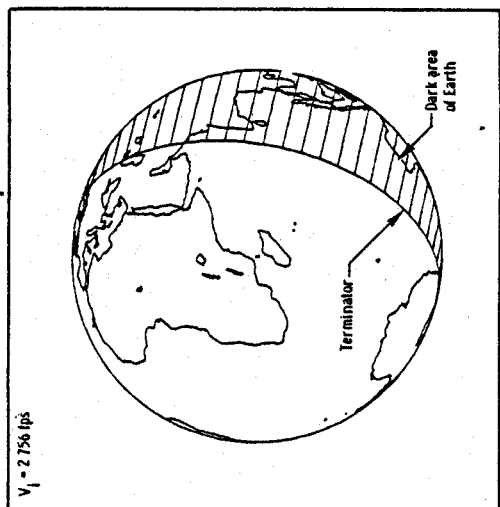
EAT PERIOD

NOTES

DAP LOAD STATUS
(21101)(1111)

EARTH DISTANCE
~170,566 NM

GET=58:00 PTC FOV=3°



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	57:00 - 58:00	3/TLC	3-52

FLIGHT PLANNING BRANCH

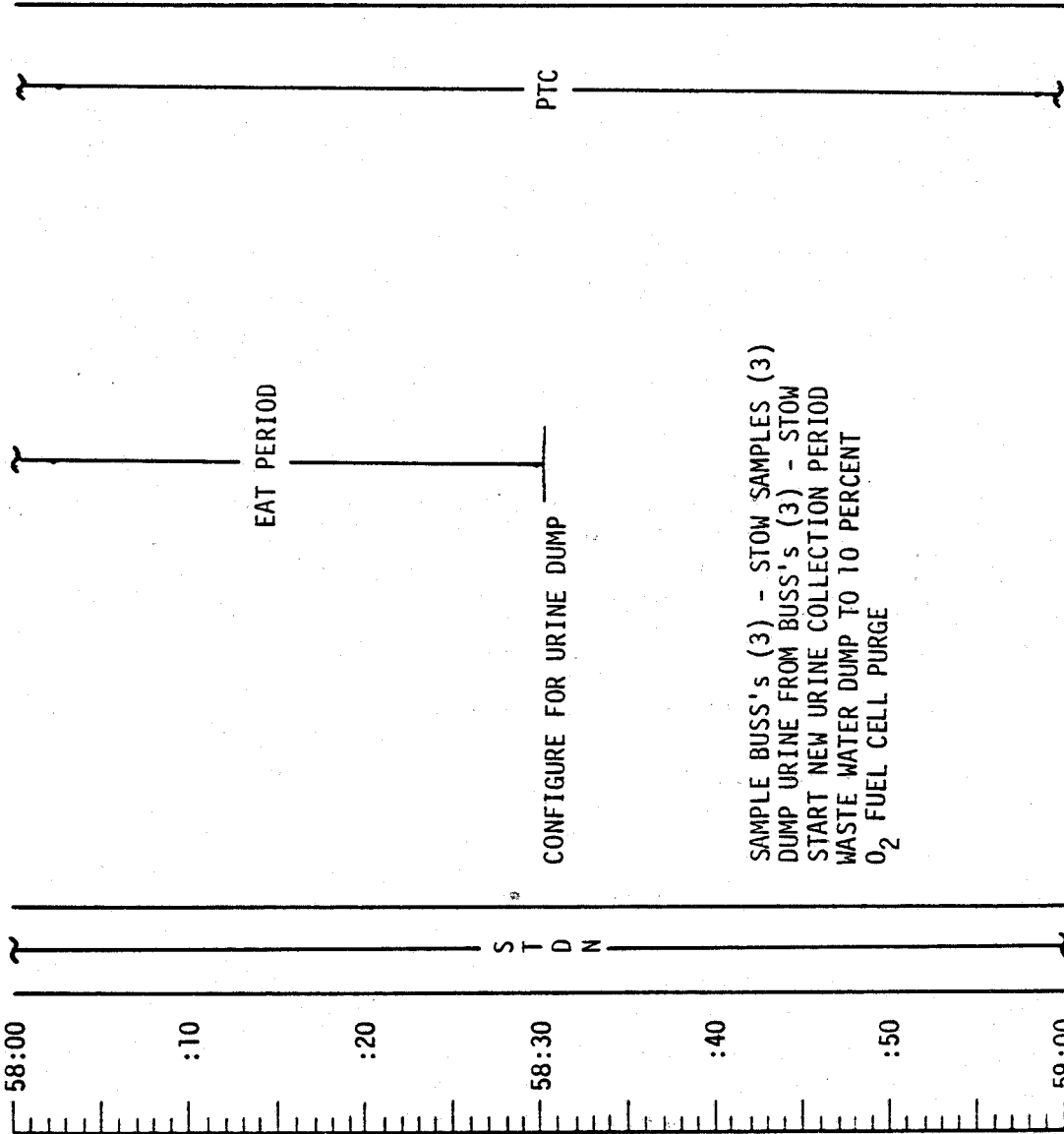
FLIGHT PLAN

MCC-H

0653 CST

NOTES

DAP LOAD STATUS
(21101)(1111)



UPDATE
CONSUMABLES STATUS
FLIGHT PLAN

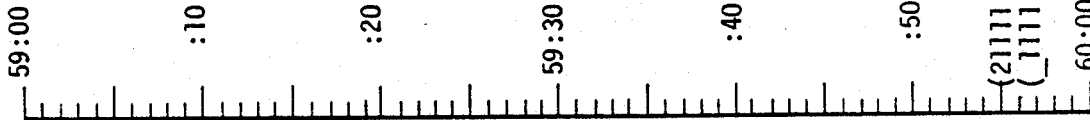
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	58:00 - 59:00	4/TLC	3-53

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0753 CST



LMP DON BIOMED HARNESS

CHECK LMP BIOMED
CDR DOFF BIOMED HARNESS

P52 (OPTION 3)
(PTC ORIENT)

REPORT: GYRO TORQUING ANGLES
GDC ALIGN

V48 (21111)(1111)
CHARGE BATTERY B

S T D N

NOTES

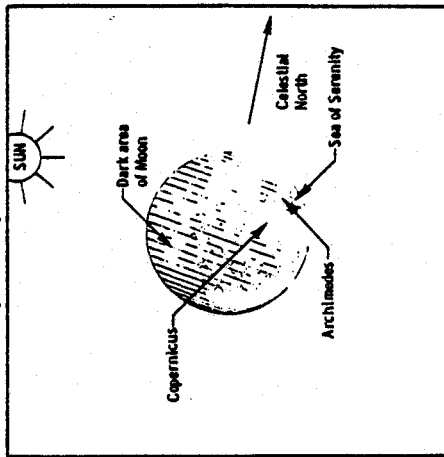
DAP LOAD STATUS
(21101)(1111)

P52	IMU REALIGN
N71:	---
N05:	---
N93:	---
X	---
Y	---
Z	---
GET	---

PTC

GET=60:00

FOV=5°



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	59:00 - 60:00	4/TLC	3-54

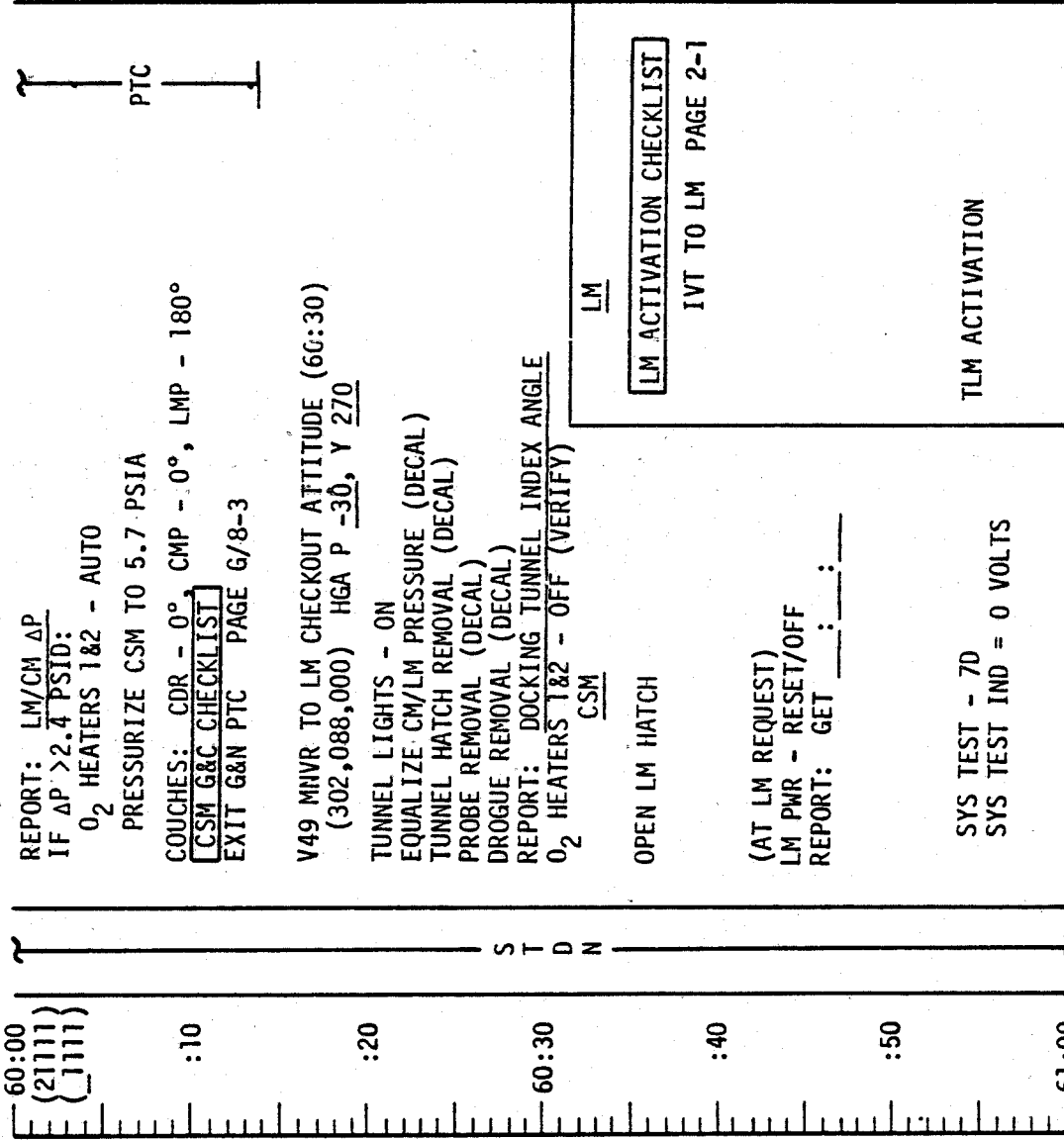
FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

0853 CST

MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	60:00 - 61:00	4/TLC	3-55

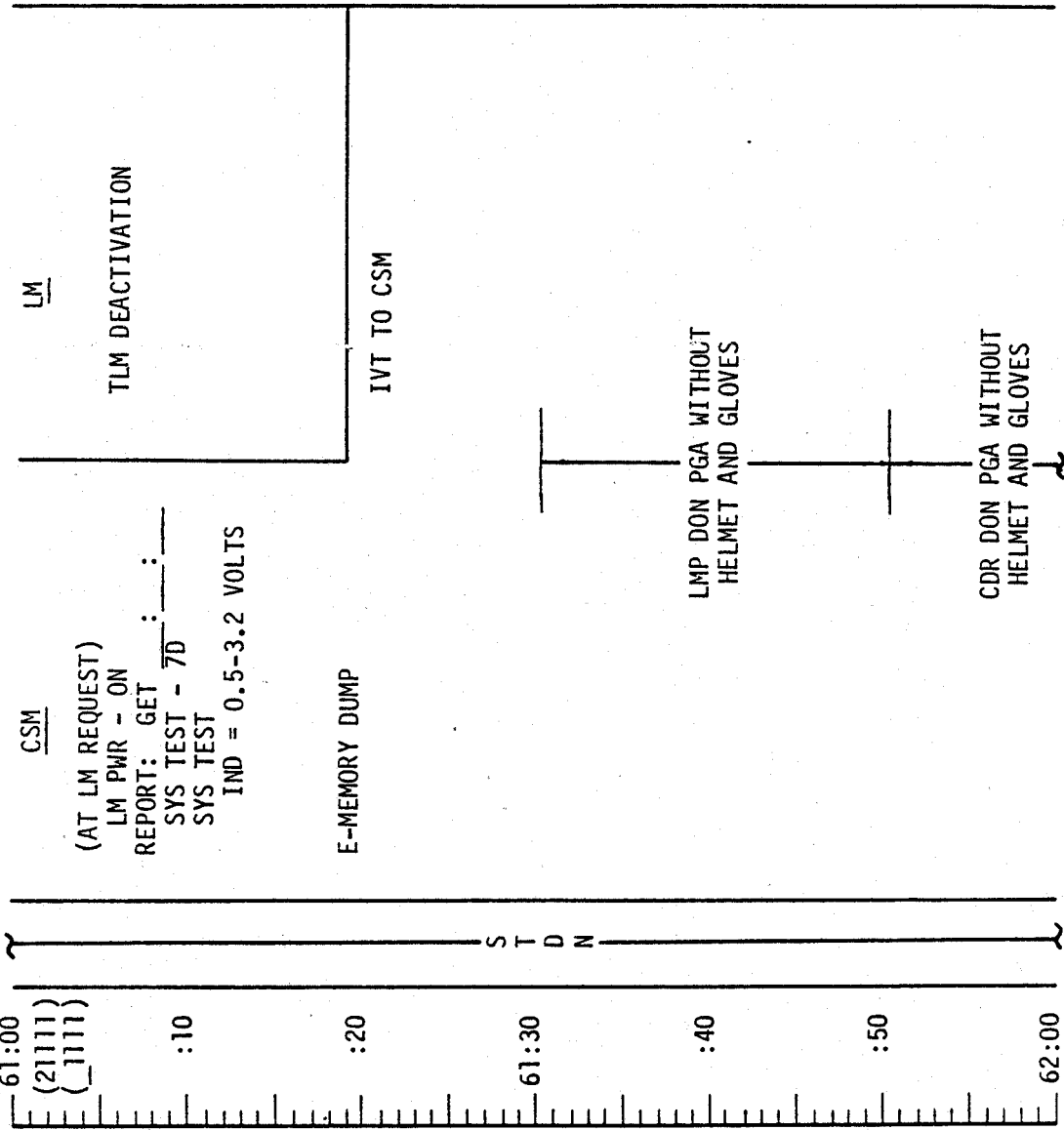
FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

0953 CST

MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	61:00 - 62:00	4/TLC	3-56

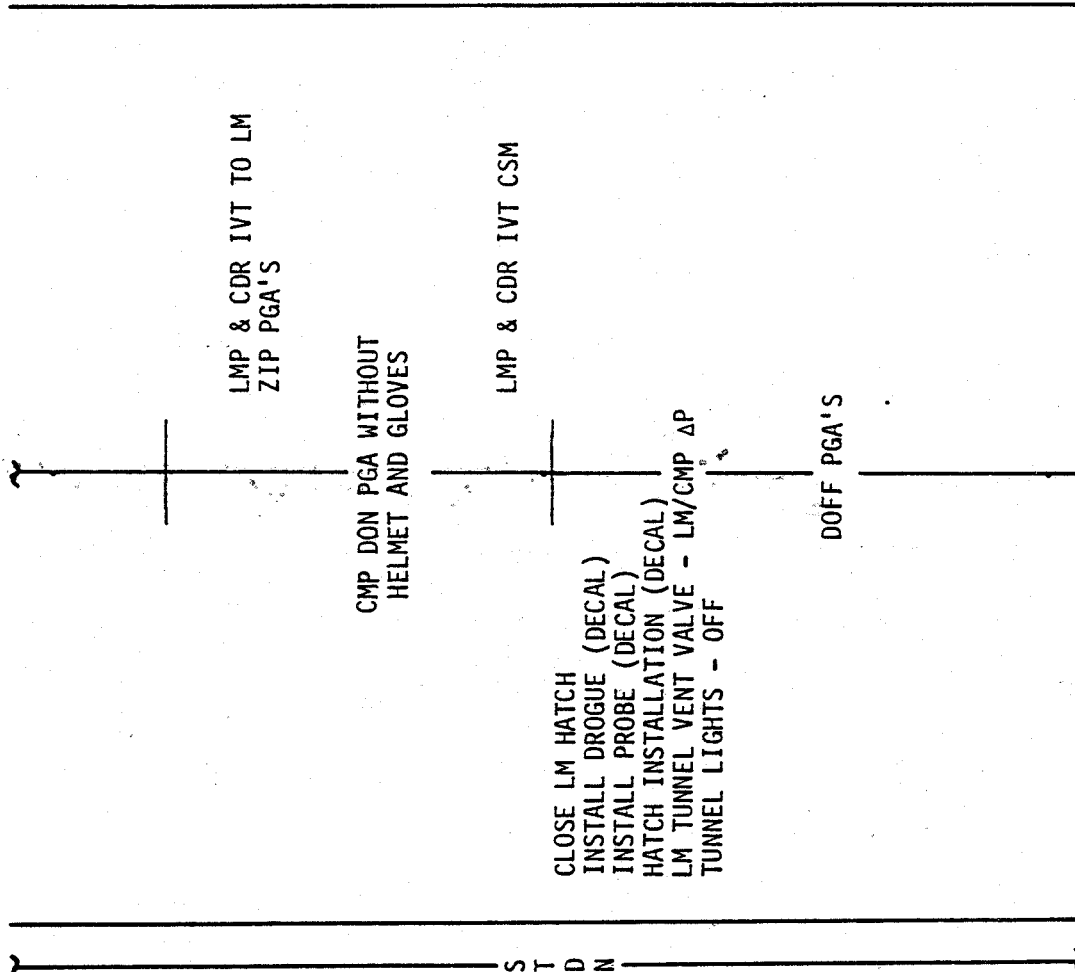
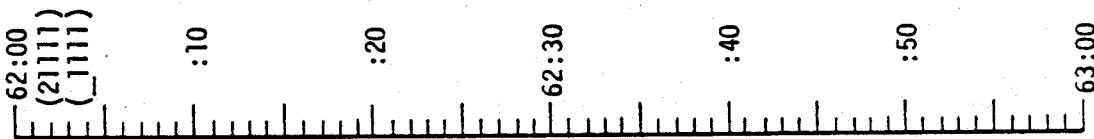
FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

MCC-H

1053 CST

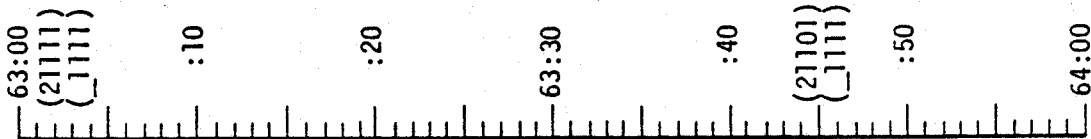


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	62:00 - 63:00	4/TLC	3-57

FLIGHT PLAN

NOTES

MCC-H 1153 CST



DOFF PGA'S

STOW PGA'S

STDN

OMNI B
SECURE HGA: MAN, WIDE P -52, Y 270

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	63:00 - 64:00	4/TLC	3-58

FLIGHT PLANNING BRANCH

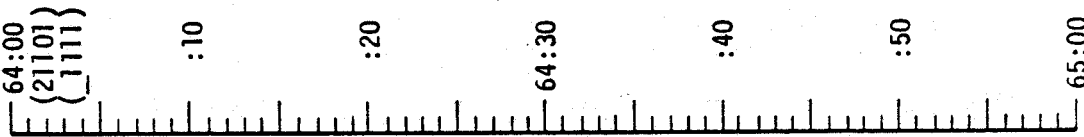
FLIGHT PLAN

NOTES

1253 CST

MCC-H

UPDATE
FLIGHT PLAN
QUADS TO ENABLE
FOR PTC SPINUP



CYCLE CMC MODE - FREE/AUTO
V48 (21101)(1111)

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N) PAGE G/8-2

V49 MNVR TO PTC ATTITUDE

(N20,090,000)

P20 OPT 2, X-AXIS

N78 (0,0,0)

N79 (-0.4200, +000.50)

N34 (0,0,0)

S T D N

PTC

H2 HEATERS 1 & 2 - AUTO

H2 FANS 3 - OFF

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	64:00 - 65:00	4/TLC	3-59

FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

MCC-H 1353 CST

65:00

(21101)
(1111)

:10

:20

65:30

:40

:50

66:00

S T D N

EAT PERIOD

PTC

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	65:00 - 66:00	4/TLC	3-60

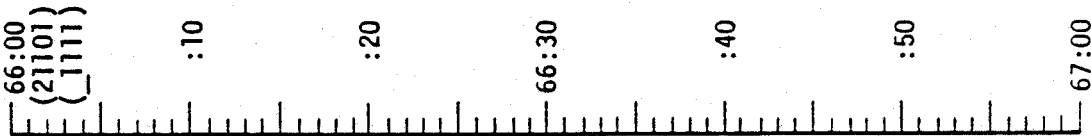
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1453 CST

NOTES



LOI -22 HOURS

IF MCC-3 IS REQD
PERFORM AT GET 66:55

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	8/28/72	66:00 - 67:00	4/TLC	3-61

FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

MCC-H

UPDATE
FLIGHT PLAN

1553 CST

67:00
(21101)
(1111)

:10

:20

67:30

:40

:50

68:00

STDN

T EPHEM UPDATE	
OID	LOAD B
03	---
04	---
05	---

PTC

SYNCHRONIZE MISSION TIMER TO GMC CLOCK (IF REQUIRED)
V05NOTE, 1706E (T EPHEM VERIFICATION BY STDN,
COPY FROM DSKY ON STDN CUE).
COPY T-EPHEM IN FP SUPPLEMENT

LIFTOFF TIME WILL BE
UPDATED IF THE TIME
OF REV 2 MERIDIAN
CROSSING DIFFERS
MORE THAN + 1 MIN
FROM 90:59:22

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	67:00 - 68:00	4/TLC	3-62

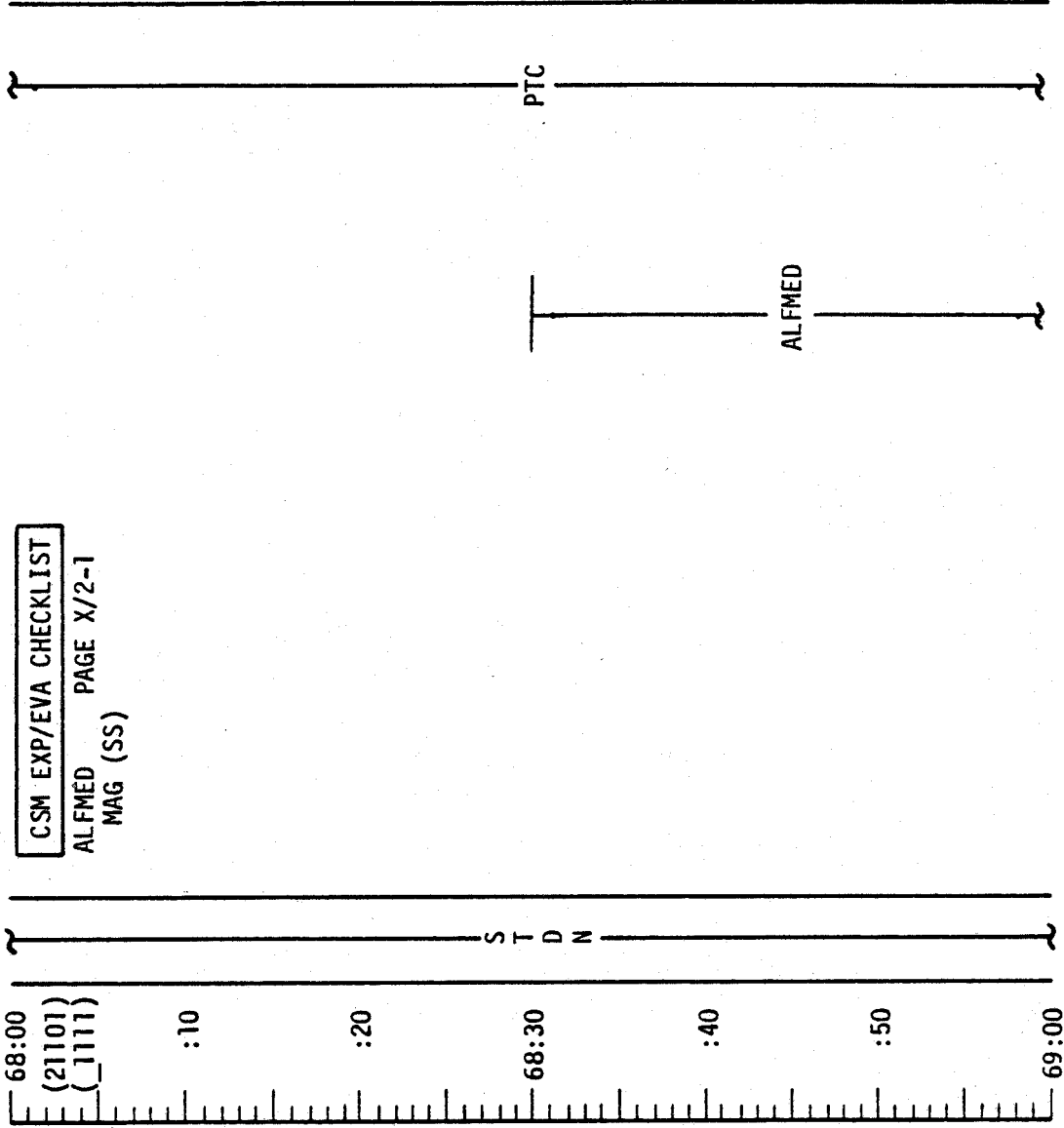
FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

MCC-H

1653 CST



CSM EXP/EVA CHECKLIST
ALFMED PAGE X/2-1
MAG (SS)

CMD
DSE RECORD
PCM BIT RATE - LOW

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	68:00 - 69:00	4/TLC	3-63

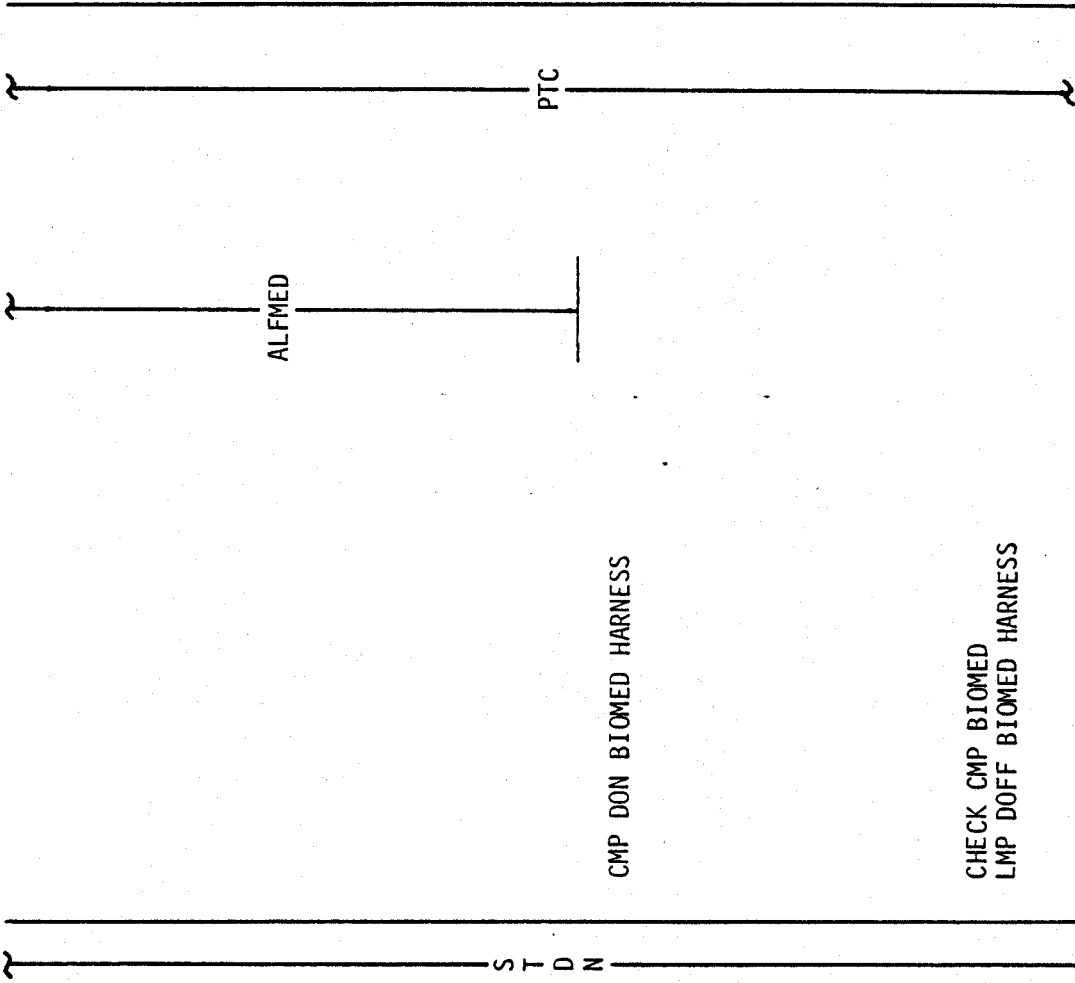
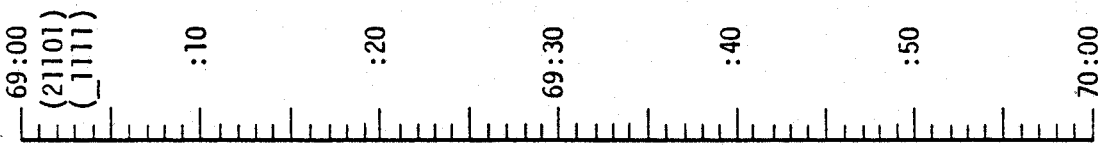
FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

MCC-H

1753 CST



CMD
DSE REMIND

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	69:00 - 70:00	4/TLC	3-64

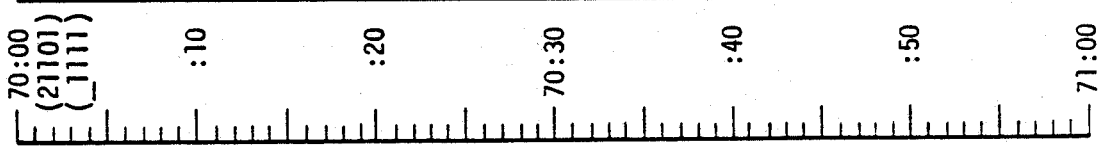
FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

1853 CST

MCC-H



CMD
DATA SYS-ON

CMD
DATA SYS-OFF
DSE PLAYBACK

CMS EXP/EVA CHECKLIST

PC AND MC FILM CYCLING PAGE X/1-17
ON STDN CUE: ACQUIRE HGA
ON STDN CUE: CYCLE FILM

ON STDN CUE:
OMNI B
SECURE HGA: MAN, WIDE P -52, Y 270
P52 (OPTION 3)
(PTC ORIENT)

REPORT: GYRO TORQUING ANGLES
GDC ALIGN
L10H CANISTER CHANGE
(8 INTO B, STOW 6 IN B6)

PTC

P52	IMU REALIGN
N71:	---
N05:	---
N93:	---
X	---
Y	---
Z	---
GET	---

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	70:00 - 71:00	4/TLC	3-65

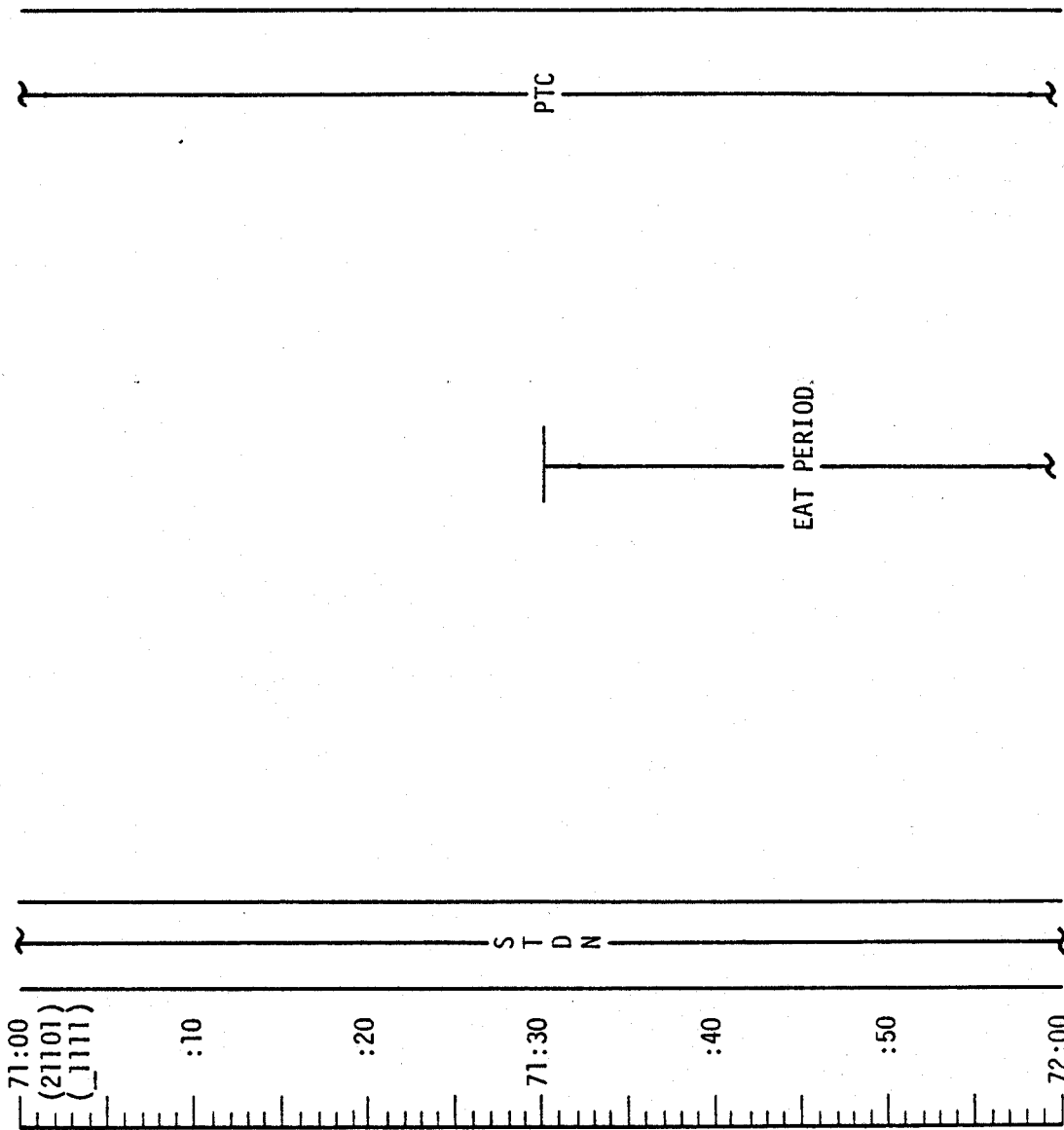
FLIGHT PLAN

NOTES

1953 CST

MCC-H

UPDATE
FLIGHT PLAN

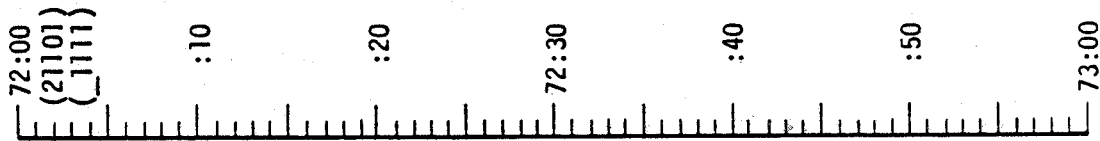


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	71:00 - 72:00	4/TLC	3-66

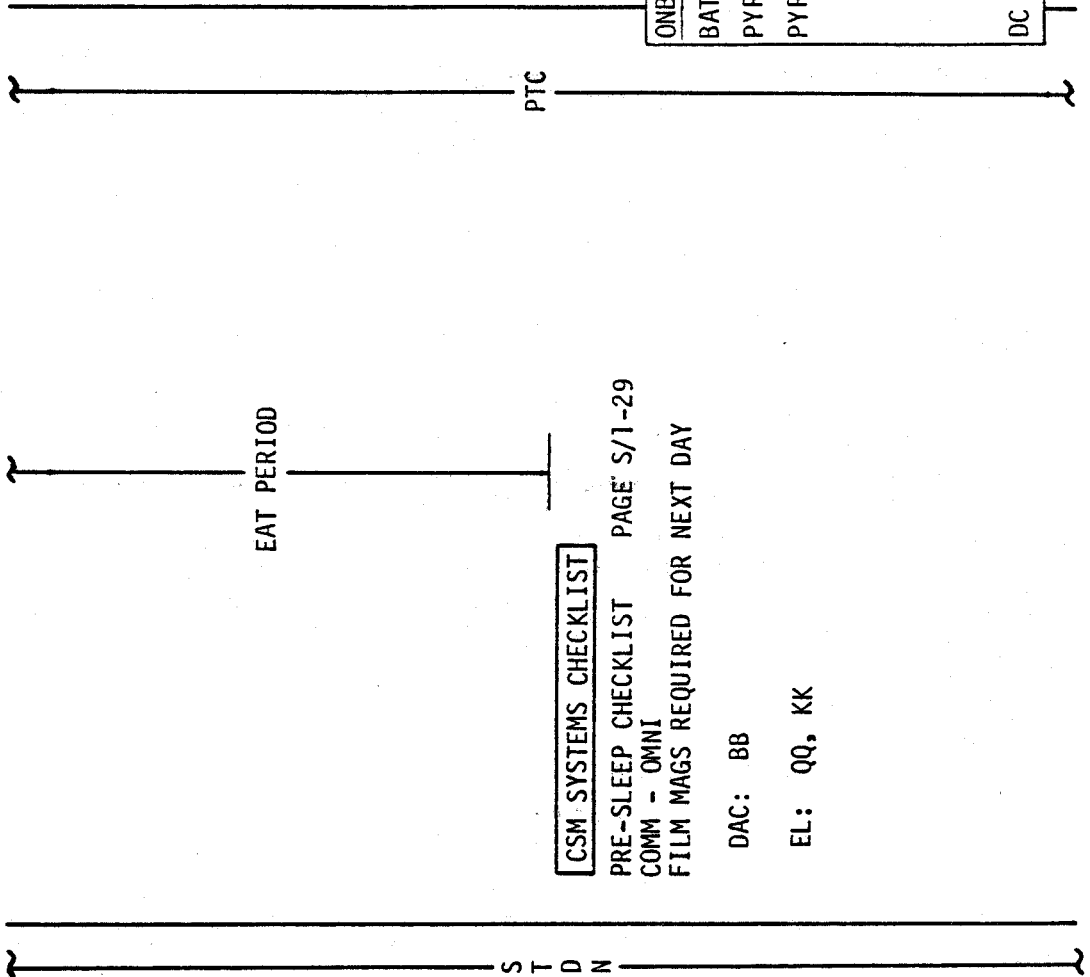
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H 2053 CST



NOTES



CSM SYSTEMS CHECKLIST

PRE-SLEEP CHECKLIST PAGE S/1-29
 COMM - OMNI
 FILM MAGS REQUIRED FOR NEXT DAY

DAC: BB
 EL: QQ, KK

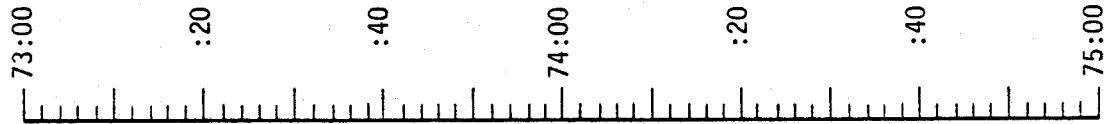
ONBOARD READOUT	
BAT C	_____
PYRO BAT A	_____
PYRO BAT B	_____
RCS A	_____
B	_____
C	_____
D	_____
DC IND SEL - MNA OR B	

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	72:00 - 73:00	4/TLC	3-67

FLIGHT PLAN

MCC-H

2153 CST



STDN

REST PERIOD
(8 HOURS)

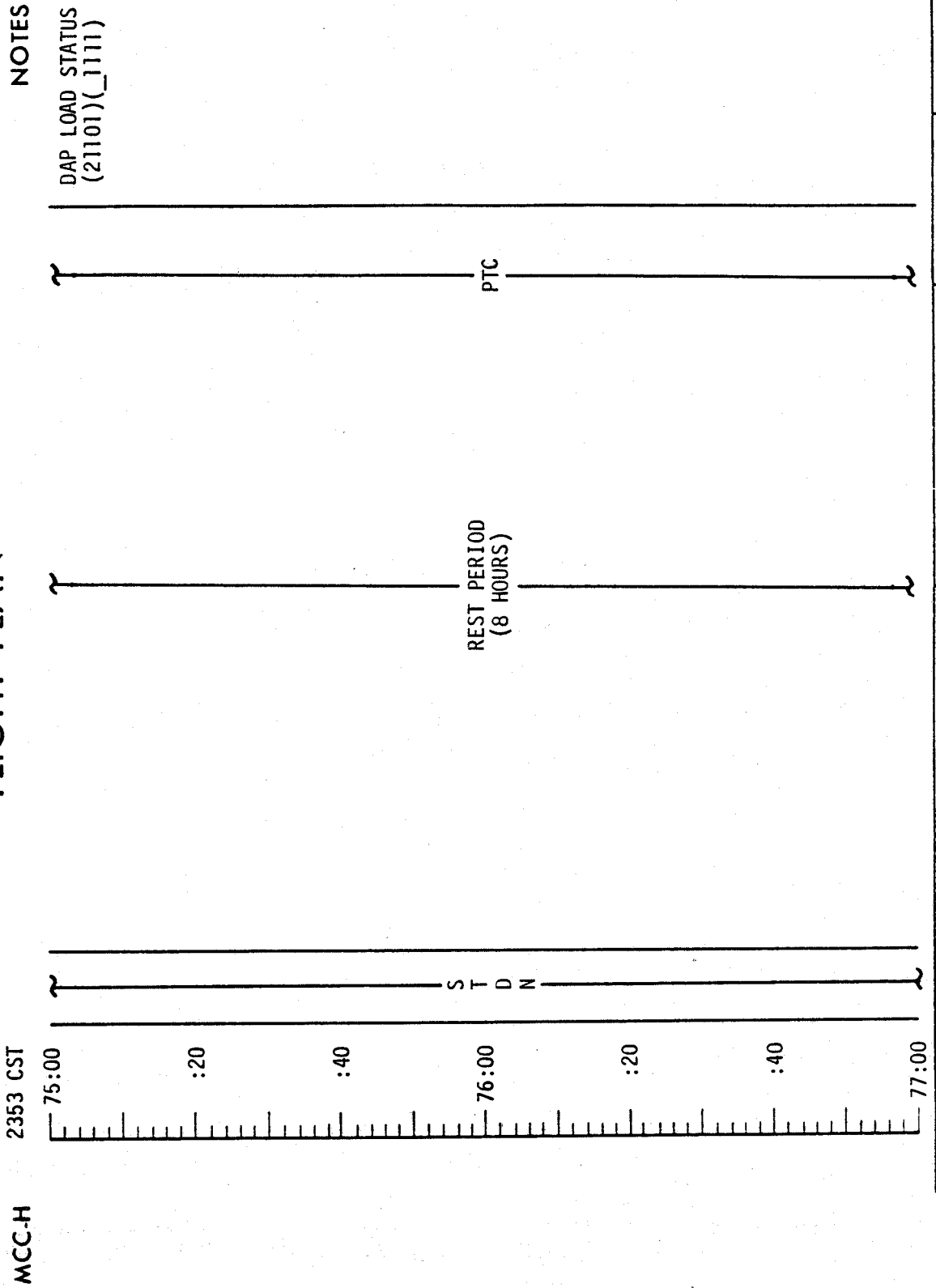
PTC

NOTES
DAP LOAD STATUS
(21101)(1111)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	73:00 - 75:00	4/TLC	3-68

FLIGHT PLANNING BRANCH

FLIGHT PLAN



MCC-H

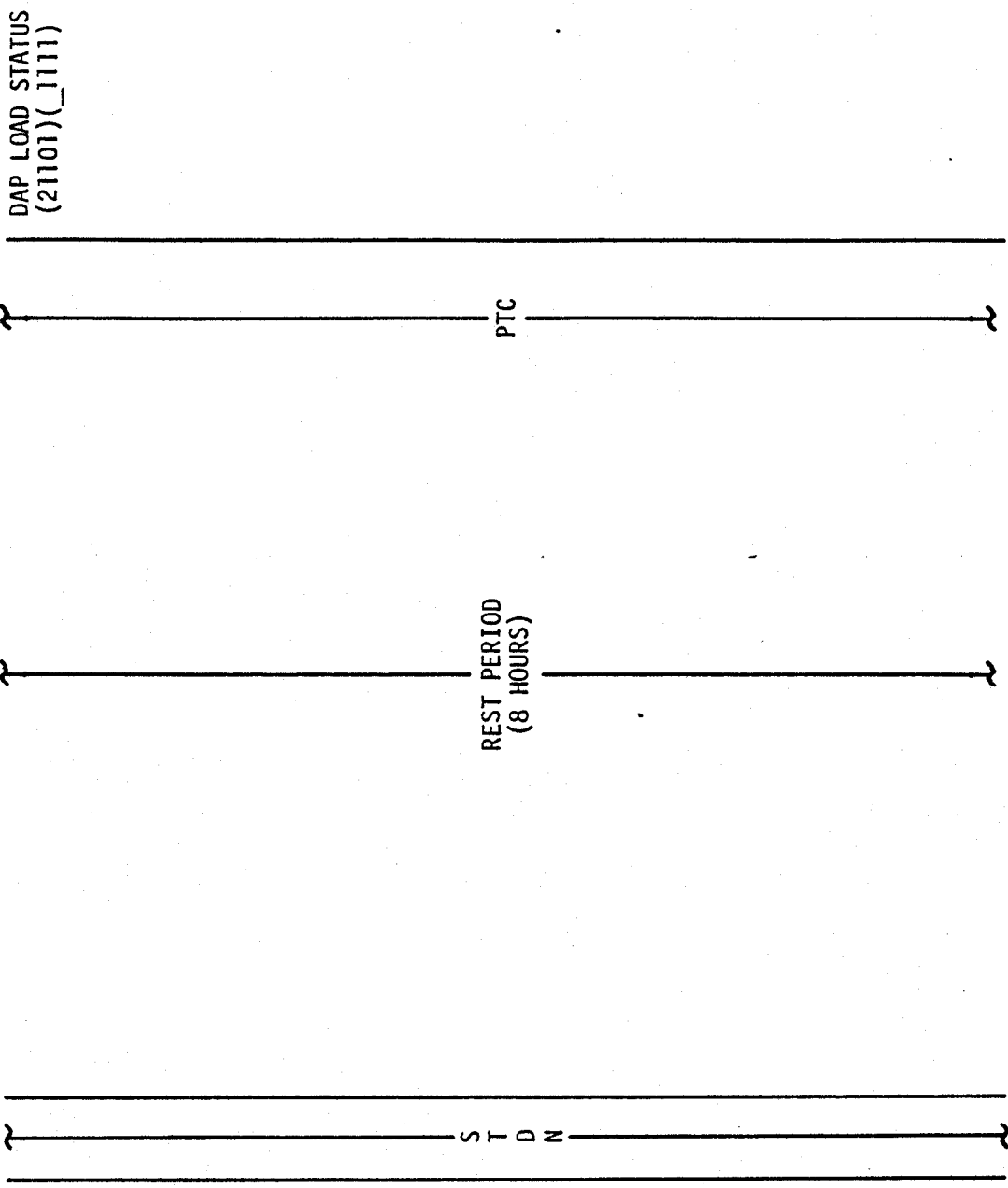
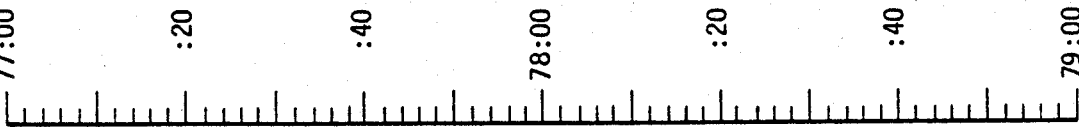
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	75:00 - 77:00	4/TLC	3-69

FLIGHT PLAN

MCC-H

0153 CST

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	77:00 - 79:00	4/TLC	3-70

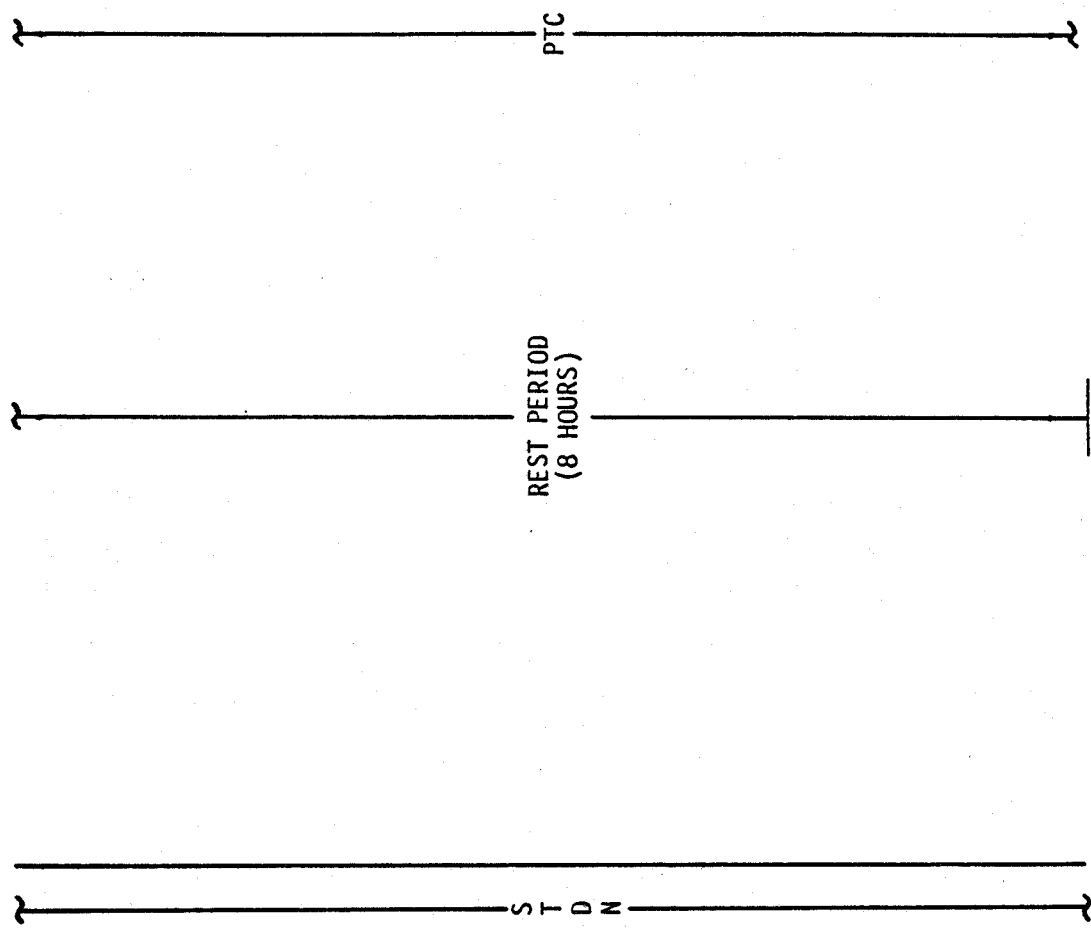
FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0353 CST

NOTES



DAP LOAD STATUS
(21101)(J111)

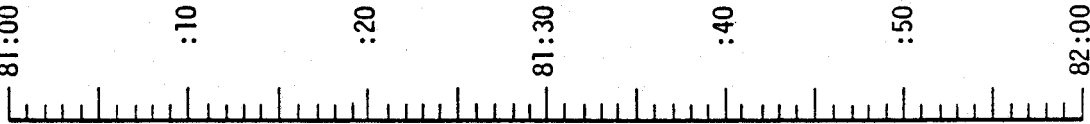
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	79:00 - 81:00	4/TLC	3-71

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0553 CST



CSM SYSTEMS CHECKLIST
 POST-SLEEP CHECKLIST PAGE S/1-29

REPORT: LM/CM ΔP
 IF ΔP > 2.4 PSID:
 O₂ HEATERS 1&2 - AUTO
 PRESSURIZE CSM TO 5.7 PSIA

CSM G&C CHECKLIST
 *EMS ΔV TEST & NULL BIAS CHECK PAGE G/2-5 GET=82:00
 *REPORT: BIAS

UPDATE
 GO/NO-GO FOR MCC-4

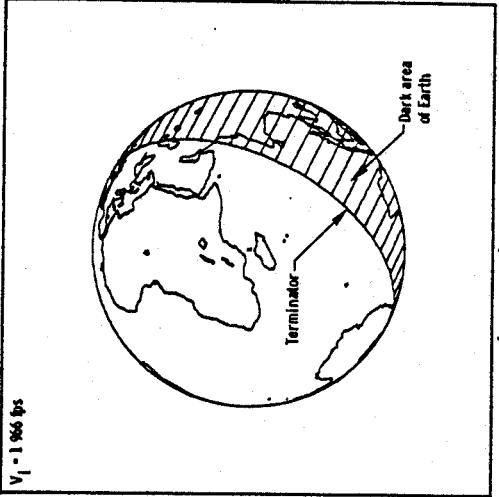
NOTES

DAP LOAD STATUS
 (21101)(1111)
 EARTH DISTANCE
 ~202,616 NM

*PERFORM IF MCC-4
 IS REQUIRED

PTC

FOV=3°



EAT PERIOD

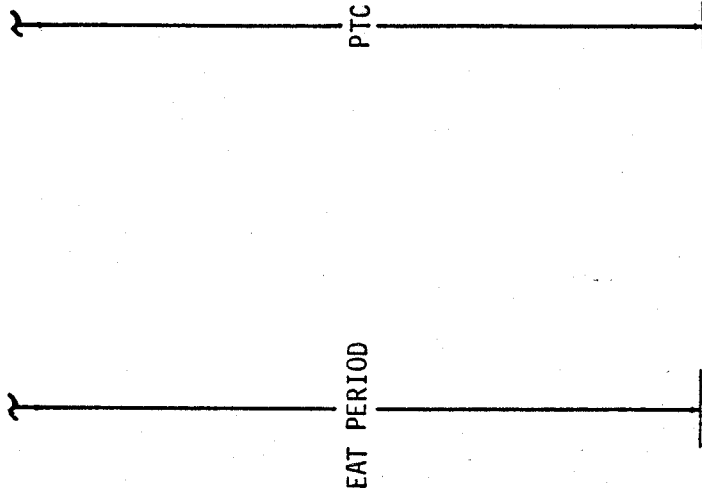
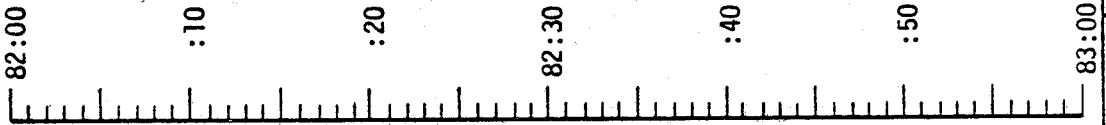
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	81:00 - 82:00	4/TLC	3-72

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0653 CST



- UPDATE
- CONSUMABLES STATUS
- FLIGHT PLAN
- MCC-4 MNVR PAD
- PERICYNTHION +2 HR
- ABORT PAD
- WASTE WATER
- DUMP PERCENT
- UPLINK
- CSM S.V. & V66
- MCC-4 TGT LOAD

CSM G&C CHECKLIST

*EXIT G&N PTC AT R 299 (P52) PAGE 6/8-3
 HGA: P -30, Y 270 AUTO, NARROW
 CM/LM PRESSURE EQUALIZATION (DECAL)
 PRESSURE EQUAL VALVE - CLOSED
 O₂ HEATERS 1&2 - OFF (VERIFY)

CONFIGURE CAMERA FOR SIM DOOR JETT PHOTOS
 CM5/DAC/75/CEX (f8,1/250,100) 24 fps (5% MAG)
 MAG (BB) _____, MAG % _____

NOTES

DAP LOAD STATUS
 (21101)(1111)

*PERFORM IF MCC-4
 IS REQUIRED

PERICYNTHION +2 HR
 ABORT PAD TARGETED
 FOR A FAST RETURN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	82:00 - 83:00	5/TLC	3-73

MCC-4
BURN TABLE

SPS LIMITS	P OR Y RATES	DEVIATION	MANUAL START ACTION	OVERBURN SHUTDOWN CRITERIA	RCS TRIM GUIDELINES
TIGHT	10°/SEC TERMINATE	+ 10° TERMINATE	NO MANUAL STARTS NO RESTART	BT + 1 SEC	TRIM ONLY X-AXIS TO 0.2 FPS

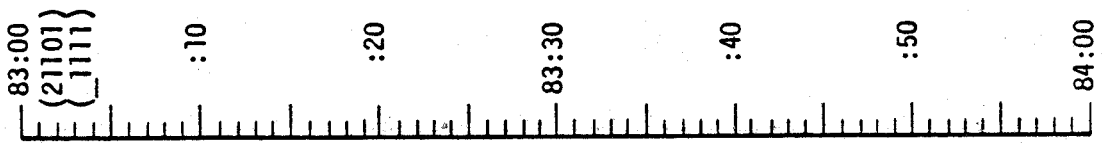
BALL VLV FAILURE - START ON SUSPECT BANK
Shut down good bank to verify; reenable

APOLLO 17 FINAL (12/6) 10/23/72 5/TLC 3-74

MCC-H

FLIGHT PLAN

0753 CST



P52	IMU REALIGN
N71:	-----
N05:	-----
N93:	-----
X	-----
Y	-----
Z	-----
GET	-----

NOTES

*PERFORM IF MCC-4 IS REQD

SIM EXP STATUS (*0000)(31000)

L10H CANISTER CHANGE (9 INTO A, STOW 7 IN B6) CONFIGURE FOR URINE DUMP H₂ PURGE LINE HTRS - ON

P52 (OPTION 3) (PTC ORIENT)

REPORT: GYRO TORQUING ANGLES

GDC ALIGN

*P30 EXTERNAL ΔV

*V49 MNVR TO PAD BURN ATT

*IF SPS MIDCOURSE REQUIRED

* PRE-SPS BURN SIM PREP (CUE CARD)

*SXT STAR CHECK

*P40 SPS THRUSTING OR P41 RCS THRUSTING

H₂ & O₂ FUEL CELL PURGE

WASTE WATER DUMP TO PERCENTAGE SPECIFIED BY STDN

SAMPLE BUSS's (3) - STOW SAMPLES (3)

DUMP URINE FROM BUSS's (3) - STOW

START NEW URINE COLLECTION PERIOD

H₂ PURGE LINE HTRS - OFF

MCC-4

TIG: 83:55
 BT: NOM ZERO
 ΔVT: NOM ZERO
 ULLAGE: NONE

BURN STATUS REPORT		ΔTIG	BT	V gx	R	P	Y	V gx	V gy	V gz	ΔV C	OX	FUEL	UNBAL
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													

LOI -5 HR

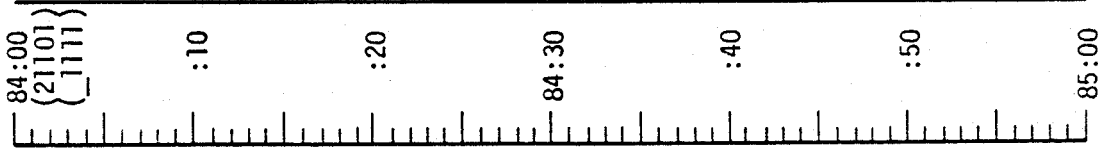
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	83:00 - 84:00	5/TLC	3-75

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0853 CST



84:00
(21101)
(1111)

CMD
DATA SYS - ON
DSE RECORD

CSM EXP/EVA CHECKLIST

SIM DOOR JETTISON PAGE X/1-6 (TO STDN CUE)

*V66 SET CSM S.V. INTO LM S.V.

*REPORT: BURN STATUS

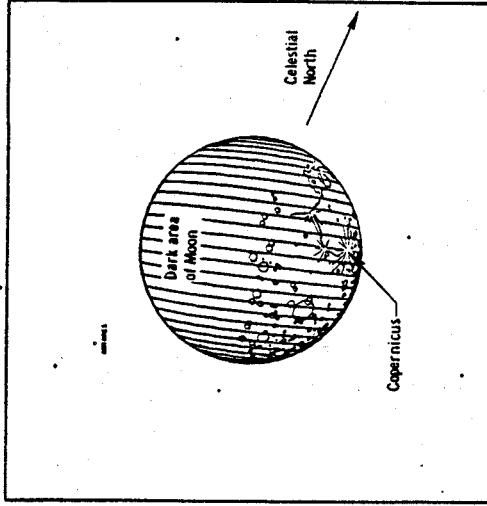
V49 MNVR TO SIM DOOR JETTISON ATTITUDE (84:15)
(138,249,000) HGA P -48, Y 238

NOTES

*PERFORM IF MCC-4 IS REQUIRED

SIM EXP STATUS
(*0000)
(31000)

GET=85:00 FOV=25°



GO/NO-GO FOR SIM DOOR JETTISON (CUE)

SIM DOOR JETTISON 84:25

V49 MNVR TO P52 ATTITUDE (84:50)
(262,043,330) HGA P -11, Y 311

UPDATE
CUE FOR IR - OFF

cb O₂ TK 100W HTRS (1 & 2) - OPEN

O₂ HEATERS 1 & 2 - AUTO

O₂ HEATER 3 - OFF

REPORT: LM/CM ΔP

IF ΔP < 0.2 PSID, LM TUNNEL VENT VLV - LM PRESS

IF ΔP > 0.2 PSID, PERFORM CM/LM PRESSURE EQUALIZATION (DECAL)

PRESS EQUAL VALVE - CLOSE

LM TUNNEL VENT VLV - LM PRESS

CHECK MISSION TIMER AGAINST CMC CLOCK

UPLINK
CSM S.V. & V66
(PRELIMINARY)
LOI TGT LOAD
(PRELIMINARY)
DESIRED ORIENT (LOI)

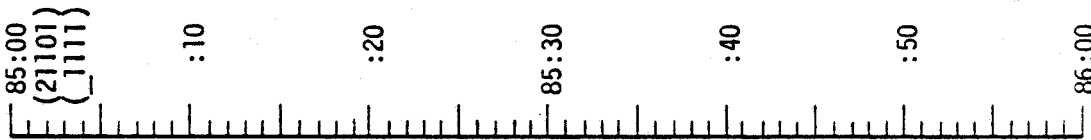
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	84:00 - 85:00	5/TLC	3-76

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0953 CST



CSM G&C CHECKLIST

EMS ΔV TEST & NULL BIAS CHECK PAGE G/2-5
 REPORT: BIAS
 CDR DON BIOMED HARNESS

NOTES

SIM EXP STATUS
 (*0000)
 (31001)

P52	IMU REALIGN
N71:	_____
N05:	_____
N93:	_____
X	_____
Y	_____
Z	_____
GET	_____

LOI REFSMMAT ATT
 R 351, P 128, Y 034

LIMIT CYCLE - ON
 ATT DEADBAND - MIN
 RATE - LOW
 BMAG (3) - ATT 1/RATE 2
 SC CONT - SCS
 P52 (OPTION 3)
 (PTC ORIENT)

STARS _____
 SA _____
 TA _____

REPORT: GYRO TORQUING ANGLES
 P52 (OPTION 1)
 (LOI ORIENT)

SC CONT - CMC
 BMAG (3) - RATE 2
 GDC ALIGN

CHECK CDR BIOMED
 CMP DOFF BIOMED HARNESS

UPDATE
 LOI MNVR PAD
 (PRELIMINARY)
 TEI 4 PAD
 FLIGHT PLAN

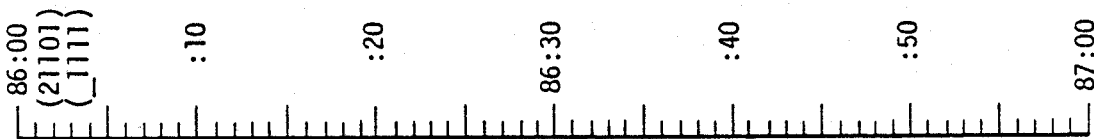
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	85:00 - 86:00	5/TLC	3-77

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1053 CST



CONFIGURE CABIN FOR LUNAR ORBIT

S T D N

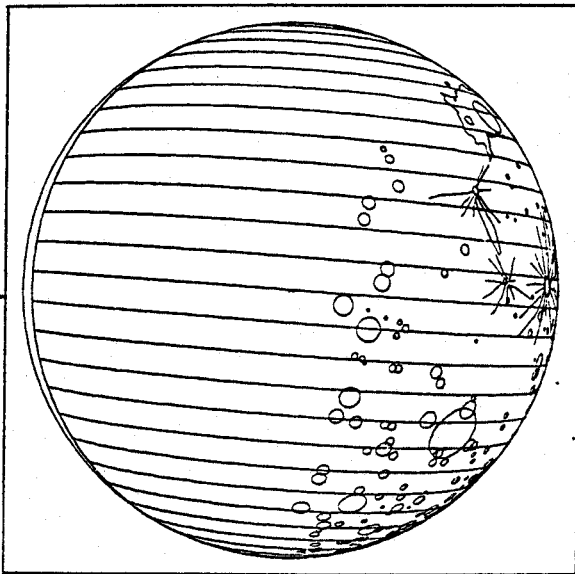
EAT PERIOD

NOTES

SIM EXP STATUS
(*0000)
(31001)

GET=87:00

FOV=20°



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	86:00 - 87:00	5/TLC	3-78

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1153 CST

87:00
(21101)
(1111)

:10

:20

87:30

:40

:50

88:00

S T D N

EAT PERIOD

CMC MODE - FREE
UV COVER-OPEN

UV COVER-CLOSE
CMC MODE - AUTO

P52 (OPTION 3)
(LOI ORIENT)

REPORT: GYRO TORQUING ANGLES

GDC ALIGN

CSM SYSTEMS CHECKLIST

PRE-LOI SECONDARY GLYCOL LOOP CHECK PAGE S/1-19

C/W SYSTEM OPERATIONAL CHECK PAGE S/1-20

SPS MONITORING CHECK PAGE S/1-1

SM RCS MONITORING CHECK

CM RCS MONITORING CHECK

ECS MONITORING CHECK PAGE S/1-5

OXIDIZER FLOW VALVE INCR - NORM (VERIFY)

PRE-SPS BURN SIM PREP (CUE CARD)

NOTES

SIM EXP STATUS
(*0000)
(31001)

P52 IMU REALIGN

N71: _____

N05: _____

N93: _____

X _____

Y _____

Z _____

GET _____

UPDATE

LOI MNVR PAD

MAP UPDATE REV 1

(88:20)

UPLINK

CSM S.V. & V66

LOI TGT LOAD

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	87:00 - 88:00	5/TLC	3-79

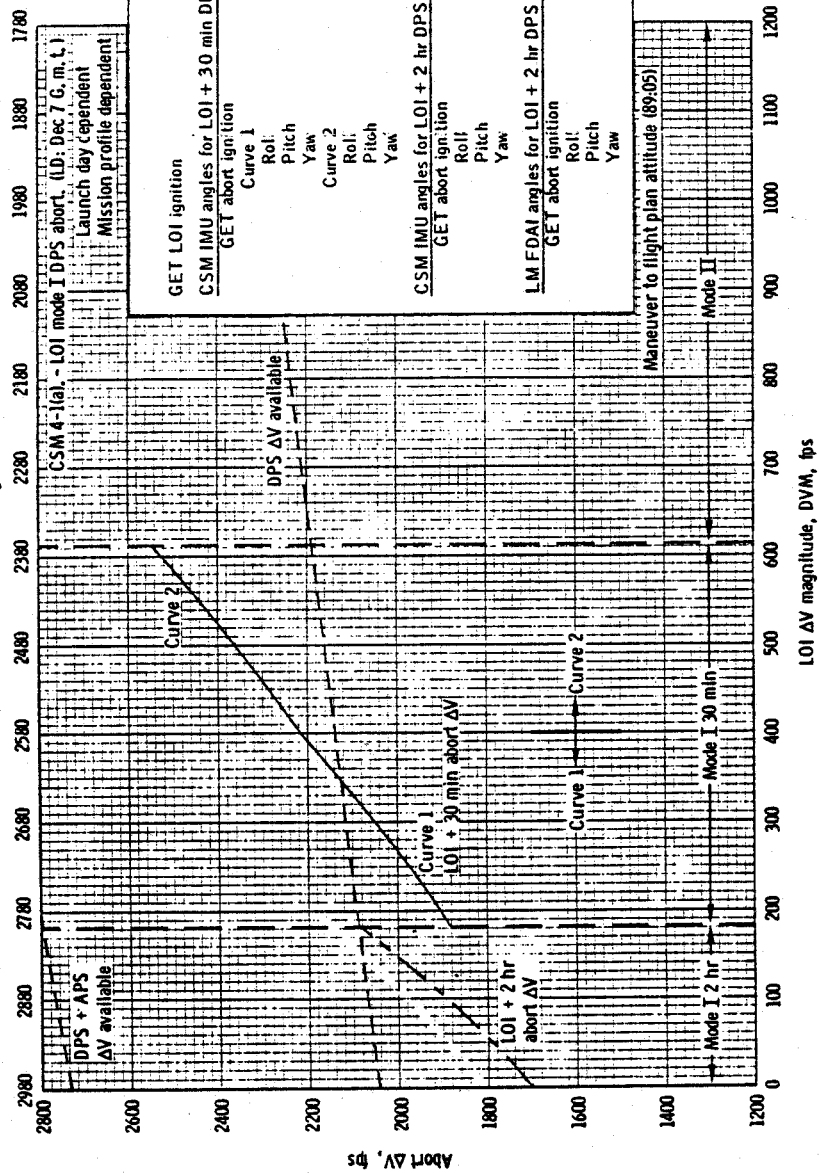
FLIGHT TRAINING BRANCH

P30 MANEUVER

PURPOSE	L	O	I	S	P	G	&	N	PURPOSE	
									WT	PROP/GUID
SET STARS										
R ALIGN			0	0						N47
P ALIGN			0	0						N48
Y ALIGN			0	0						
	+		0	0						
	+		0	0	0	0				GETI
	+		0	0	0	0				N33
	+		0	0						SEC
ULLAGE										ΔV_x
										N81
										ΔV_y
										ΔV_z
	X	X	X							R (000)
	X	X	X							P (000)
	X	X	X							Y (000)
	+									H_A
										N44
										H_p
	+									ΔVT
	X	X	X							BT
	X									ΔVC
	X	X	X	X						SXTS
	+								0	SFT
	+							0	0	TRN
	X	X	X							BSS
	X	X								SPA
	X	X	X							SXP

HORIZON/WINDOW

Velocity to be gained, V , ft/s



LOI AV magnitude, DVM, ft/s

LOI mode I DPS abort.

	Nominal	Update
GET LOI ignition	88:55:37.6	
CSM IMU angles for LOI + 30 min DPS abort	HGA Pitch = -48°, Yaw = 111°	
GET abort ignition	89:25:37.6	
Curve 1		
Roll	210	
Pitch	10	
Yaw	19	
Curve 2		
Roll	212	
Pitch	10	
Yaw	13	
CSM IMU angles for LOI + 2 hr DPS abort	HGA Pitch = -69°, Yaw = 263°	
GET abort ignition	90:55:37.6	
Roll	146	
Pitch	21	
Yaw	13	
LM FDAI angles for LOI + 2 hr DPS abort	90:55:37.6	
GET abort ignition		
Roll	194	
Pitch	27	
Yaw	334	

LOI
BURN TABLE

P OR Y RATES	ATT DEVIATION	SHUTDOWN TIME	RESIDUALS
10°/SEC TAKEOVER & COMPLETE	+10° TAKEOVER & COMPLETE	BT + 10 SEC	DO NOT TRIM

BALL VLV FAILURE - START ON GOOD BANK (LM AVAIL)
 Shut down good bank 10 sec before nominal C/O.
 EARLY C/O - RESTART IF NO LIMITS EXCEEDED, G&N IS GO AND VGO > 50

CSM 4-1(b). - LOI mode IDPS abort. (LD: Dec 7 G. m. t.) Launch day dependent 9/26/72 Final
 Mission profile dependent

Burntime	ΔVM	Mode	SPS limits	Procedure
0:00 - 0:28	0 - 183	I	TIGHT	DPS at 2 hr (RTCC)
0:28 - 0:53	183 - 348	I	TIGHT	DPS at 30 min (crew chart)
0:53 - 1:31	348 - 613	I	LOOSE	DPS at 30 min to depletion + APS at 2 1/2 hr (RTCC); loss of comm, DP; followed immediately by APS (crew chart)
1:31 - 2:03	613 - 833	II	LOOSE	DPS at 2 hr + DPS to depletion at perilune + APS at 2 hr after DPS depletion (RTCC)
2:03 - 2:54	833 - 1200	II	LOOSE	DPS at 2 hr + DPS at perilune (RTCC)
2:54 - 3:40	1200 - 1543	III	LOOSE	DPS at perilune (RTCC)
3:40 - 4:30	1543 - 1930	III	TIGHT	DPS at perilune (RTCC)
4:30 - Cutoff	1930 - 2980	III	TIGHT	DPS to depletion at perilune + APS at 2 hr after DPS depletion (RTCC)

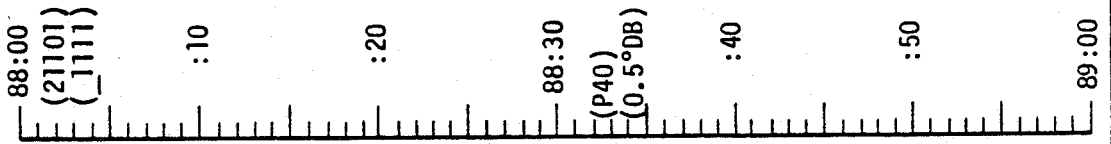
THE PU VALVE SHOULD BE USED TO MAINTAIN THE INDICATED UNBALANCE TO WITHIN +50 LB OF THE STABILIZED READING (TIG +25 SEC) UNTIL CROSSOVER. AFTER CROSSOVER THE VALVE SHOULD BE USED TO CONTROL THE GREEN BAND (0+100 LB). THE APPROXIMATE TIME OF CROSS-OVER IS 4 MIN 20 SEC INTO THE LOI BURN

IGN < 3 MIN 40 SEC LATE
SHUTDOWN TIMES
0 TO 1 MIN 20 SEC - 10 SEC
1 MIN 20 SEC TO 2 MIN - 5 SEC
2 MIN TO 3 MIN 40 SEC - 0 SEC

FLIGHT PLAN

MCC-H

1253 CST



P30 EXTERNAL ΔV

V49 MNVR TO PAD BURN ATTITUDE (88:20)

OMNI C

MAP UPDATE REV _____

AOS WITHOUT BURN 89:07:46

AOS WITH BURN 89:16:29

SXT STAR CHECK

P40 SPS THRUSTING

GO/NO-GO FOR LOI

VERIFY DSE TAPE MOTION (LBR/RCD/FWD/CMD RESET)

LOI

TIG: 88:55:37.5
 BT: 6 MIN 35.4 SEC
 AVT: 2979.9 FPS
 ULLAGE: NONE
 ORBIT: 170.8x51.4 NM

NOTES

SIM EXP STATUS
 (*0000)
 (31001)

BURN STATUS REPORT		ΔTIG	BT	V gx	R	P	Y	V gx	V gy	V gz	ΔV _C	OX	FUEL	UNBAL
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													
X	X													

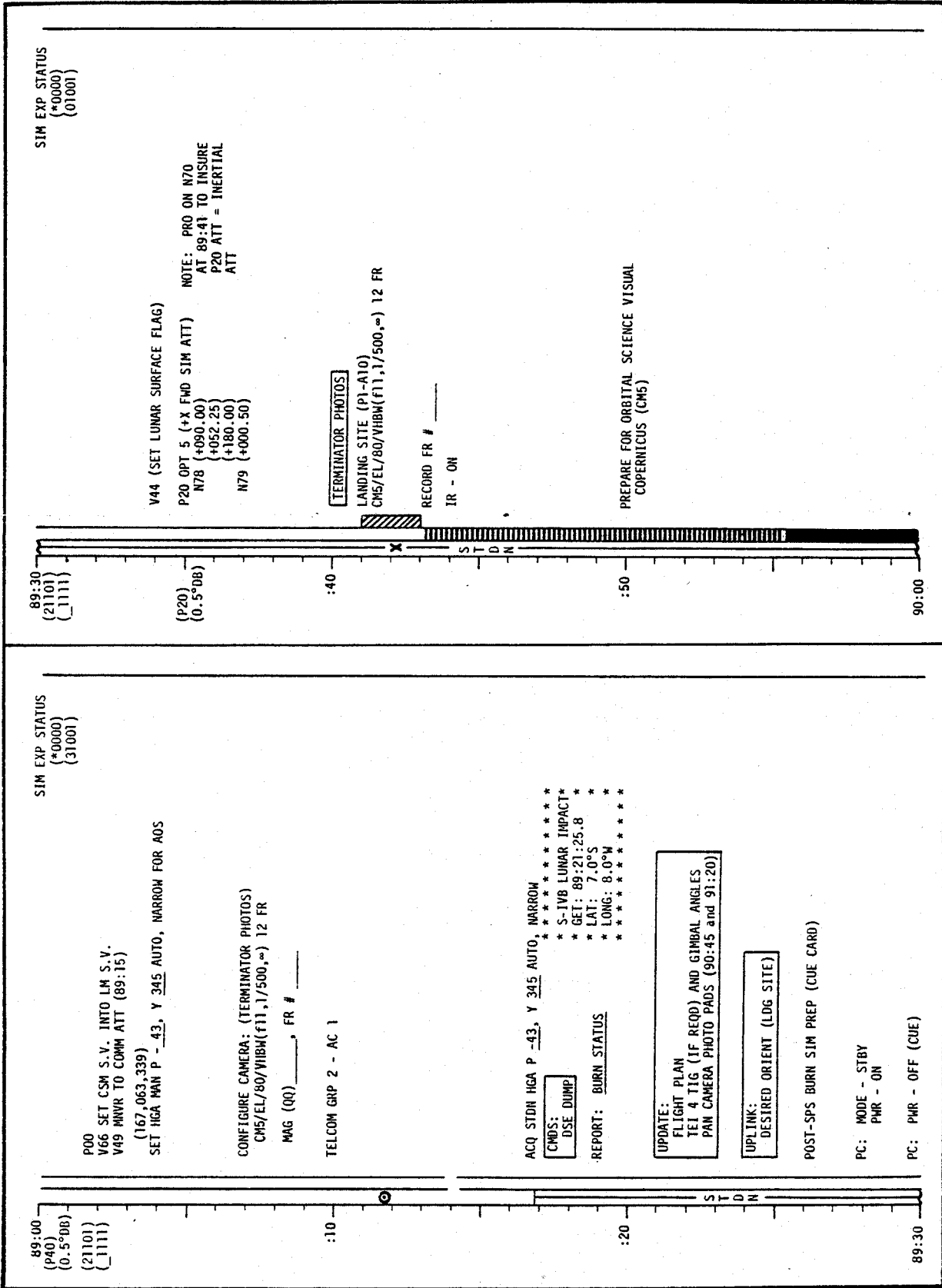
ΔV_M _____

PREDICTED LOI SINGLE
 BANK BURN TIME:
 6 MIN 50 SEC

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	88:00 - 89:00	5/TLC	3-83

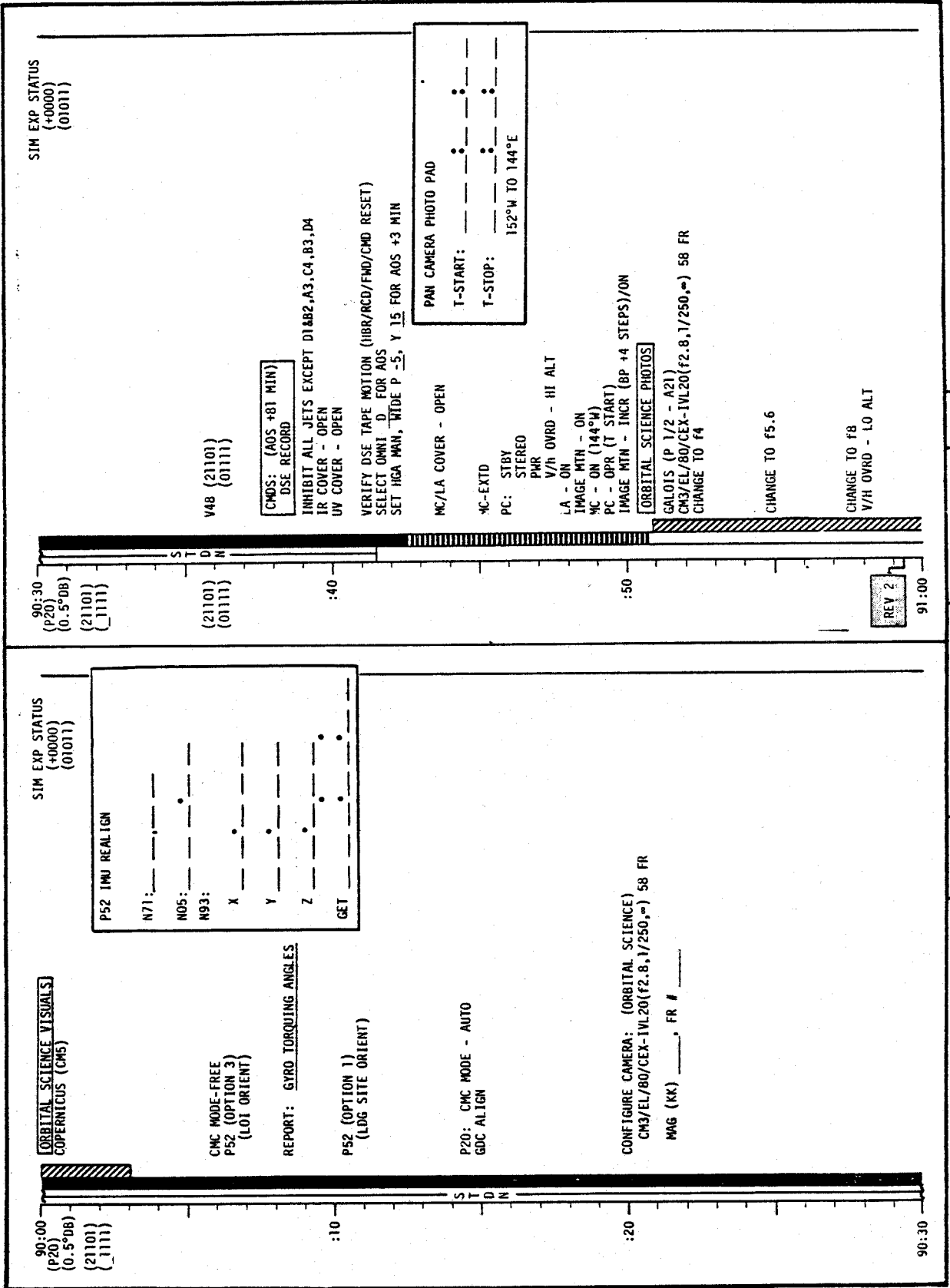
FLIGHT MANAGER'S SIGNATURE

CSM FLIGHT PLAN



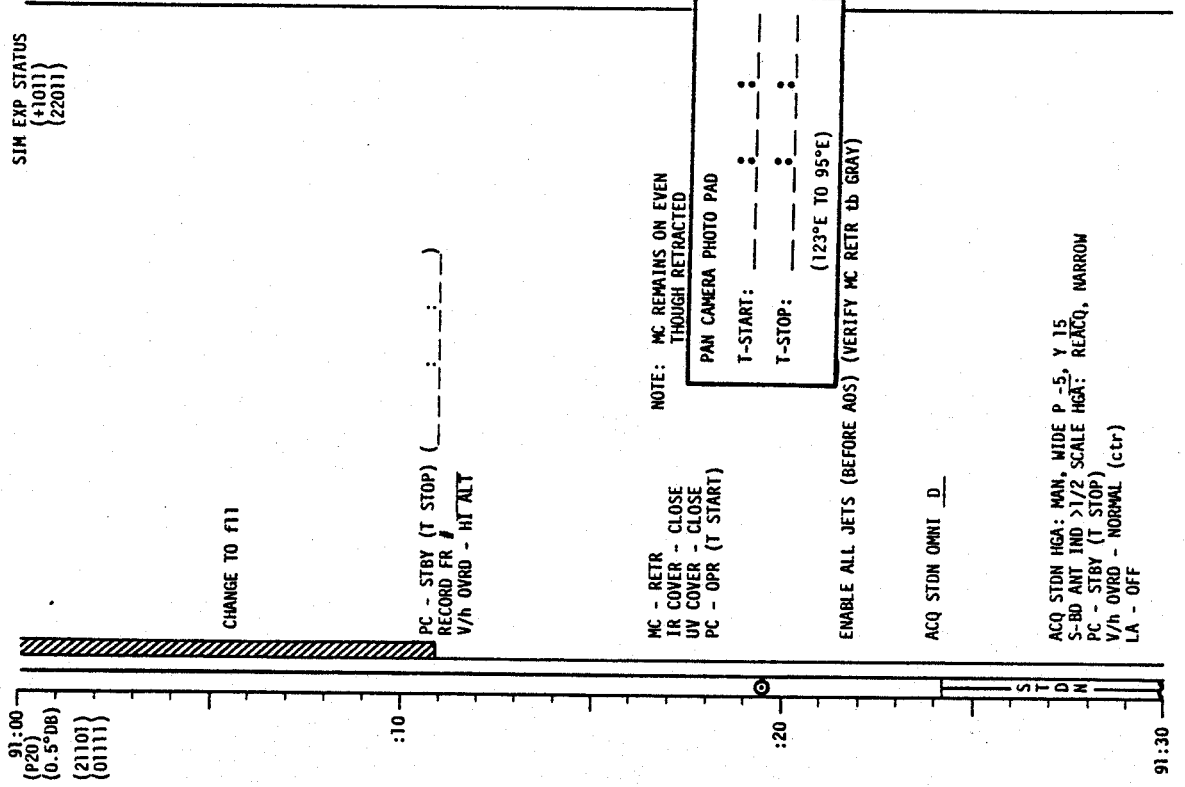
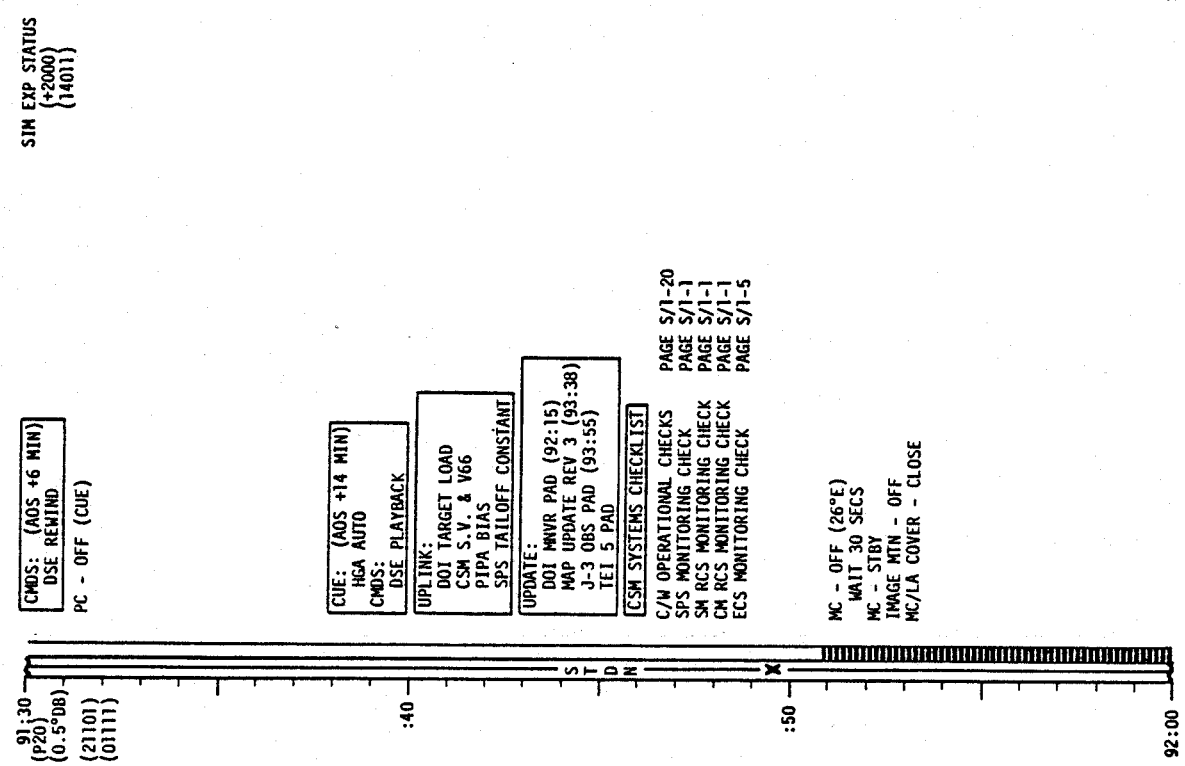
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-84

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-85

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-86

CSM FLIGHT PLAN

92:00
(21101)
(3111)

P00
SIM EXP STATUS
(+0000)
(07011)

P52 (OPTION 3)
(LOG SITE ORIENT)

REPORT: GYRO TORQUING
ANGLES

GDC ALIGN

PRE-SPS BURN SIM PREP (CUE CARD)

P30; VERIFY DOI TIG AND ΔV'S

P40

STON RECORD:
V6 IMU DATA

P00
V49 MNVR TO DOI PAD BURN ATT (92:31)
ACQ STON OMNI C

P52 IMU REALIGN

N71: _____

N05: _____

N93: _____

X _____

Y _____

Z _____

GET _____

P30 MANEUVER

D	S	P	I	G	N	PURPOSE	
						WT	PROP/GUID
							M47
							M48
							P TRIM
							Y TRIM
							HRS GET1
							MIN N33
							SEC
							ΔV _X N81
							ΔV _Y
							ΔV _Z
X	X	X	X	X	X		R (000)
X	X	X	X	X	X		P (225)
X	X	X	X	X	X		Y (000)
							H _A M44
							H _p
							ΔVT
X	X	X	X	X	X		BT
X	X	X	X	X	X		ΔVC
X	X	X	X	X	X		SATS
							SFT
							TRN
X	X	X	X	X	X		BSS
X	X	X	X	X	X		SPA
X	X	X	X	X	X		SXP
							LAT N61
							LONG
							RTGO EMS
							V10
							GET 0.05G

SET STARS

R ALIGN _____

P ALIGN _____

Y ALIGN _____

ULLAGE _____

HORIZON/WINDOW _____

OTHER _____

S T D N

:10

:20

92:30

CSM FLIGHT PLAN

SIM EXP STATUS
 (*0000)
 (31011)

92:30
 (2101)
 (1111)

CMD5:
 DSE REWIND

SKT STAR CHECK
 LOAD EMS WITH ΔVT

UPDATE:
 GO/NO GO FOR DOI

CMD5:
 DSE RECORD

P40 (TRIM)
 VERIFY DSE TAPE MOTION (LBR/RCD/FMD/CMD RESET)

NOTE:
 DSE VOICE RECORDED
 THIS BACKSIDE WILL
 NOT BE DUMPED

(P40)
 (0.5°DB)

:50

93:00

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-88

CSM FLIGHT PLAN

93:30
(21101)
(1111)

*** NO UP VOICE PROCEDURE*
 AOS-NO UP VOICE PROCEDURE
 1. WAIT 30 SEC, CHECK HGA
 2. SELECT OMNI C
 3. SELECT SEC XPNDR
 4. AFTER 3 MIN GO TO LOSS
 * OF COMM CUE CARD*
 * *****
 ACQ STDN HGA P +9, Y 338 NOTE: IF UNABLE TO LOCK UP
 HGA, GO TO OMNI C

CMDS: DSE DUMP
 REPORT: BURN STATUS

LOAD N89 (J-3 OBS)

UPDATE:
 STAY/BAILOUT

P24 (ORB NAV MONITOR LDMK) (TAKE MARKS)
 OPT ZERO - OFF
 OPT MODE - CMC
 OPT TEL TRUN - SLAVE TO SXT
 OPT COUPLING - RSLV
 OPT SPEED - HIGH

* SC CONT - SCS
 * P47 THRUST MONITOR
 * BAILOUT BURN (000,083/002,000)
 * P00
 * V66 SET CSM
 TIG: 93:48:17
 BT: 11.05 SEC
 S.V. INTO LM
 S.V.
 AVC: 100.0 FEET/SEC
 ULLAGE: 4 JET 17 SEC
 ORBIT: 61.5 X 5.0 NM

LDMK ACQUISITION
 TCA
 RELOAD P24
 LOAD N89 (17-1 OBS)
 N89 (+20.160)(+15.405)

MAP UPDATE REV 3
 AOS WITHOUT BURN
 AOS WITH BURN

LDMK J-3 OBS
 T HOR
 TCA -20 SEC
 LAT: + 19.948
 LONG/2: + 20.051
 ALT: +000.000

:40

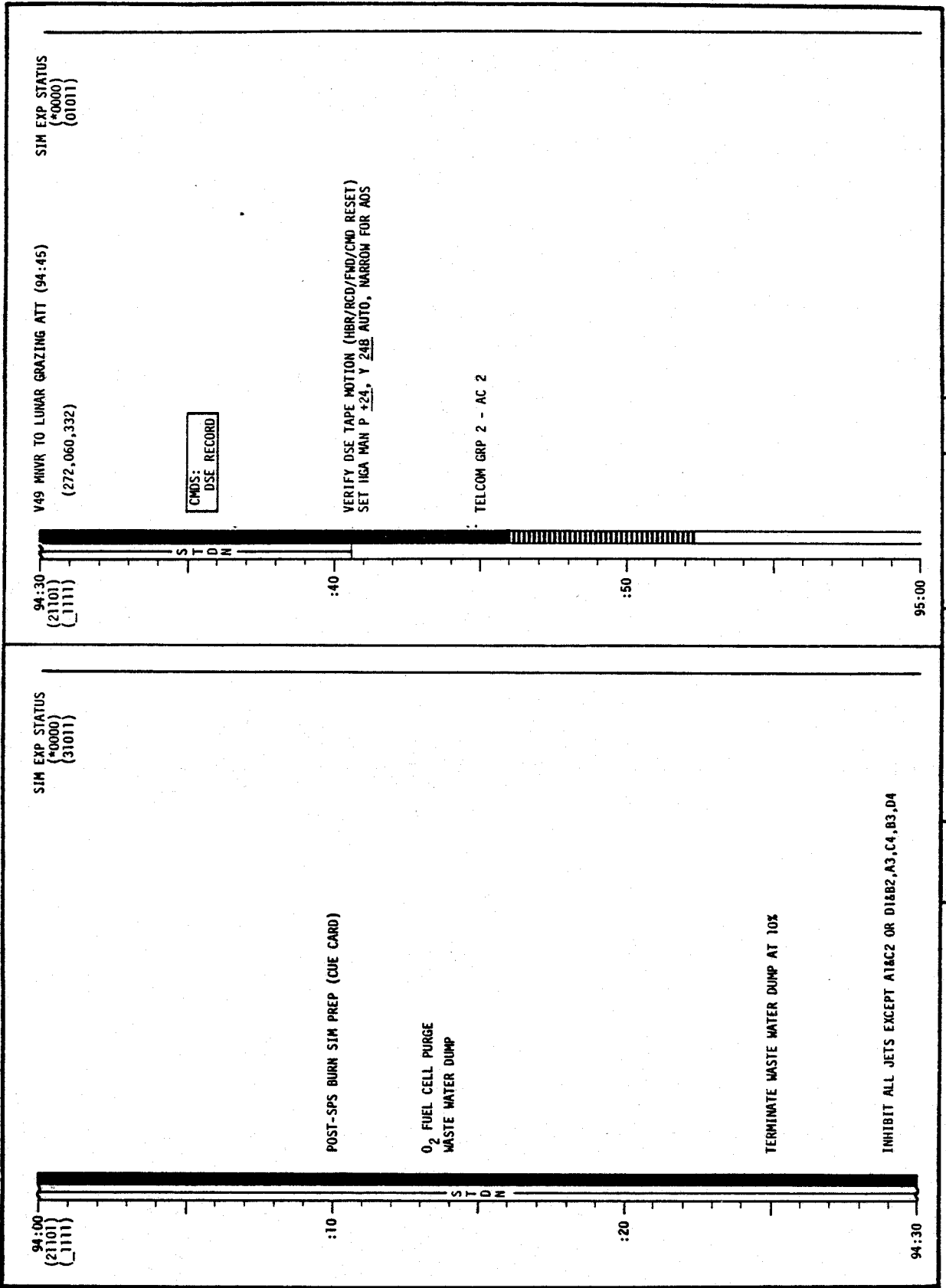
:50

94:00

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-90

CSM FLIGHT PLAN

6.53



CSM FLIGHT PLAN

SIM EXP STATUS
(*0000)
(01011)

L10H CANISTER CHANGE
(10 INTO B, STOW 8 IN B6)

LMP DON BIOMED HARNESS NOTE: CMP MAY DON BIOMED HARNESS

IR COVER - OPEN
UV COVER - OPEN

ACQ STDN HCA P +24, Y 24B AUTO, NARROW

CHDS:
DSE DUMP

95:00
REV 4
(21101)
(1111)

:10

:20

95:30

95:30
(21101)
(1111)

UPDATE:
FLIGHT PLAN
TRAJECTORY STATUS
REFSWMAT 00 TIME (IF REQD)
TEI 12 AND TEI 19 PADS
LM DAP LOAD (COPY ON PAGE 1
IN THE LM DATA CARD BOOK)

RIPLINK:
SHORT BURN CONSTANTS
CSM S.V. AND V66
LIFT-OFF TIME (IF REQD)
DESIRED ORIENT (LDG SITE)
(IF REQD)

SYNCHRONIZE MISSION TIMER
TO CMC (IF REQD)
V05NOTE, 1706E (T EPIHEM
VERIFICATION BY STDN,
COPY FROM DSKY ON STDN
CUE) (COPY T EPIHEM IN
FP SUPPLEMENT)

PC: MODE - STBY
PWR - ON

(CHECK LMP BIOMED HARNESS
CDR DOFF BIOMED HARNESS

NOTE: CDR HARNESS REMOVAL IS
OPTIONAL

PC: PWR - OFF (CUE)

P20 OPT 5 (-X FMO SIM ATT)(96:03)

N78 (+086.74)
(+052.20)
(+358.45)
N79 (+002.00)

SIM EXP STATUS
(*0011)
(01011)

NOTE: LIFT-OFF TIME WILL BE
UPDATED IF THE TIME OF
REV 26 MERIDIAN CROSS-
ING DIFFERS MORE THAN
+2 MIN FROM 137:49:03

OID	T EPIHEM UPDATE LOAD B
03	---
04	---
05	---

REFSWMAT 00 TIME		
	HRS	MIN
+	0	0
+	0	0
+	0	0

S T D N I X

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-92

CSM FLIGHT PLAN

96:00
(P20)
(2.0°DB)
(21101)
(1111)

CMC MODE - FREE
P52 (OPTION 3)
(LOG SITE ORIENT)
REPORT: GYRO TORQUING
ANGLE'S

P52 (OPTION 1)(IF REQD)
(LDG SITE ORIENT)
P20: CMC MODE - AUTO
GDC ALIGN

LM TUNNEL VENT VALVE - LM/CH DP

E-MEMORY DUMP

UPLINK:
JET - ON MONITOR LOADS

P52 LMU REALIGN

N71: --- · ---
N05: --- · ---
N93: --- · ---
X --- · ---
Y --- · ---
Z --- · ---
GET --- · ---

SIM EXP STATUS
(*0011)
(01011)

96:30
(P20)
(2.0°DB)
(21101)
(1111)

CMDS: (AOS +64 MIN)
DSE RECORD

:40

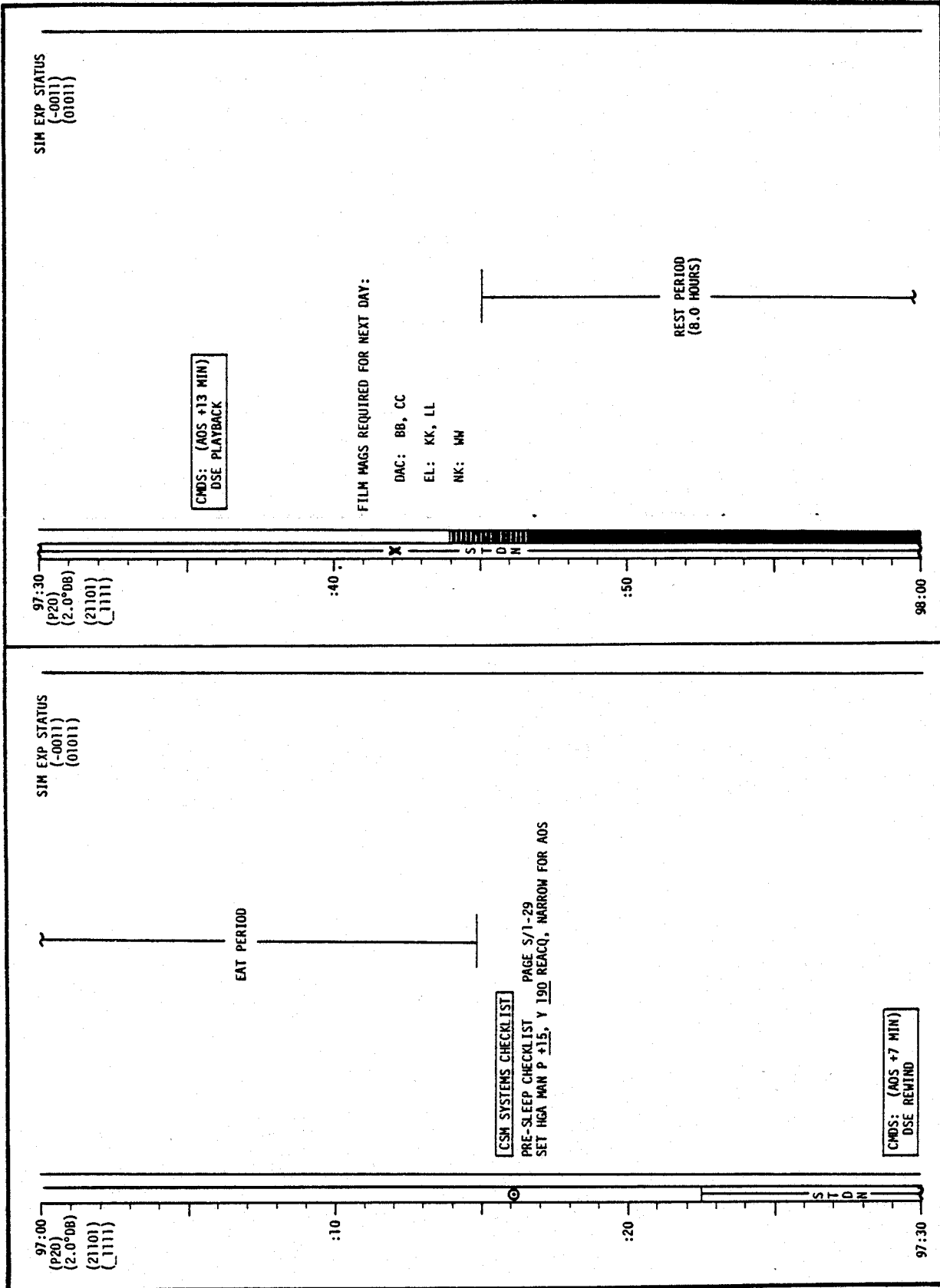
EAT PERIOD

:50

REV 5

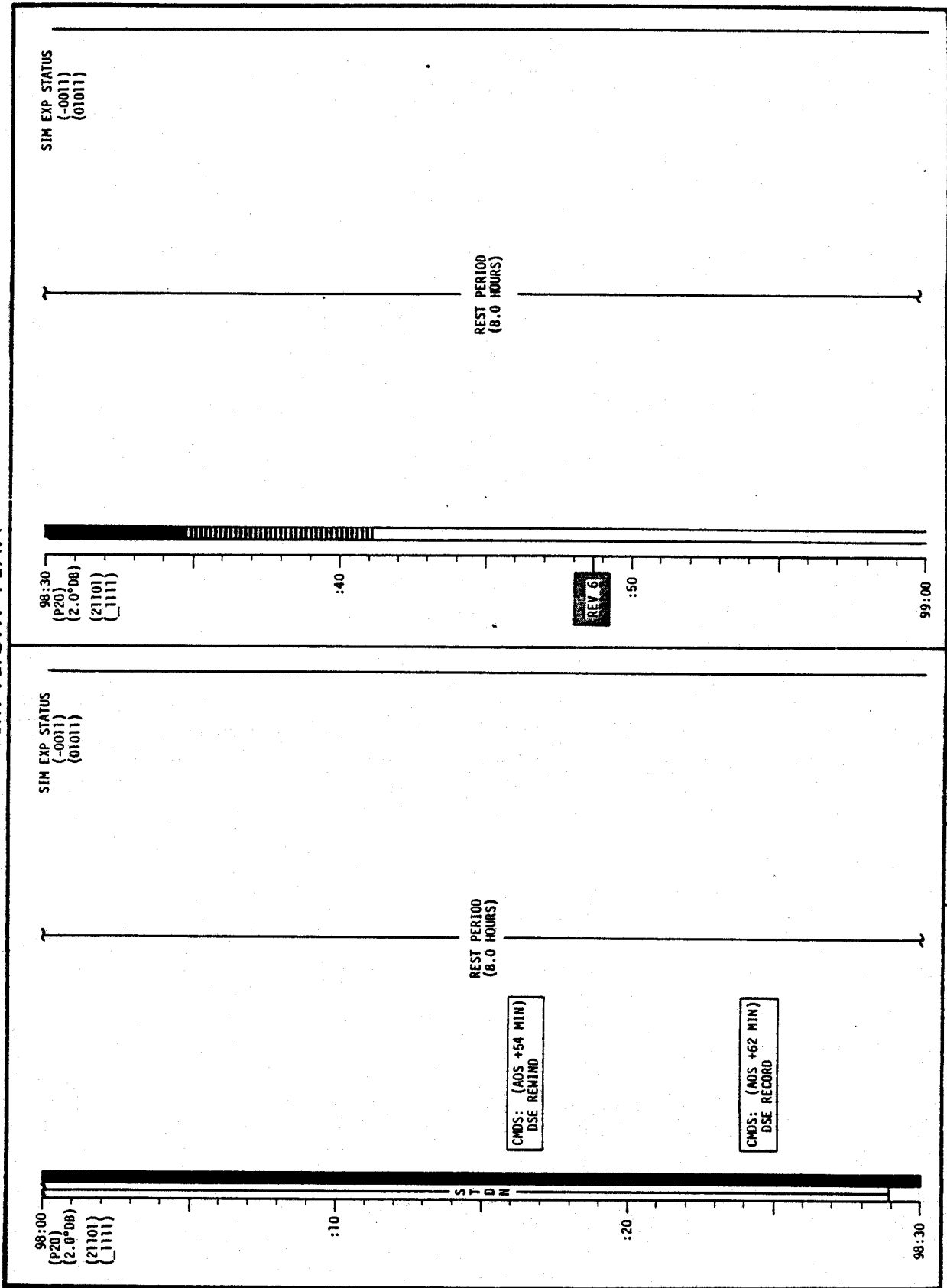
96:30

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-94

CSM FLIGHT PLAN



SIM EXP STATUS
(-0011)
(01011)

REST PERIOD
(8.0 HOURS)

98:00
(P20)
(2.0°DB)
(21101)
(1111)

:40

REV 6

:50

99:00

SIM EXP STATUS
(-0011)
(01011)

REST PERIOD
(8.0 HOURS)

CMDS: (AOS +54 MIN)
DSE REMIND

CMDS: (AOS +62 MIN)
DSE RECORD

98:00
(P20)
(2.0°DB)
(21101)
(1111)

:10

:20

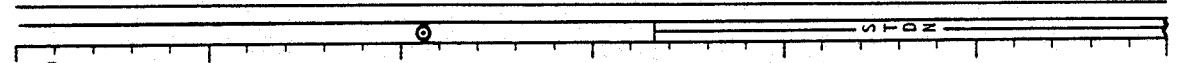
98:30

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-95

CSM FLIGHT PLAN

SIM EXP STATUS
(-0011)
(01011)

99:00
(P20)
(2.0°DB)
(21101)
(1111)



REST PERIOD
(8.0 HOURS)

CMDS: (AOS +7 MIN)
DSE REMIND

99:30
(P20)
(2.0°DB)
(21101)
(1111)

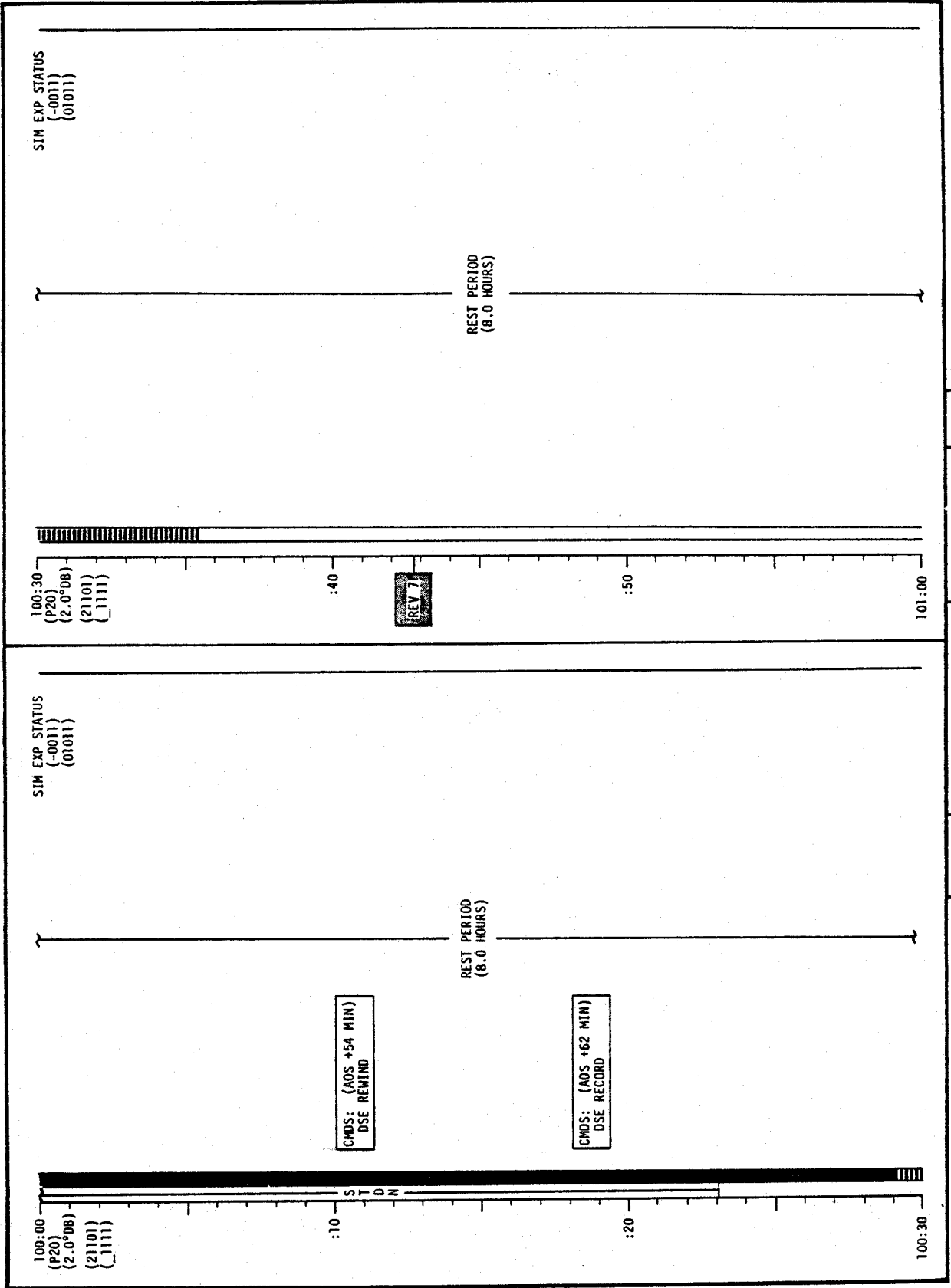


REST PERIOD
(8.0 HOURS)

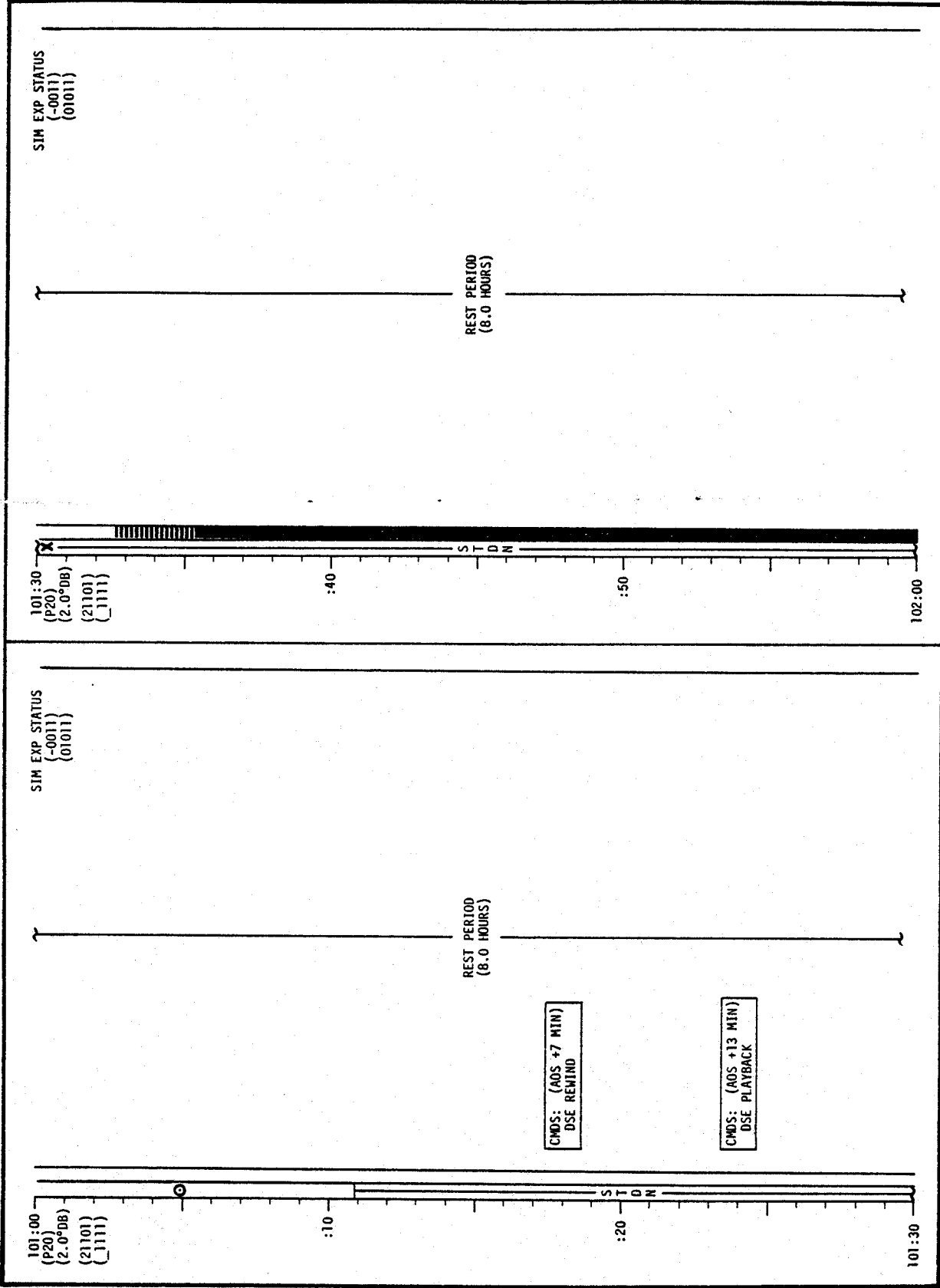
CMDS: (AOS +15 MIN)
DSE PLAYBACK

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-96

CSM FLIGHT PLAN

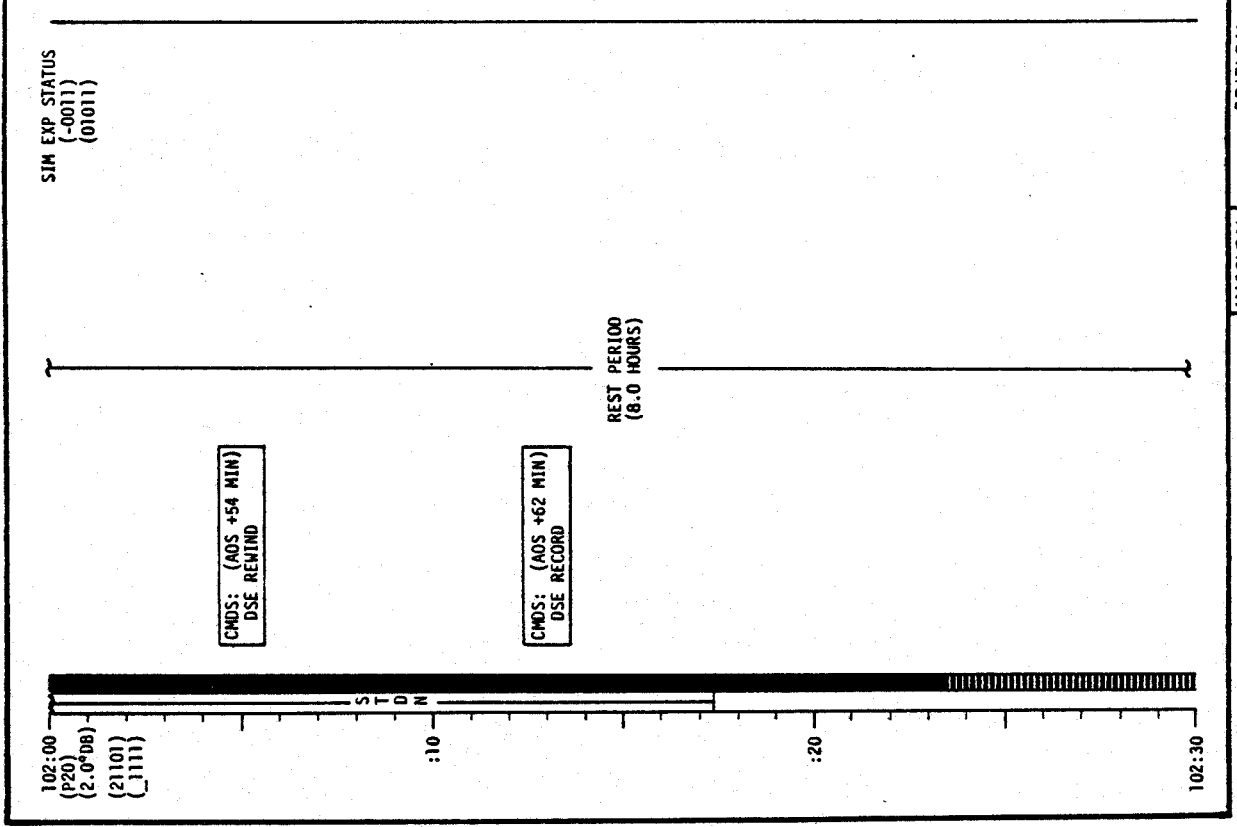
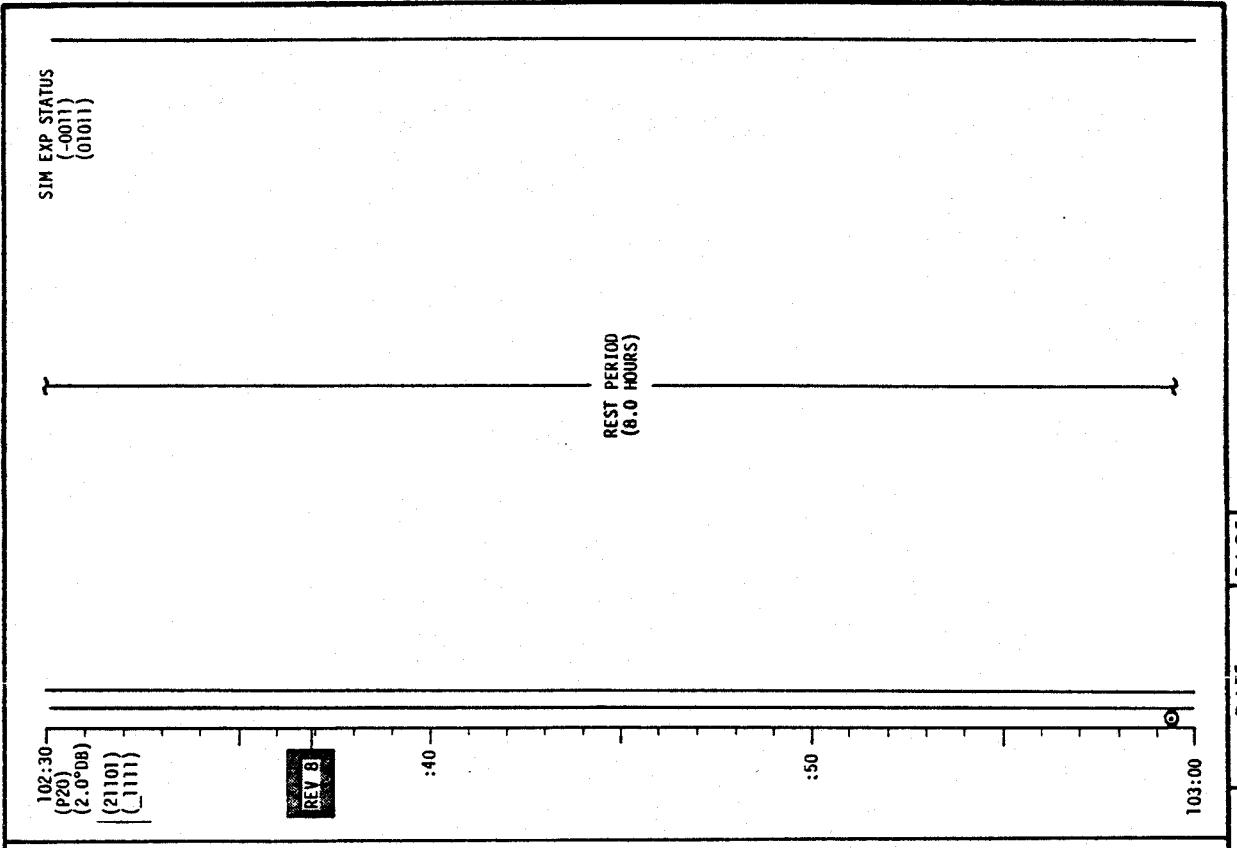


CSM FLIGHT PLAN

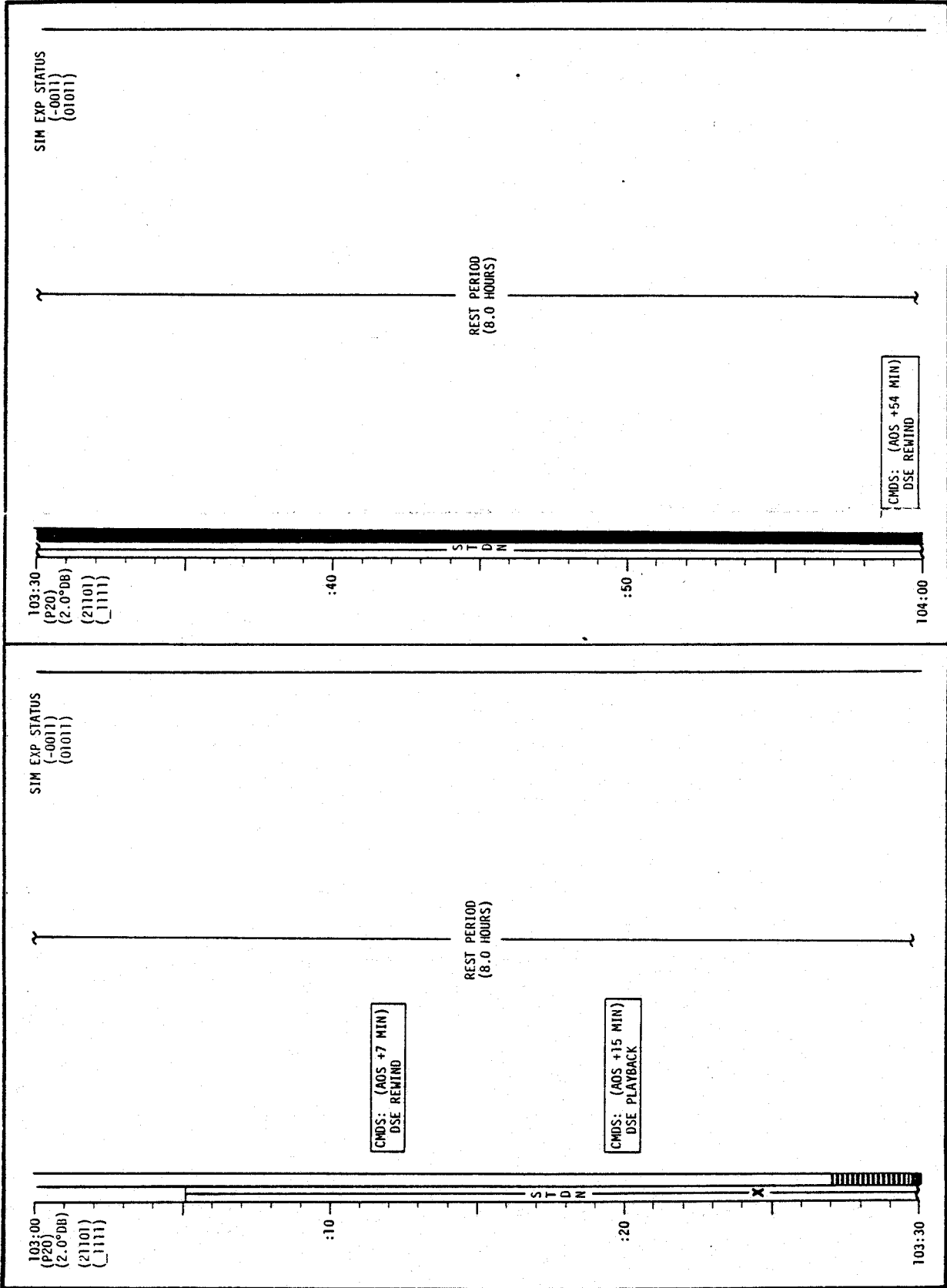


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-98

CSM FLIGHT PLAN

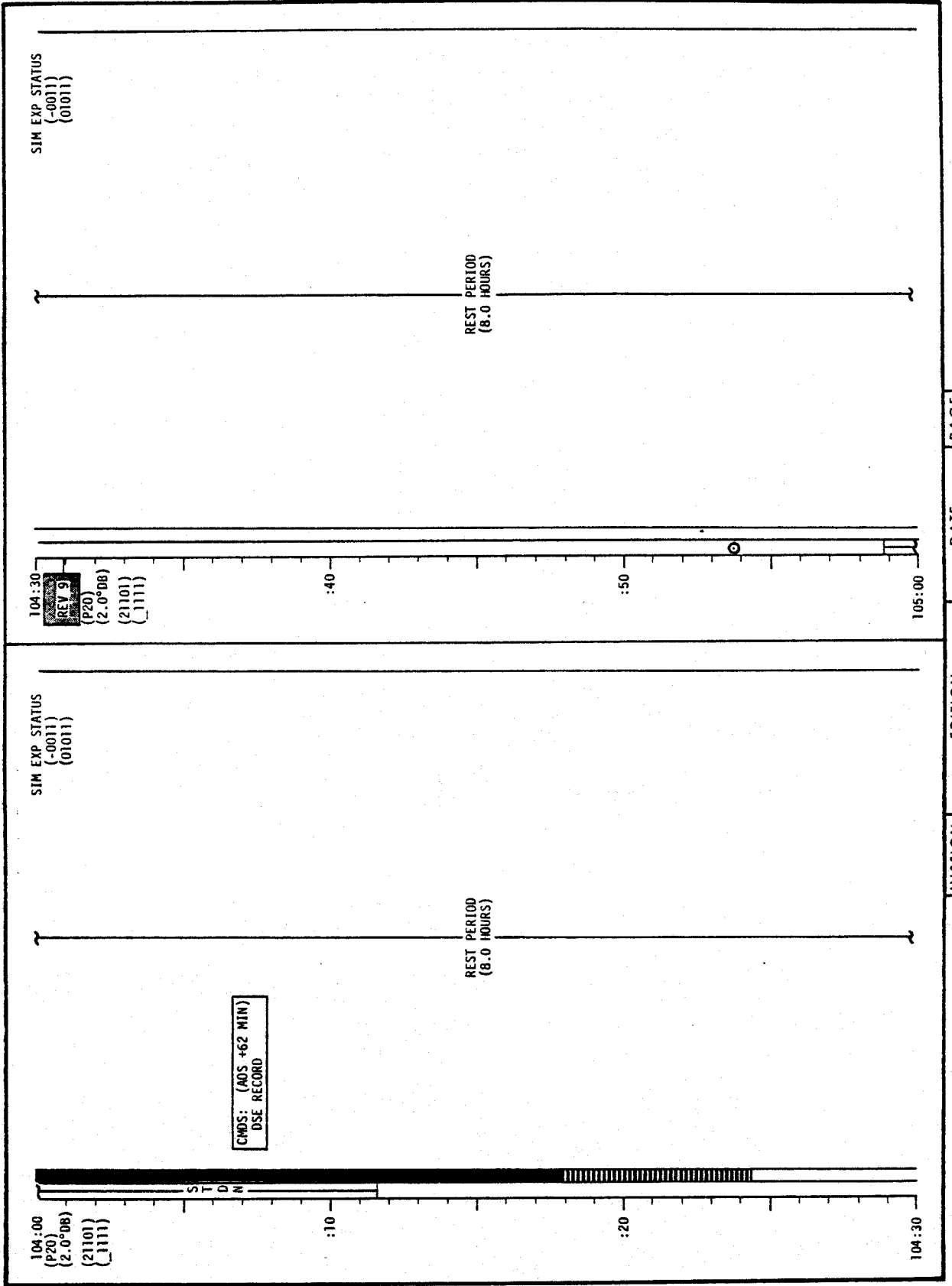


CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-100

CSM FLIGHT PLAN



SIM EXP STATUS
(-0011)
(01011)

REST PERIOD
(8.0 HOURS)

104:30
REV 9
(P20)
(2.0°DB)
(21101)
(1111)

:40

:50

105:00

SIM EXP STATUS
(-0011)
(01011)

REST PERIOD
(8.0 HOURS)

CMDS: (AOS +62 MIN)
DSE RECORD

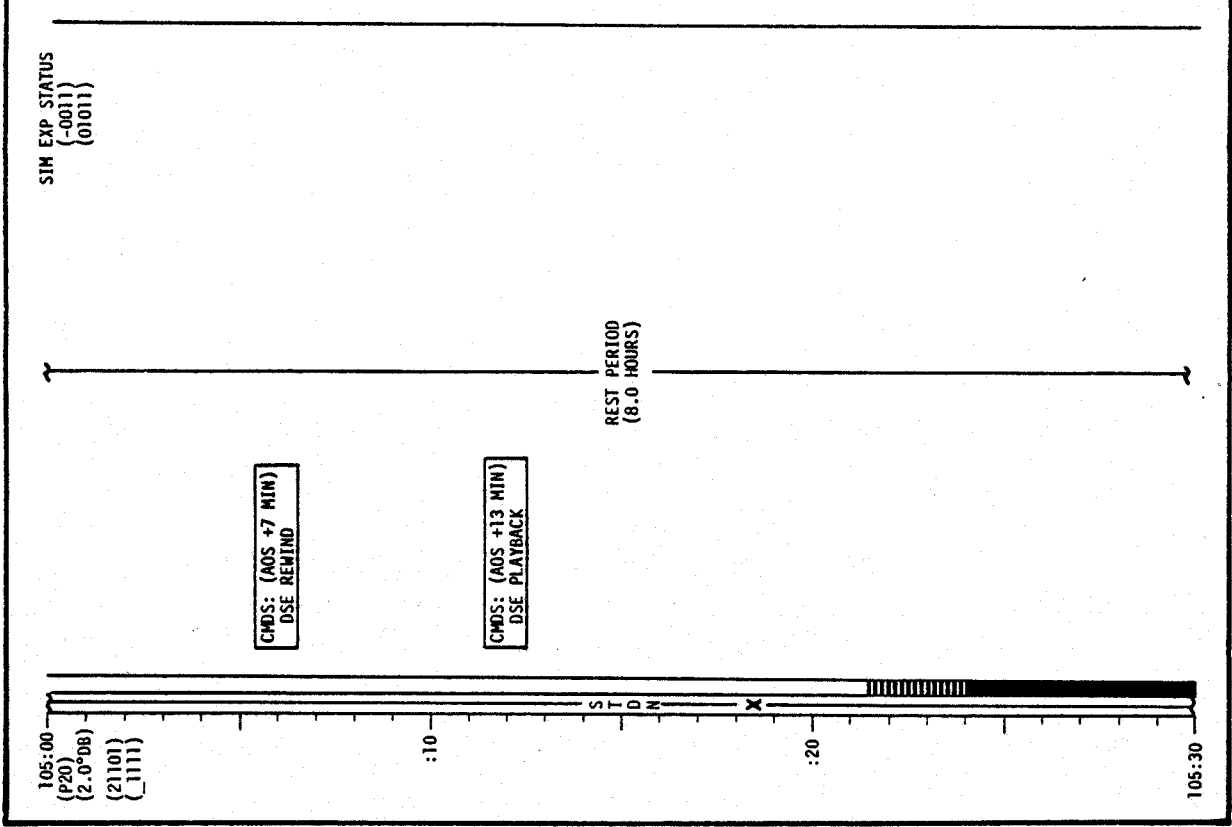
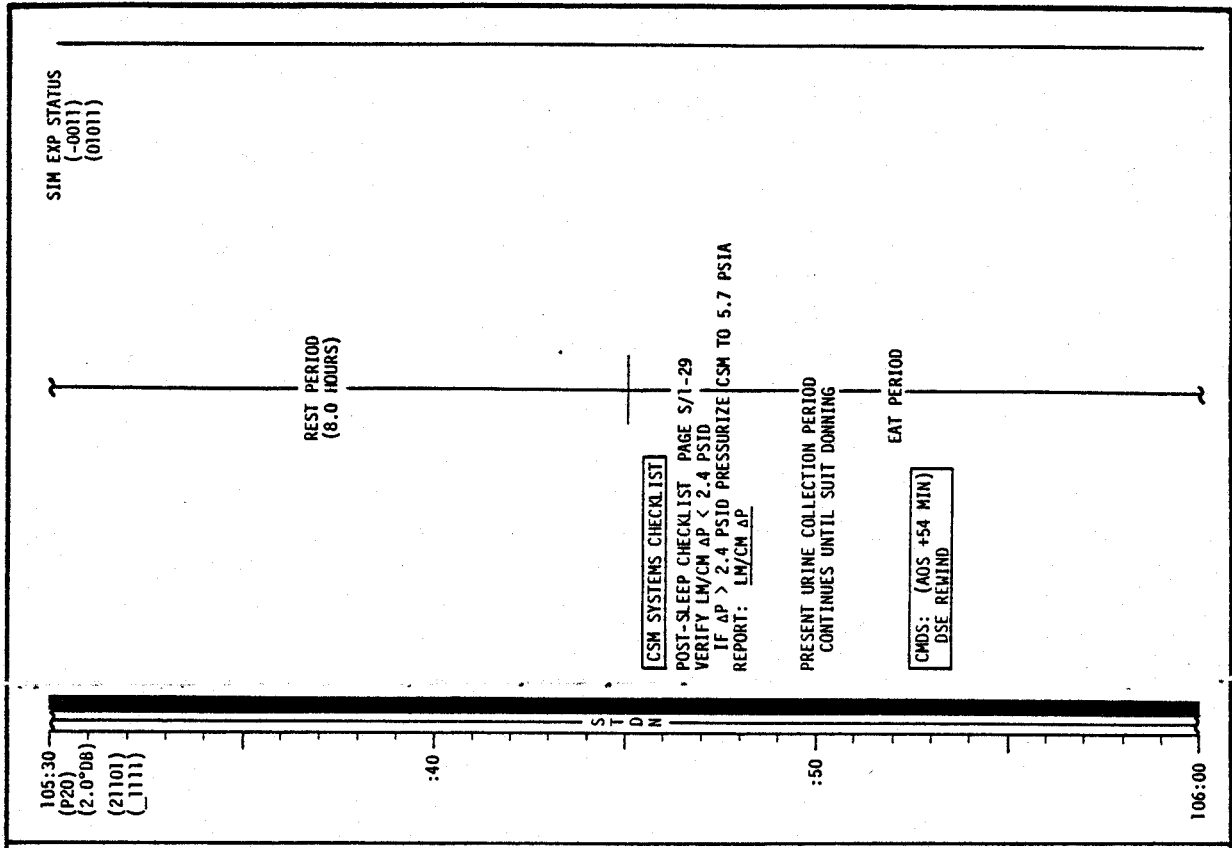
104:00
(P20)
(2.0°DB)
(21101)
(1111)

:10

:20

104:30

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-102

CSM FLIGHT PLAN

SIM EXP STATUS
(-0011)
(01011)

106:30
(P20)
(2.0 DB)
(21101)
(1111)

EAT PERIOD

LMP & CDR: UNSTOW PGA'S
FILL DRINK BAG, EVAC AND INSTALL
INSTALL FOOD STICK
TERMINATE JET - ON MONITOR
P30
P20
V21N26 (00000)
UV COVER - CLOSE
IR COVER - CLOSE
LOGIC PHR (2) - OFF
IR - OFF
UV - OFF

ENABLE ALL JETS (BEFORE AOS)
PREPARE COUCHES: CDR -0°, CMP -0°, LMP -180°
REMOVE PROBE STRAPS (R5)
TUNNEL LIGHTS - ON(up)
VERIFY LN/CM AP < 0.2 PSID
IF AP > 0.2 PSID PERFORM CM/LM PRESSURE EQUALIZATION (DECAL)
TUNNEL HATCH REMOVAL (DECAL); STOW HATCH
PROBE REMOVAL (DECAL); STOW PROBE
BROGUE REMOVAL (DECAL); STOW DROGUE

CMDS: (AOS +7 MIN)
DSE REMIND

SIM EXP STATUS
(-0011)
(01011)

106:00
(P20)
(2.0 DB)
(21101)
(1111)

EAT PERIOD

CMDS: (AOS +62 MIN)
DSE RECORD

REV 10

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-103

CSM FLIGHT PLAN

107:00
(P20)
(2.0°DB)
(21101)
(1111)

REPORT: DOCKING TUNNEL INDEX ANGLE

UPLINK:
CSM S.V. AND V66

UPDATE:
TRAJECTORY STATUS
FLIGHT PLAN

SIM EXP STATUS
(-0000)
(01000)

LMP DON LCG AND PGA WITHOUT HELMET AND GLOVES

CMDS: (AOS +15 MIN)
DSE PLAYBACK

:10

X
S T D N

:20

CDR DON BIOMED HARNESS, LCG AND PGA WITHOUT HELMET AND GLOVES

107:30

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-104

THIS PAGE INTENTIONALLY BLANK

LM FLIGHT PLAN

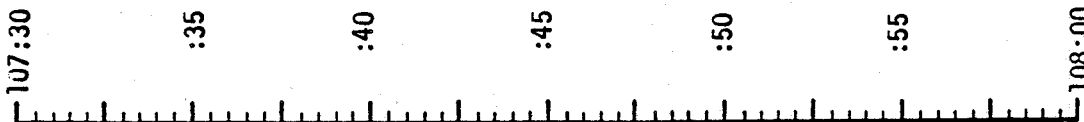
NOTES

LMP

CDR

MCC-H

0823 CST



STDN

LM ACTIVATION CHECKLIST PAGE 3-1

-2:30

IVT TO LM
OPEN HATCH
VERIFY DOCKING ANGLE

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	107:30 - 108:00	6/10	3-106

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(-0000)
(01000)

P52 IMU REALIGN

M71: _____
 M05: _____
 M93: _____
 X _____
 Y _____
 Z _____
 GET _____

V45 (RESET LUNAR SURFACE FLAG)
P00

P52 (OPTION 3)
(LDG SITE ORIENT)

REPORT: GYRO TORQUING ANGLES

GDC ALIGN
V49 HNRV TO UNDOCK ATT (107:48)

(000,105,000)
HGA P -30, Y 202

CMDS: (AOS +58 MIN)
DSE REMIND

PGA INTERCONNECTS - AB TO TSB
CMP DON BIOMED HARNESS, PGA WITHOUT
HELMET AND GLOVES

CDR & LMP IVT TO LM

CMDS: (AOS +66 MIN)
DSE RECORD

VERIFY DSE TAPE MOTION (LBR/RCD/FWD/CMD RESET)
SET HGA MAN P -30, Y 202 AUTO, HARRON FOR AOS

107:30
(P20)
(2.0"DB)
(21101)
(1111)

:40

:50

108:00

S T D N

CSM TO LM TRANSFER LIST

CSM LOCATION	ITEM	LM LOCATION
AZ	JETTISON BAG (1)	TEMP STMG
ON CREW	BTO INSTRUMENTATION (2)	ON CREW
PGA BAG	UCTA (2)	ON CREW
AZ	FCS (2)	ON CREW
UI	LCG (2)	ON CREW
TEMP STMG	DRINK BAG (2)	ON PGA
TEMP STMG	FOOD STICK (2)	ON PGA
PGA BAG	SUIT TISLA-EV (2)	ON CREW
ICG	SUNGLASSES IN POUCH (2)	PGA POCKET
ON CREW	WATCH/MATCHBAND (2)	ON PGA
ON CREW	PEN (2)	PGA POCKET
ON CREW	PEN - FELT TIP (2)	PGA POCKET
ON CREW	PENCIL (2)	PGA POCKET
ON CREW	POCKET, C/L & SCISSOR (2)	ON PGA
ON CREW	POCKET, DATA (2)	ON PGA
ON CREW	SCISSOR	ON CREW
ON CREW	PEN LIGHT (2)	PGA POCKET
ON CREW	EAR PLUG (2 PR)	PGA POCKET
ON CREW	DOSIMETER - PERSONAL (2)	PGA POCKET
	PASSIVE (6)	
ON CREW	COMM CARRIER (2)	ON CREW
HELMET ACC BAG	IV GLOVES (2 PR) - CDR TRANSFER	TEMP STMG
HELMET BAG	HELMET (2) - CDR TRANSFER	TEMP STMG
RB	CMG ELECT ADPTR CAP (2)	ON CHG ADPTR
CCU CABLE	CMG ELECT ADPTR (2)	LHSSC
IN JETT BAG	LCG PLUG (2)	PURSE
ON PGA	GAS CONNECTOR PLUGS (4)	ON PGA
ON PGA	PGA ELECT CONN CAP (2)	PURSE
AB	LIGHTWEIGHT HEADSETS (2)	LHSSC
R3	LM XFER DATA CARD KIT	DATA FILE
	LM TIMELINE BOOK	
	LM DATA CARD BOOK	
	LM LUNAR SURFACE C/L	
	ORBIT MONITOR CHART (LM)	
	ASCENT MONITOR CHART	
	LM STAR CHARTS (3)	
	LM ACT C/L (1)	
	(RETURN JETTISON BAG TO CSM)	

LM FLIGHT PLAN

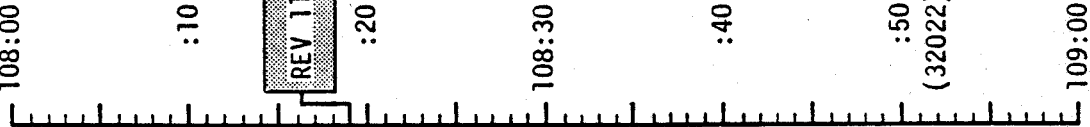
MCC-H

CDR

LMP

NOTES

0853 CST



IVT TO LM	TRANSFER POWER LIGHTS ON DES O ₂ AND H ₂ O - OPEN	
MISSION TIMER ACTIVATION	EPS ACTIVATION CONNECT TO LM COMM	-2:00
	PRIMARY GLYCOL LOOP ACT	
	CAUTION/WARNING CHECKOUT	
	ECS ACTIVATION & CHECKOUT	
CONNECT TO LM ECS CB ACTIVATION ACTIVATE RCS HEATERS	CONNECT TO LM ECS CB ACTIVATION	
PGNS TURN ON AND SELF TEST	VHF CHECKOUT RECORDER - ON	
LGC/CMC CLOCK SYNC T EPHM UPDATE	SUIT FAN/H ₂ O SEP CHECK GLYCOL PUMP CHECK	
SET DAP E-MEMORY DUMP LDG GEAR DEPLOY	STEERABLE ANTENNA ACTIVATION PRIM S-BAND CHECK SEC S-BAND BIOMED - RIGHT	-1:30

- UPDATE TO LM
- AGS ABORT CONSTANTS
- DOI-2 PAD
- UPLINK TO LM
- L/S REFSMAT
- LM S.V. & V66
- LGC ABORT CONST
- LGC AT CLOCK SYNC
- (IF REQ)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	108:00 - 109:00	6/10-11	3-108

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

AT LM REQUEST:
 LM PHR - RESET/OFF GET _____ : _____ : _____
 (RECORD)
 SYS TEST - 7D
 SYS TEST 1nd - 0 volts
 DATA SYS - OFF

CONFIGURE CAMERA: (UNDOCKING PHOTOS)
 CM2/DAC/18/CEX-BRKT.MIR (TB, 1/250.7) 12 fps (100% MAG)

MAG (CC) _____, MAG % _____
 UTILITY PHR - ON
 CM2/EL/80/CEX (f8, 1/250, FOCUS) 10 FR
 MAG (KK) _____, FR # _____

L10H CANISTER CHANGE
 (11 INTO A, STOW 9 IN A9)

AT CDR REQUEST:
 MARK TO LM FOR LM MISSION TIMER SYNC

108:30
 (21101)
 (11111)

:40

:50

109:00

REMOVE AND STOW CSM/LM UMBILICAL IN F1 or F2
 INSTALL DROGUE AND PROBE (DECAL)
 PRE-LOAD PROBE (DECAL)

VHF C/O AT LMP REQUEST
 VHF ANT - RIGHT
 VHF AM B - SIMPLEX FOR VHF B CHECK then OFF
 VHF AM A - SIMPLEX FOR VHF A CHECK
 ADJUST SQUELCH

LM CLOCK SYNC:
 VT6N65E
 ON CDR MARK - V06N65E
 LM T EPHIEM UPDATE:
 V05N01E, 1706E (T EPHIEM)

ACQ STDN HGA P -30, Y 202 AUTO, MARRON
 REPORT: LM PHR - RESET/OFF GET (FROM 108:00)

RELEASE DOCKING LATCH NO'S. 1 & 7
 CB DOCKING PROBE (2) - CLOSED
 PROBE EXT/D/REL - RETR
 PROBE EXT/D/REL Td (2) - bp (VERIFY)
 CB DOCKING PROBE (2) - OPEN
 PROBE EXT/D/REL - OFF
 VERIFY PROBE EXTEND LATCH
 ENGAGED INDICATOR (RED)
 NOT VISIBLE

CMDS:
 DSE DUMP

LM LANDING GEAR DEPLOY

UPLINK:
 CSM S.V. AND V66

UPDATE:
 -DAP DATA (110:05)
 UNDOCK/SEP PAD COPY AT (110:25)
 P24 TRK PAD: (LDMK 17-X) (110:55)
 LM DOI-2 P76 PAD (112:10)

MISSION	DATE	PAGE
APOLLO 17	10/23/72	3-109
EDITION		
APOLLO 17		FIML (12/6)

LM FLIGHT PLAN

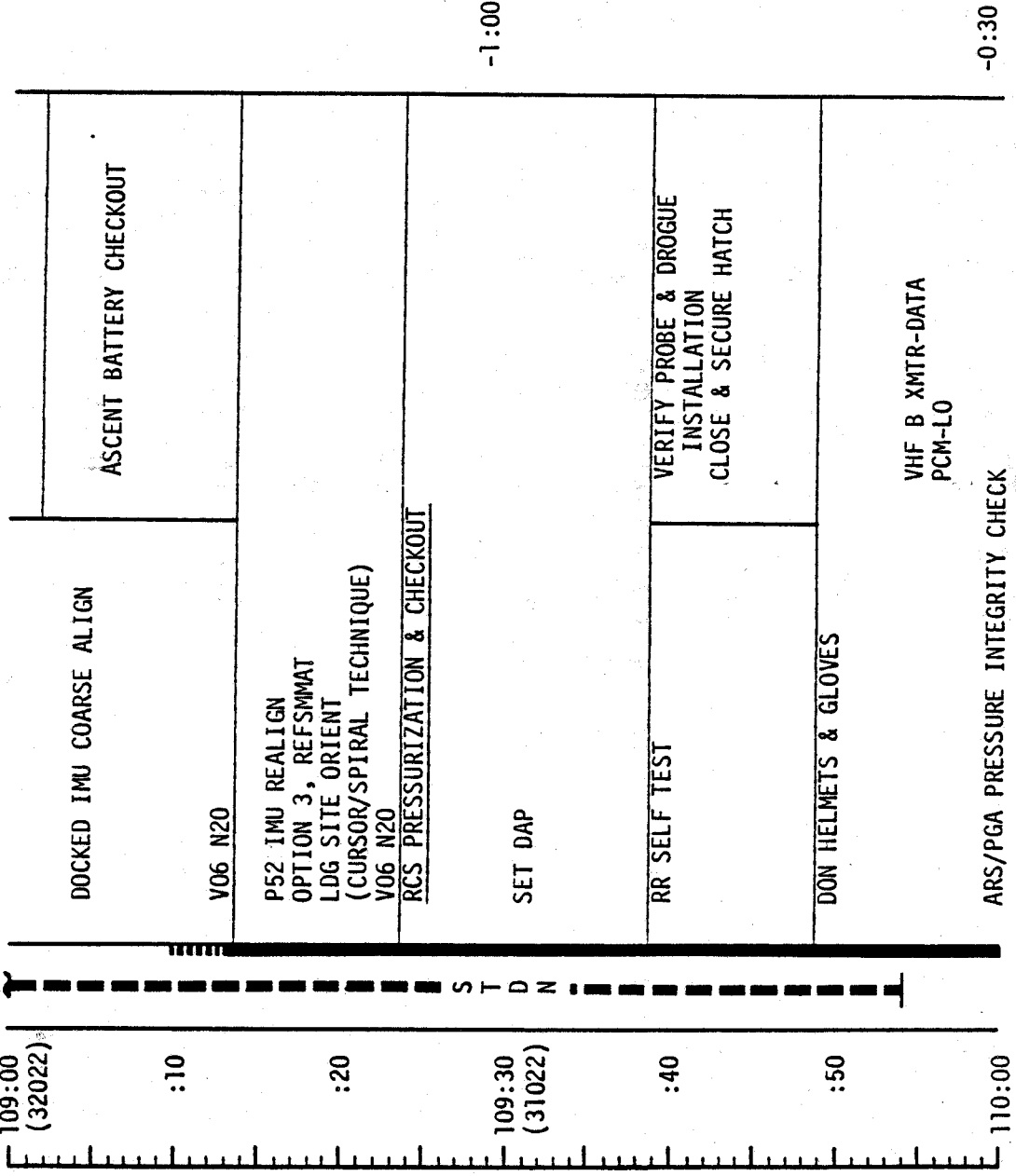
NOTES

LMP

CDR

0953 CST

MCC-H



-1:00

-0:30

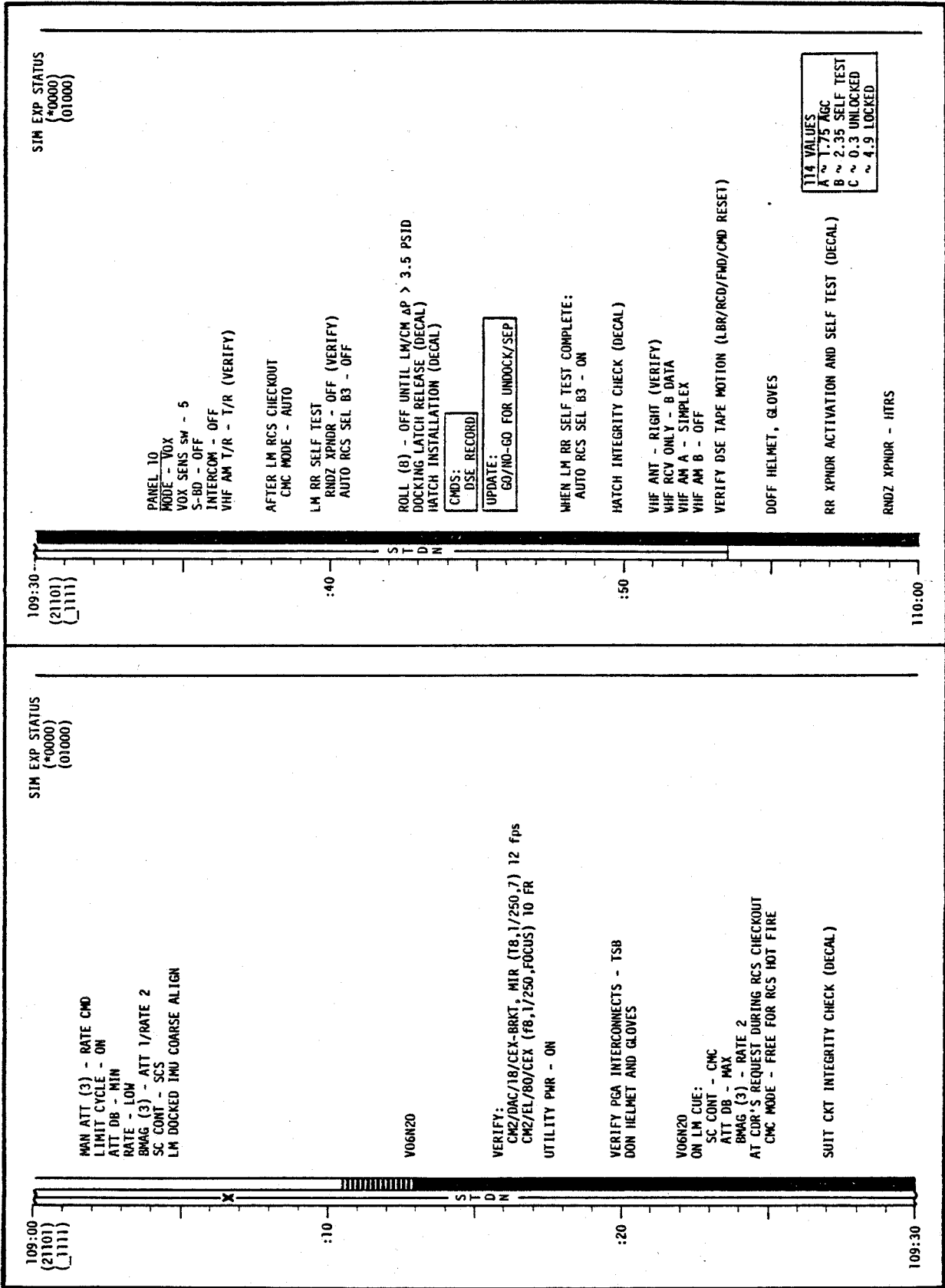
UPDATE TO LM
PIPA BIAS (IF REQ)

GO/NO-GO FOR
UNDOCKING &
SEPARATION

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	109:00 - 110:00	6/11	3-110

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



SIM EXP STATUS
(*0000)
(01000)

PANEL 10
MODE - VOX
VOX SENS SW - 5
S-BD - OFF
INTERCOM - OFF
VHF AM T/R - T/R (VERIFY)

AFTER LM RCS CHECKOUT
CMC MODE - AUTO

LM RR SELF TEST
RNDZ XPNDR - OFF (VERIFY)
AUTO RCS SEL B3 - OFF

ROLL (8) - OFF UNTIL LM/CM AP > 3.5 PSID
DOCKING LATCH RELEASE (DECAL)
HATCH INSTALLATION (DECAL)

CMCDS:
DSE RECORD

UPDATE:
GO/NO-GO FOR UNDOCK/SEP

WHEN LM RR SELF TEST COMPLETE:
AUTO RCS SEL B3 - ON

HATCH INTEGRITY CHECK (DECAL)

VHF ANT - RIGHT (VERIFY)
VHF RCV ONLY - B DATA
VHF AM A - SIMPLEX
VHF AM B - OFF

VERIFY USE TAPE MOTION (LBR/RCD/FMD/CMD RESET)

DOFF HELMET, GLOVES

RR XPNDR ACTIVATION AND SELF TEST (DECAL)

RNDZ XPNDR - ITRS

T14 VALUES
A ~ 1.75 AGC
B ~ 2.35 SELF TEST
C ~ 0.3 UNLOCKED
~ 4.9 LOCKED

SIM EXP STATUS
(*0000)
(01000)

MAN ATT (3) - RATE CMD
LIMIT CYCLE - ON
ATT DB - MIN
RATE - LOW
BMAG (3) - ATT 1/RATE 2
SC CONT - SCS
LM DOCKED IMU COARSE ALIGN

V06N20

VERIFY:
CMZ/DAC/18/CEX-BRKT, MIR (T8,1/250,7) 12 fps
CMZ/EL/80/CEX (F8,1/250,FOCUS) 10 FR
UTILITY PWR - ON

VERIFY PGA INTERCONNECTS - TSB
DON HELMET AND GLOVES

V06N20
ON LM CUE:
SC CONT - CMC
ATT DB - MAX
BMAG (3) - RATE 2

AT CDR'S REQUEST DURING RCS CHECKOUT
CMC MODE - FREE FOR RCS HOT FIRE

SUIT CKT INTEGRITY CHECK (DECAL)

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-111

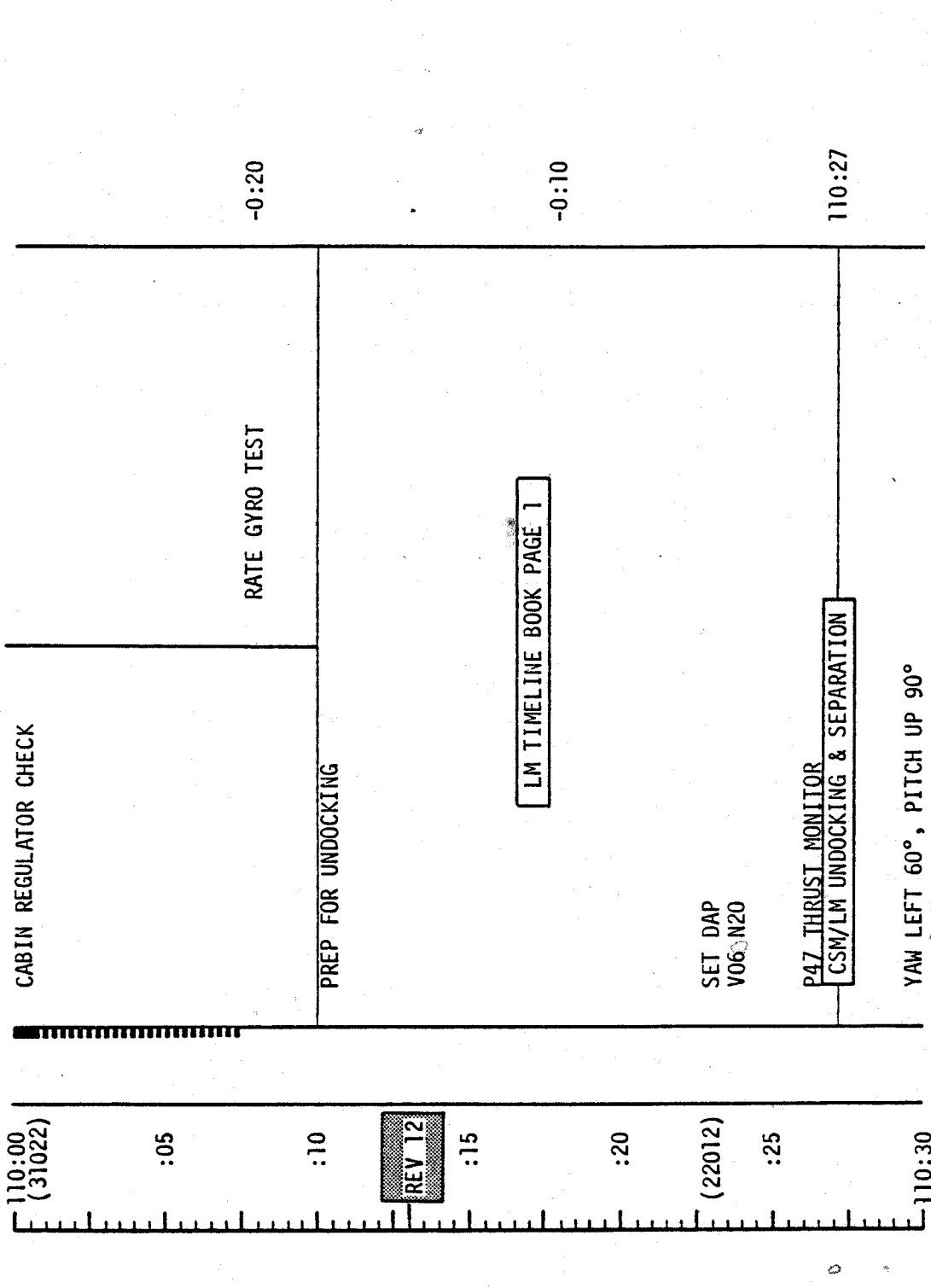
LM FLIGHT PLAN

MCC-H

CDR

LMP

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	110:00 - 110:30	6/11-12	3-112

FLIGHT PLANNING BRANCH

LM FLIGHT PLAN

MCC-H

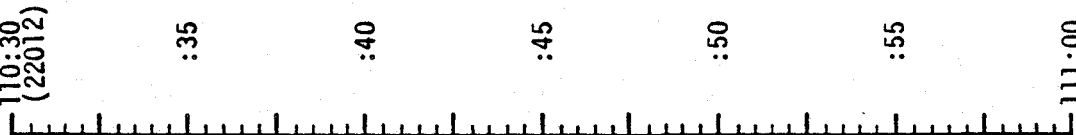
CDR

LMP

NOTES

1123 CST

110:30
(22012)



DOFF HELMETS & GLOVES	SEPARATION PHOTOGRAPHY LM3/DAC & DC
LDG RADAR CHECK	CONFIGURE CAMERAS FOR CABIN PHOTOS, LM/DAC & DC
REPORT: V06N20 ANGLES & GET DPS THROTTLE CHECK	VHF B XMTR-OFF, BIOMED-LEFT PCM-HI
DPS PRESSURIZATION & CHECKOUT	AGS ACTIVATION
	LOAD AGS ABORT CONSTANTS
	V47 AGS INITIALIZATION ALIGN AGS TO PGNS
MNVR TO RR CHECK ATT	AGS CONTROL CHECK CONFIGURE CAMERAS FOR TCA LM3/DAC, LM/DC

UPDATE TO LM
AGS K-FACTOR
REV 12 LS TCA

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	110:30 - 111:00	6/12	3-114

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
 (*0000)
 (01000)

V49 MWVR TO LOW ALT LDMK TRK PAD ATT (110:40)
 SET HGA MAN P +12, Y 334 REACQ, NARROW FOR AOS

CONFIGURE CAMERA: (LDMK TRK)
 CM/DAC/SXT/CEX (EXP-PAD) 1 fps (3% MAG)

MAG (BB) _____ MAG % _____
 UTILITY PHR - ON
 RR XPNDR - PMR

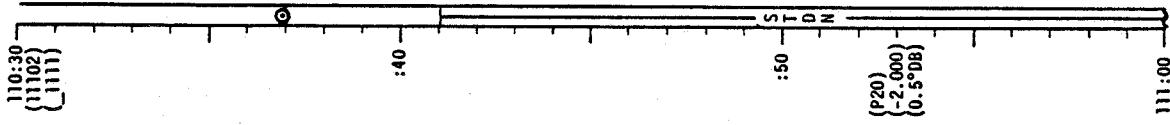
ACQ STDN HGA P +12, Y 334 REACQ, NARROW
 VHF ANT - LEFT
 VHF AM A - OFF
 VHF AM B - DUPLEX
 ADJUST SQUELCH
 VHF RING - RING (USE VOICE USE MARGINAL)
 VHF AM RCY ONLY - OFF

CMDS: _____
 DSE STOP _____
 CUE: _____
 HGA AUTO _____
 UPDATE: _____
 P24 T2 TIME (IF REQD) _____

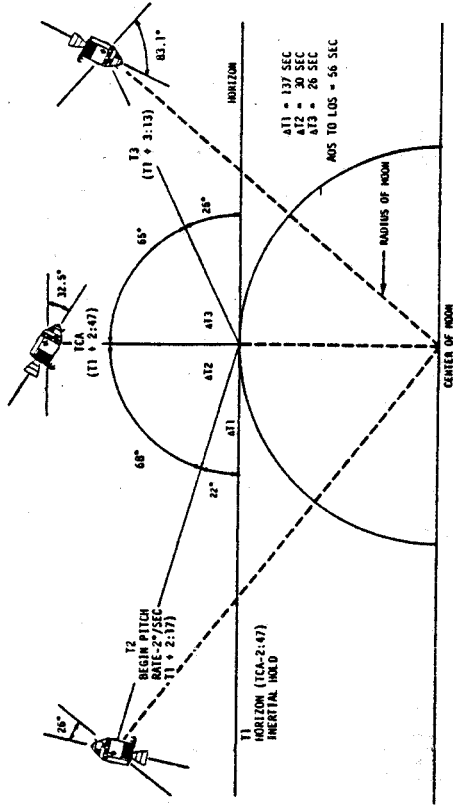
P20 OPT 2 (LOW ALT LDMK TRK)
 N78 (+090.00)
 (LOAD LDMK PAD ROLL ANGLE)
 N79 (-2.0000)
 (+000.50)
 N34 (LOAD T2 TIME)
 PRO _____

CMDS: _____
 DSE RECORD _____
 P24 (LDMK 17-X)
 OPT ZERO - OFF
 OPT MODE - CMC
 OPT TEL TRUN - SLAVE TO SXT
 OPT COUPLING - RSLV
 OPT SPEED - HI

0:00 - T1 (HORIZON) DET - RESET/START
 DAC - ON



CSM LOW ALTITUDE LDMK TRACKING PROFILE



P24 LDMK TRACKING		(1/125)	
TGT:			
T1			
T2			(111:00:28.5)
TCA			
T3			
R	^{op}	^{oy}	^{TA} (T2 ACQ)
N or S	(0 2 0)	(2 9 6)	(0 0 0)
TA			
N89	17-1	17-2	17-3
LAT	+20.160	+20.020	+20.272
LONG/2	+15.405	+15.402	+15.350
ALT	-001.96	-001.97	-001.89

LM FLIGHT PLAN

NOTES

LMP

CDR

1153 CST

MCC-H

111:00
(22012)

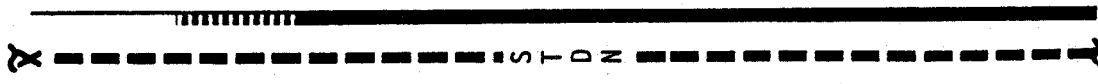
UPDATE TO LM
CSM CIRC P76 PAD
NO PDI+12 ABORT PAD
PDI PAD
PDI EARLY ABORT PAD
PDI LATE ABORT PAD
T2 ABORT
T3 TIG
SHe PRESSURE

OBSERVE LDG SITE

RR CHECKOUT

P52 IMU REALIGN
OPTION 3, REFSMMAT
(LDG SITE ORIENT)

COAS CALIBRATION



:05

:10

:15

:20

:25

111:30

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	111:00 - 111:30	6/12	3-116

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

111:00
(P20)
(0.5°DB)
(11102)
(1111)

2:17 - T2 (AUTO PITCH RATE BEGINS) OPT MODE - MAN, TAKE MARKS
2:47 - TCA
3:13 - T3 (LOMK LOSS) DAC - OFF
STOP PITCH RATE AT P 091
VHF RING - RESET, COMPARE RR AND VHF RANGE
ACQ STDN HGA P -49, Y 187
RECORD MAG % _____, REMOVE & STOW DAC

CMDS:
DSE DUMP
P00
P52 (OPTION 3)
(LOG SITE ORIENT)
REPORT: GYRO TORQUING ANGLES
GDC ALIGN

P52 IMU REALIGN

N71: _____
N05: _____
N93: _____
X _____
Y _____
Z _____
GET _____

UPDATE:
CIRC PAD (111:15)
P24 LDMK TRACK PAD (LOMK RP-3) (112:20)
PADS E-N (113:15)
PIPA BIAS (IF REQD)

VHF AM A - SIMPLEX
ADJUST SQUELCH
VHF AM B - OFF
VHF BCV ONLY - 8 DATA
VHF AM T/R - T/R
MODE - ICON/PTT (PNL 9)
VHF RING - OFF
MODE - VOX (PNL 6 & 10)

UPLINK:
CSM S.V. (CIRC-10)
CIRC TARGET LOAD

P30; VERIFY CIRC TTIG AND ΔV'S
V49 MNVR TO CIRC BURN PAD ATT (111:34)
HGA P -35, Y 207

P30 MANEUVER

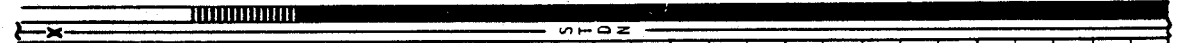
PURPOSE	C I R C			S P G & N			PROP/GUID.
	S	P	G	S	G	N	
WT							M47
P TRIM	0	0	0				M48
Y TRIM	0	0	0				
HRS	+	0	0				GETI
MIN	+	0	0				N33
SEC	+	0	0				
ΔV _X							N81
ΔV _Y							
ΔV _Z							
R (000)	X	X	X				
P (100)	X	X	X				
Y (358)	X	X	X				
H _A	+						M44
H _p							
ΔVT	+						
BT	X	X	X				
ΔVC	X						
SKTS	X	X	X				
SFT	+					0	
TRN	+					0	
BSS	X	X	X				
SPA	X	X	X				
SXP	X	X	X				

SET STARS

R ALIGN _____
P ALIGN _____
Y ALIGN _____

ULLAGE _____

HORIZON/WINDOW _____



111:30

LM FLIGHT PLAN

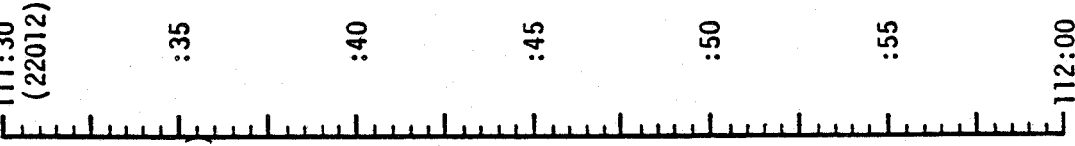
NOTES

LMP

CDR

1223 CST

MCC-H



UPLINK TO LM
 CSM S.V.
 LM S.V.
 E-MEMORY (IF REQ)
 DES TARGETING
 UPDATE TO LM (IF REQ)
 GYRO DRIFT COMP
 PIPA BIAS

GO/NO-GO FOR DOI-2

MNVR TO AGS CAL ATT
 VHF COMM CHECK W/CSM
 CONFIGURE VHF FOR LOS
 VHF B XMTR-DATA

AGS CALIBRATION

CONFIGURE S-BAND FOR LOS
 PCM-LO

PREP FOR DOI-2
 P30, P41
 MNVR TO DOI-2 ATTITUDE

CSM CIRC 111:56

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	111:30 - 112:00	6/12	3-118

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(0000)
(01000)

GDC ALIGN
VERIFY ORDEAL
ALT SET = 60 NM
VHF COMM CHECK WITH LM
PRE-SPS BURN SIM PREP (CUE CARD)
V48 (11101)
(11111)
SET DET COUNTING UP TO CIRC

P40 (TRIM)

UPDATE:
GO/NO-GO FOR CIRC

CMDS:
DSE RECORD

VERIFY DSE TAPE MOTION (LBR/RCD/FWD/CMD RESET)

TIG: 111:55:22.7
BT: 4.0 SEC
AVT: 70.1 FPS
ULLAGE: 4 JET, 12 SEC
ORBIT: 70.3 X 54.3

P00
VOICE P76 BURN DATA TO LM
V82

111:30
(11102)
(11111)

(11101)
(11111)

:40
(P40)
(0.5°DB)

:50

(11101)
(11111)

112:00

CIRC BURN TABLE					
SPS LIMITS	P OR Y RATES	ATT DEVIATIONS	SHUTDOWN TIME	RESIDUALS	MANUAL
TIGHT	10°/SEC TERMINATE	+10° TERMINATE	BT +1 SEC	IF X, Y, AZ ARE <5 FPS TRIM TO <0.2 FPS DO NOT TRIM IF ANY RESIDUAL >5 FPS IF (-) V _{gy} OR (+) V _{gz} ROLL LEFT AND USE -Z THRUSTERS	MANUAL START RESTART IF ΔV >20 FPS ΔV _{go}

BALL VLV FAILURE - START ON SUSPECT BANK

BURN STATUS REPORT		ΔTIG
		BT
		V _{gx}
		R
		P
		Y
		V _{gx}
		V _{gy}
		V _{gz}
		ΔVC
		OX
		FUEL
		UNBAL

CONTINGENCY COMMUNICATIONS

1. Loss of voice comm with LM
VHF AM B - SIMPLEX
VHF RCY ONLY - OFF
(LM will select A and B simplex)
2. If no reply from CSM call or garbled voice
VHF AM A - OFF
3. If no reply from CSM call
VHF AM B - DUPLEX
(LM will select duplex A)
4. Select back up audio center

LM FLIGHT PLAN

CDR

LMP

NOTES

1253 CST

112:00
(22012)

LM DOI-2

P76 UPDATE CSM S.V.

V47 AGS INITIALIZATION

PREP FOR PDI

MNVR TO PDI ATTITUDE

:05

REV 13

:10

CHECK ECS, RCS, EPS, APS
CAMERA PREP FOR EARTHRISE
LM/DC

(22112)

SET DAP

CAMERA PREP FOR PDI
LM3/DAC

:15

DON HELMETS & GLOVES

BATS 5 & 6 - ON
INVERTER-1

:20

:25

112:30

TIG: 112:01
BT: (RCS) 27 SEC

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	112:00 - 112:30	6/12-13	3-120

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

112:00
(P20)
(0.5°DB)
(11101)
(1111)

P20 OPT 5 (LDMK TRK ATT) (112:10)
N78 (+051.05)
 (-053.41)
N79 (+012.20)
 (+000.50)
(030.338/030.000)
SET HGA MAN P -10, Y 343
REACQ, NARROW FOR ADS

SIM EXP STATUS
(*0000)
(31000)

LM D01-2 (112:01)

CONFIGURE CAMERA: (LDMK TRK)
CM/DAC/SXT/CEX (EXP-PAD) 1 fps (3.8% MAG)

MAG (BB) MAG %
UTILITY POWER - ON

COPY P76 DATA FROM STDN
33 : : :
84 : : :

P76 (LM D01-2)
GDC ALIGN
VERIFY ORDEAL
ALT SET 70 NM

P24 (LDMK RP -3)
OPT ZERO - OFF
OPT MODE - CMC
OPT TEL TRUN - SLAVE TO SXT
OPT COUPLING - RSLV
OPT SPEED - MED

0:00 - T1 (HORIZON) DET - RESET/START

3:50 - DAC - ON

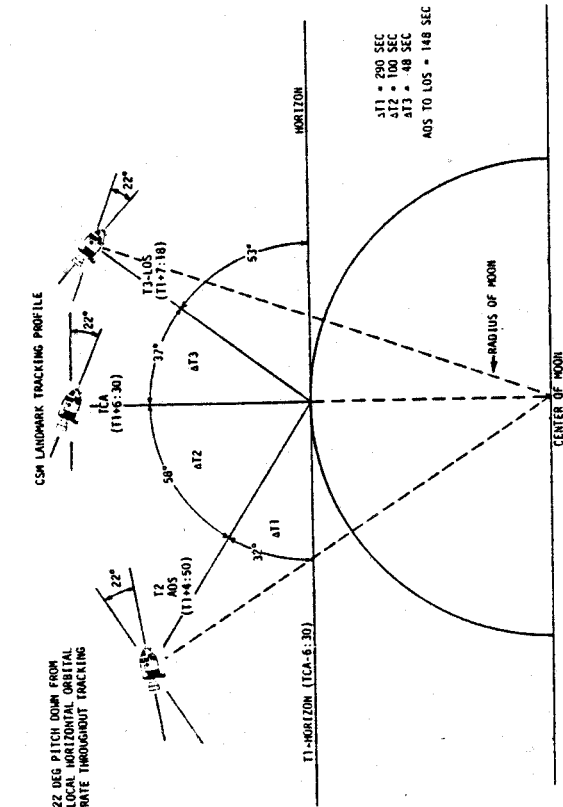
4:50 - T2 (LDMK ACQ) OPT MODE - MAN,
TAKE MARKS TO SEC APART

6:30 - TCA
7:18 - T3 (LDMK LOSS) DAC - OFF

P20

LOAD N89 FOR LDMK 17-1
(+20.160)(+15.405)

UNSTOW CSM RESCUE BOOK



P24 LDMK TRACKING
(1/250)

TGT: RP-3									
T1									
T2									(112:21:46.7)
TCA									
T3									
R									(T2 ACQ)
N or S	NM	/SA	TA						(T2 ACQ)
N89									
LAT									-03.694
LONG/2									+65.956
ALT									+000.00

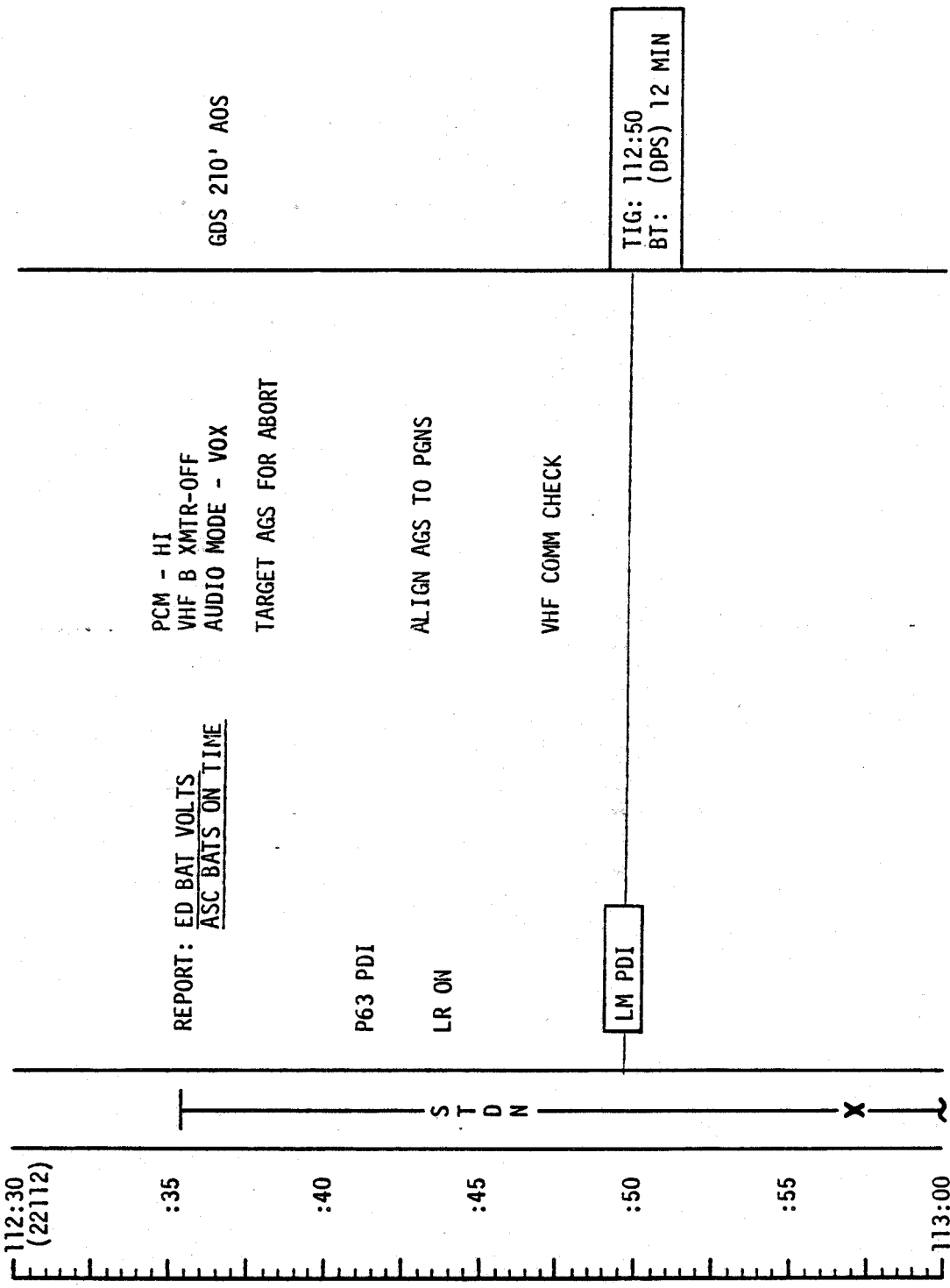
LM FLIGHT PLAN

CDR

LMP

1323 CST

MCC-H



UPLINK TO LM
LM S.V. (PDI-10)
RLS-2
UPDATE TO LM
AGS RLS

UPDATE TO LM
N69 BACKUP RLS
(IF REQD)

GO/NO-GO FOR PDI

UPDATE TO LM
N69 NOMINAL, DOWN
TRACK, CROSS
TRACK, RADIAL
(IF REQD)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	112:30 - 113:00	6/13	3-122

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
 (*0000)
 (31000)

ACQ STDN HGA P -10, Y 343 REACQ, MARRON

REPORT: BURN STATUS

CMDS:
 DSE STOP

UPDATE:

FLIGHT PLAN
 P24 LDMK TRACK PAD (LDMK 17-1 (112:50)
 GO/NO-GO FOR PDI

UPLINK:
 CSM S.V. (P24 T2 ACQ)
 LM S.V. (PDI-10)

VHF COMM CHECK WITH LM

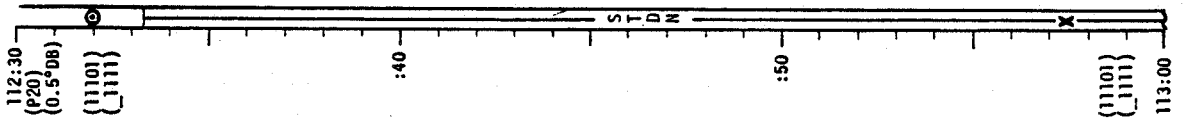
P24 (LDMK 17-1)
 OPT ZERO - OFF
 OPT MODE - CMC

0:00 - T1 (HORIZON) DET - RESET/START

CMDS:
 DSE RECORD
 3:50 - DAC - ON

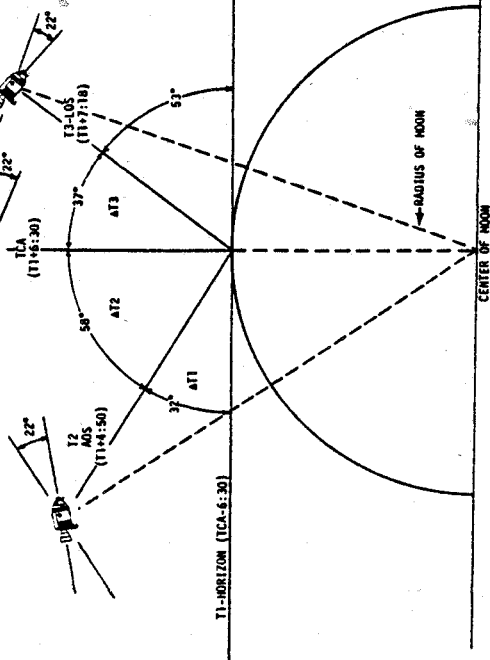
4:50 - T2 (LDMK ACQ) OPT MODE - MAN,
 TAKE MARKS TO SEC APART

6:30 - TCA
 7:18 - T3 (LDMK LOSS) DAC - OFF
 P00



22 DEG PITCH DOWN FROM
 LOCAL HORIZONTAL ORBITAL
 RATE THROUGHOUT TRACKING

CSM LANDMARK TRACKING PROFILE



AT1 - 200 SEC
 AT2 - 100 SEC
 AT3 - 48 SEC
 AOS TO LOS = 148 SEC

P24 LDMK TRACKING

TGT: 17-	(1/60)
T1	
T2	(112:55:46.7)
TCA	
T3	
R	*P *Y * (T2 ACQ)
N or S NM	/SA TA (T2 ACQ)
N89	
LAT	+20.160
LONG/2	+15.405
ALT	-001.96

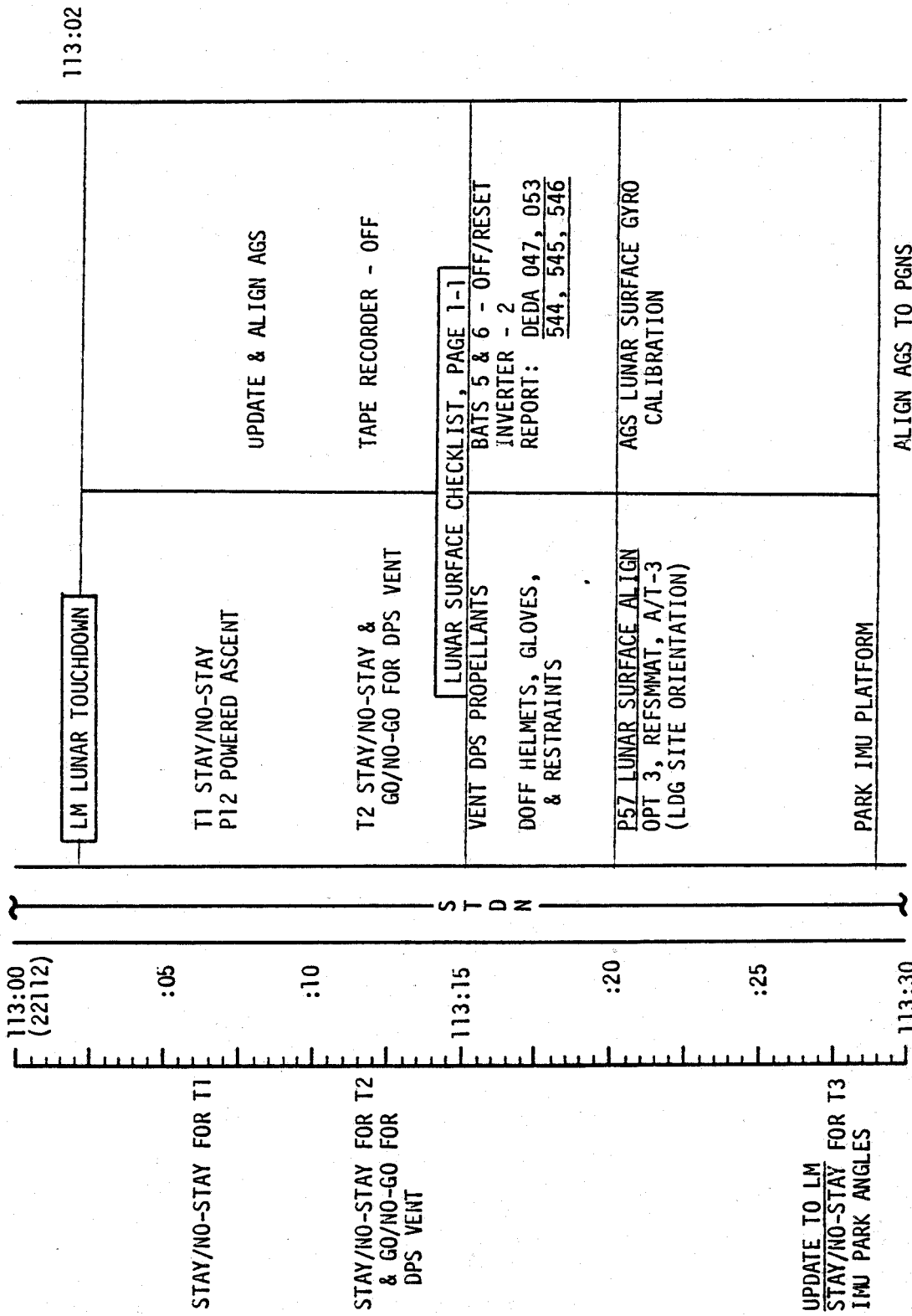
LM FLIGHT PLAN

NOTES

LMP

CDR

1353 CST



MCC-H

STAY/NO-STAY FOR T1

STAY/NO-STAY FOR T2 & GO/NO-GO FOR DPS VENT

UPDATE TO LM STAY/NO-STAY FOR T3 IMU PARK ANGLES

113:02

UPDATE & ALIGN AGS

TAPE RECORDER - OFF

LUNAR SURFACE CHECKLIST, PAGE 1-1

BATS 5 & 6 - OFF/RESET
INVERTER - 2
REPORT: DEDA 047, 053
544, 545, 546

AGS LUNAR SURFACE GYRO CALIBRATION

ALIGN AGS TO PGNS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	113:00 - 113:30	6/13	3-124

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

V49 MNVR TO P52/COAS CAL ATT (113:10)
 (180,284,338) HGA P -33, Y 2

SIM EXP STATUS
 (*0000)
 (21000)
 LM TOUCHDOWN (113:02)

P52 IMU REALIGN
 N71: _____
 N05: _____
 N93: _____
 X _____
 Y _____
 Z _____
 GET _____

CONFIRM STAY/NO STAY FOR T1
 CUE: HGA AUTO
 CMDS: DSE DUMP

P52 (OPTION 3)
 (LDG SITE ORIENT)
 CONFIRM STAY/NO STAY FOR T2

REPORT: GYRO TORQUING ANGLES
 GDC ALIGN

CSM G&C CHECKLIST

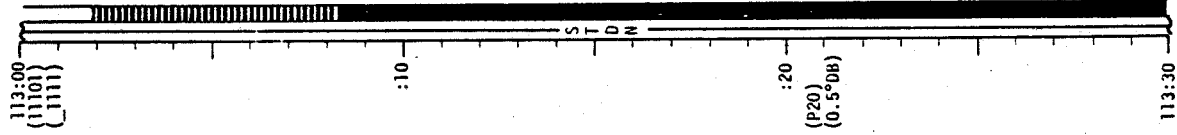
P52 (COAS CALIB) PAGE G/7-6
 USE STAR 16 (PROCYON)
 V44 (SET LUNAR SURFACE FLAG)
 INHIBIT ALL JETS EXCEPT A1&2 OR D1&2,A3,C4,B3,D4

P20 OPT 5 (+X FND SIM ATT)(113:35)
 N78 (+090.00)
 (+052.25)
 N79 (+180.00)
 (+000.50)
 HGA P -24, Y 173

COAS CALIB - N92
 SHAFT: _____
 TRIM: _____

UPDATE:
 PAN CAMERA PHOTO PAD (114:10)

RNDZ XPNDR - OFF
 EXT LIGHTS RUN/EVA - OFF
 CMDS:
 PCM BIT RATE - HIGH



PURPOSE				PDI PAD			
GETI	HRS	MIN	SEC	+	0	0	0
PDI				+	0	0	0
N33				+	0	0	0

PURPOSE				PDI ABORT EARLY PAD			
GETI	HRS	MIN	SEC	+	0	0	0
TPI				+	0	0	0
N37				+	0	0	0

PURPOSE				PDI ABORT LATE PAD			
GETI	HRS	MIN	SEC	+	0	0	0
TPI				+	0	0	0
N37				+	0	0	0

PURPOSE				T2-1 ABORT PAD			
GETI	HRS	MIN	SEC	+	0	0	0
T2				+	0	0	0
				+	0	0	0

PURPOSE				T3 ABORT PAD			
GETI	HRS	MIN	SEC	+	0	0	0
T3				+	0	0	0
				+	0	0	0

PURPOSE				NO PDI+12 ABORT			
GETI	HRS	MIN	SEC	+	0	0	0
N33				+	0	0	0
				+	0	0	0
N84	ΔVX						
LOCAL	ΔVY						
VERT	ΔVZ						
GETI	HRS	MIN	SEC	+	0	0	0
CSI				+	0	0	0
N11				+	0	0	0
				+	0	0	0
GETI	HRS	MIN	SEC	+	0	0	0
TPI				+	0	0	0
N37				+	0	0	0

LM FLIGHT PLAN

MCC-H

CDR

LMP

NOTES

1423 CST

113:30
(22112)

:35

:40

113:45

:50

:55

114:00

LM POWER DOWN
LGC - STANDBY, IMU - OFF

BAT L (LMP) - ON
BATS 2 & 1 - OFF/RESET
BIOMED - RIGHT

CABIN CONFIGURATION FOR STAY

DEPLOY LM EVA ANTENNA

S T D N

UPDATE TO LM
LIFT-OFF TIMES FOR
REVS 15-20

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	113:30 - 114:00	6/13	3-126

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(+0000)
(31000)

POST-SPS BURN SIM PREP (CUE CARD)
VHF AM A - OFF (CTR)
VHF RCY ONLY - OFF

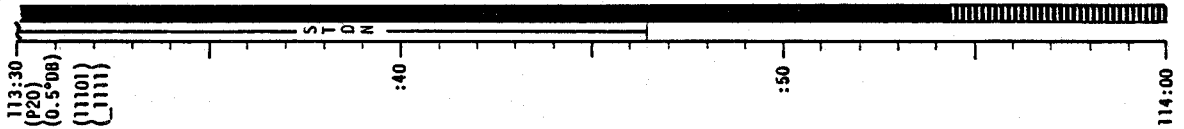
DATA SYS - ON
IR - ON
UV - ON
MC/LA COVER - OPEN
IR COVER - OPEN
UV COVER - OPEN
MC - EXTD

CMDS: (AOS +68 MIN)
DSE RECORD

VERIFY DSE TAPE MOTION (IBR/RCD/FMD/CMD RESET)
SET HGA MAN, WIDE P -10, Y 25 FOR AOS

PC: STBY
STEREO
PHR

LA - ON
IMAGE MTN - ON



LM FLIGHT PLAN

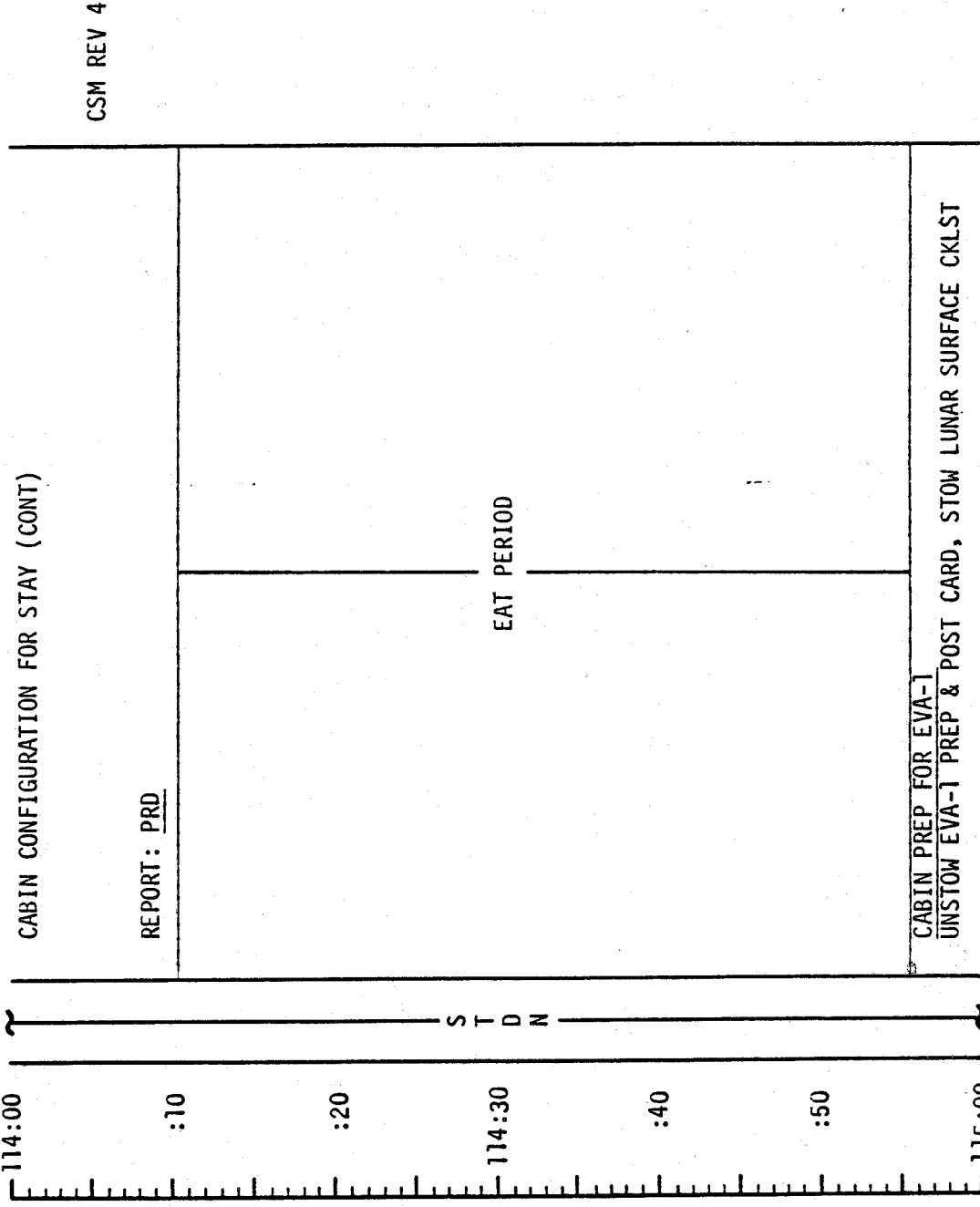
CDR

LMP

NOTES

1453 CST

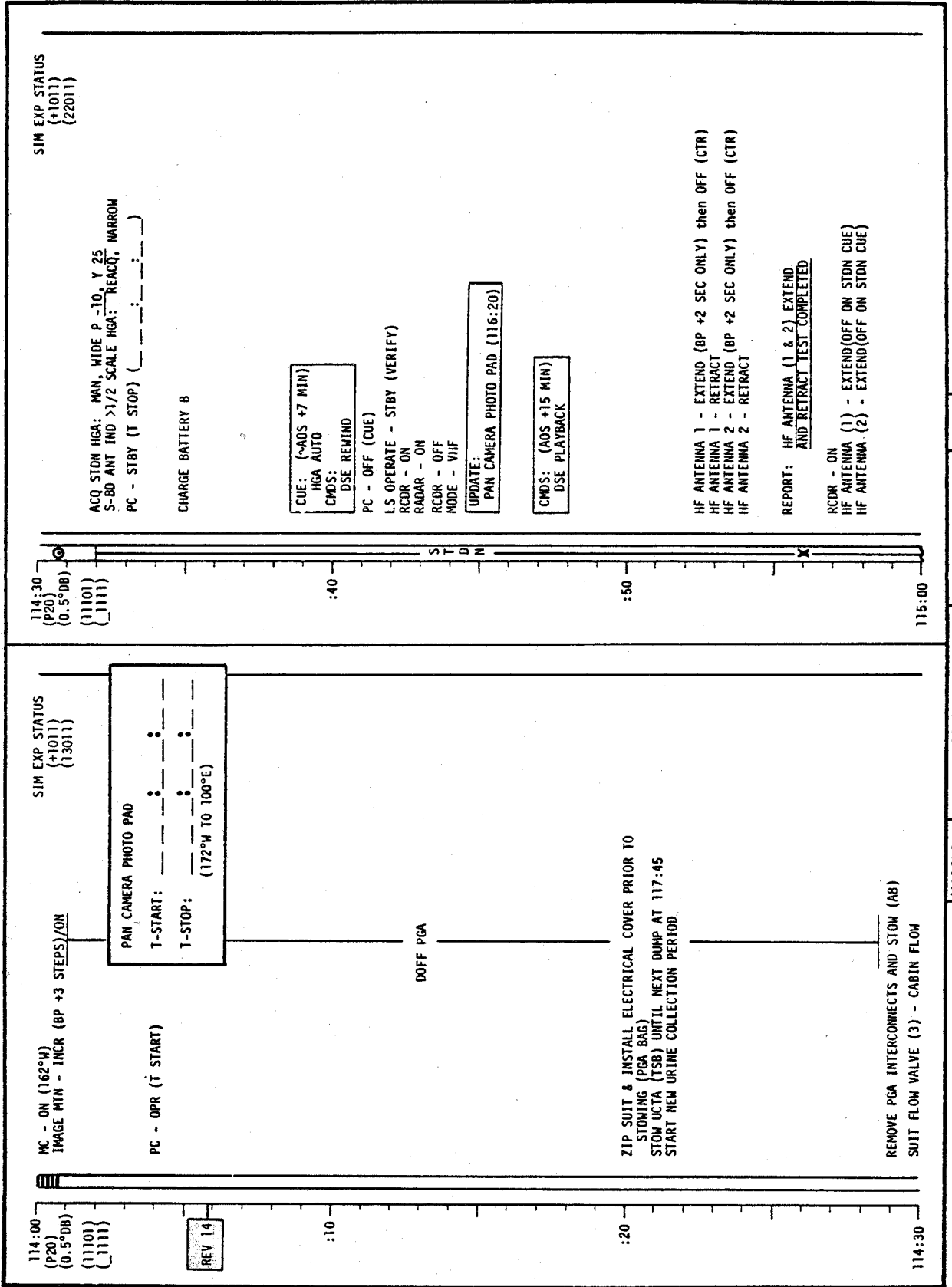
MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	114:00 - 115:00	6/13-14	3-128

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

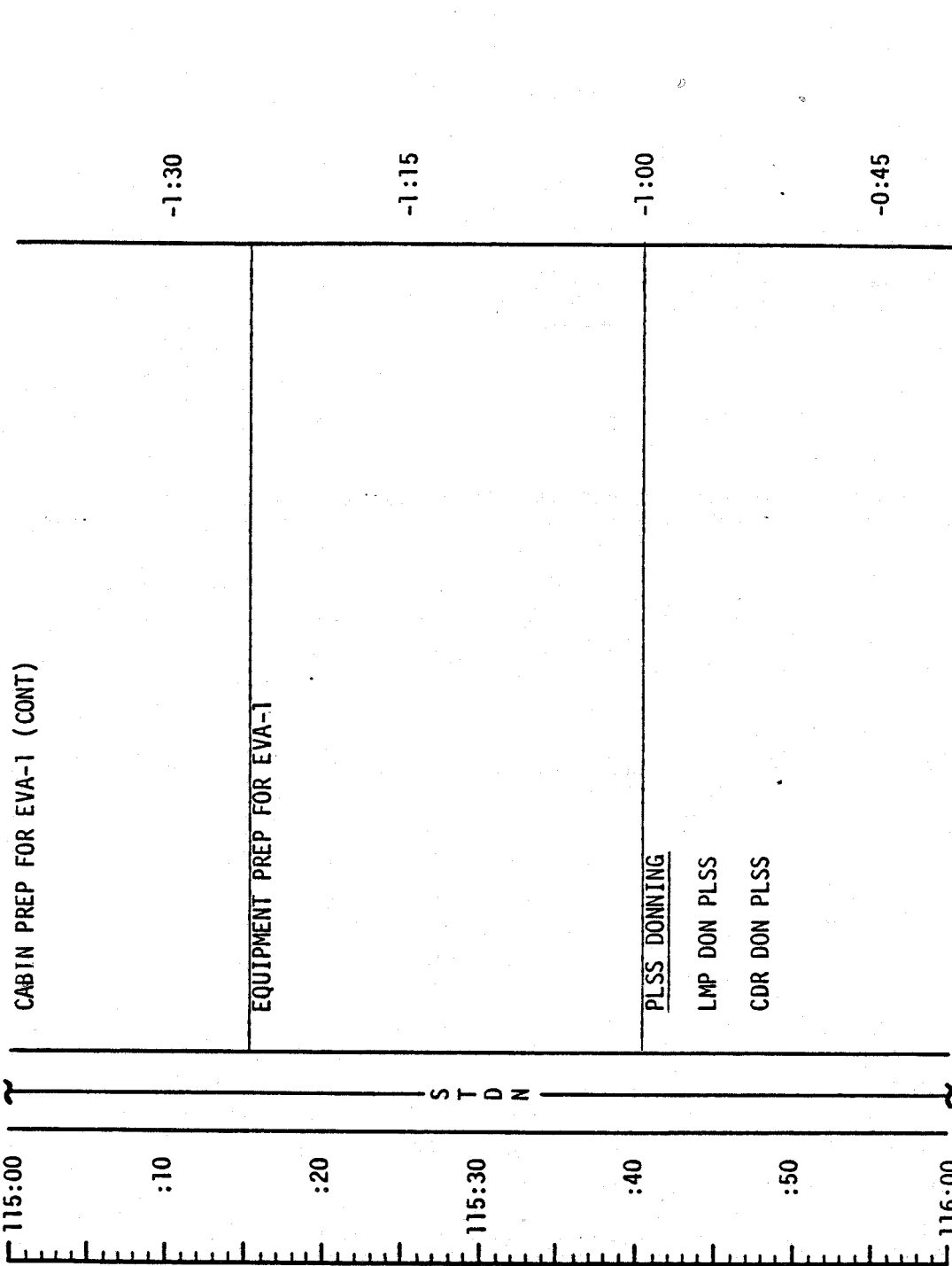
MCC-H

1553 CST

CDR

LMP

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	115:00 - 116:00	6/14	3-130

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(+1111)
(02411)

115:00
(P20)
(0.5°DB)
(11101)
(1111)

MC - OFF (7°E)
WAIT 30 SEC
MC - STBY
LA - OFF
IMAGE MIN - OFF
MC - OFF

CMDS:
DSE REMIND

PC SELF TEST - OFF
UV - OFF (AFTER SUNSET)
IR - OFF
DATA SYS - OFF
SW/AC PMR - OFF

CMDS:
DSE RECORD

LS OPERATE - OPERATE (PULL FILM FOR 2 MIN)

LS OPERATE - STBY
MODE - HF
SELECT OMNI B
SET HGA: MAN, WIDE P -12, Y 211
HGA PMR - OFF
PCM BIT RATE - LOW

LS OPERATE - OPERATE (PULL FILM FOR 2 MIN)

LS OPERATE - STBY
PCM BIT RATE - HIGH
LS OPERATE - OPERATE (PULL FILM FOR 1 MIN)

LS OPERATE - STBY
V25N78 (+090.00) VHF TEST ATT (115:30)
(-017.74)
(+000.00)

V58E
(072.000/168.000)

115:30
(P20)
(0.5°DB)
(11101)
(1111)

HGA PMR - ON
SET HGA: MAN, WIDE P -12, Y 211 AUTO, NARROW
MODE - VHF
LS OPERATE - OPERATE (PULL FILM FOR 2 MIN)

LS OPERATE - STBY
MODE - HF
RCDR - OFF
SELECT OMNI B
SET HGA: MAN, WIDE P -10, Y 25 FOR AOS
HGA PMR - OFF

NOTE: S/C REALTIME
PCM AND REALTIME
SIM BAY DATA WILL
NOT BE RECEIVED
UNTIL 116:31

SELECT OMNI A
VOICE MARGINAL
THRU LOS

RCDR - ON
MODE - VHF
LS OPERATE - OPERATE (PULL FILM FOR 1 MIN)

LS OPERATE - STBY
AFTER 1 MIN:
RCDR - OFF
RADAR - OFF
V25N78 (+090.00) +X FWD SIM ATT (116:02)
(+052.25)
(+180.00)

V58E
SW/AC PMR - ON
DATA SYS - ON

115:30

116:00

LM FLIGHT PLAN

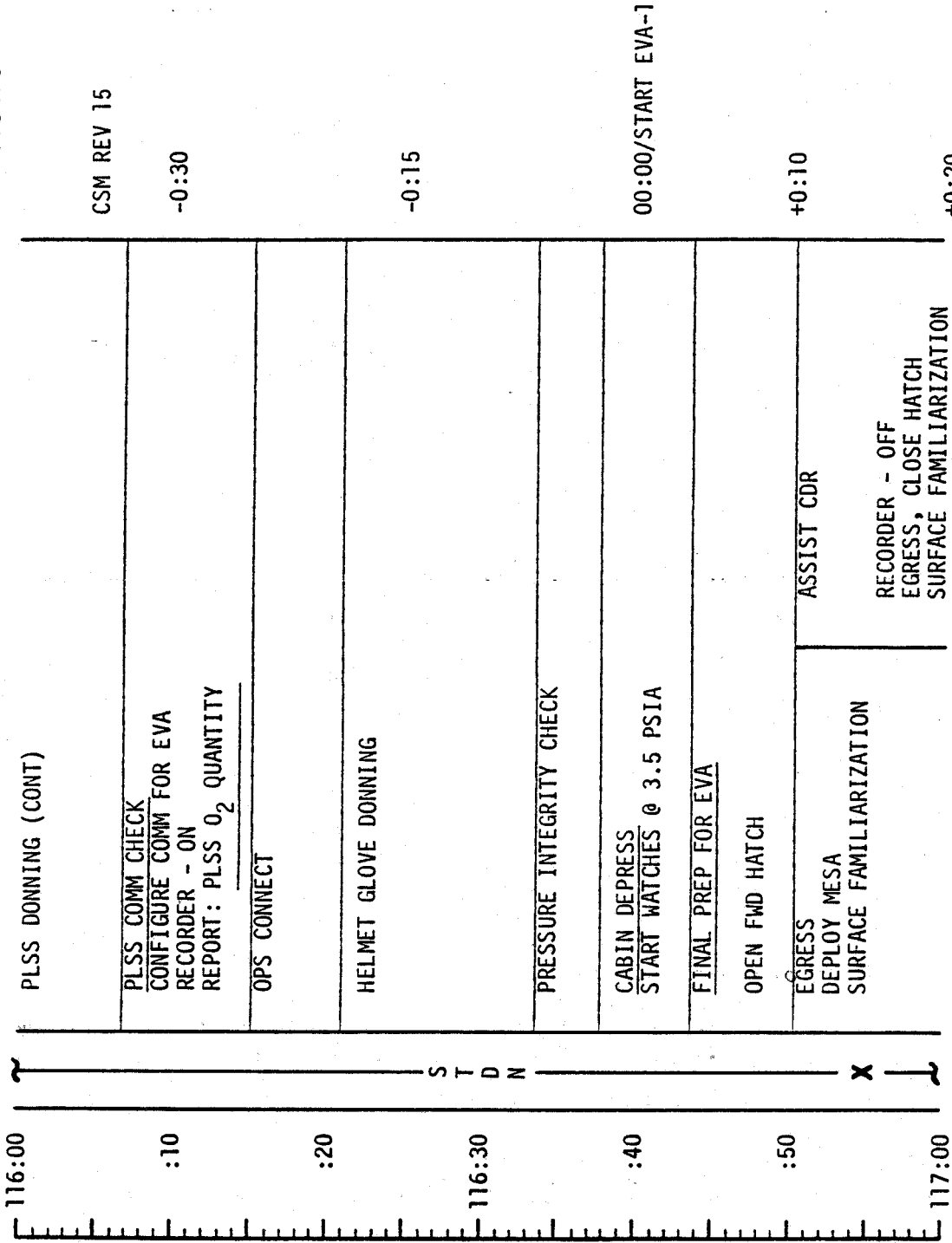
MCC-H

CDR

LMP

NOTES

1653 CST



GO/NO-GO FOR CABIN DEPRESS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	116:00 - 117:00	6/14-15	3-132

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(+1111)
(22011)

HGA PMR - ON
ACQ STDN HGA: MAN, WIDE P -10, Y 25
S-BD ANT IND >1/2 SCALE HGA: REACQ, NARROW

116:30
(P20)
(0.5°DB)
(11101)
(1111)

CUE: (~AOS +7 MIN)
HGA: AUTO
CMDS: DSE PLAYBACK

UPDATE:
FLIGHT PLAN

ORBITAL SCIENCE VISUAL
LANDING SITE (CMS)

PC - STBY (T STOP) (---)
PC - OFF (CUE)

SIM EXP STATUS
(+11111)
(01000)

IR - ON
UV - ON
MC - STBY
IMAGE MTN - ON
PC ON (164°H)
LA - ON
PC SELF TEST - ITRS

116:00
(P20)
(0.5°DB)
(11101)
(1111)

REV 15

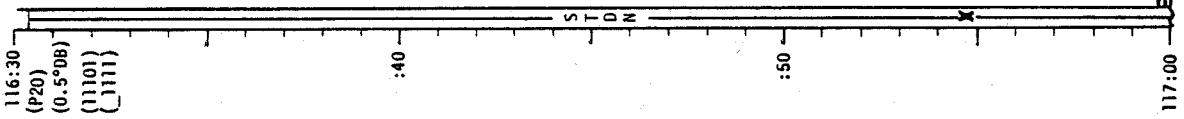
PREPARE FOR ORBITAL SCIENCE VISUAL
LANDING SITE (CMS)

PAN CAMERA PHOTO PAD
T-START: --- : :
T-STOP: --- : :
(102°E TO 14°E)

PC: STBY
STEREO
PMR

CONFIGURE DSE (STOP/CMD RESET/REWIND)

PC - OPR (T START)



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-133

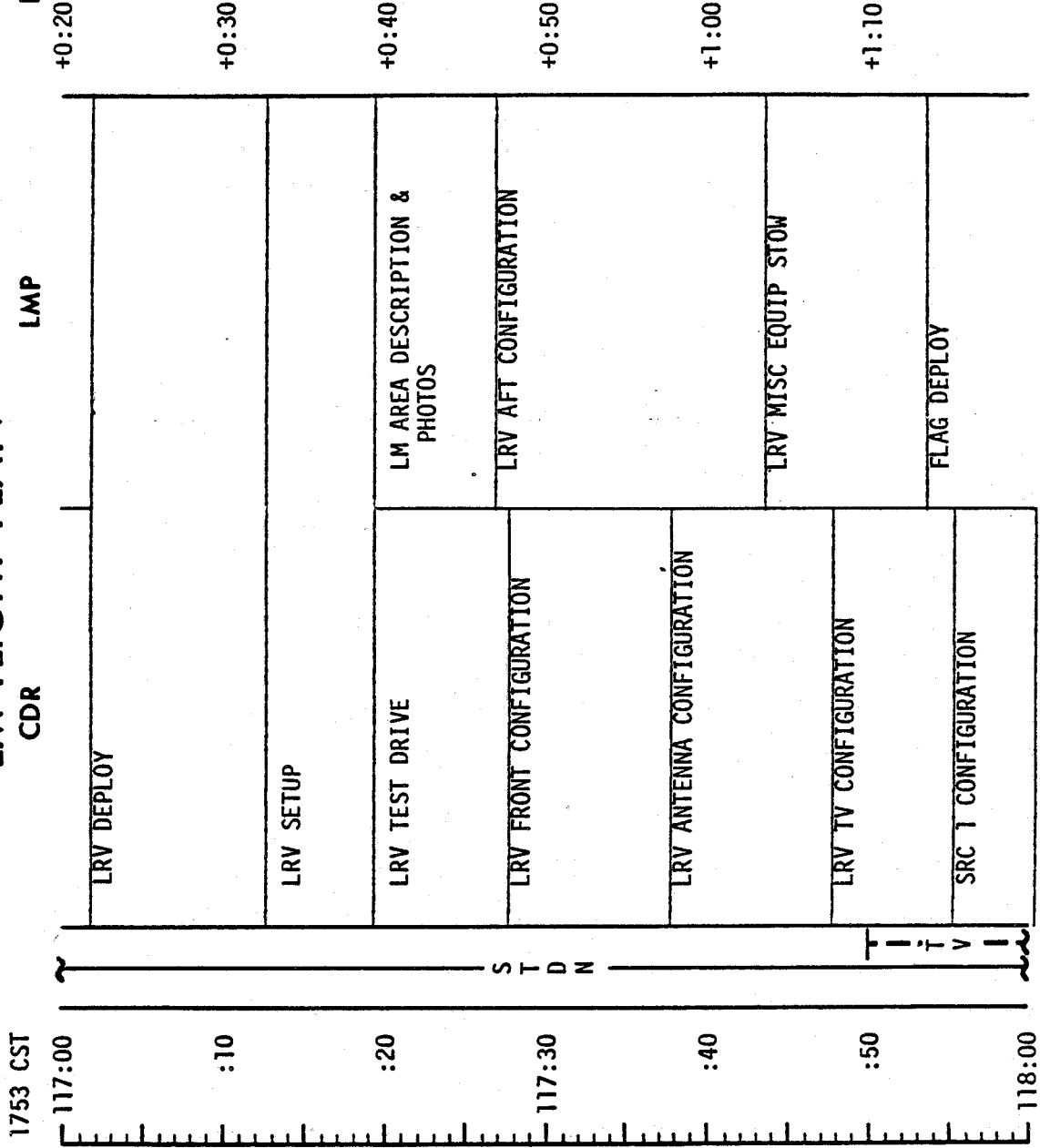
LM FLIGHT PLAN

MCC-H

CDR

LMP

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	PRELIM (8/28)	10/23/72	117:00 - 118:00	6/15	3-134

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(+1111)
(02011)

CONFIGURE CAMERA: (ORBITAL SCIENCE PHOTOS)
CM5/EL/250/CEX-1VL8(FS.6.1/250.-) 58 FR
MAG (KK) _____, FR # _____

- H₂ PURGE LINE HEATERS - ON
- MC - OFF (63°W)
- WAIT 30 SECONDS
- MC - STBY
- IMAGE MTN - OFF
- MC - RETR
- LA - OFF
- UV - OFF
- IR - OFF
- UV COVER - CLOSE
- IR COVER - CLOSE
- MC/LA COVER - CLOSE

117:00
(P20)
(0.5°DB)
(11101)
(1111)

:10

:20

117:30

SIM EXP STATUS
(+0100)
(01000)

CONFIGURE FOR URINE DUMP

CMDS: (AOS +68 MIN)
DSE REMIND

CONFIGURE DSE (LBR/RCD/FMD/CMD RESET)(AOS +76 MIN)
SET MGA MAN, WIDE P -10, Y 25 FOR AOS

- H₂ & O₂ FUEL CELL PURGE
- WASTE WATER DUMP
- SAMPLE BUSS'S (3) - STOW SAMPLES (3)
- DUMP URINE FROM BUSS'S (3) - STOW
- DUMP UTCA
- CONTINUE URINE COLLECTION PERIOD

TERMINATE WASTE WATER DUMP AT 10%

117:30
(P20)
(0.5°DB)
(11101)
(1111)

:40

:50

118:00

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-135

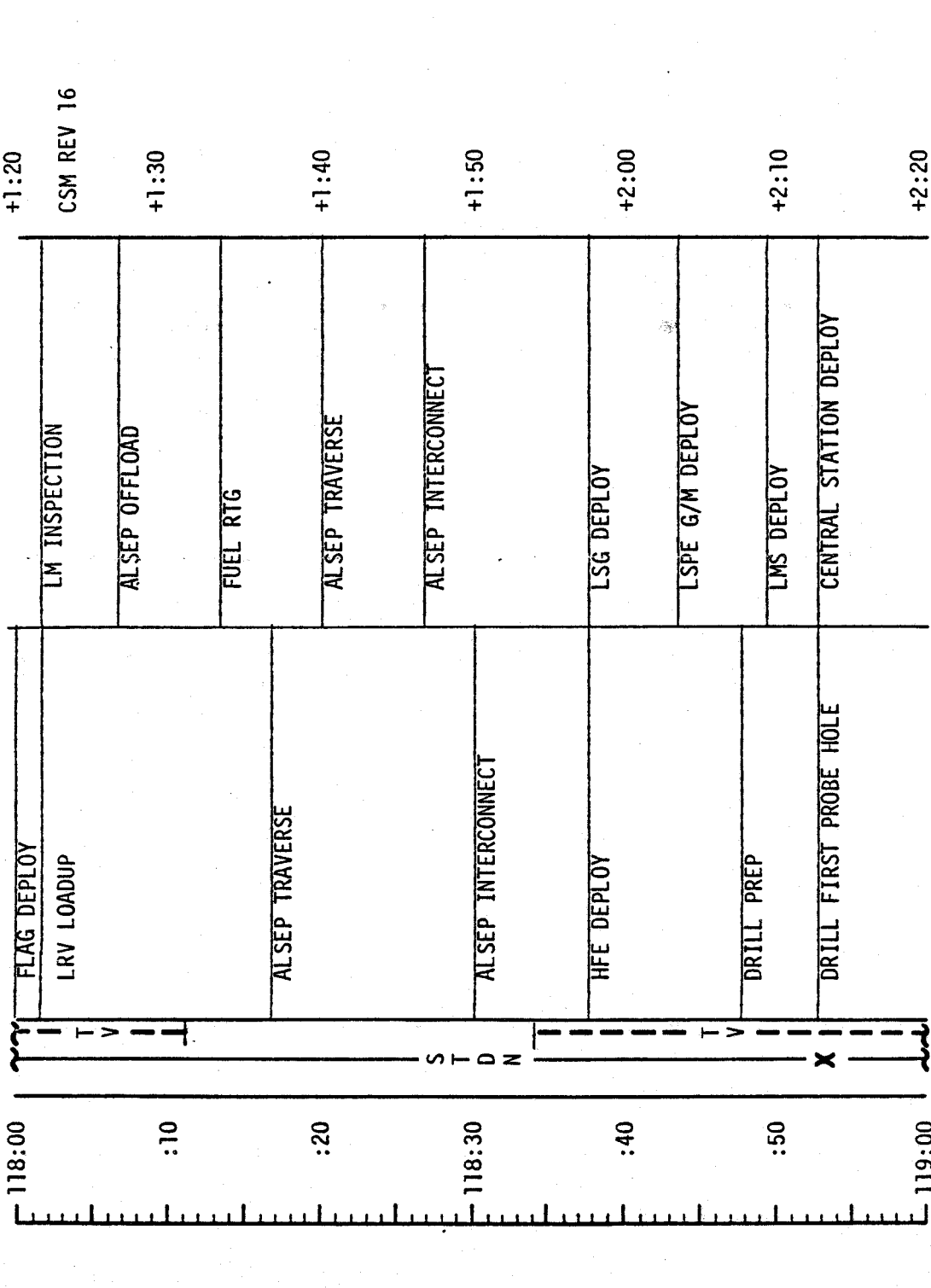
LM FLIGHT PLAN

MCC-H 1853 CST

CDR

LMP

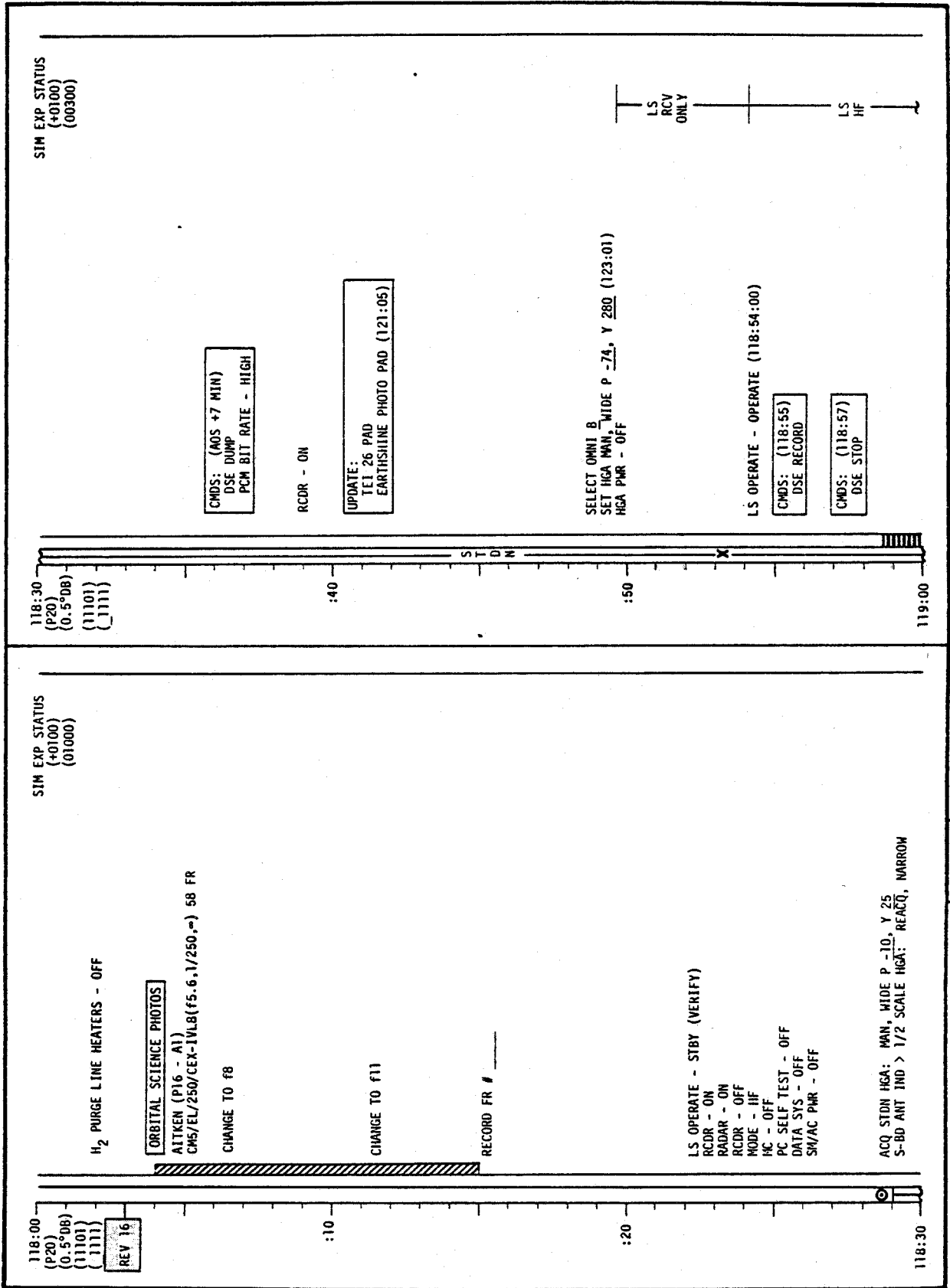
NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	PRELIM (8/28)	10/23/72	118:00 - 119:00	6/15-16	3-136

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

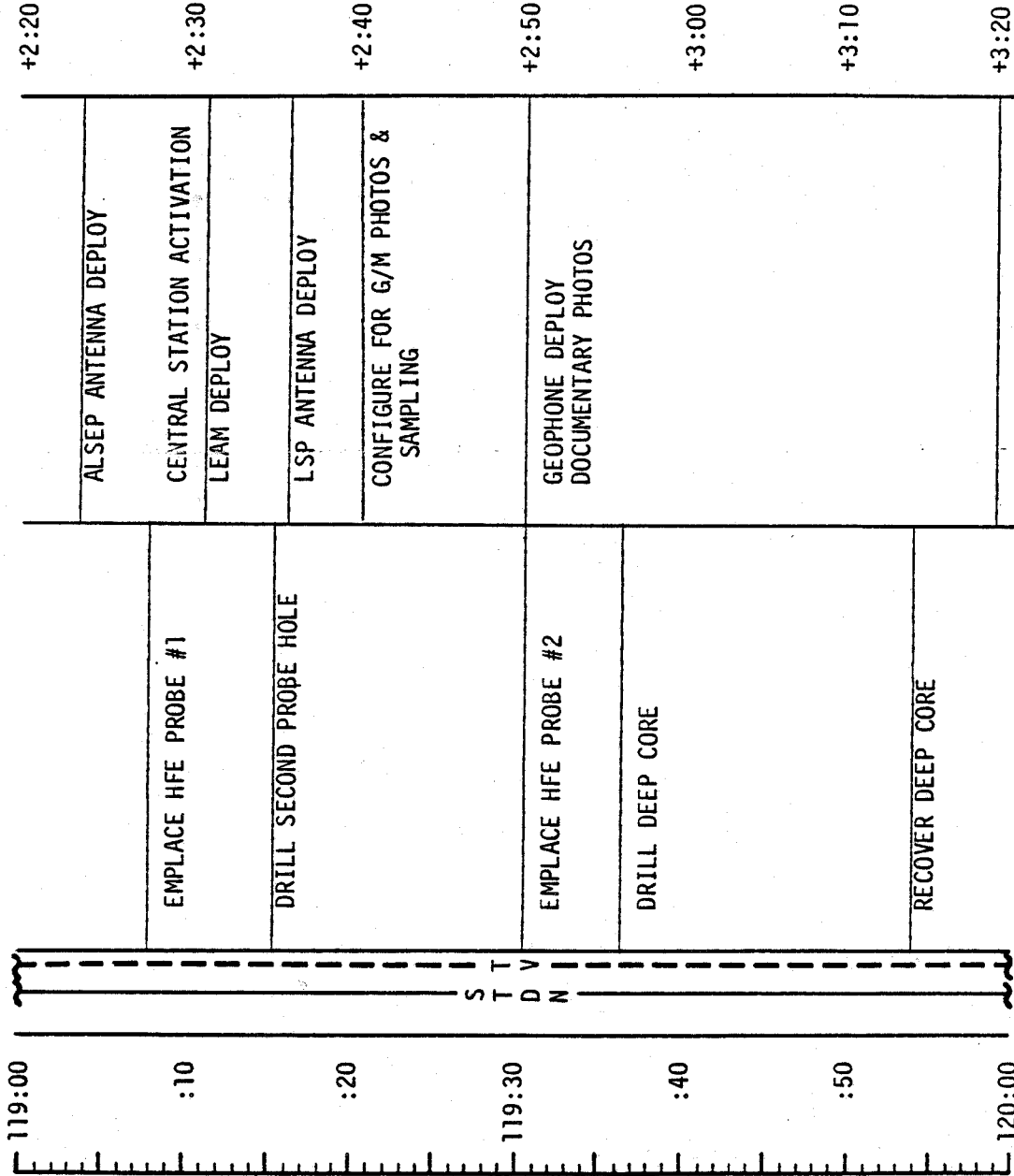
MCC-H

1953 CST

CDR

LMP

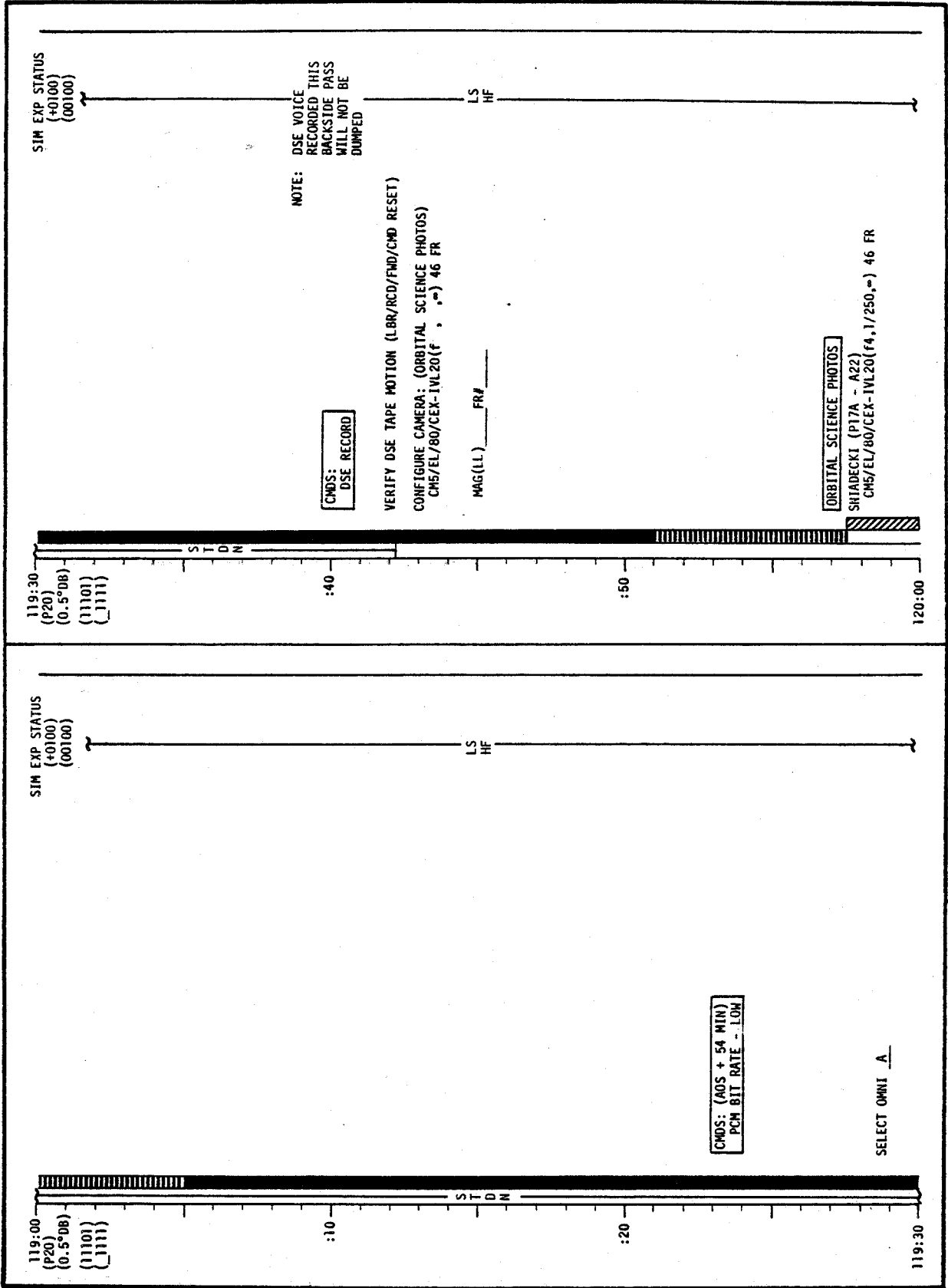
NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	119:00 - 120:00	6/16	3-138

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

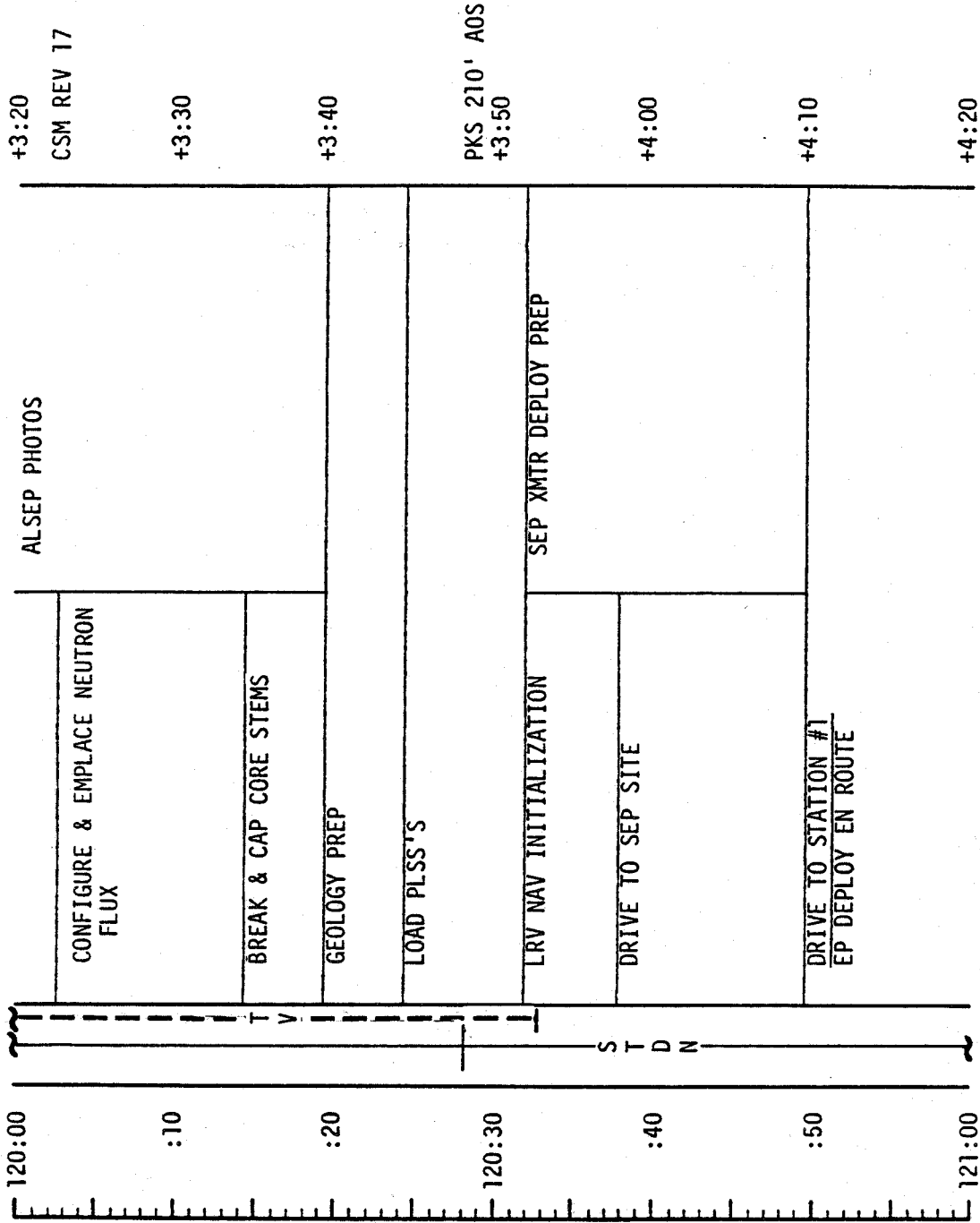
MCC-H

2053 CST

CDR

LMP

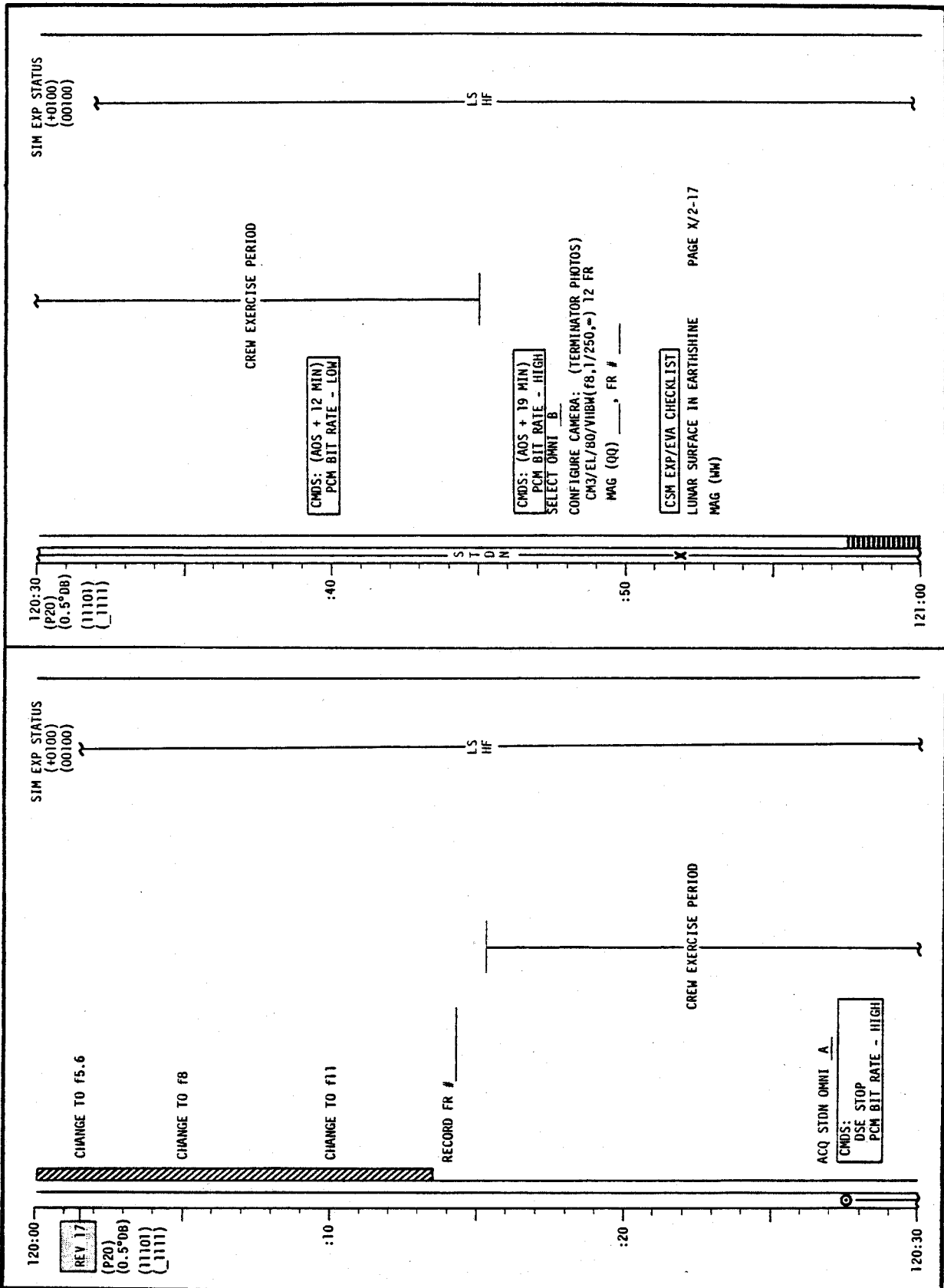
NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	PRELIM (8/28)	10/23/72	120:00 - 121:00	6/16-17	3-140

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-141

LM FLIGHT PLAN

MCC-H

CDR

LMP

NOTES

2153 CST

121:00

:10

:20

121:30

:40

:50

122:00

+4:20

+4:30

+4:40

+4:50

+5:00

+5:10

+5:20 CSM REV 18

STATION #1

GEOLOGICAL OBSERVATIONS & PHOTOS

RAKE SAMPLES

DOCUMENTED SAMPLES

DOUBLE CORE

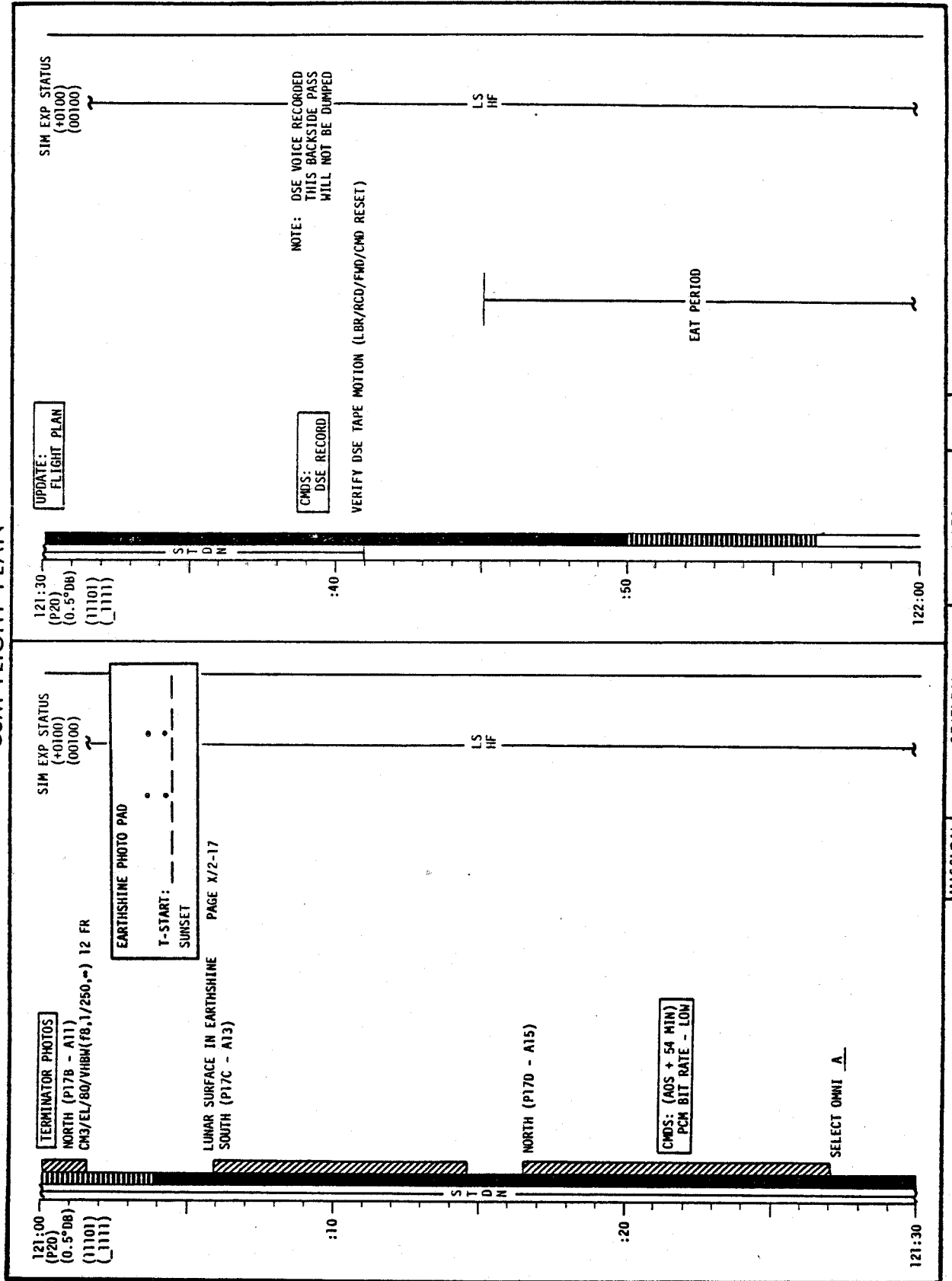
EP DEPLOY

S
T
D
N

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	PRELIM (8/28)	10/23/72	121:00 - 122:00	6/17	3-142

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-143

LM FLIGHT PLAN

CDR

LMP

NOTES

+5:20 CSM REV 18

2253 CST

MCC-H

STATION #1 (CONT)

11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

122:00 :10 :20 :30 :40 :50 123:00

DRIVE TO SEP SITE
EP DEPLOY EN ROUTE

SEP EXPERIMENT DEPLOY

DRIVE TO LM

+5:30

+5:40

+5:50

+6:00

GDS 210' LOS

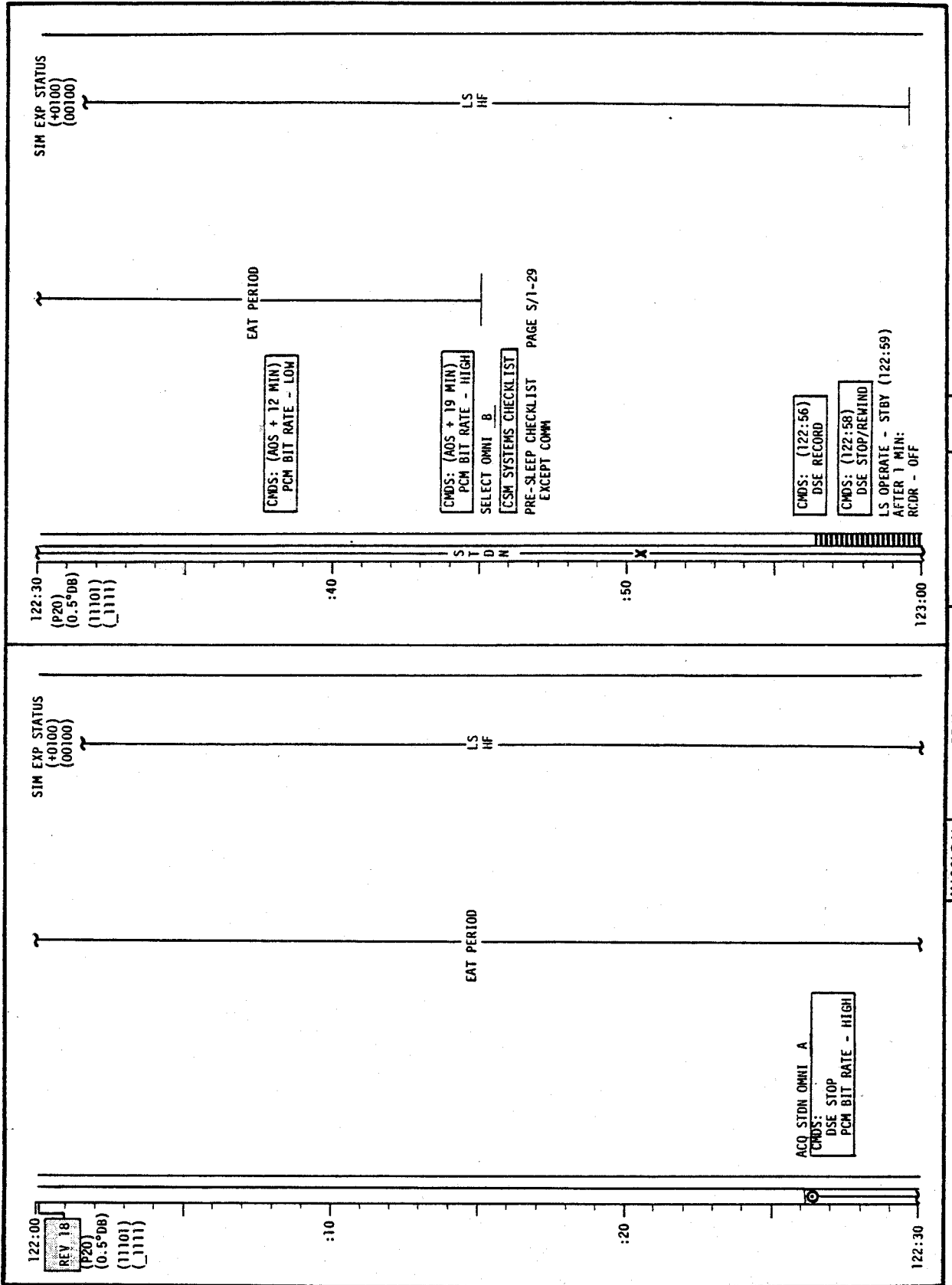
+6:10

+6:20

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	122:00 - 123:00	6/18	3-144

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-145

LM FLIGHT PLAN

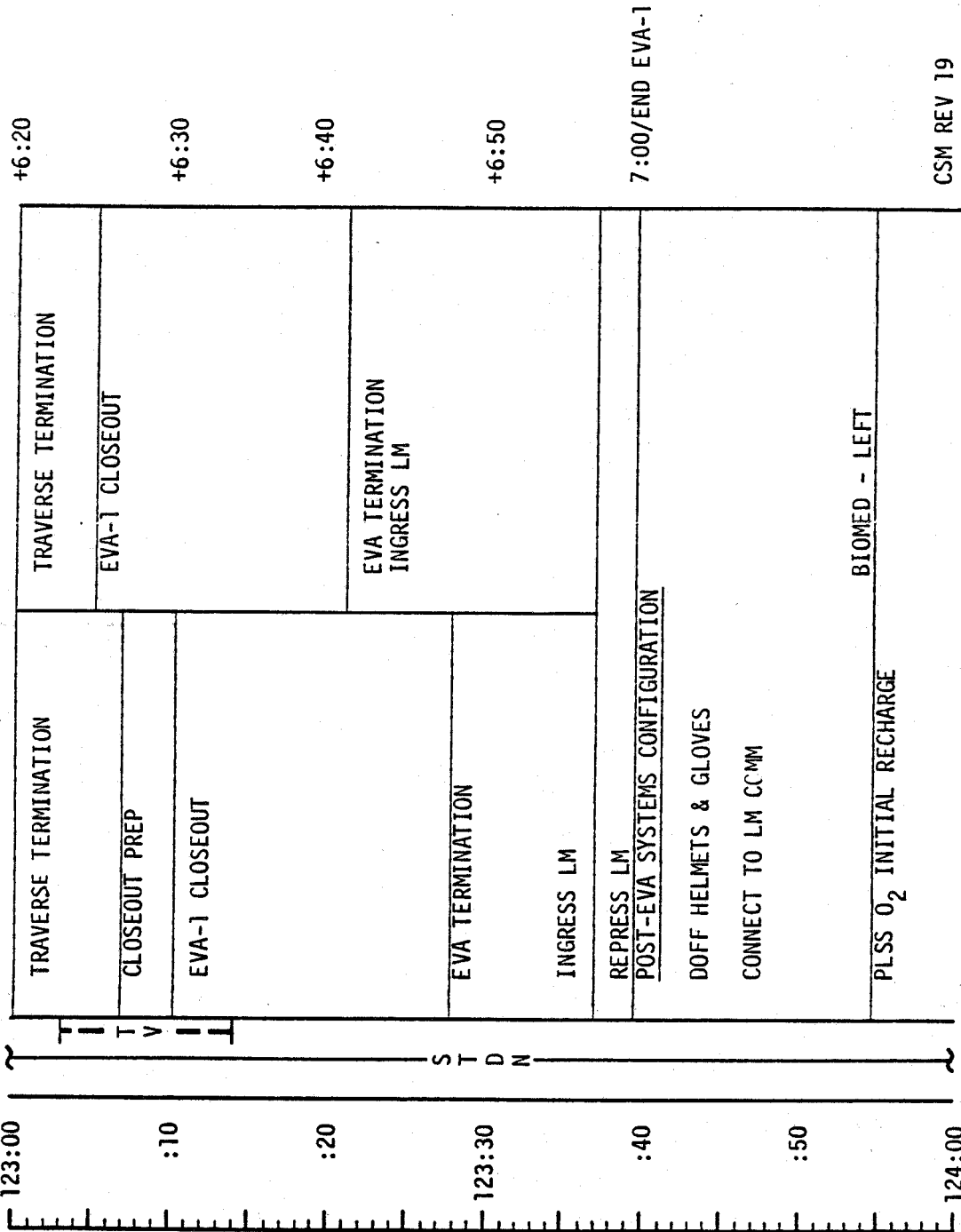
MCC-H

2353 CST

CDR

LMP

NOTES

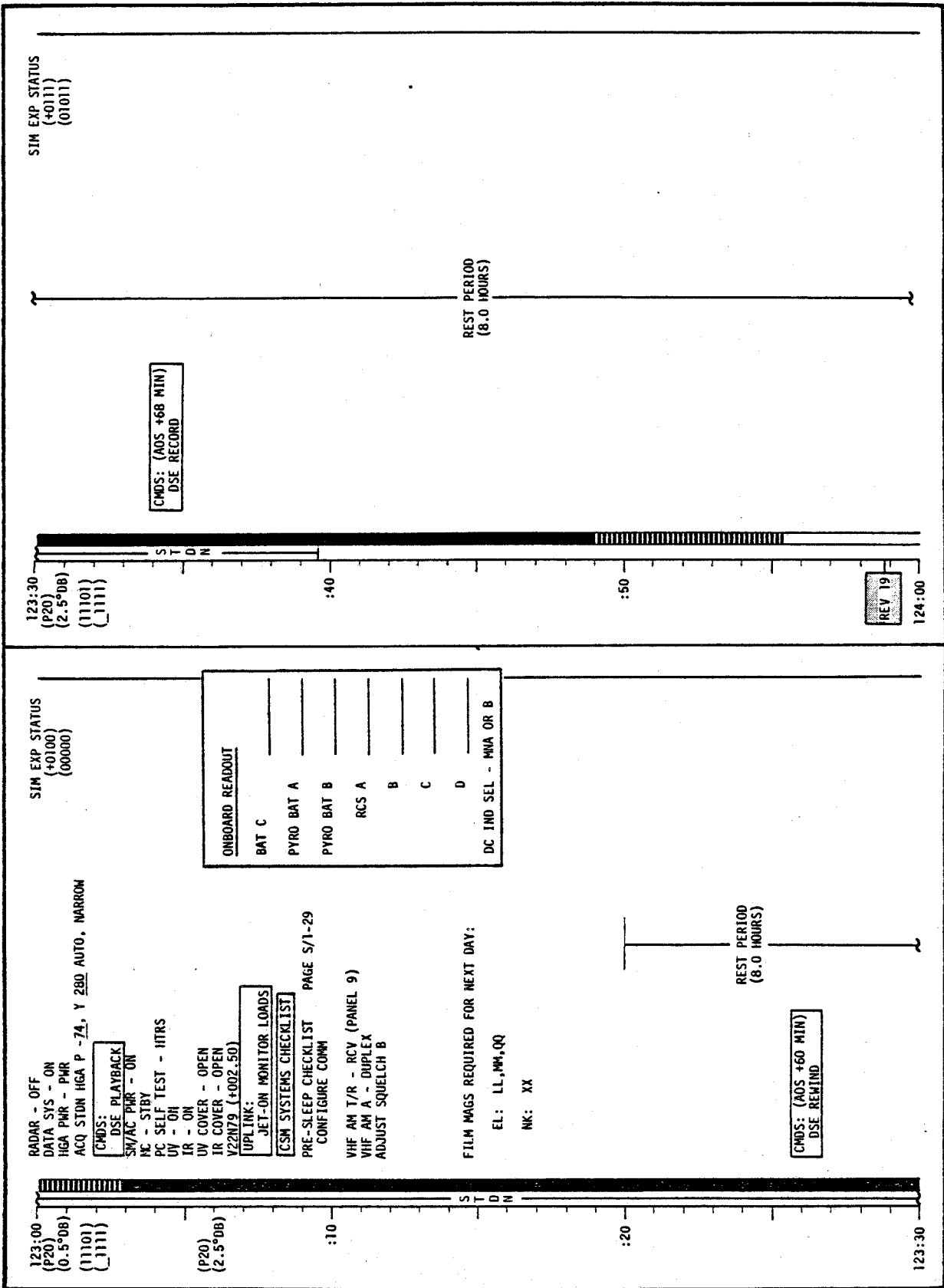


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	123:00 - 124:00	6/18-19	3-146

FLIGHT PLANNING BRANCH

CSM REV 19

CSM FLIGHT PLAN



LM FLIGHT PLAN

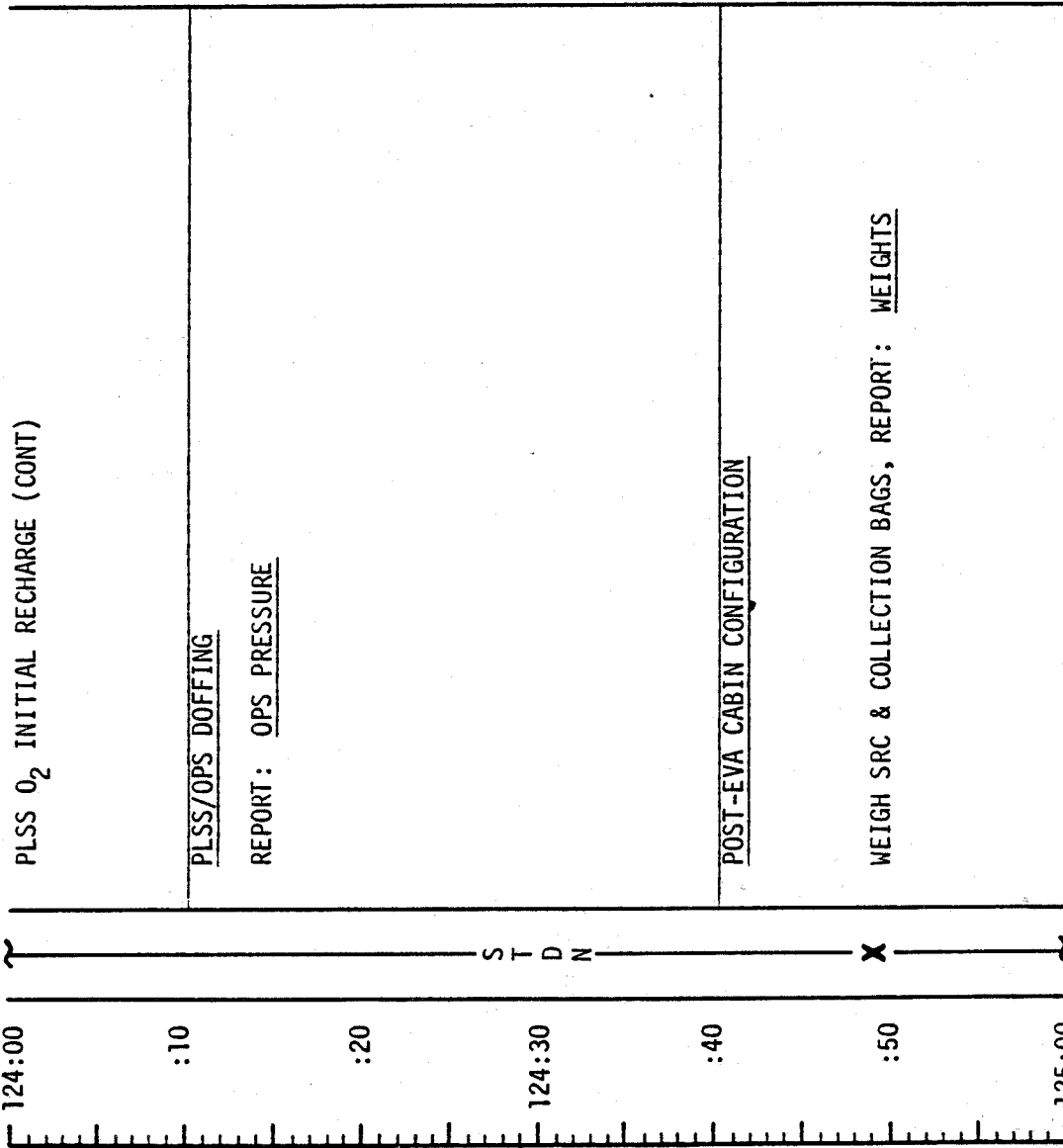
NOTES

LMP

CDR

0053 CST, 12/12

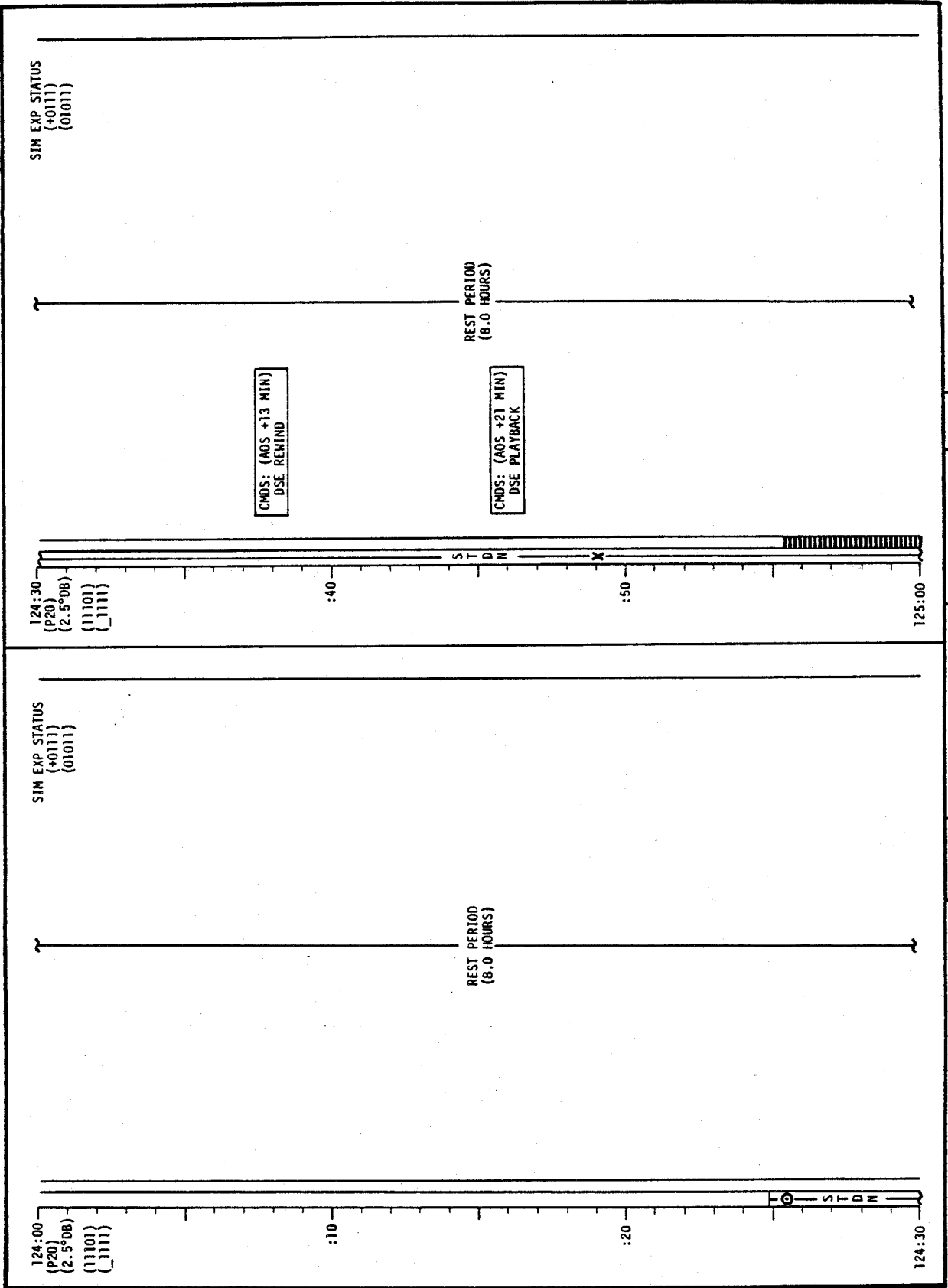
MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	124:00 - 125:00	6/19	3-148

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

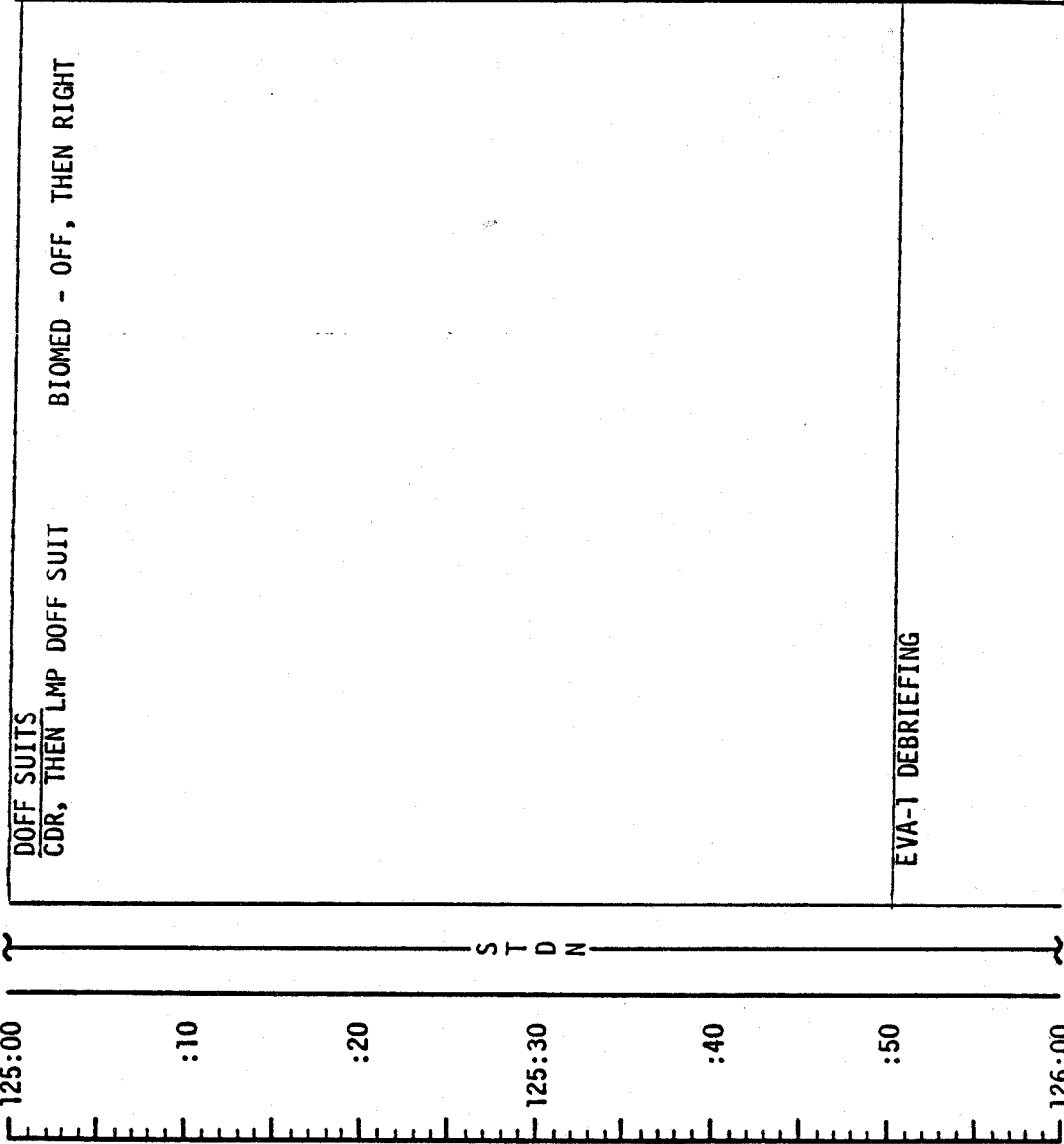
NOTES

LMP

CDR

0153 CST

MCC-H

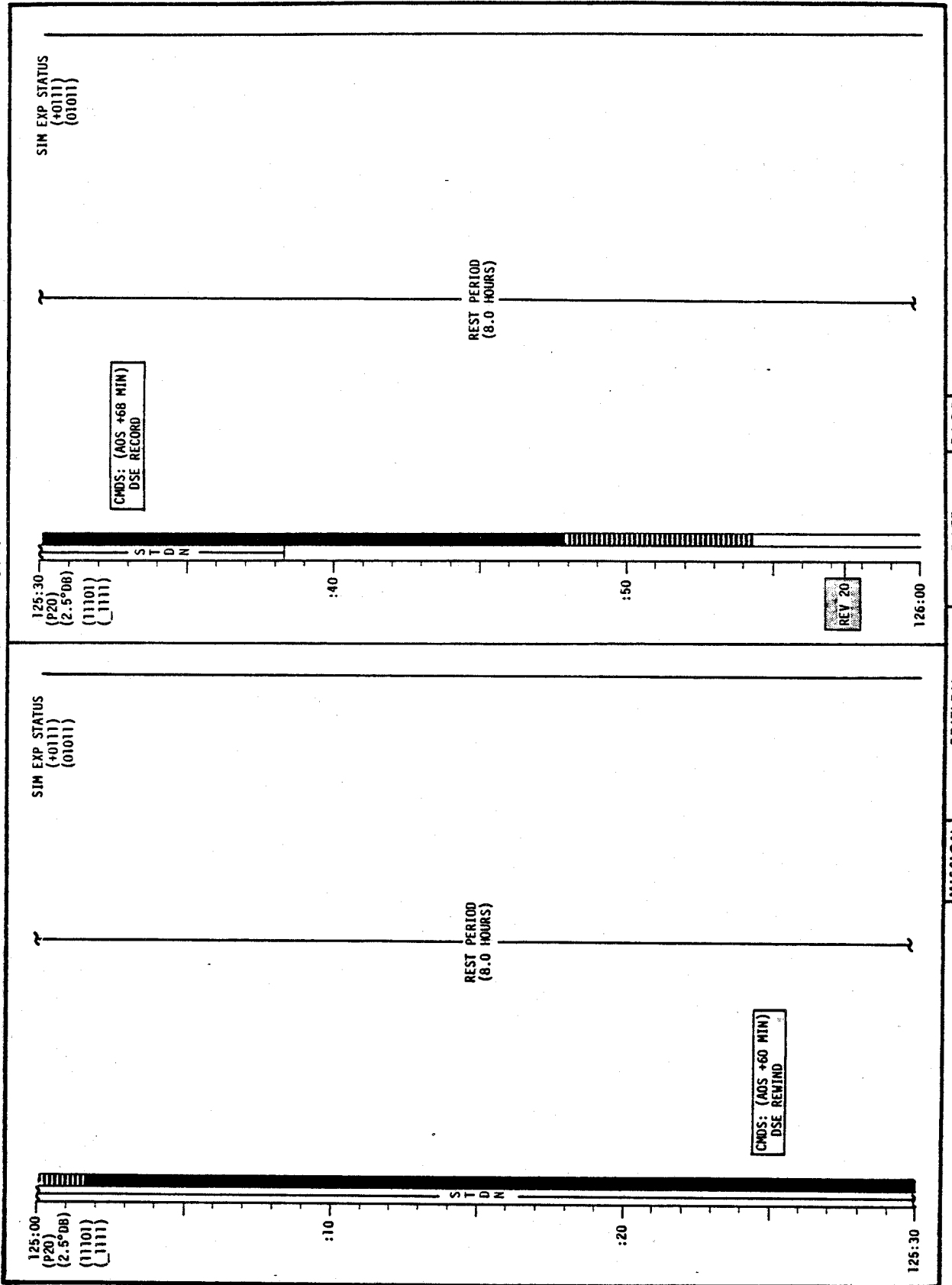


CSM REV 20

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	125:00 - 126:00	6/19-20	3-150

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



SIM EXP STATUS
(+0111)
(01011)

CMD5: (AOS +68 MIN)
DSE RECORD

REST PERIOD
(8.0 HOURS)

125:30
(P20)
(2.5 DB)
(11101)
(1111)

:40

:50

REV 20

126:00

SIM EXP STATUS
(+0111)
(01011)

CMD5: (AOS +60 MIN)
DSE REVTHD

REST PERIOD
(8.0 HOURS)

125:00
(P20)
(2.5 DB)
(11101)
(1111)

:10

:20

125:30

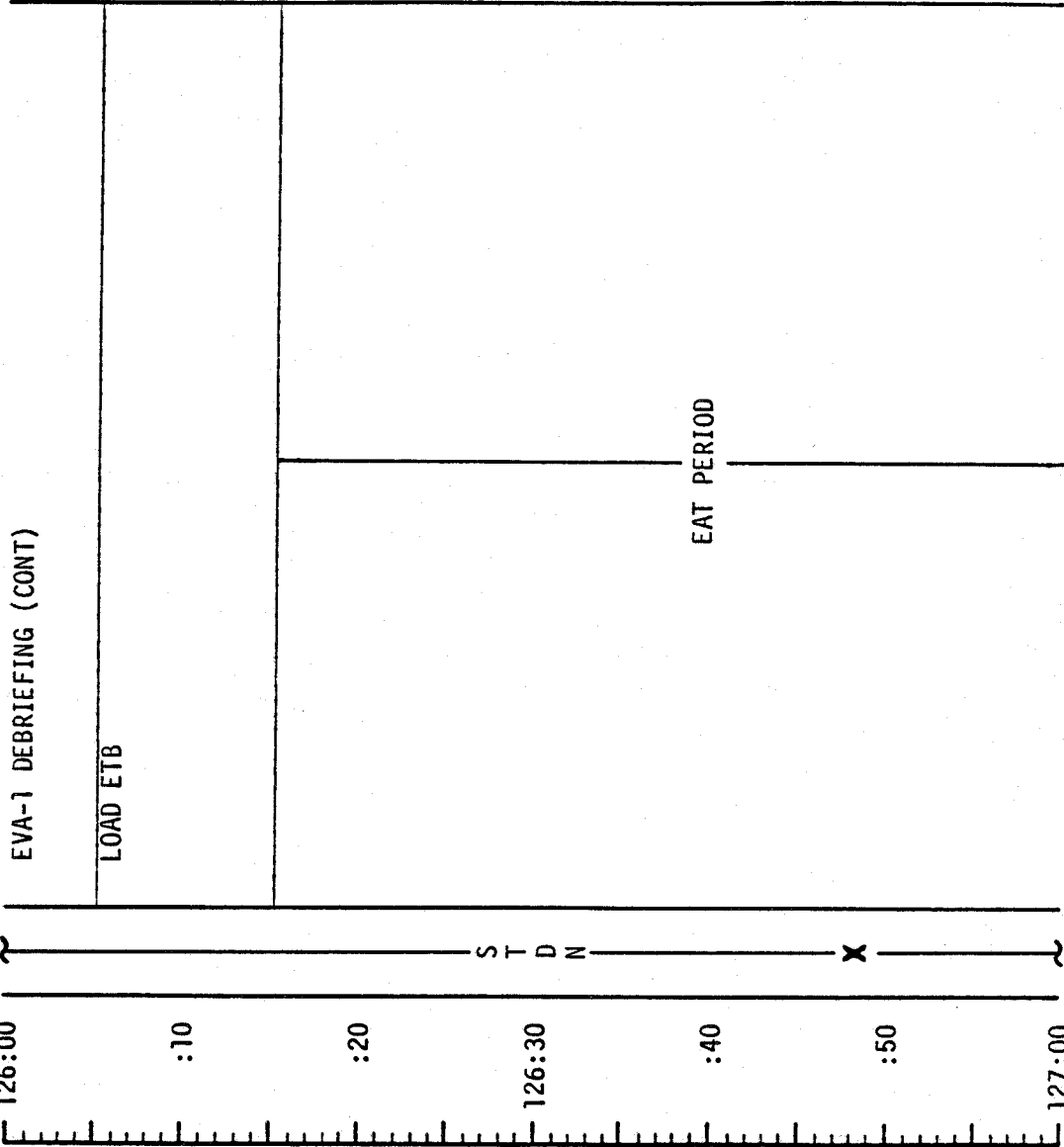
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-151

LM FLIGHT PLAN

NOTES

LMP

CDR



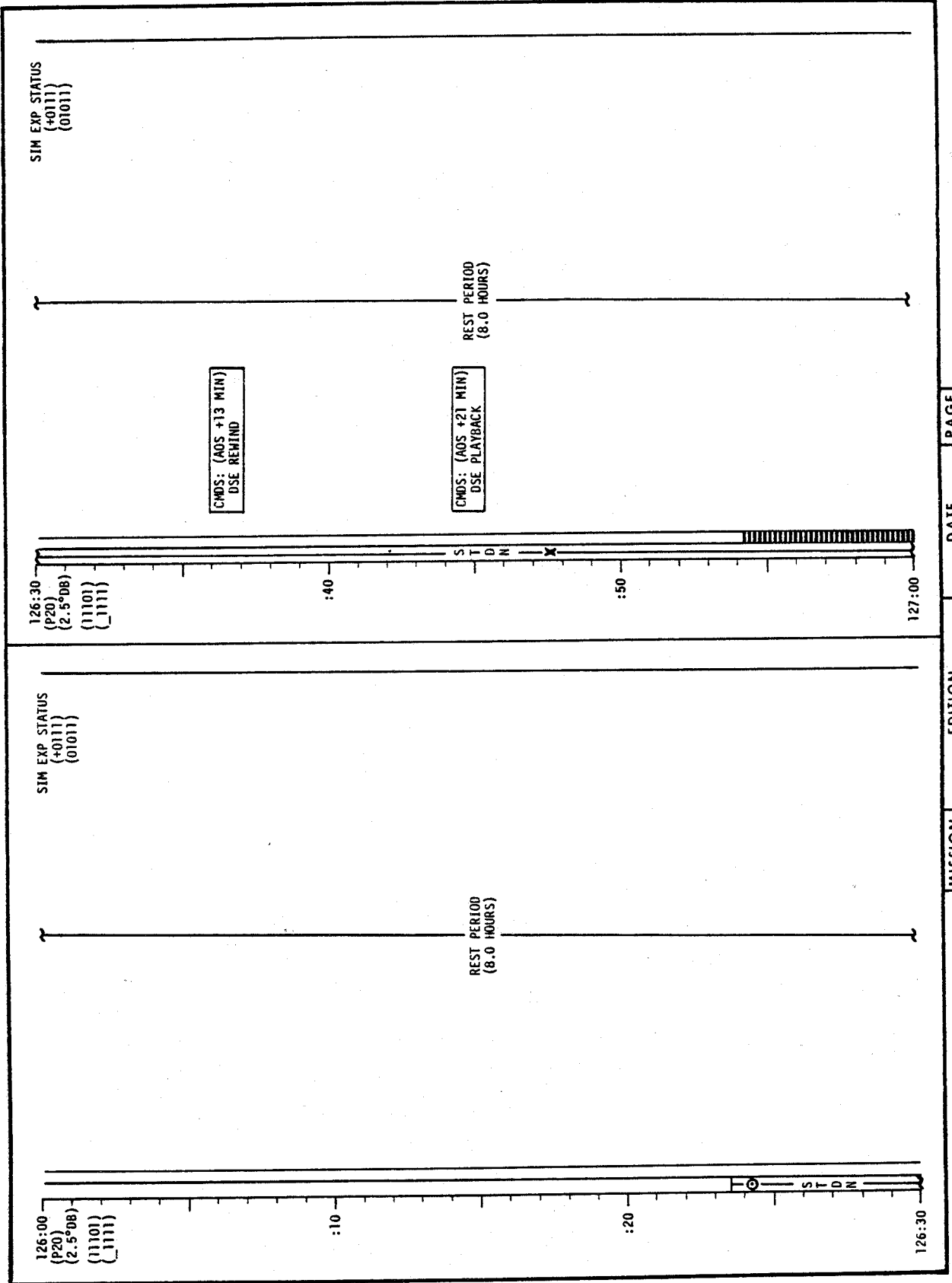
MCC-H

UPDATE TO LM
LIFT-OFF TIMES FOR
REVS 21-25

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	126:00 - 127:00	6/20	3-152

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

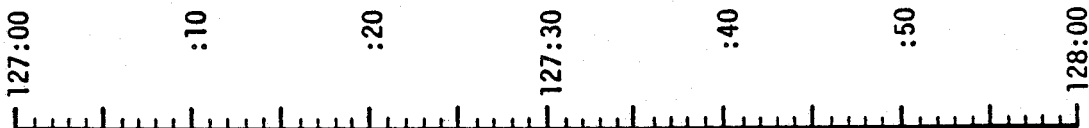
MCC-H

CDR

LMP

NOTES

0353 CST



PLSS RECHARGE	
PRESLEEP ACTIVATE LGC & PWR AMP FOR CLOCK RESET, UPDATE CSM S.V., LGC TO STANDBY	BATTERY MGT BATS 1 & 2 - ON BAT L (LMP) -OFF, (CDR) -ON BATS 3 & 4 - OFF/RESET PWR AMP-OFF ON MCC-H CUE
REST PERIOD (8 HOURS)	

PKS 210' LOS

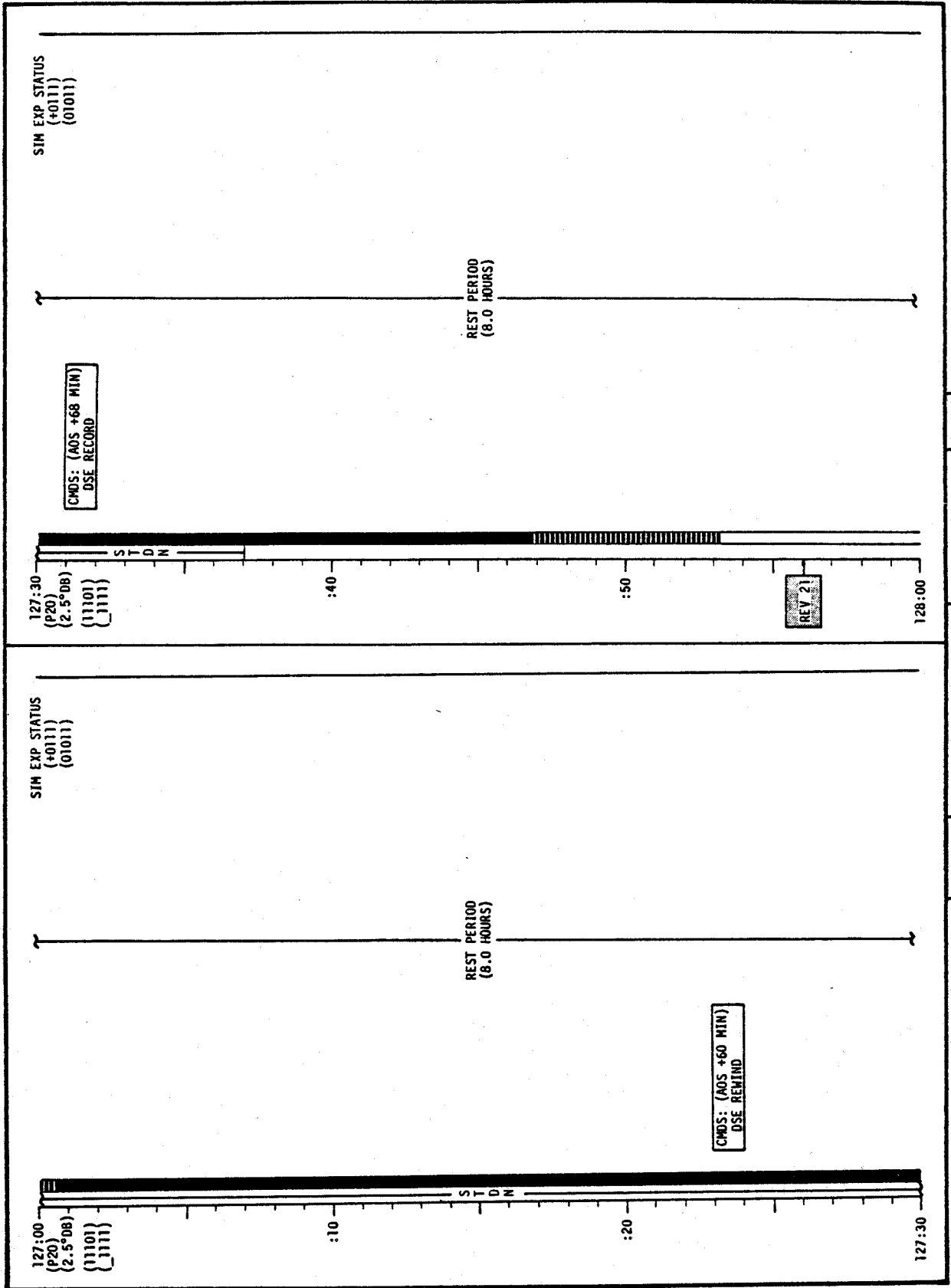
CSM REV 21

UPLINK TO LM
CSM S.V. (155:15)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	127:00 - 128:00	6/20-21	3-154

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

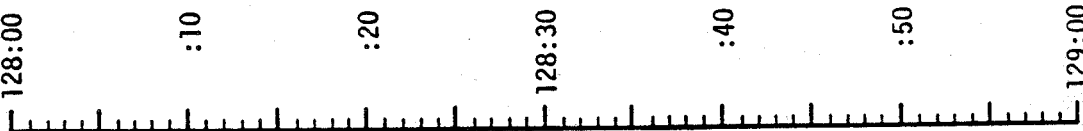
MCC-H

0453 CST

CDR

LMP

NOTES

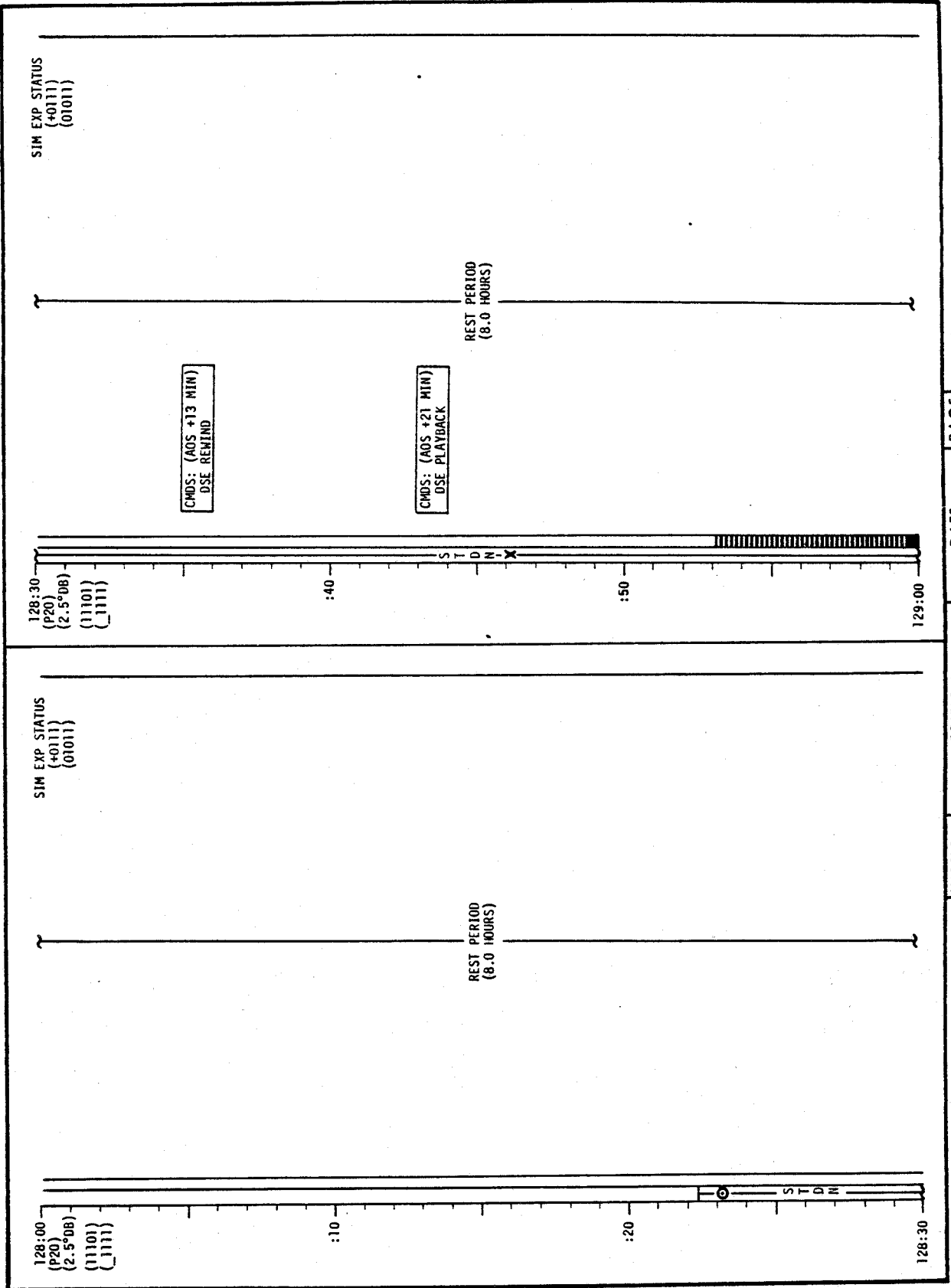


REST PERIOD
(8 HOURS)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	128:00 - 129:00	6/21	3-156

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

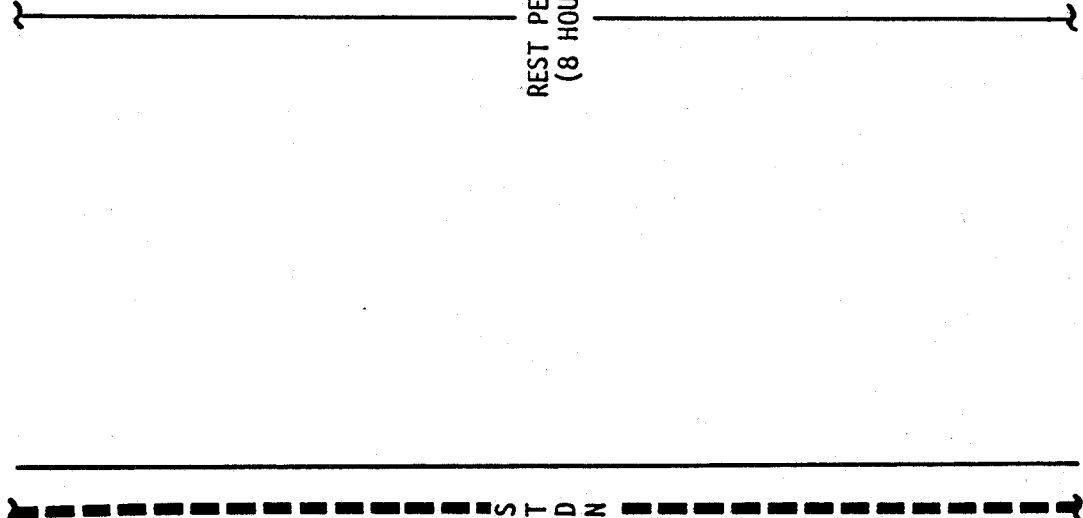
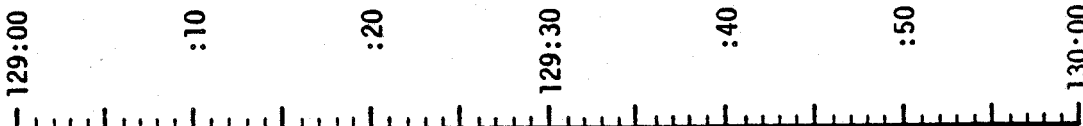
MCC-H

0553 CST

CDR

LMP

NOTES

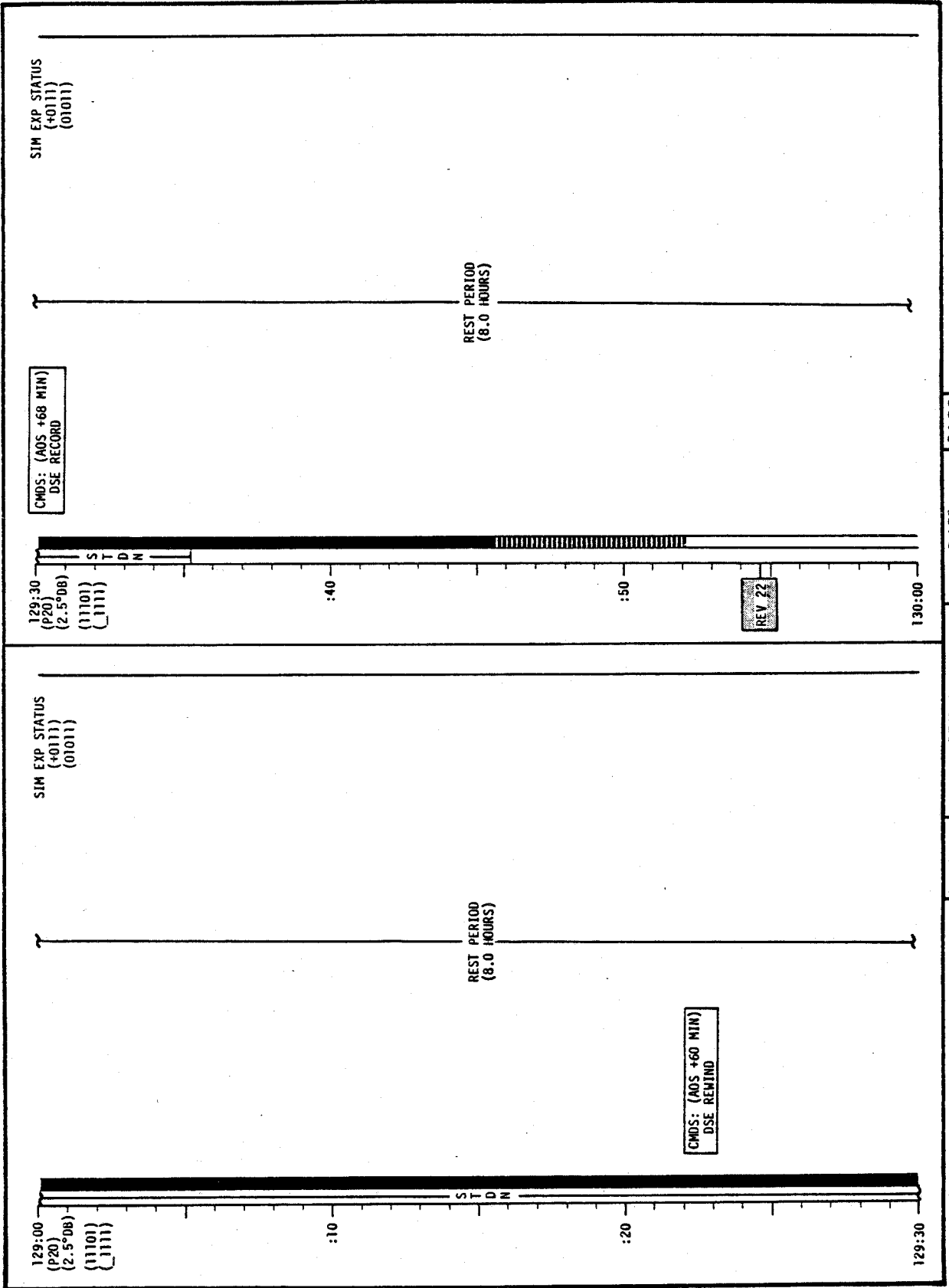


CSM REV 22

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	129:00 - 130:00	6/21-22	3-158

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-159

LM FLIGHT PLAN

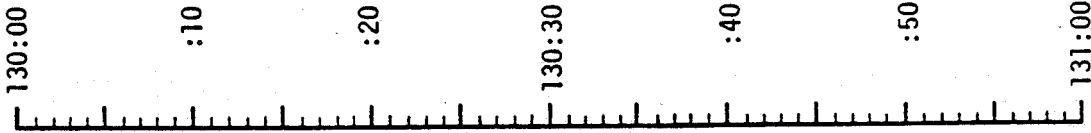
MCC-H

0653 CST

CDR

LMP

NOTES



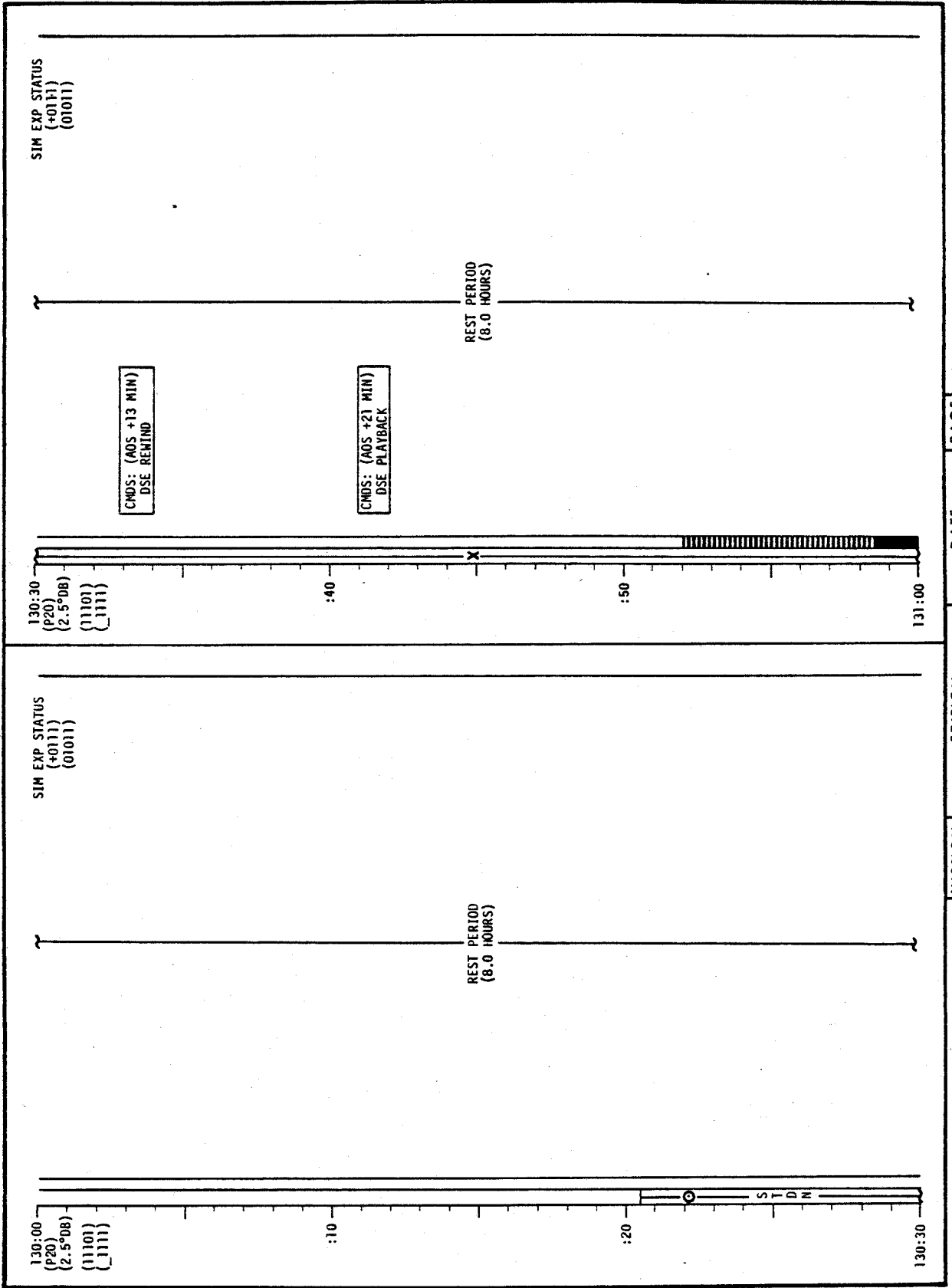
STDN X

REST PERIOD
(8 HOURS)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	130:00 - 131:00	6/22	3-160

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

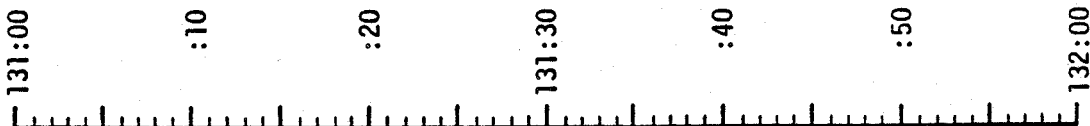
MCC-H

0753 CST

CDR

LMP

NOTES



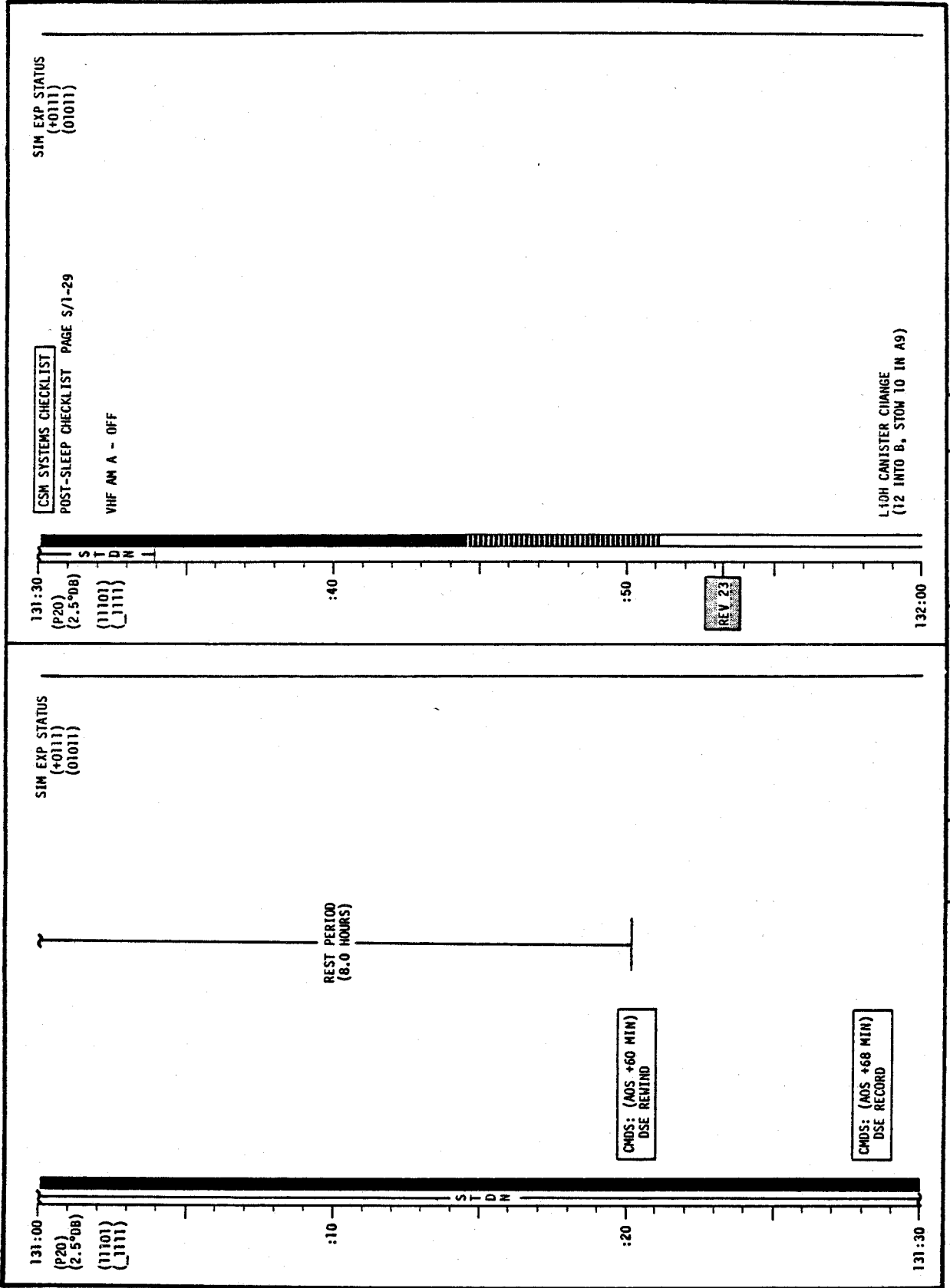
REST PERIOD
(8 HOURS)

CSM REV 23

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	131:00 - 132:00	6-7/22-23	3-162

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

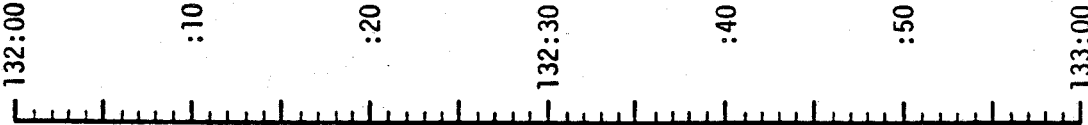
MCC-H

0853 CST

CDR

LMP

NOTES



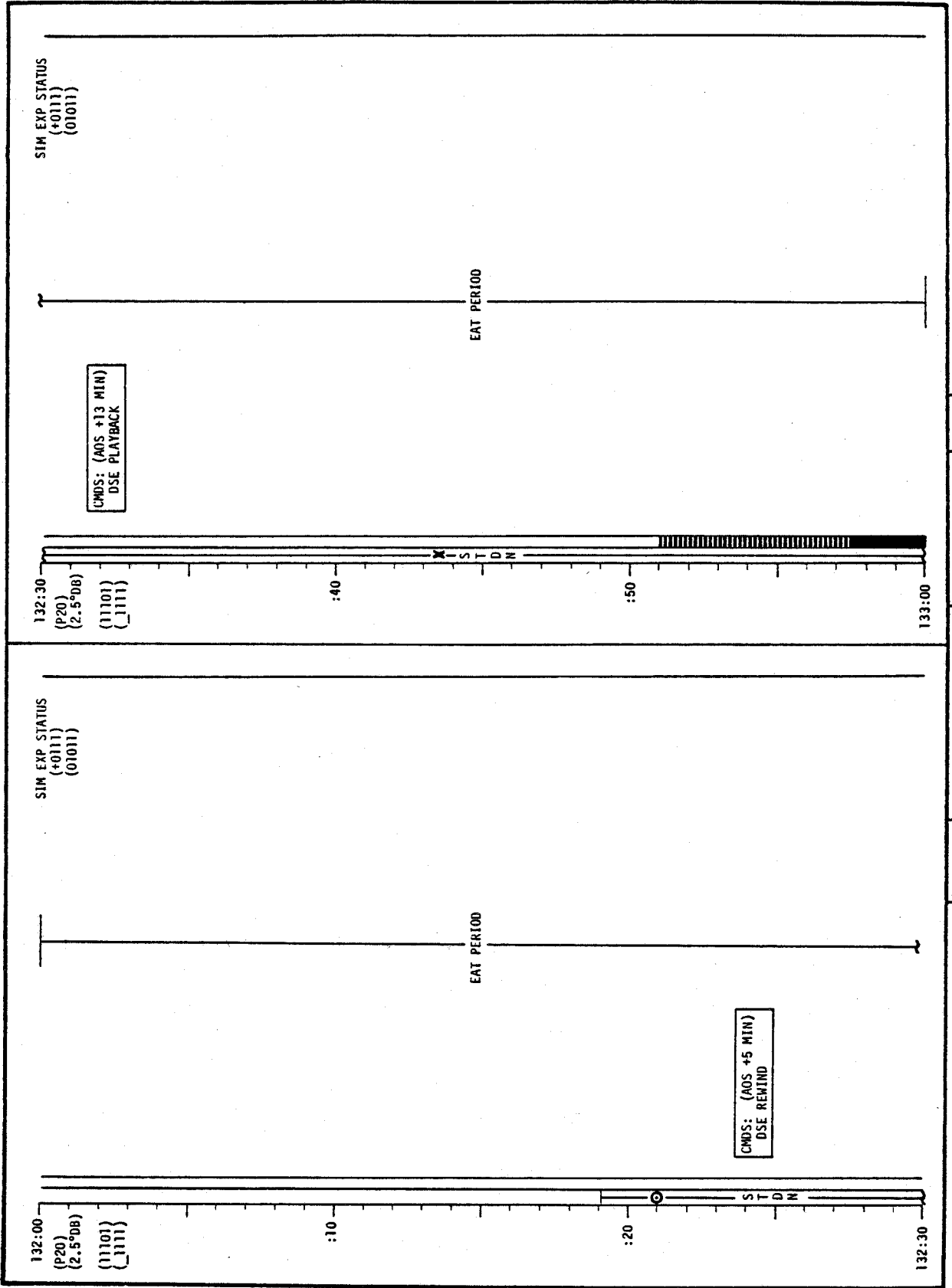
STDN X

REST PERIOD
(8 HOURS)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	132:00 - 133:00	7/23	3-164

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

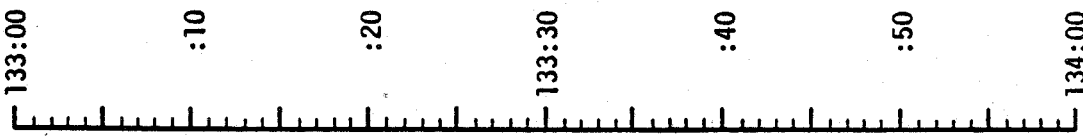
MCC-H

0953 CST

CDR

LMP

NOTES



----- S T D N -----

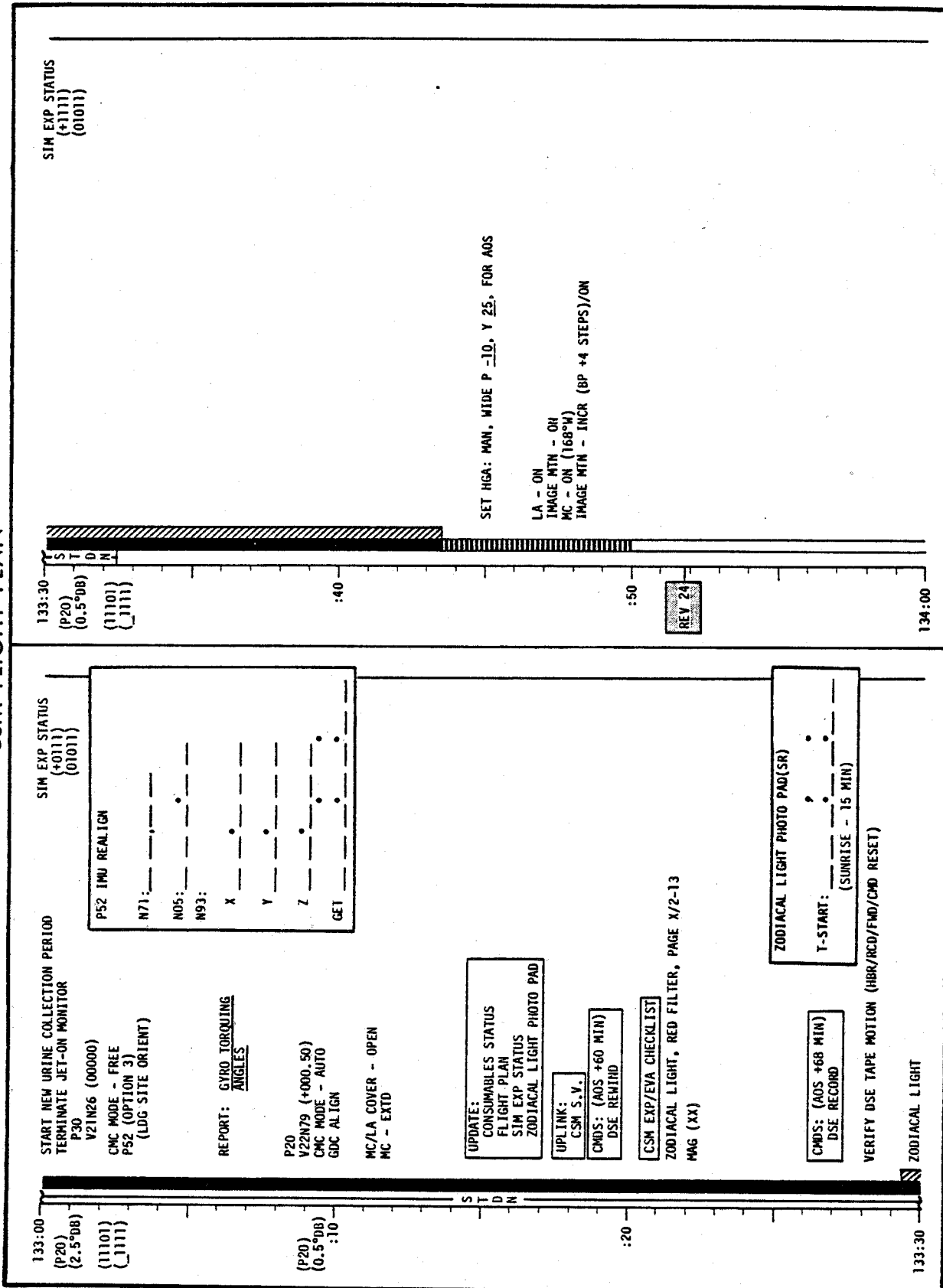
----- REST PERIOD (8 HOURS) -----

CSM REV 24

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	133:00 - 134:00	7/23-24	3-166

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION APOLLO 17	EDITION FINAL (12/6)	DATE 10/23/72	PAGE 3-167
-----------------------------	--------------------------------	-------------------------	----------------------

LM FLIGHT PLAN

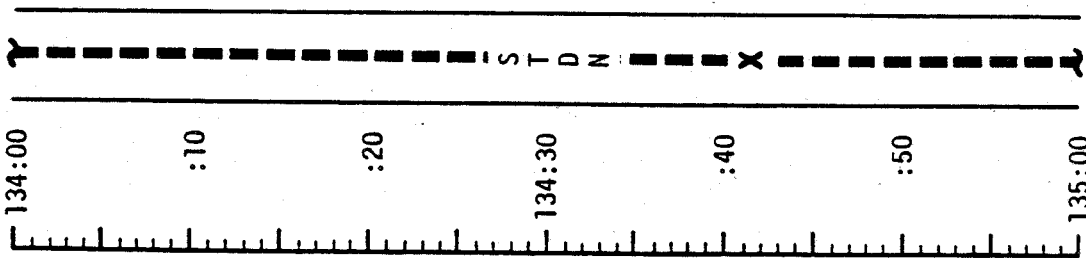
MCC-H

1053 CST

CDR

LMP

NOTES

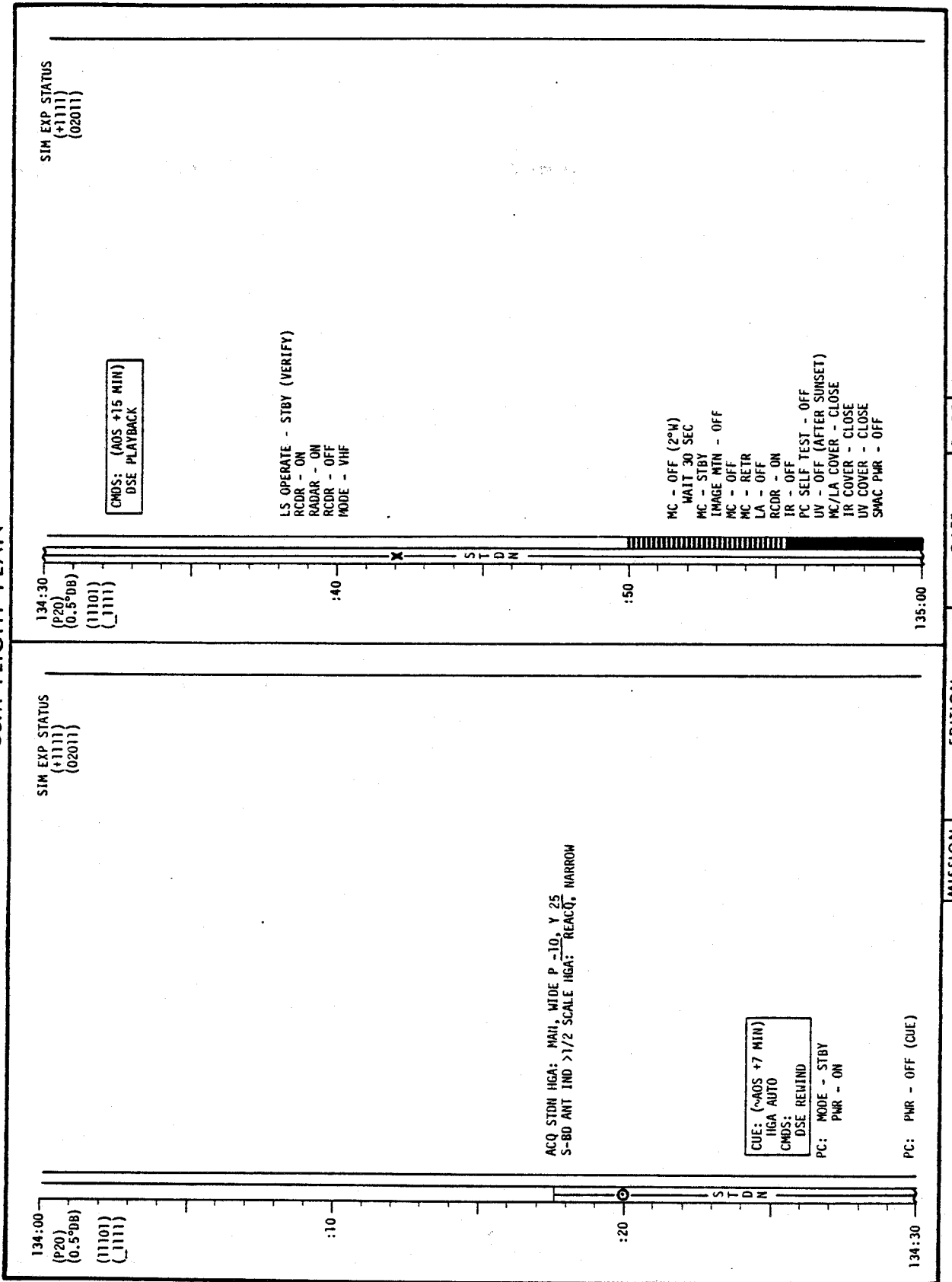


REST PERIOD
(8 HOURS)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	134:00 - 135:00	7/24	3-168

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



SIM EXP STATUS
(+1111)
(02011)

CMDS: (AOS +15 MIN)
DSE PLAYBACK

LS OPERATE - STBY (VERIFY)
RCDR - ON
RADAR - ON
RCDR - OFF
MODE - VHF

MC - OFF (2°H)
WAIT 30 SEC
MC - STBY
IMAGE MTN - OFF
MC - OFF
MC - RETR
LA - OFF
RCDR - ON
TR - OFF
PC SELF TEST - OFF
UV - OFF (AFTER SUNSET)
MC/LA COVER - CLOSE
TR COVER - CLOSE
UV COVER - CLOSE
SWAC PWR - OFF

SIM EXP STATUS
(+1111)
(02011)

ACQ STON HGA: MAH, WIDE P -10, Y 25
S-BD ANT IND >1/2 SCALE HGA: REACQ, NARROW

CUE: (~AOS +7 MIN)
HGA AUTO
CMDS: DSE REVIND

PC: MODE - STBY
PWR - ON

PC: PWR - OFF (CUE)

MISSION	EDITION	DATE	PAGE
AP0110 17	FINAL (12/6)	10/23/72	2/10

LM FLIGHT PLAN

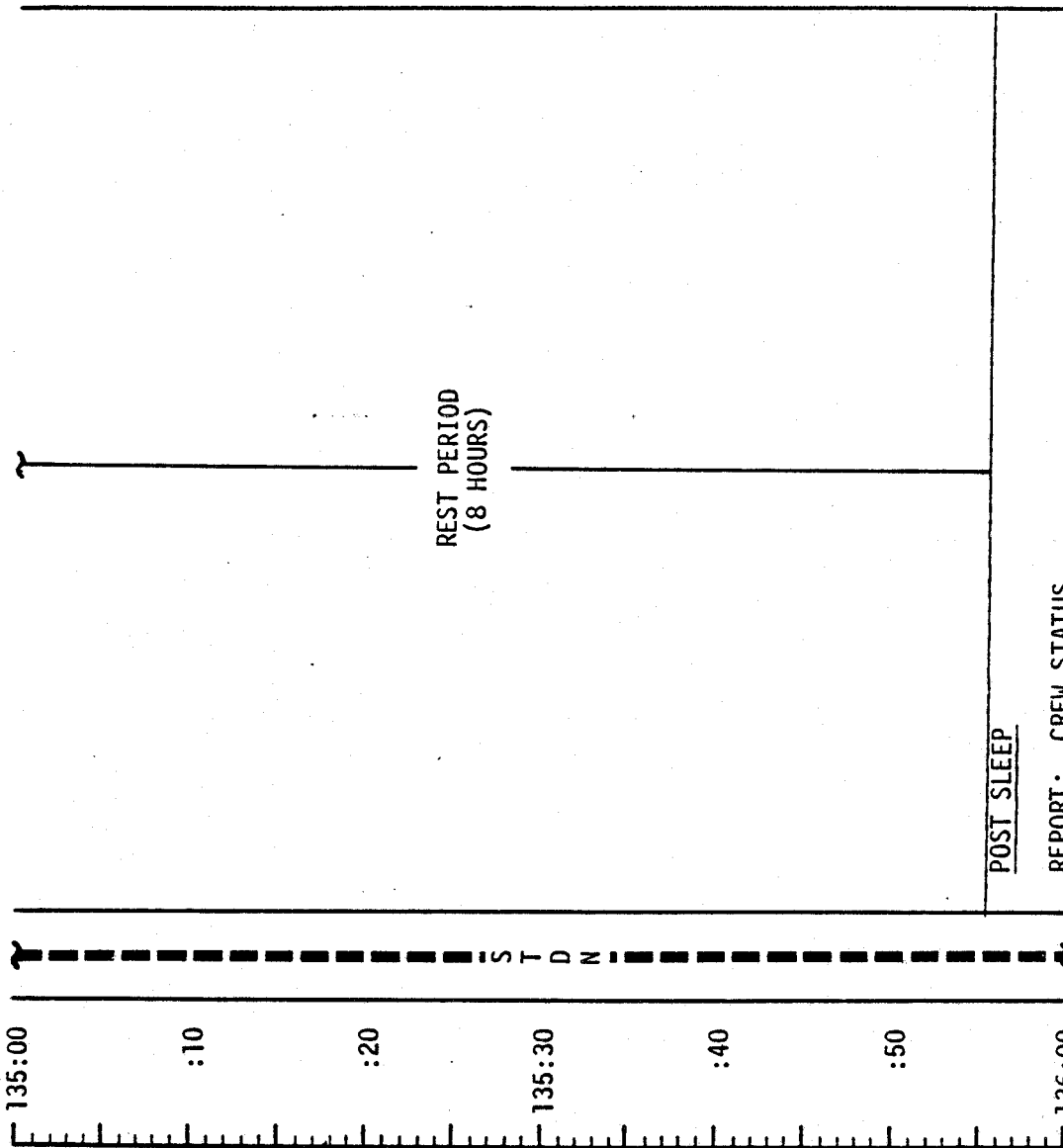
NOTES

LMP

CDR

1153 CST

MCC-H



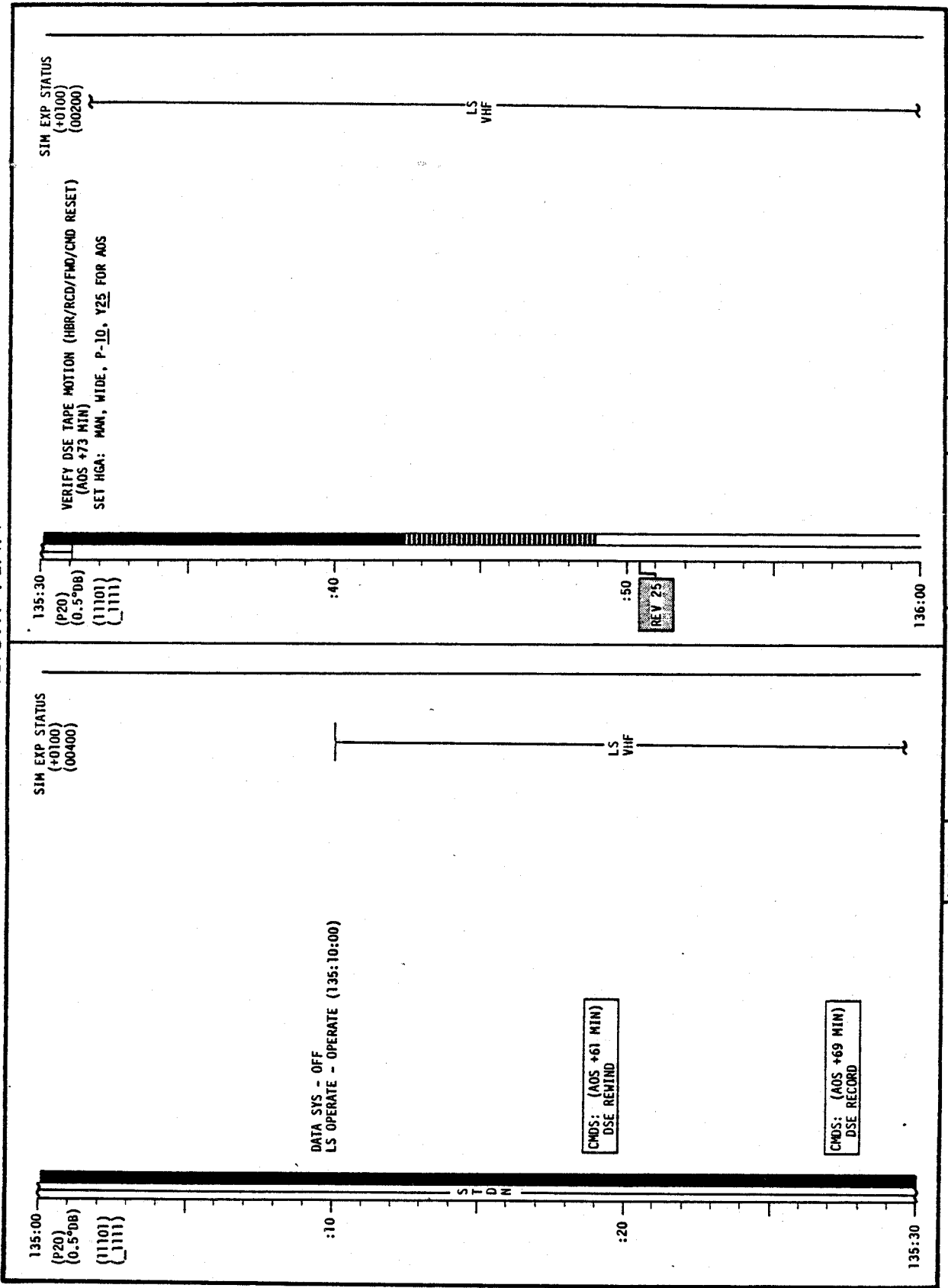
CSM REV 25

STAY/NO-STAY FOR
EVA-2

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	135:00 - 136:00	7/24-25	3-170

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

NOTES

LMP

CDR

POST SLEEP (CONT)

GDS 210' AOS

1253 CST

136:00

:10

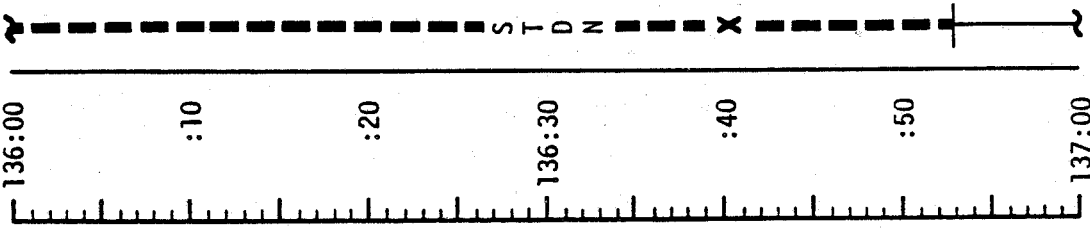
:20

136:30

:40

:50

137:00



EAT PERIOD

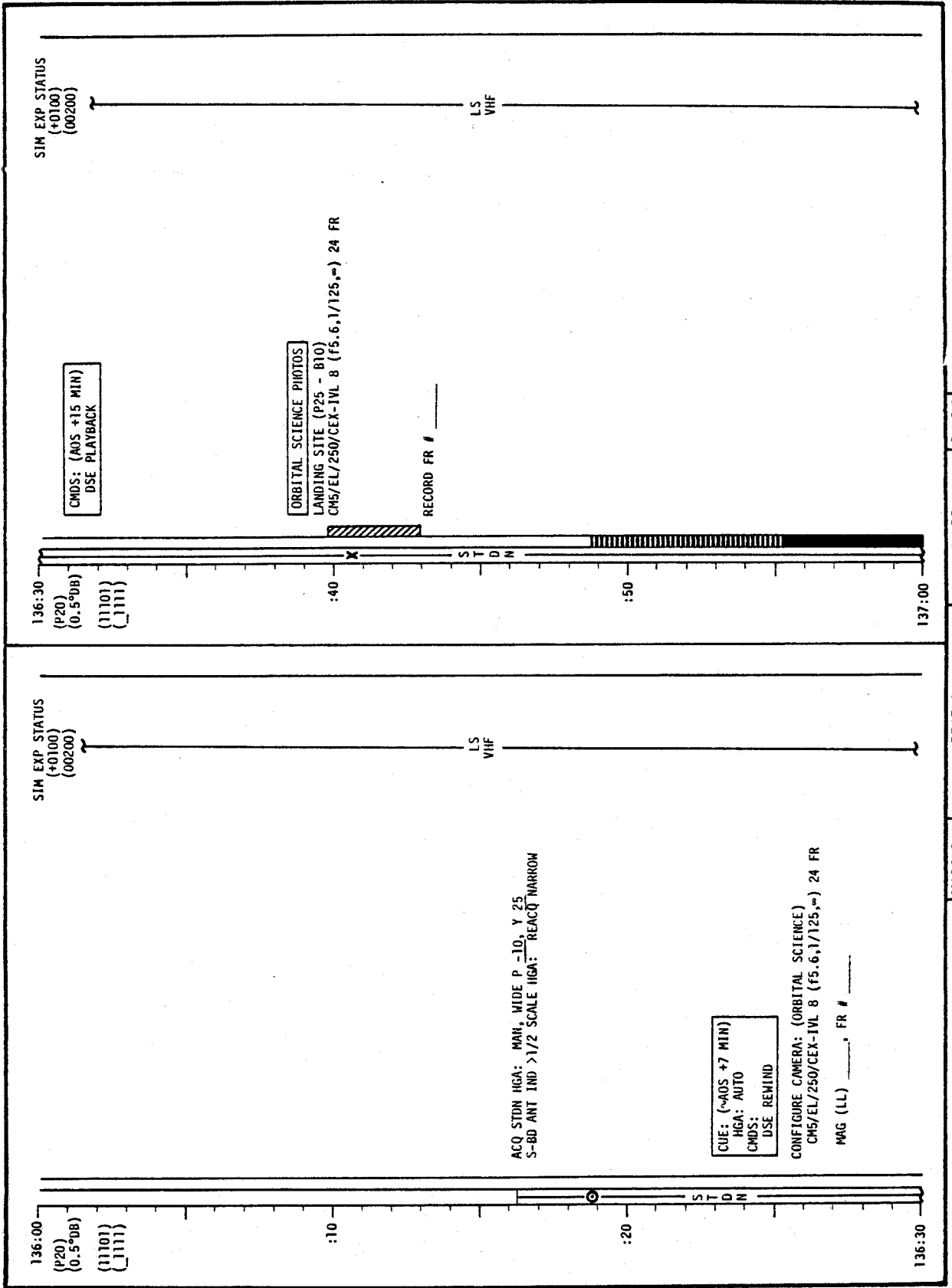
STDN X

UPDATE TO LM
LIFT-OFF TIMES FOR
KEVS 26-32

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	136:00 - 137:00	7/25	3-172

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-173

LM FLIGHT PLAN

CDR

LMP

NOTES

MCC-H

1353 CST

137:00

:10

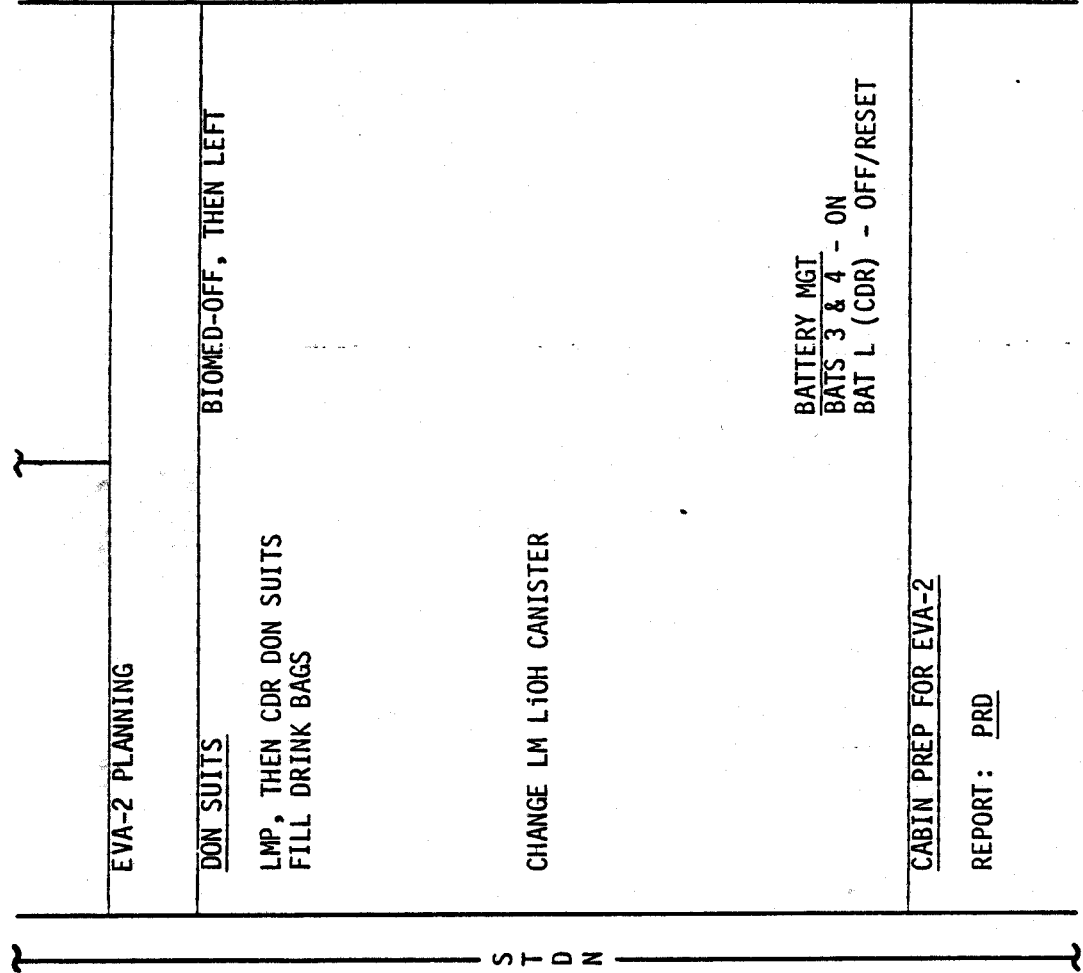
:20

137:30

:40

:50

138:00



-2:00

-1:45

-1:30

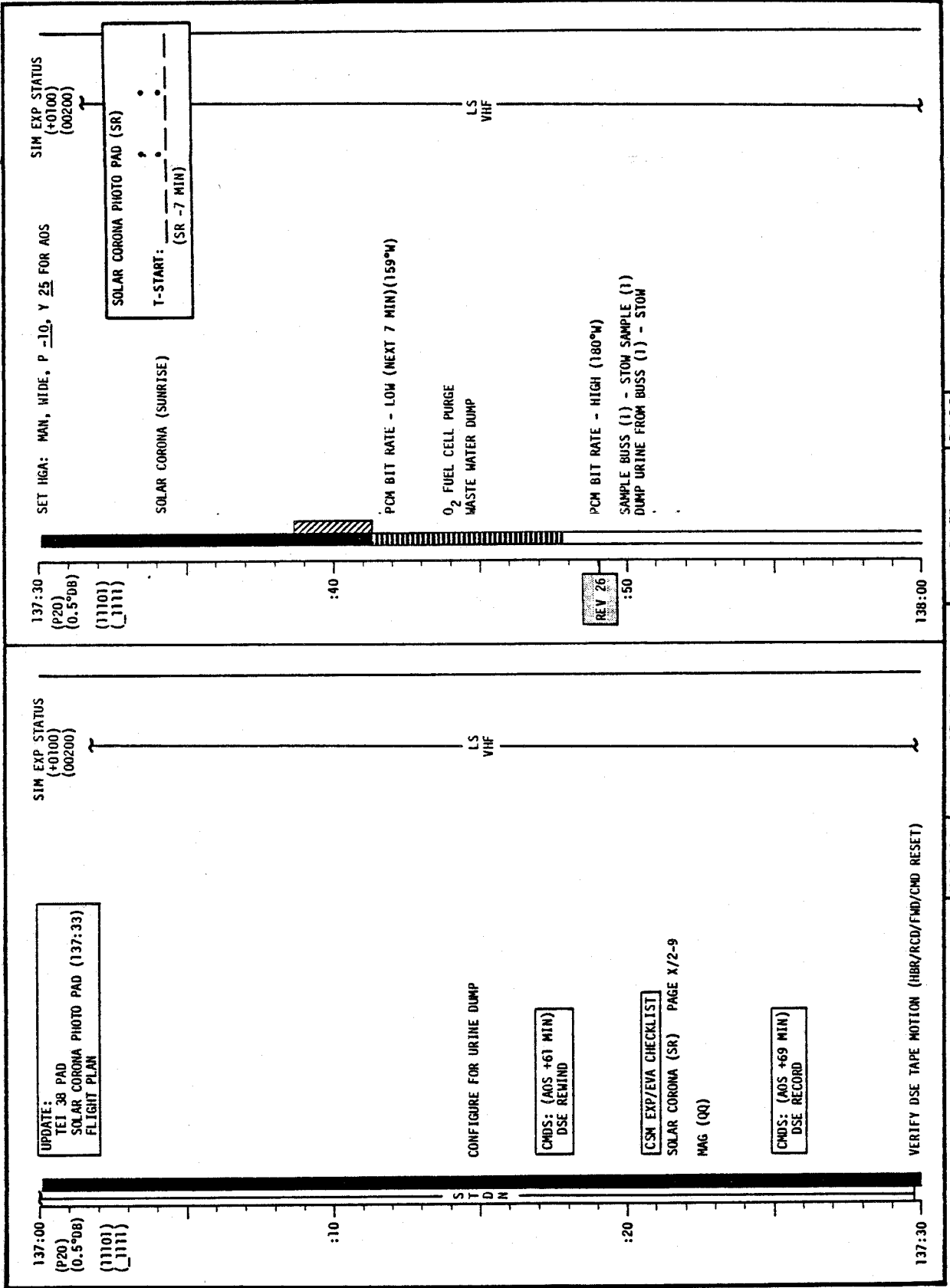
CSM REV 26

-1:15

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	137:00 - 138:00	7/25-26	3-174

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-175

LM FLIGHT PLAN

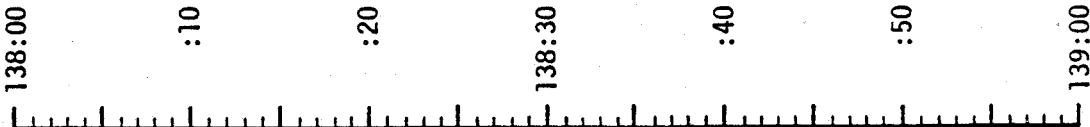
MCC-H

CDR

LMP

NOTES

1453 CST



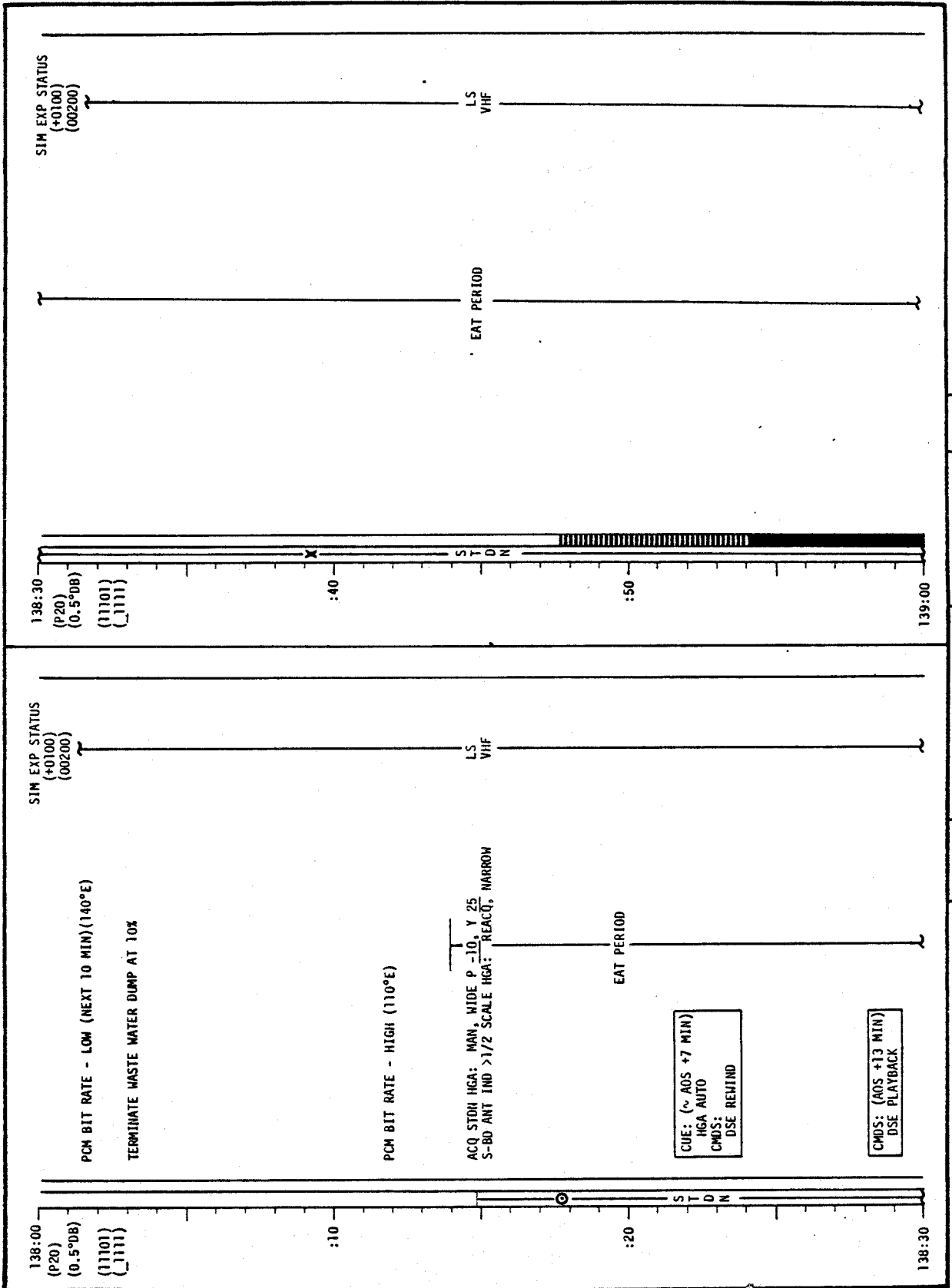
EQUIPMENT PREP FOR EVA-2	-1:00
PLSS DOWNING	-0:45
PLSS COMM CHECK CONFIGURE COMM FOR EVA RECORDER - ON REPORT: PLSS O ₂ QUANTITY	-0:30
OPS CONNECT	
HELMET/GLOVE DOWNING	-0:15

S T D N X

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	138:00 - 139:00	7/26	3-176

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



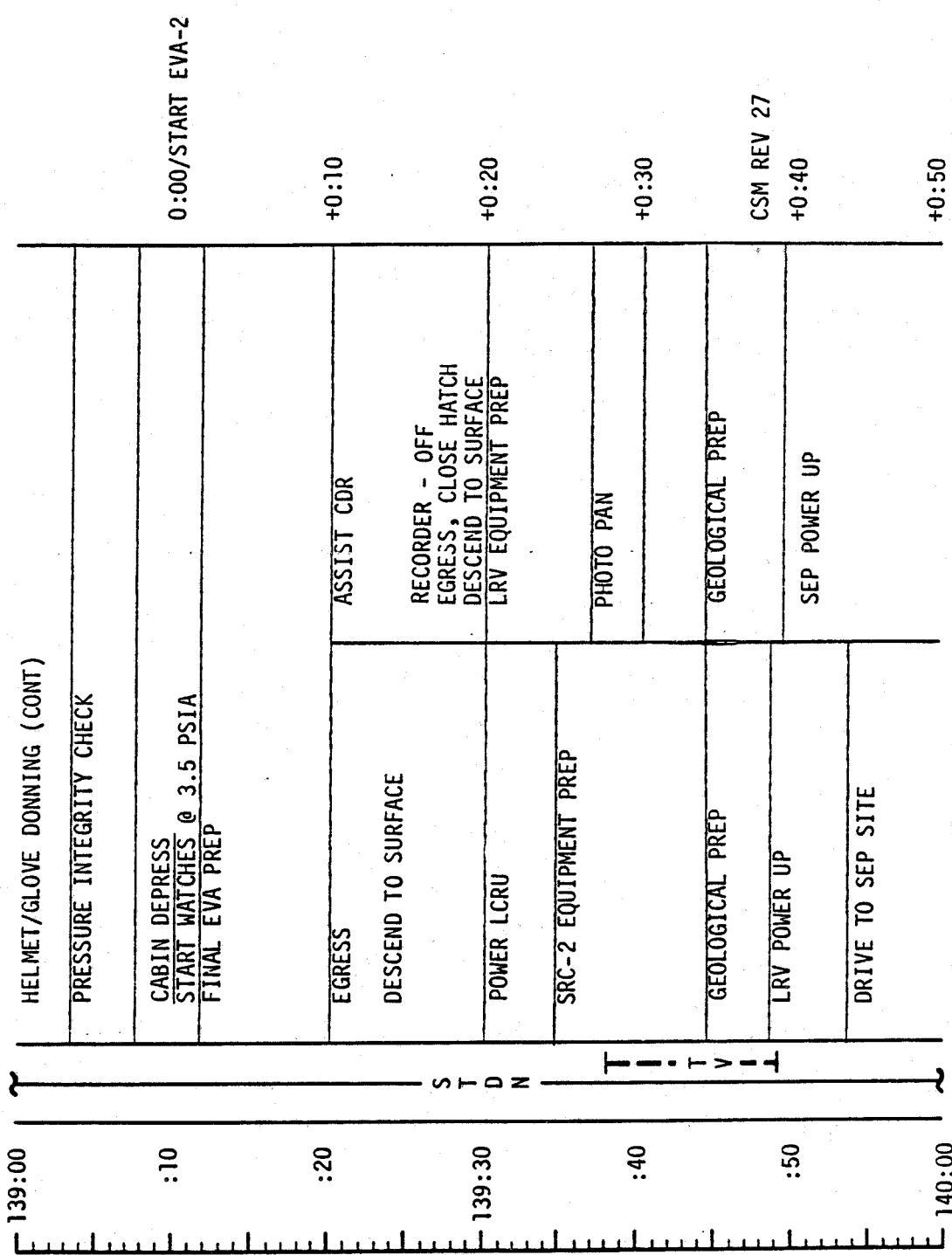
LM FLIGHT PLAN

MCC-H

CDR

LMP

NOTES



GO/NO-GO FOR CABIN DEPRESS

0:00/START EVA-2

+0:10 ASSIST CDR

+0:20 RECORDER - OFF
EGRESS, CLOSE HATCH
DESCEND TO SURFACE
LRV EQUIPMENT PREP

+0:30 PHOTO PAN

CSM REV 27

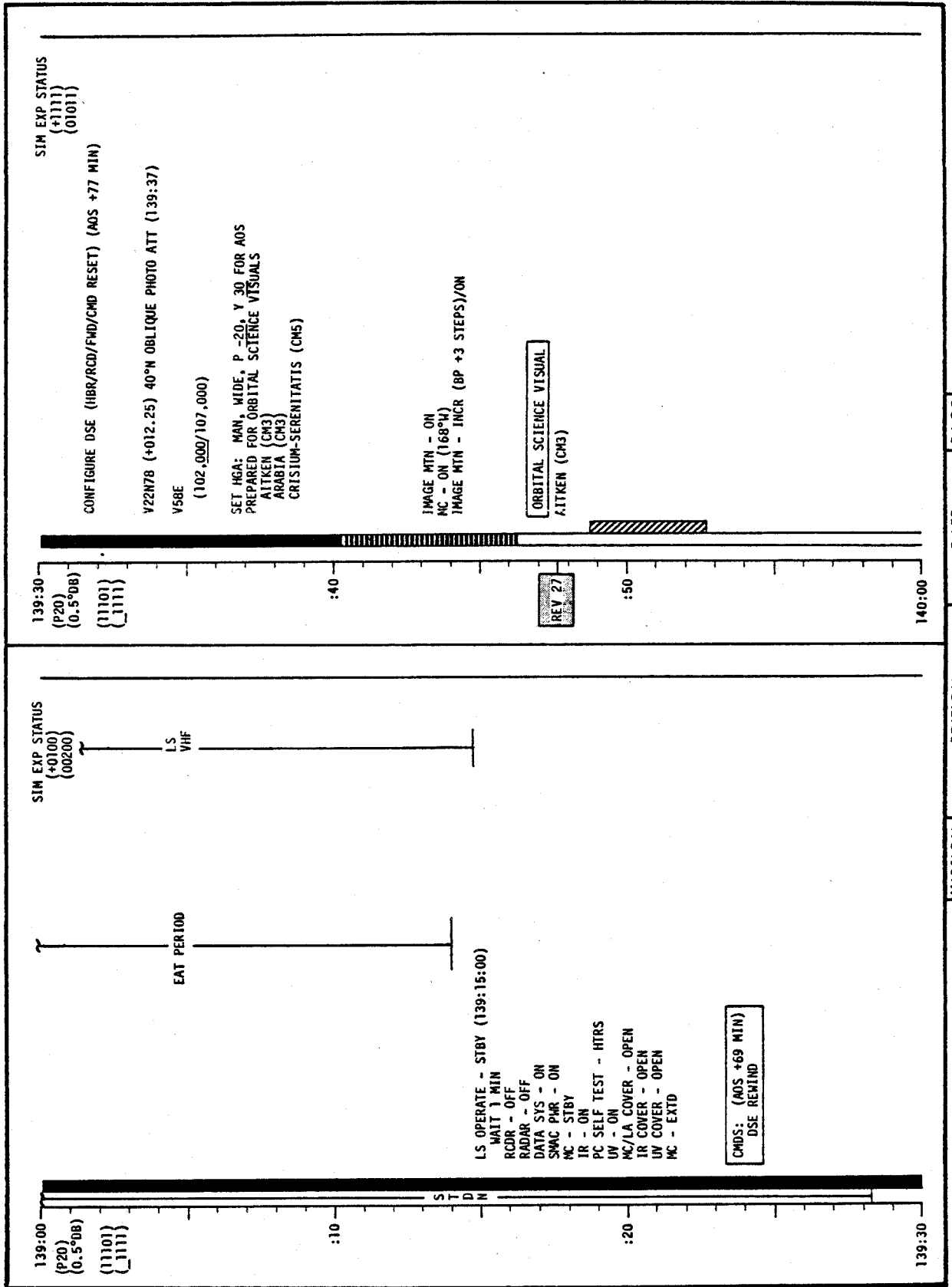
+0:40

+0:50 SEP POWER UP

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	139:00 - 140:00	7/26-27	3-178

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

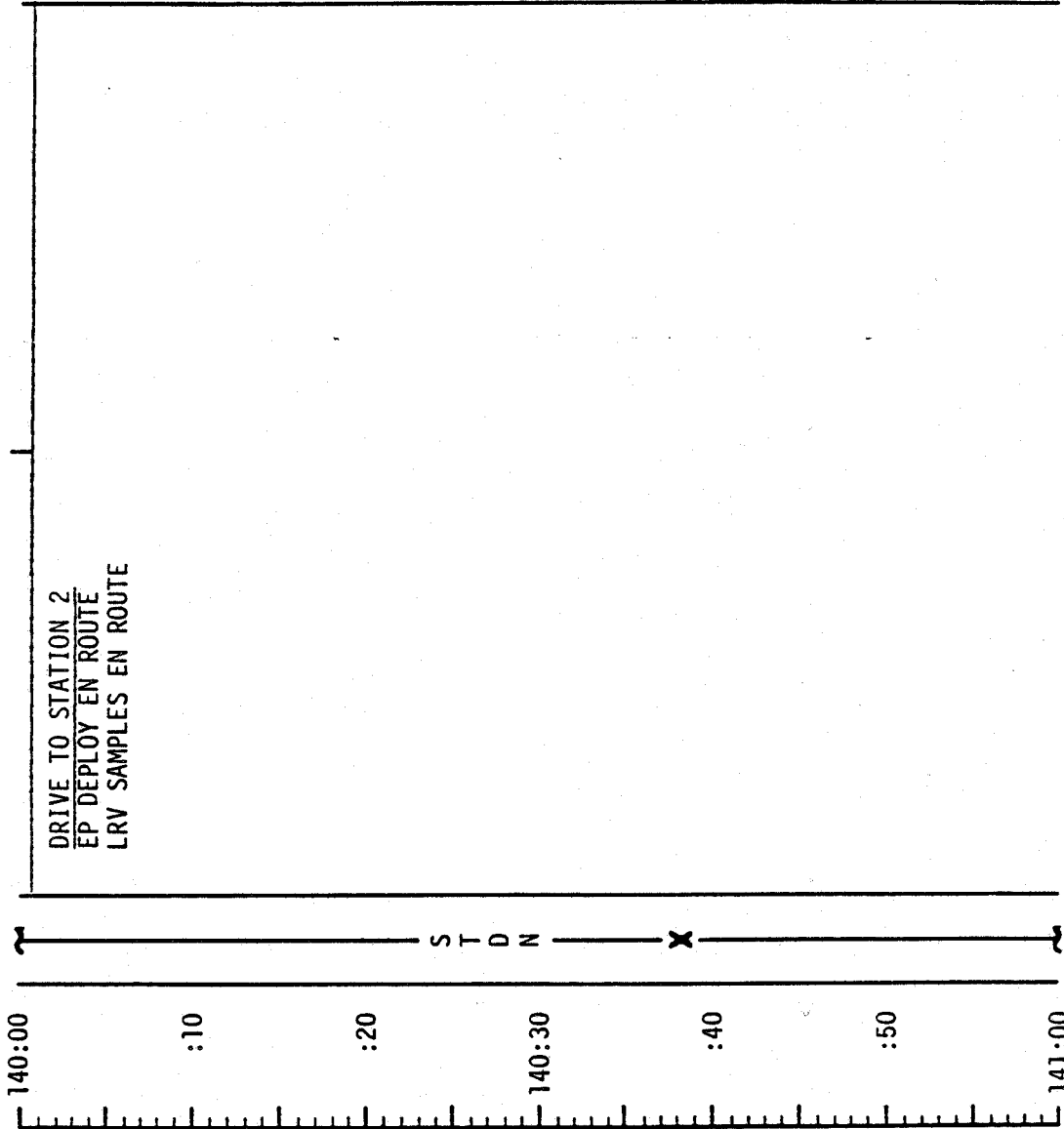
CDR

LMP

NOTES

1653 CST

MCC-H



+0:50

+1:00

+1:10

+1:20

+1:30

+1:40

+1:50

140:00

:10

:20

140:30

:40

:50

141:00

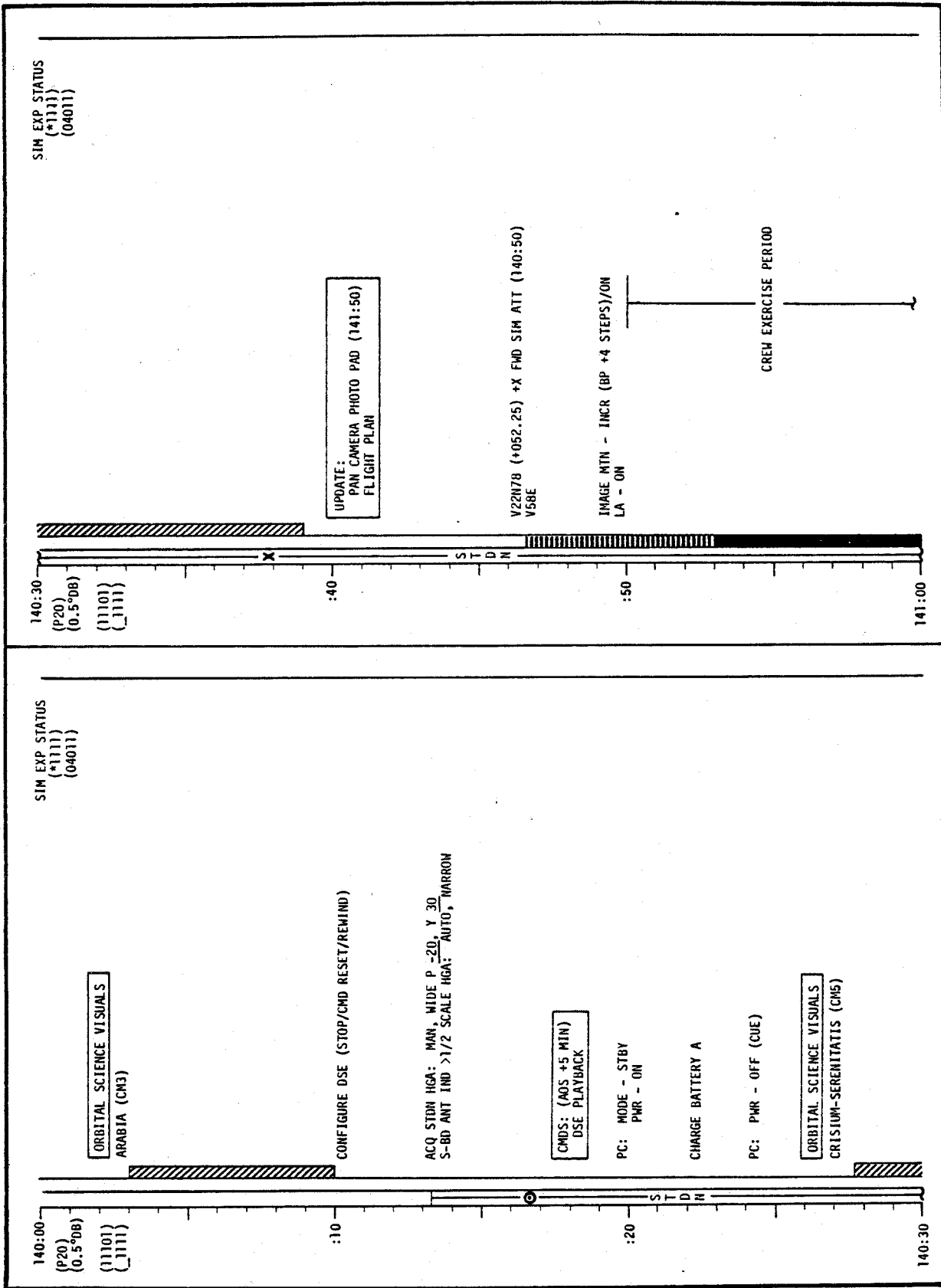
STDN X

DRIVE TO STATION 2
EP DEPLOY EN ROUTE
LRV SAMPLES EN ROUTE

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	140:00 - 141:00	7/27	3-180

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

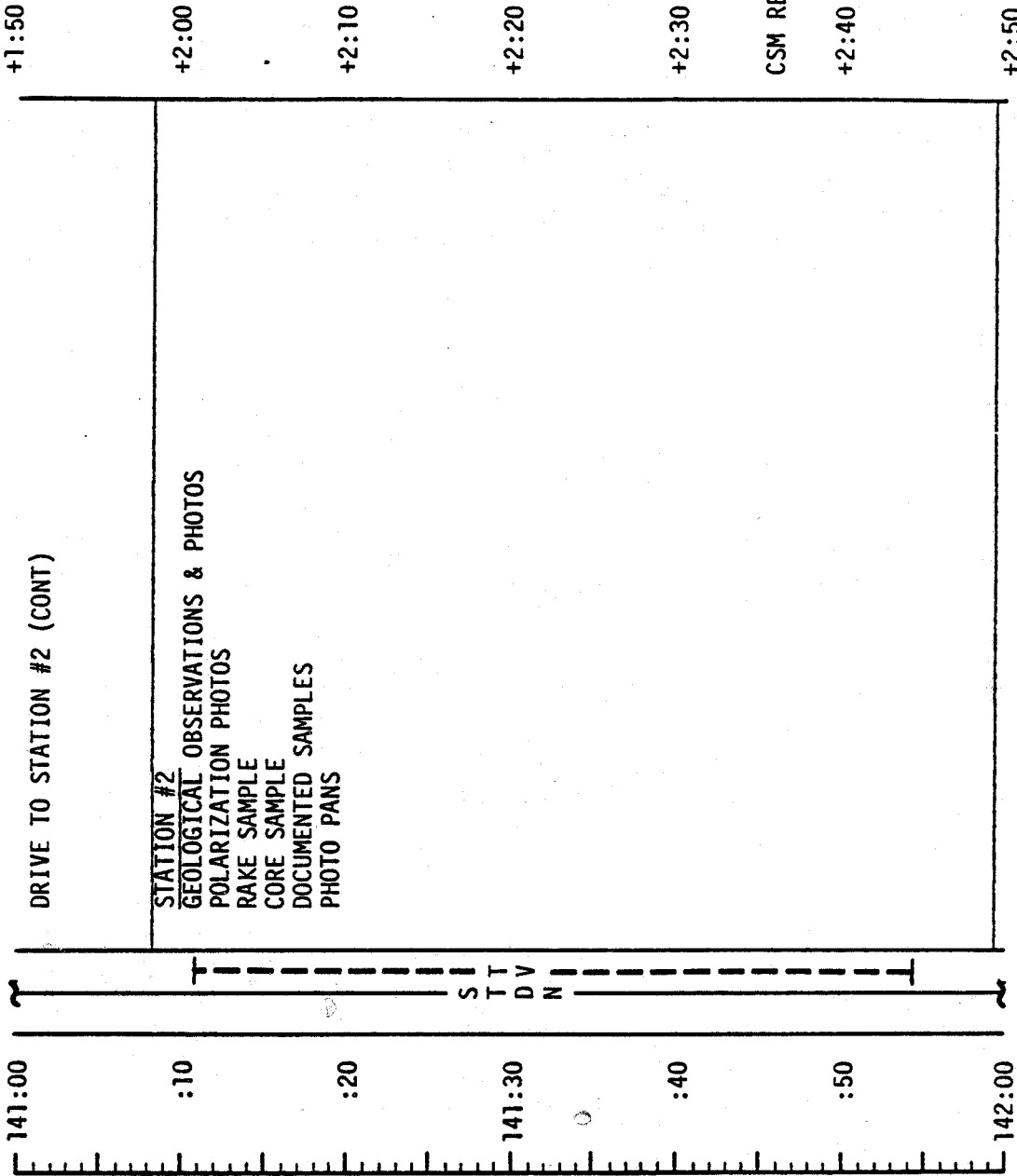
CDR

LMP

NOTES

1753 CST

MCC-H



+1:50

+2:00

+2:10

+2:20

+2:30

CSM REV 28

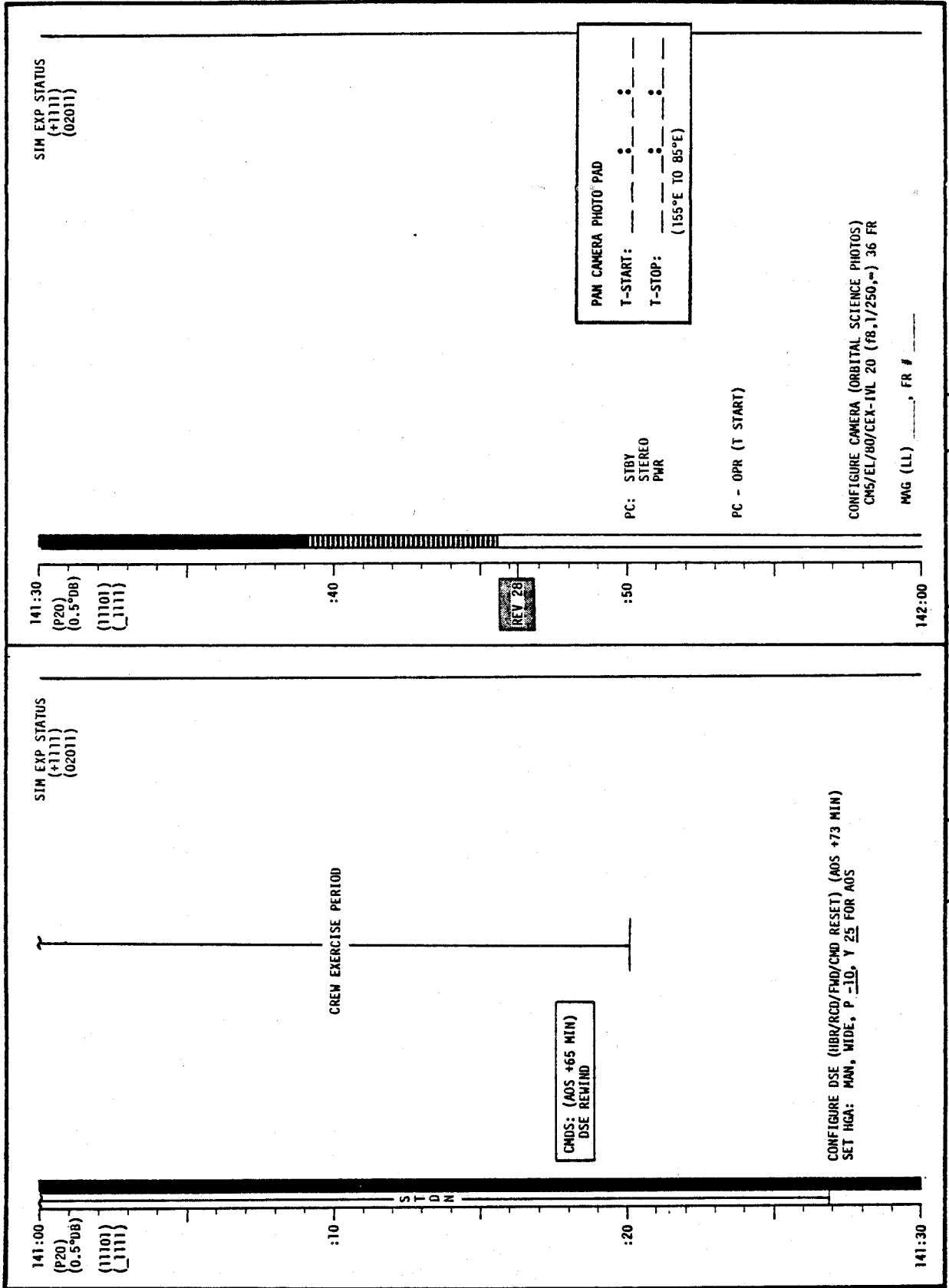
+2:40

+2:50

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	141:00 - 142:00	7/27-28	3-182

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-183

LM FLIGHT PLAN

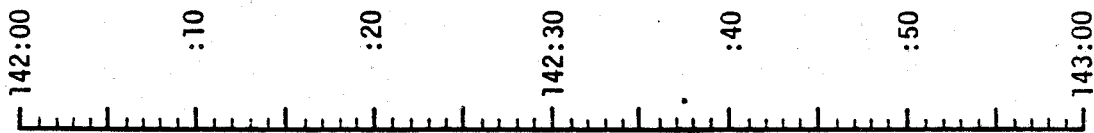
MCC-H

CDR

LMP

NOTES

1853 CST



DRIVE TO STATION #3
LRV SAMPLES EN ROUTE

STATION #3
GEOLOGICAL OBSERVATIONS & PHOTOS
DOCUMENTED SAMPLES
PHOTO PAN

+2:50

+3:00

+3:10

+3:20

+3:30

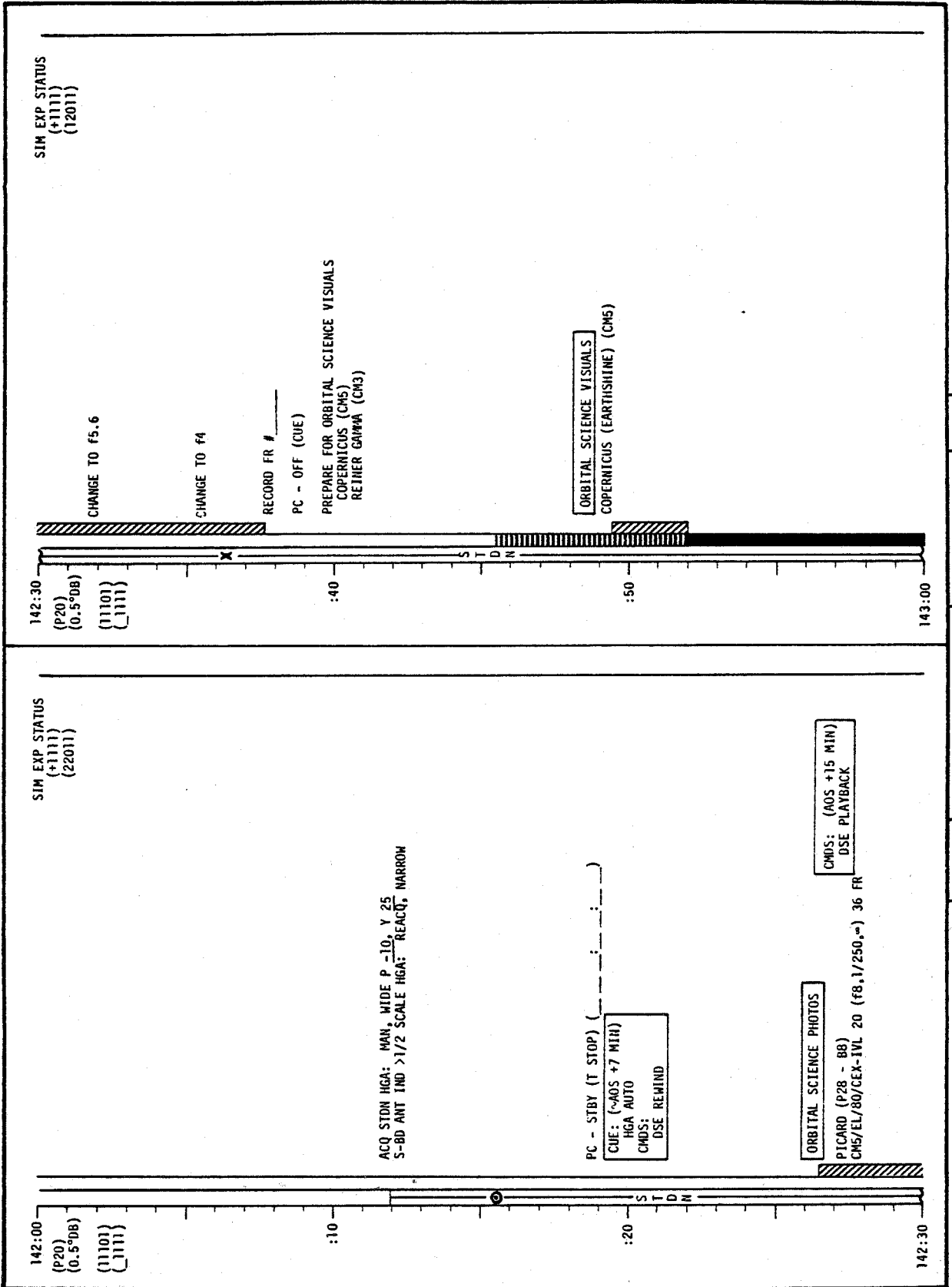
+3:40

+3:50

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	142:00 - 143:00	7/28	3-184

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

MCC-H

CDR

LMP

NOTES

1953 CST

143:00

:10

:20

143:30

:40

:50

144:00

STATION #3 (CONT)

DRIVE TO STATION #4
LRV SAMPLE EN ROUTE

STATION #4
GEOLOGICAL OBSERVATIONS & PHOTOS
POLARIZATION PHOTOS
RAKE SAMPLES

+3:50

+4:00

+4:10

+4:20

+4:30

CSM REV 29

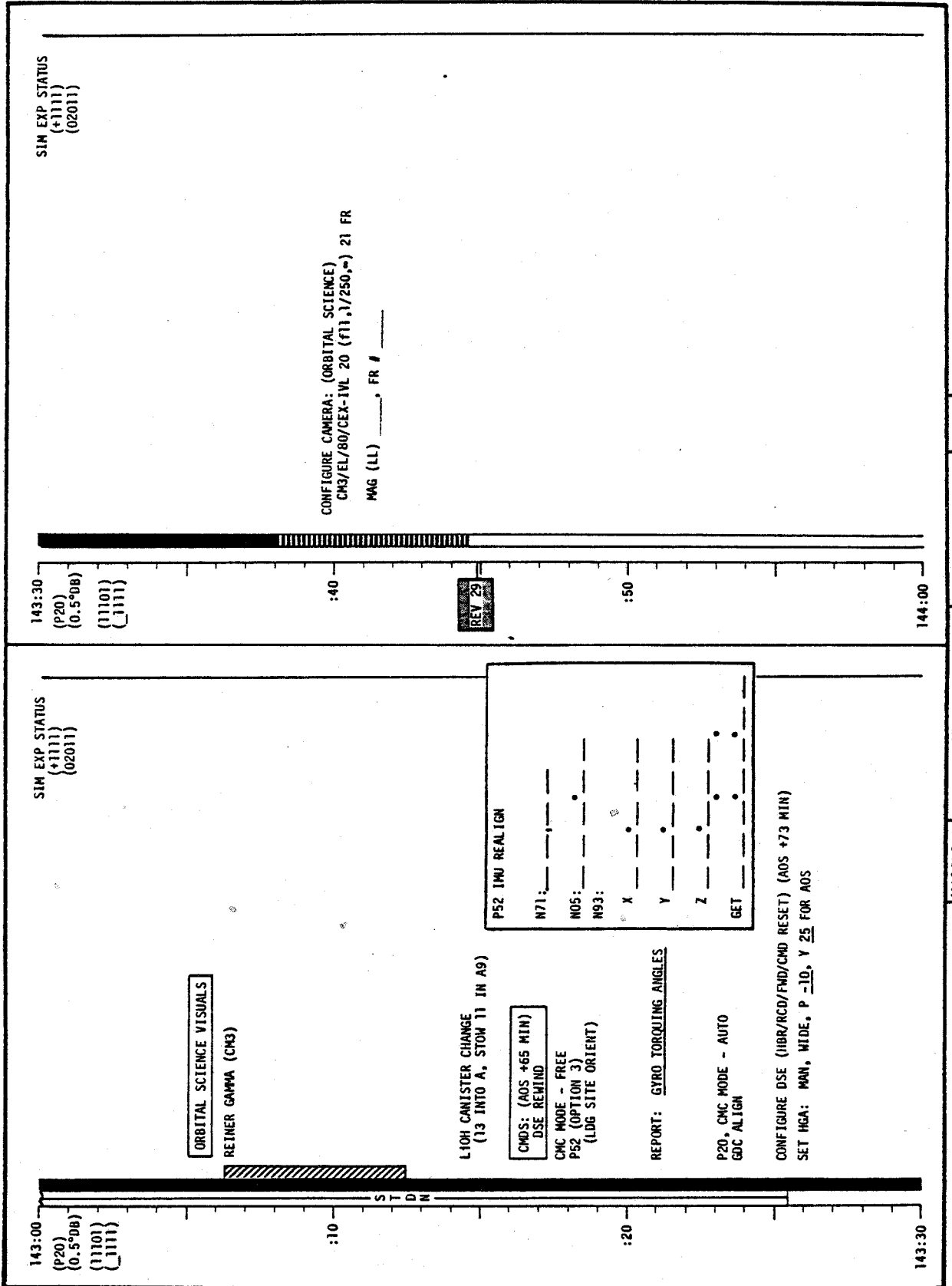
+4:40

+4:50

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	143:00 - 144:00	7/28/29	3-186

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-187

LM FLIGHT PLAN

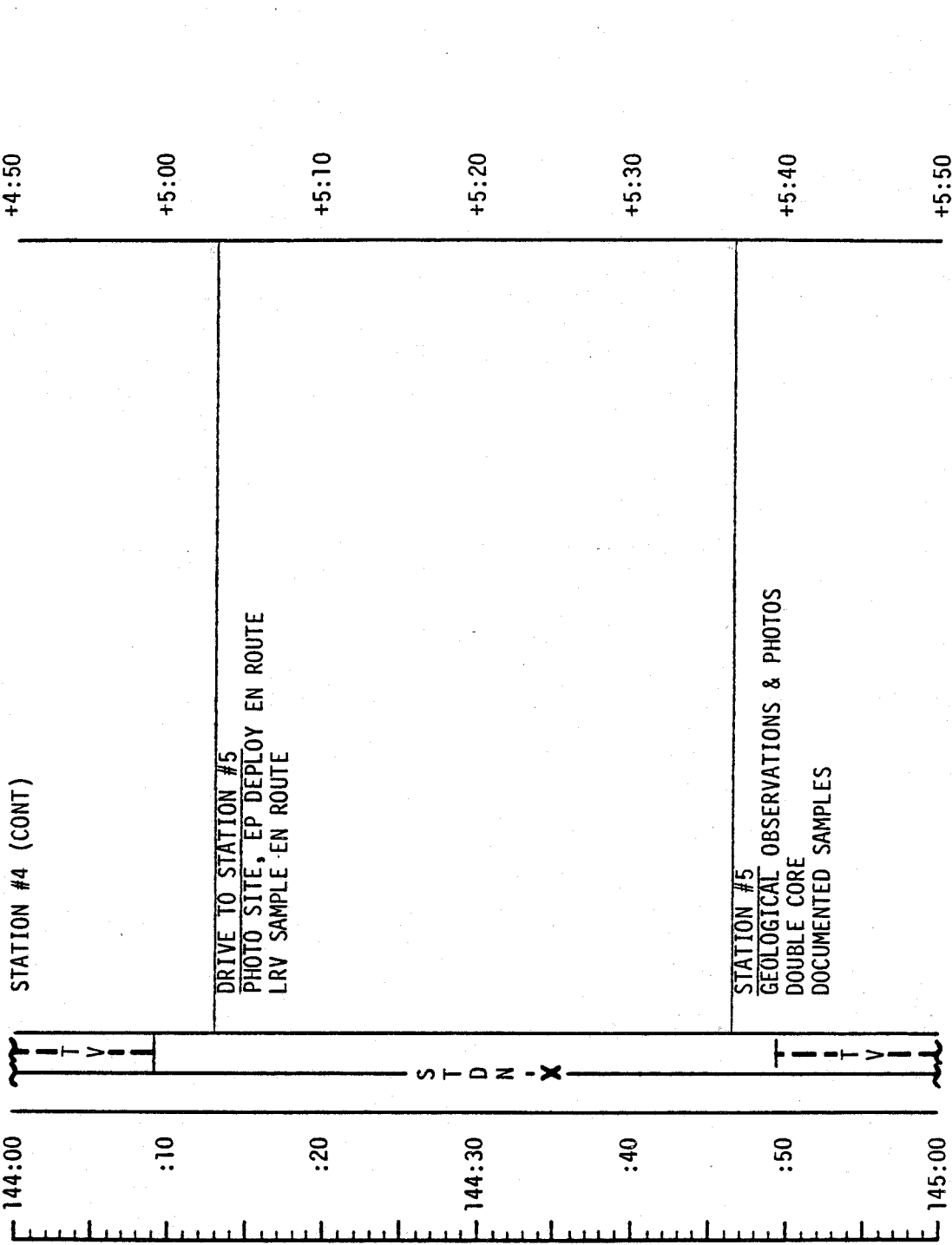
2053 CST

MCC-H

CDR

LMP

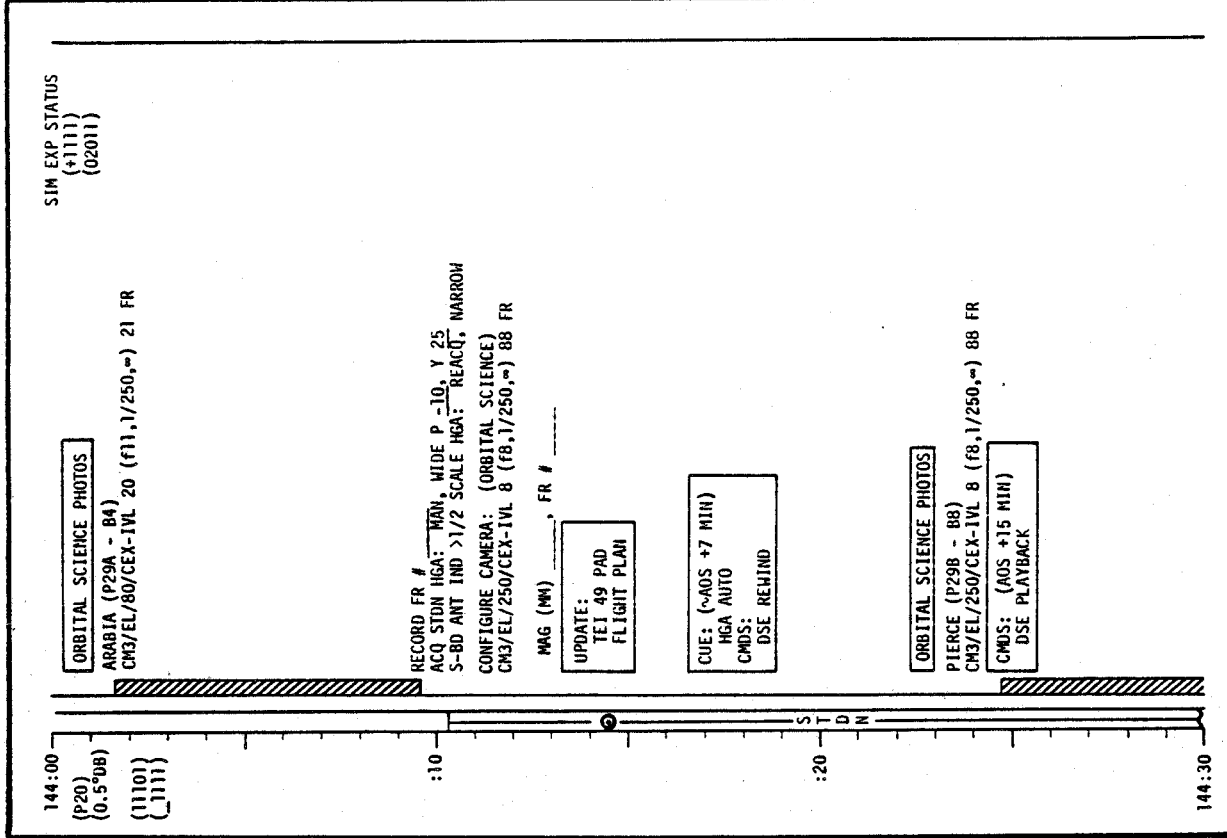
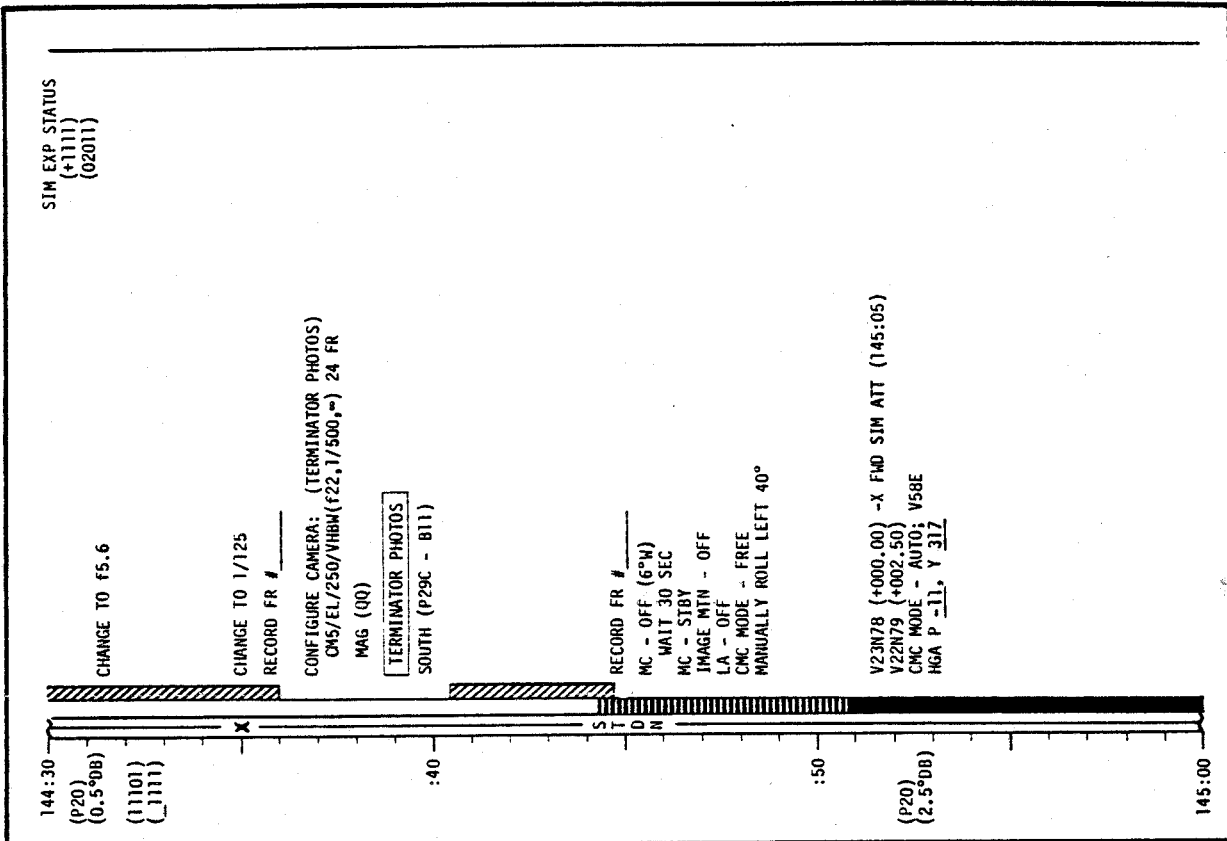
NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	144:00 - 145:00	7/29	3-188

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



SIM EXP STATUS
(+1111)
(02011)

SIM EXP STATUS
(+1111)
(02011)

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-189

LM FLIGHT PLAN

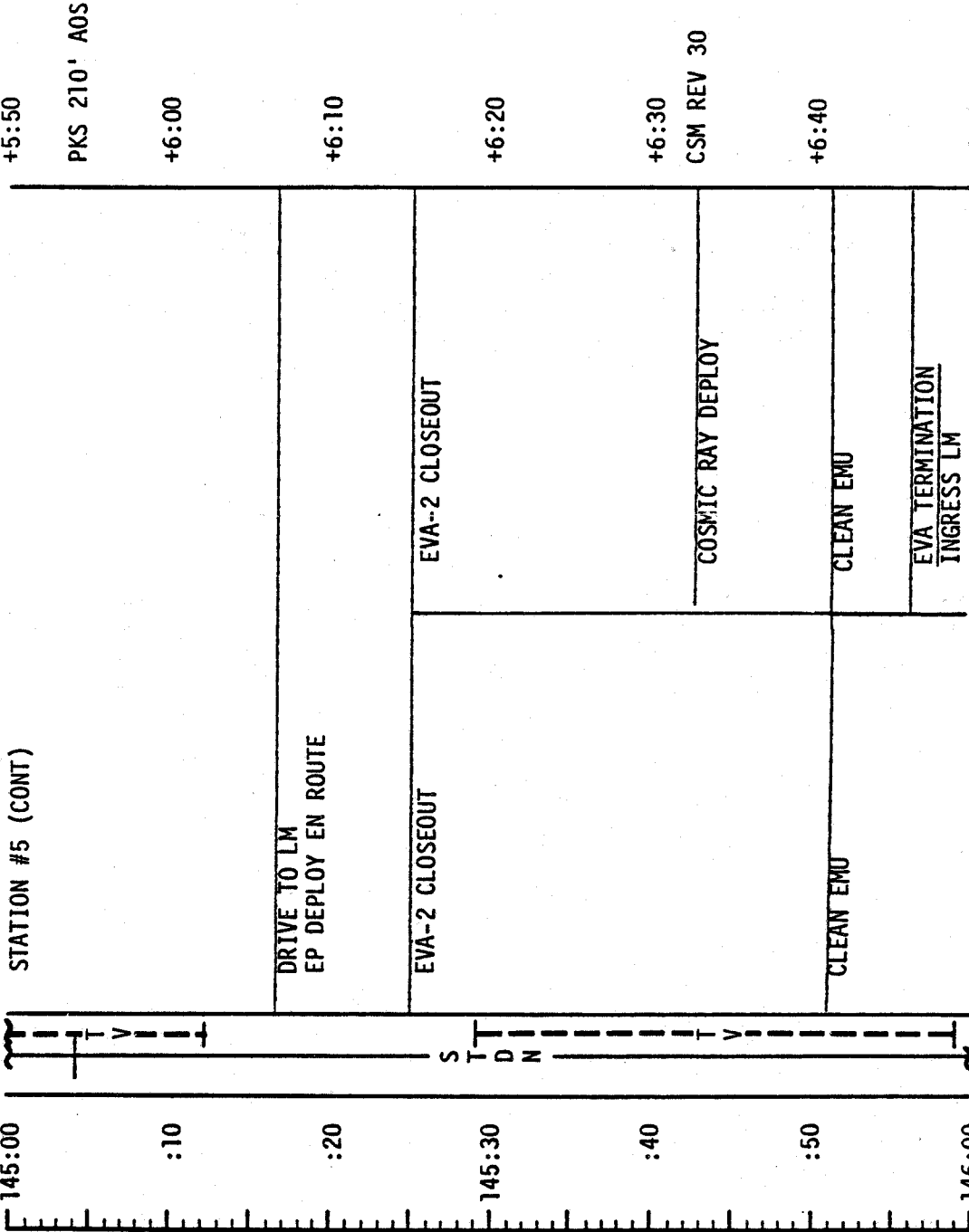
MCC-H

CDR

LMP

NOTES

2153 CST



+5:50

PKS 210' A0S

+6:00

+6:10

+6:20

+6:30

CSM REV 30

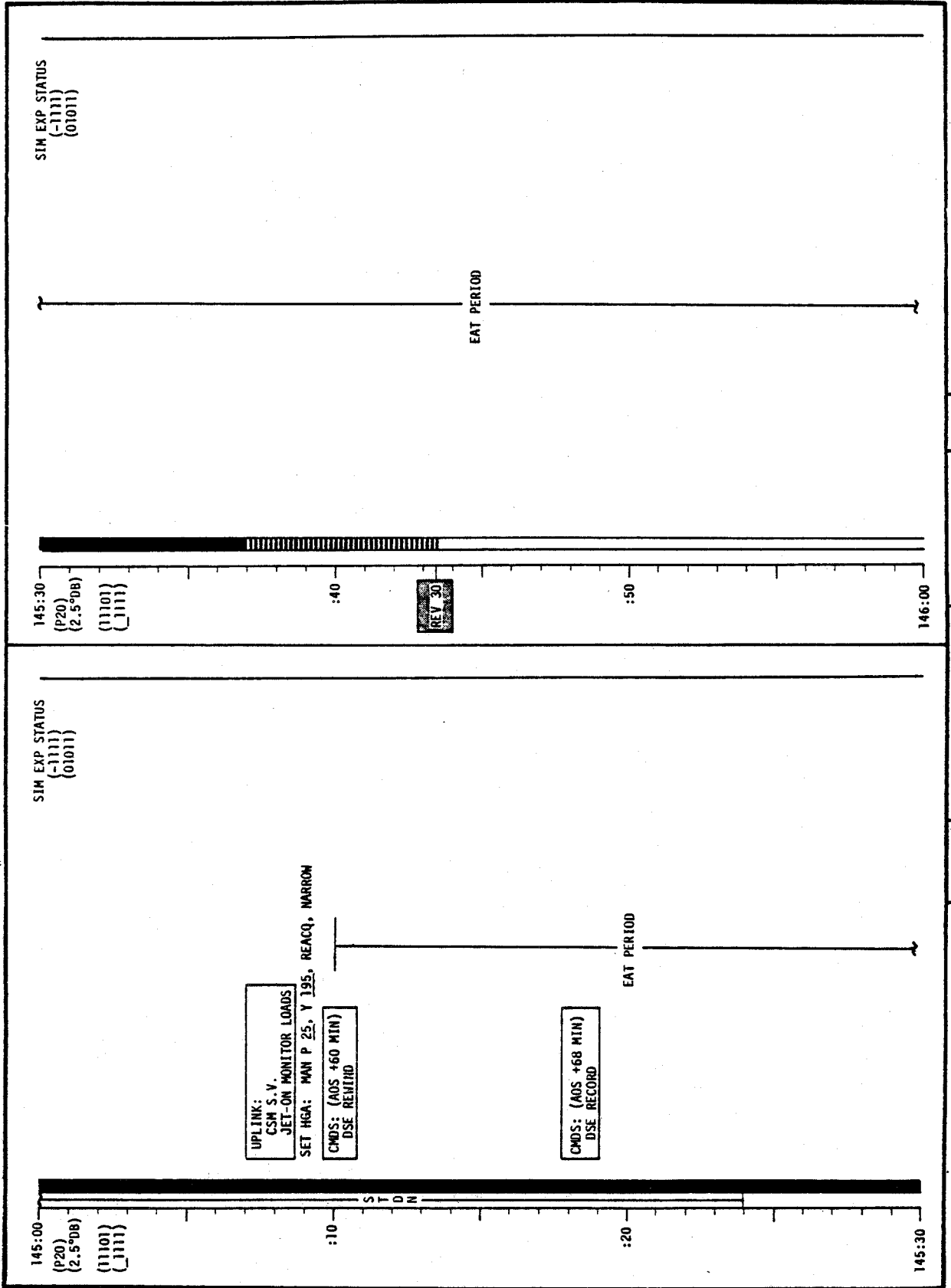
+6:40

+6:50

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	145:00 - 146:00	7/29-30	3-190

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



SIM EXP STATUS
(-1111)
(01011)

145:30
(P20)
(2.5°DB)
(11101)
(1111)

:40

REV 30

:50

146:00

EAT PERIOD

SIM EXP STATUS
(-1111)
(01011)

145:00
(P20)
(2.5°DB)
(11101)
(1111)

:10

S T D N

:20

145:30

EAT PERIOD

UPLINK:
CSM S.V.
JET-ON MONITOR LOADS

SET HGA: MAN P 25, Y 195, REACQ, NARROW

CMDS: (AOS +60 MIN)
DSE RECORD

CMDS: (AOS +68 MIN)
DSE RECORD

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINNL (12/6)	10/23/72	3-191

LM FLIGHT PLAN

CDR

LMP

NOTES

+6:50

7:00/END EVA-2

146:00	INGRESS LM	TRANSFER PALLETS
:10	REPRESS LM	
:20	<u>POST-EVA SYSTEMS CONFIGURATION</u>	
	DOFF HELMETS & GLOVES	
	CONNECT TO LM COMM	
146:30	PLSS O ₂ INITIAL RECHARGE	BIOMED - RIGHT
:40	<u>PLSS/OPS DOFFING</u>	
:50	REPORT: <u>OPS PRESSURE</u>	
147:00		

S T D N I X

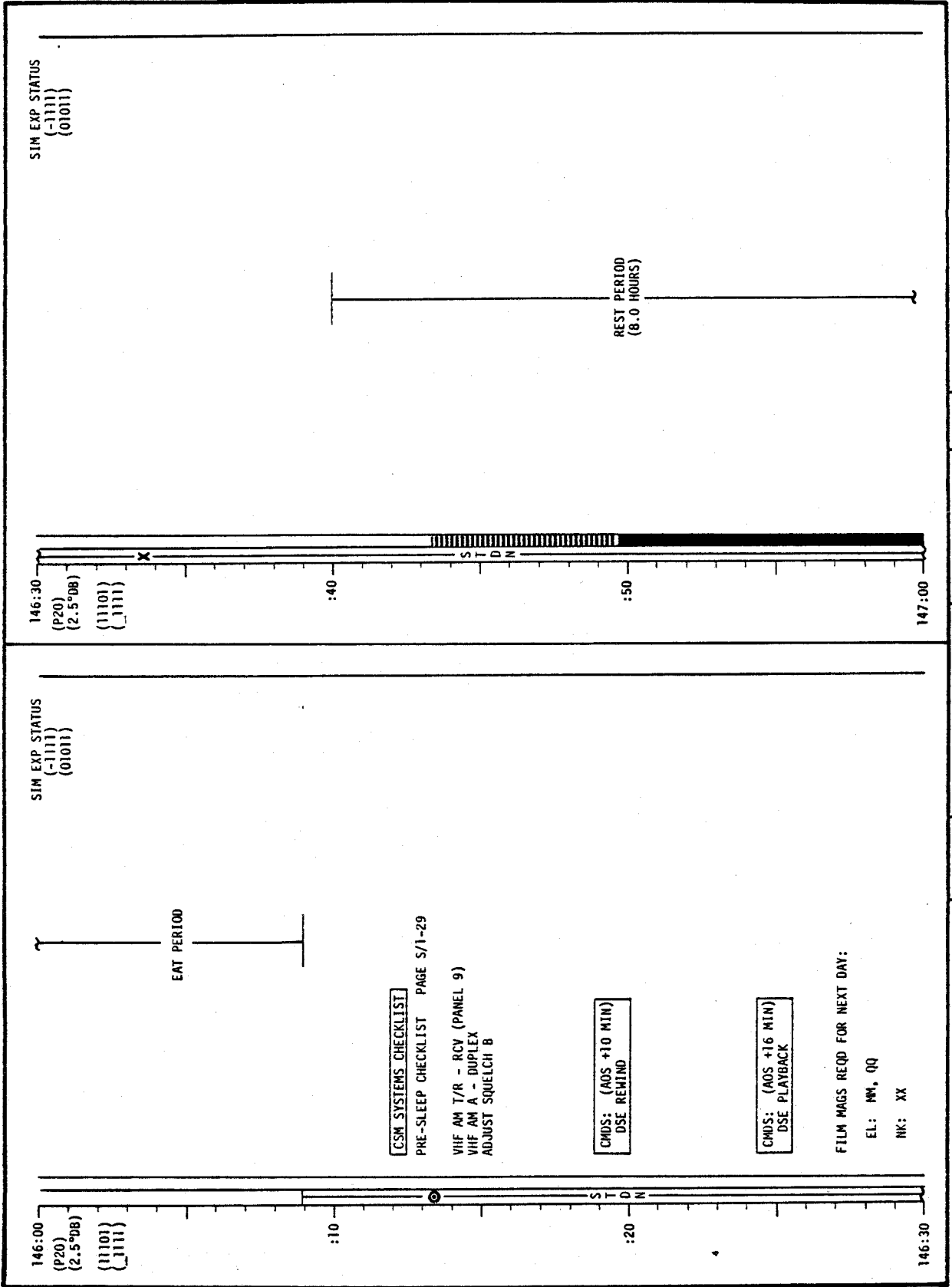
2253 CST

MCC-H

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	146:00 - 147:00	7/30	3-192

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



[CSM SYSTEMS CHECKLIST]

PRE-SLEEP CHECKLIST PAGE S/1-29

VHF AM T/R - RCV (PANEL 9)
VHF AM A - DUPLEX
ADJUST SQUELCH B

CHDS: (AOS +10 MTN)
DSE REMIND

CHDS: (AOS +16 MTN)
DSE PLAYBACK

FILM MAGS REQD FOR NEXT DAY:

EL: MM, QQ

NK: XX

LM FLIGHT PLAN

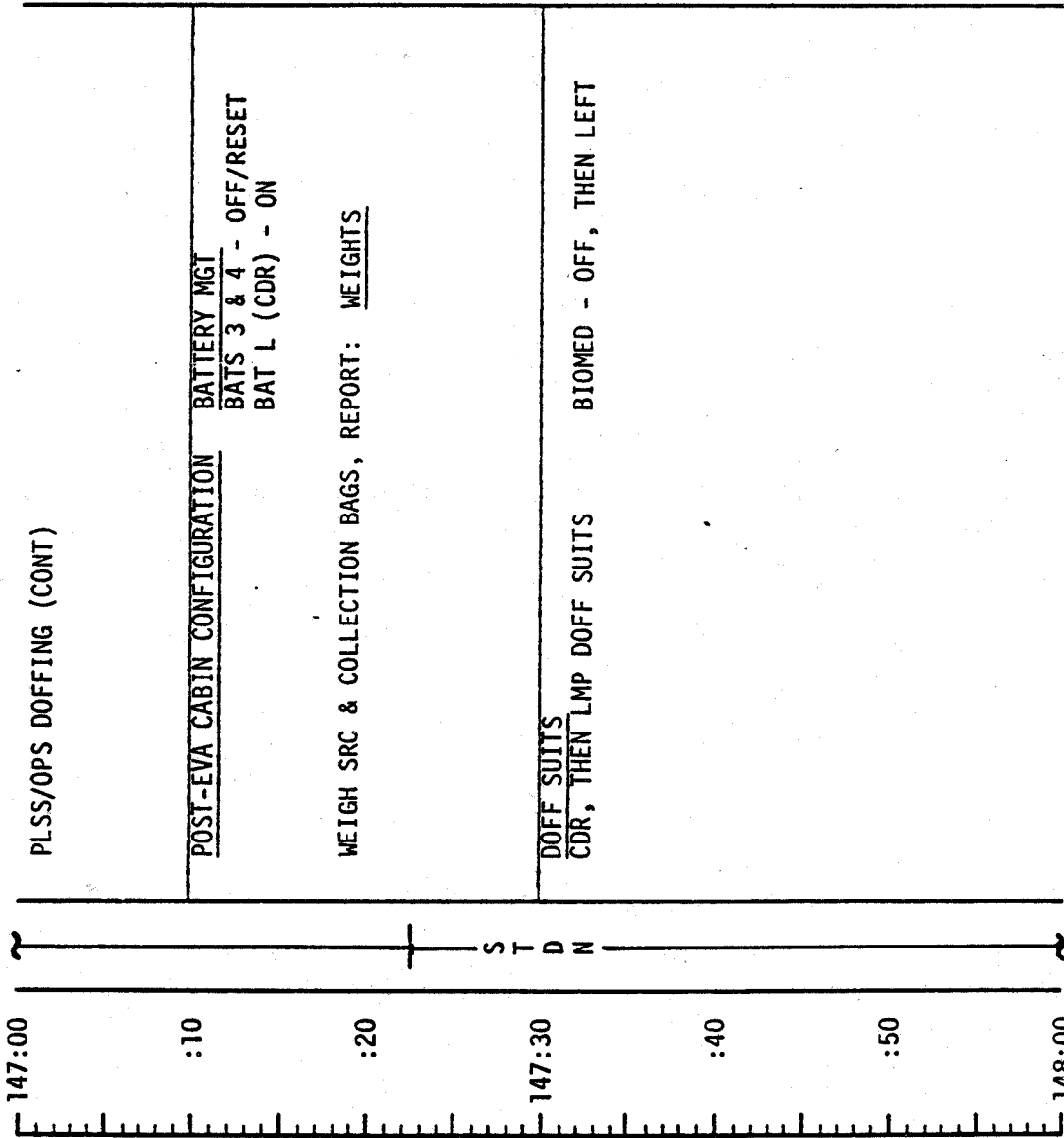
CDR

LMP

NOTES

2353 CST

MCC-H



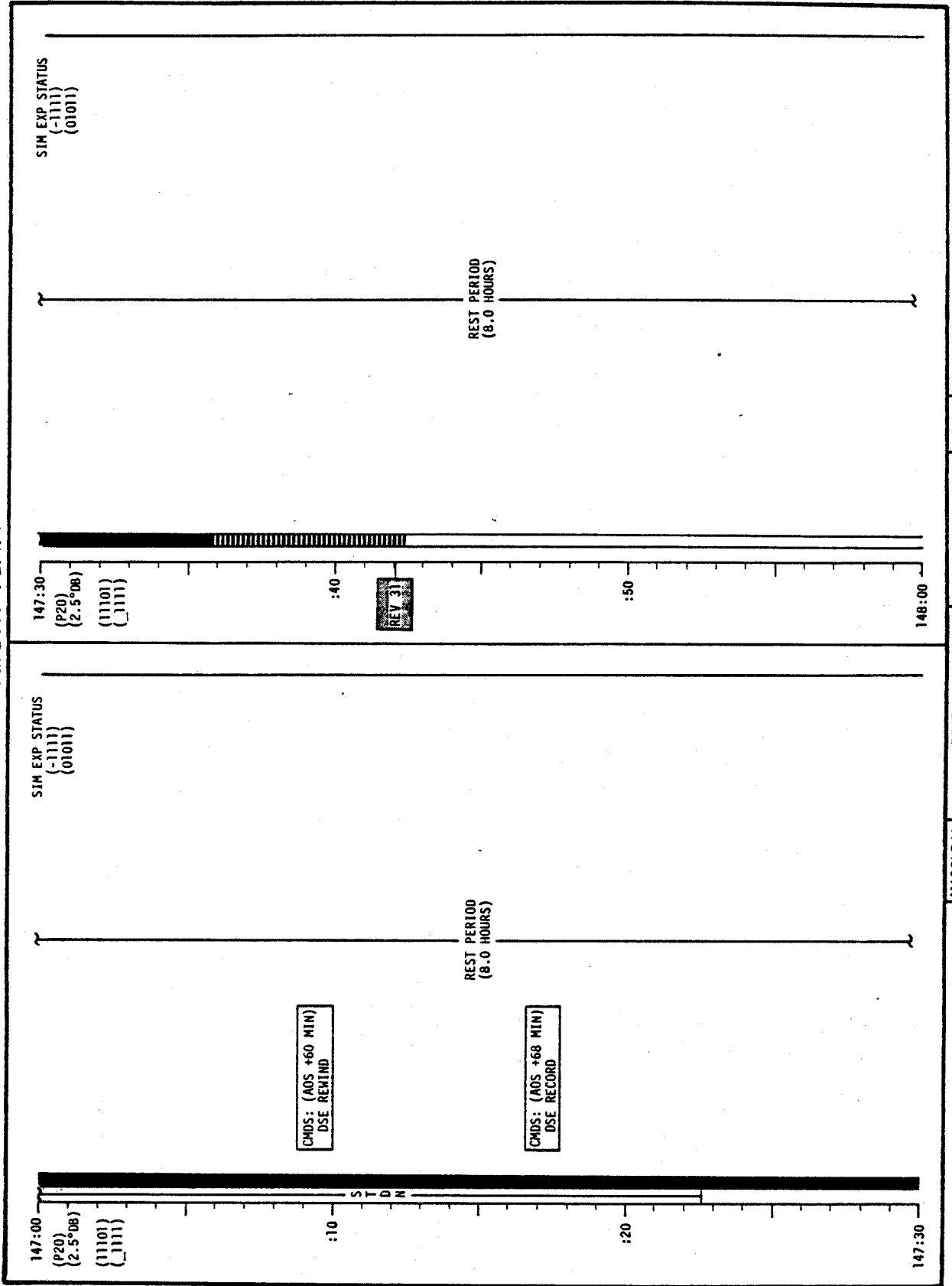
GDS 210' LOS

CSM REV 31

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	147:00 - 148:00	7/30-31	3-194

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

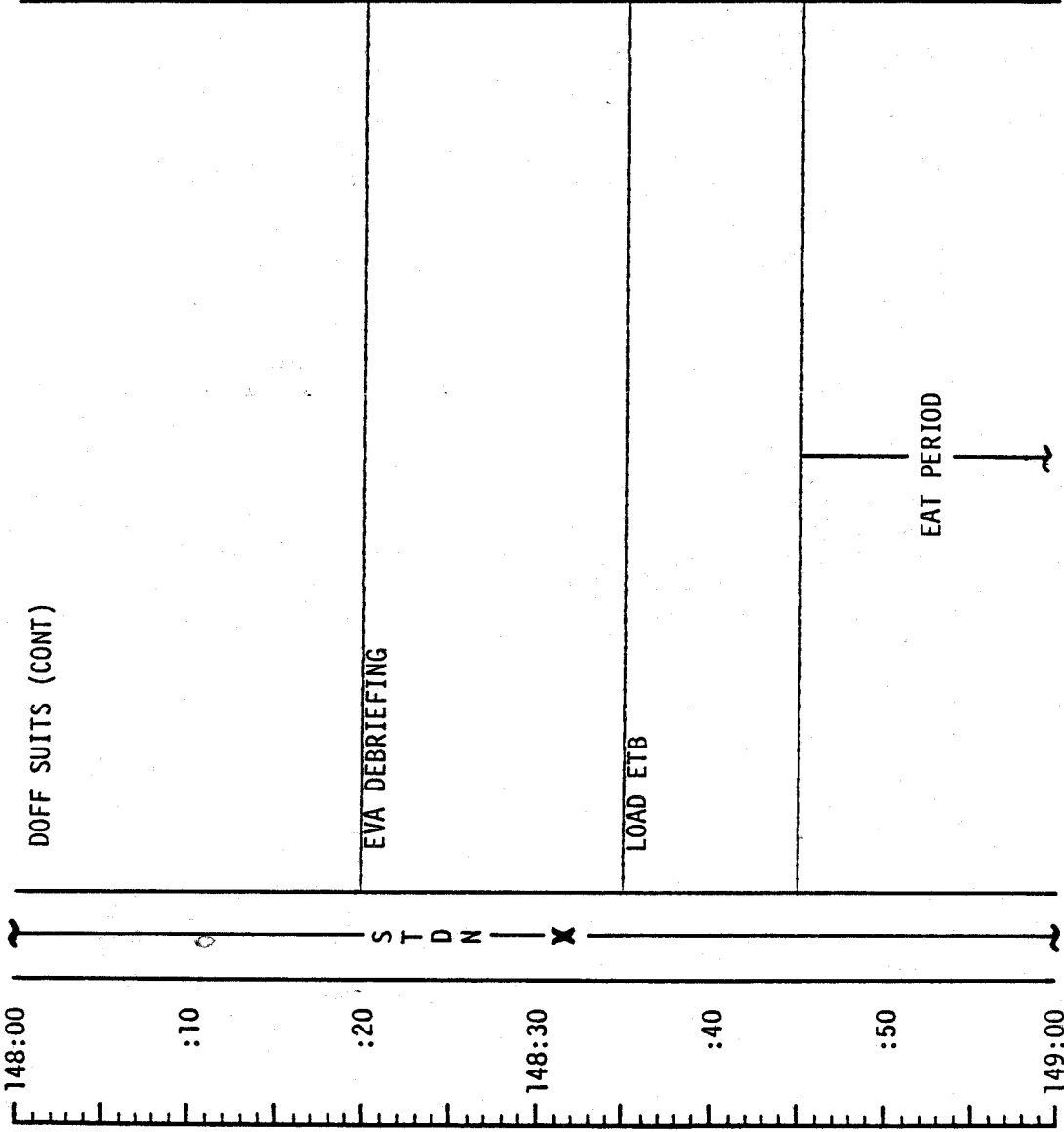
MCC-H

CDR

LMP

NOTES

0053 CST, 12/13

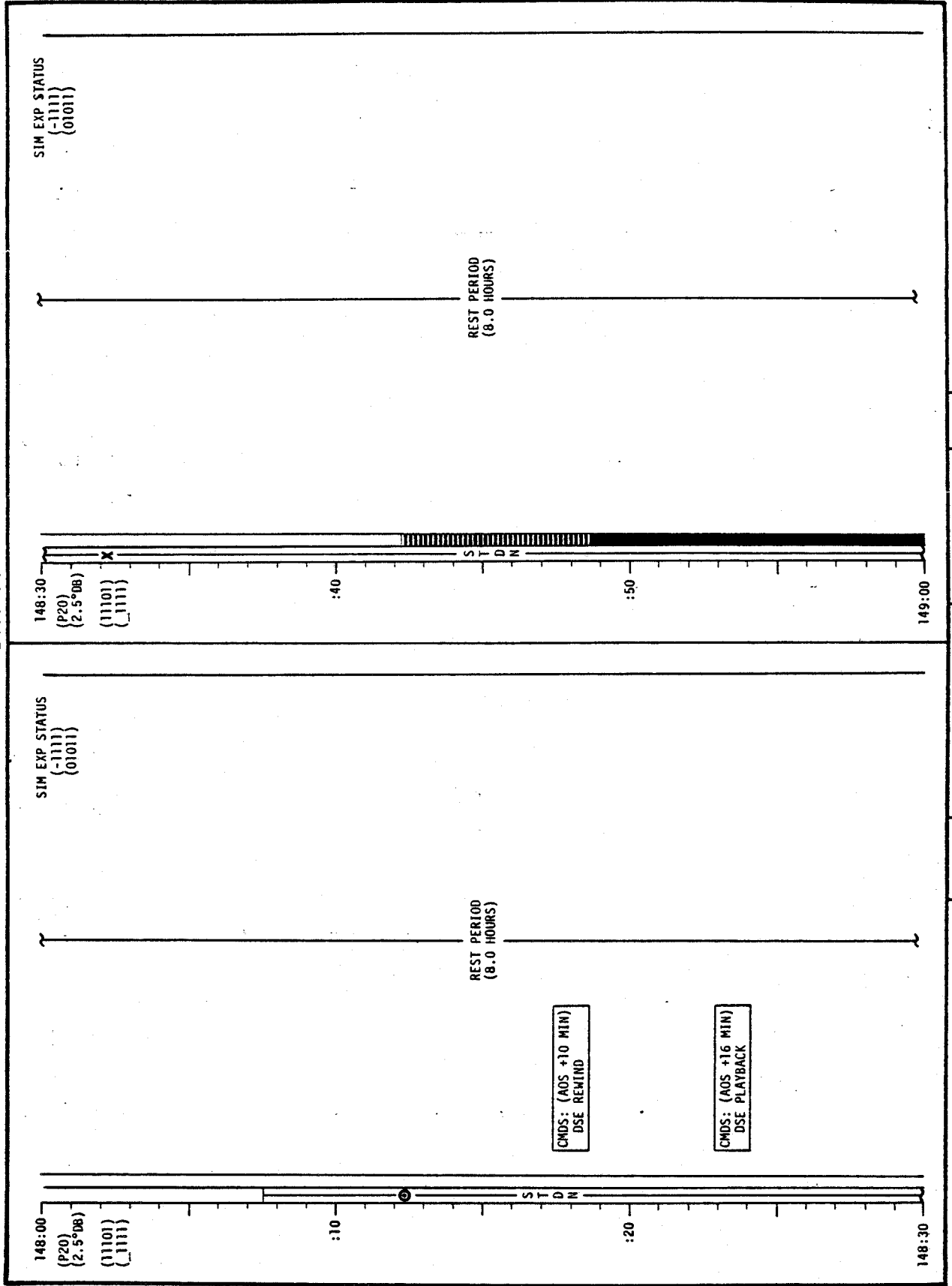


UPDATE TO LM
LIFT-OFF TIMES FOR
REVS 33-37

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	148:00 - 149:00	7/31	3-196

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-197

LM FLIGHT PLAN

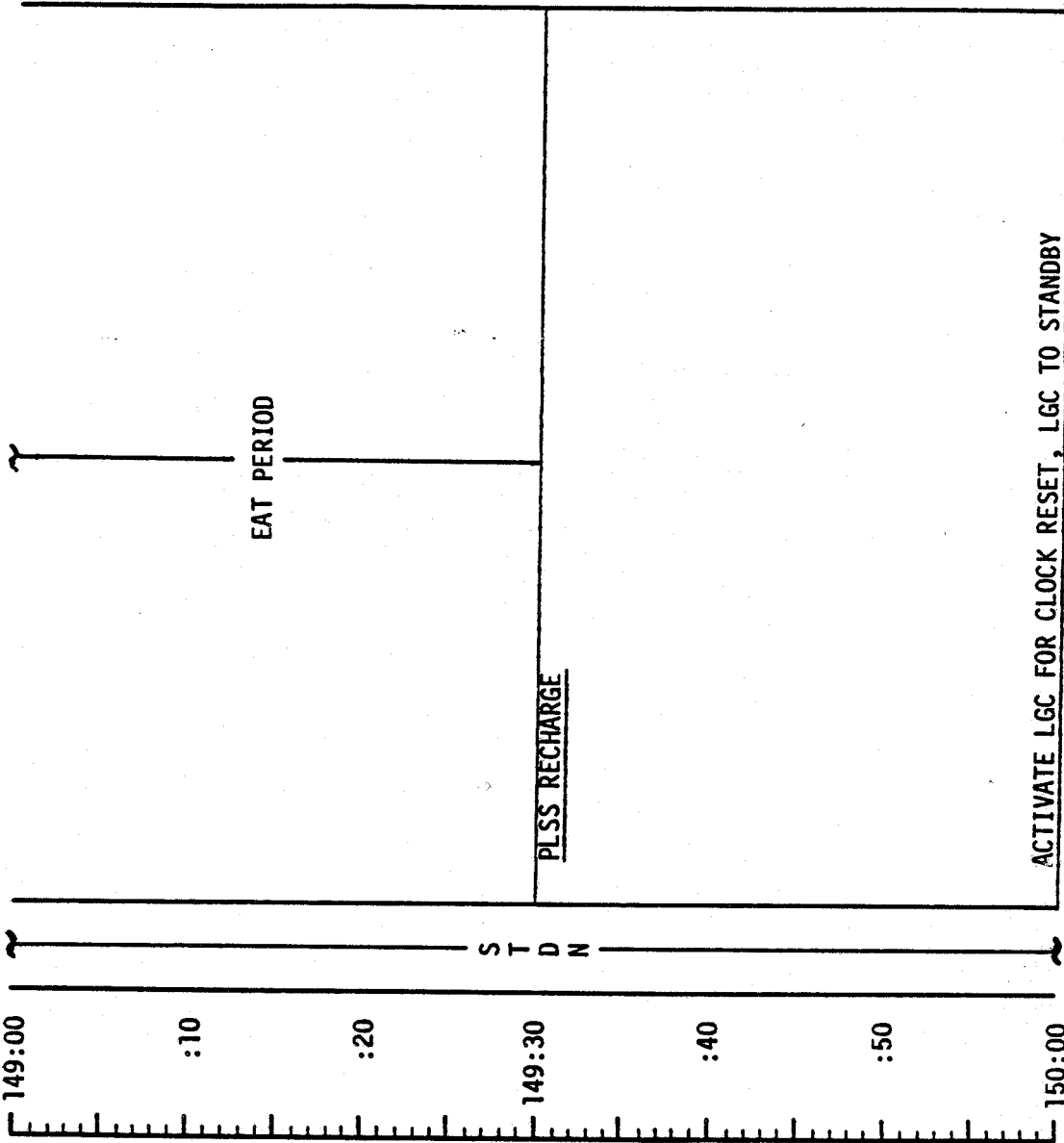
CDR

LMP

NOTES

0153 CST

MCC-H

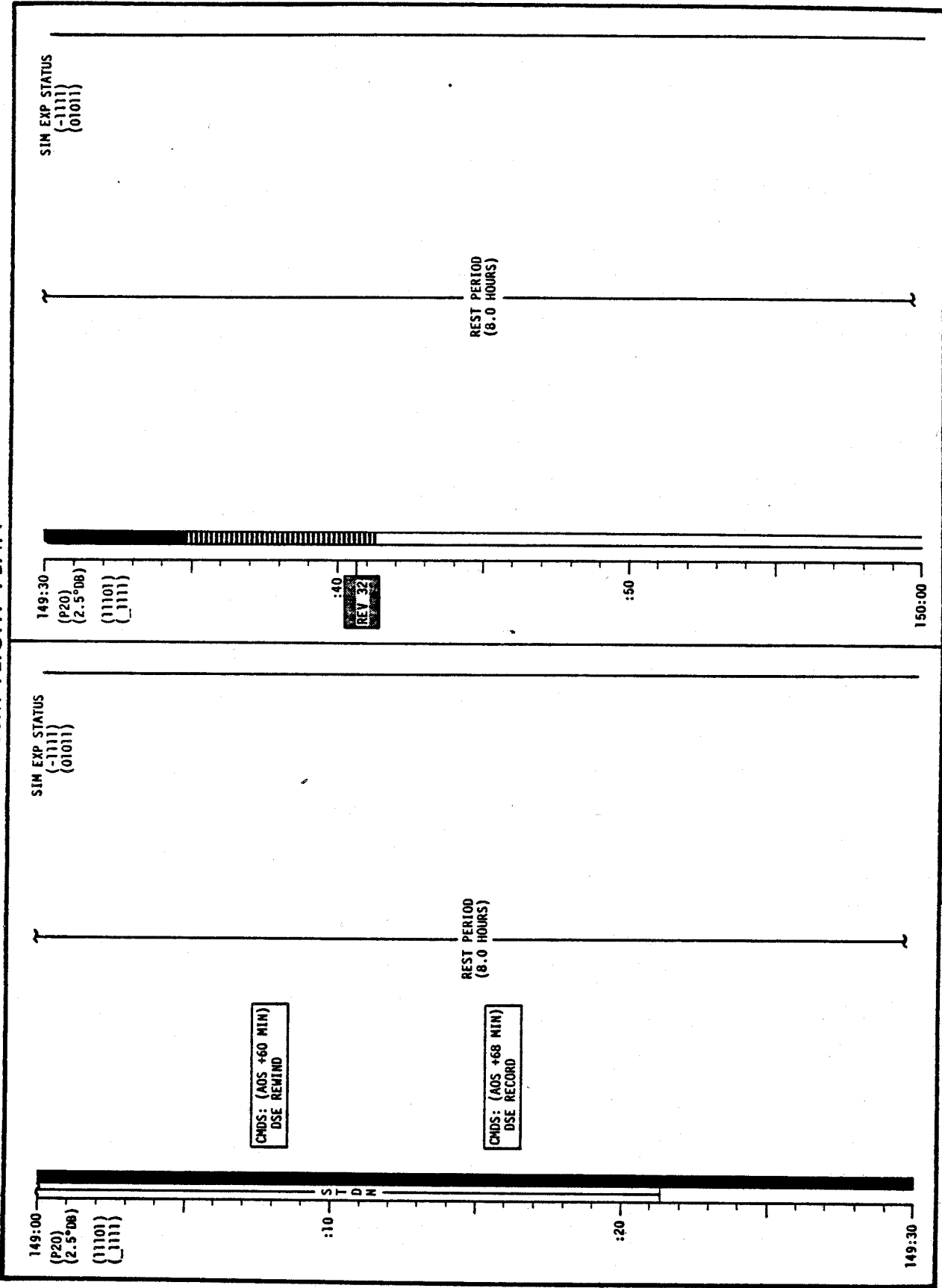


CSM REV 32

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	149:00 - 150:00	7/31-32	3-198

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



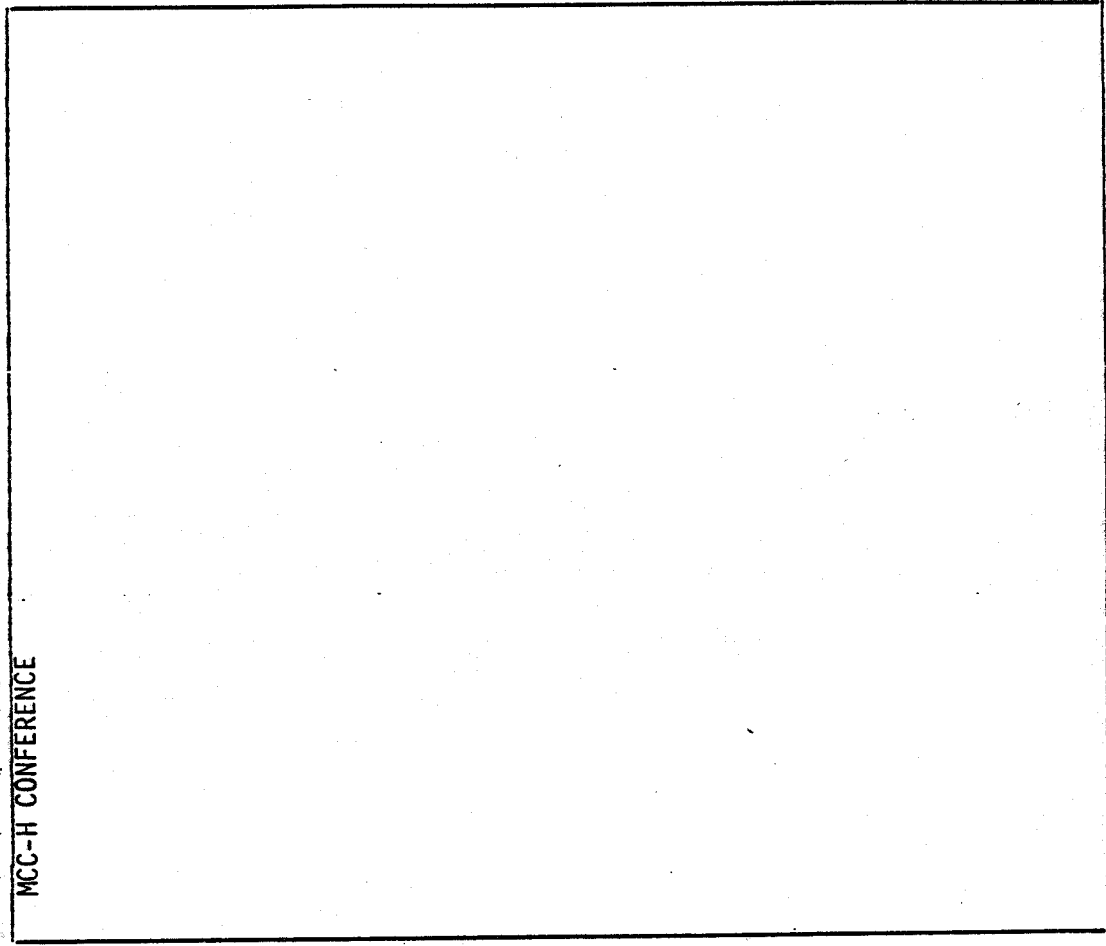
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-199

LM FLIGHT PLAN

NOTES

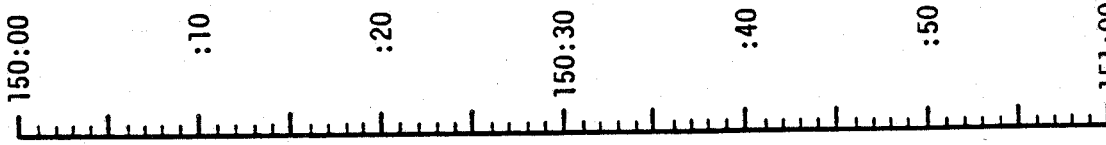
LMP

CDR



STDN X

0253 CST



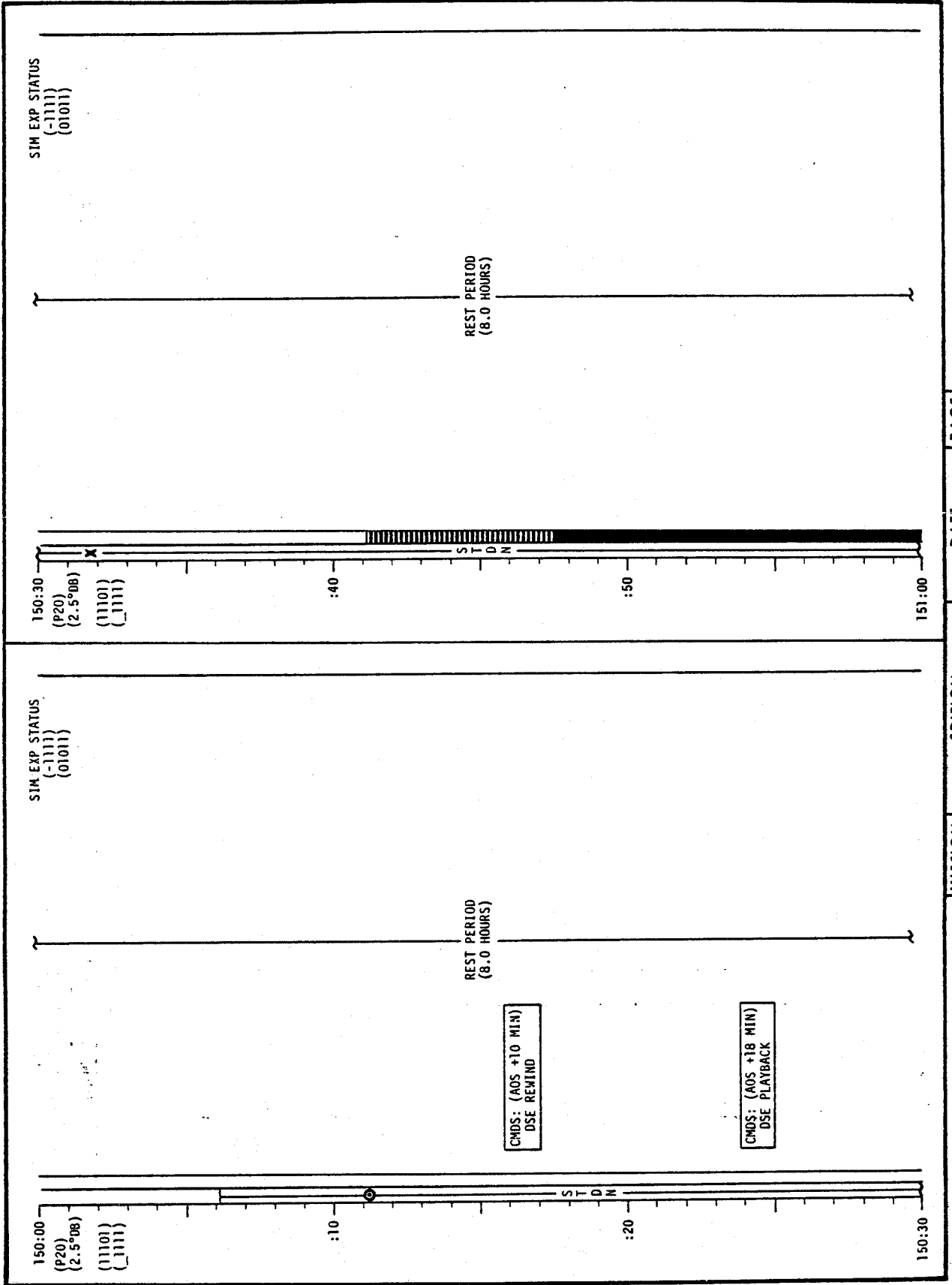
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	150:00 - 151:00	7/32	3-200

FLIGHT PLANNING BRANCH

MCC-H

MCC-H CONFERENCE

CSM FLIGHT PLAN



LM FLIGHT PLAN

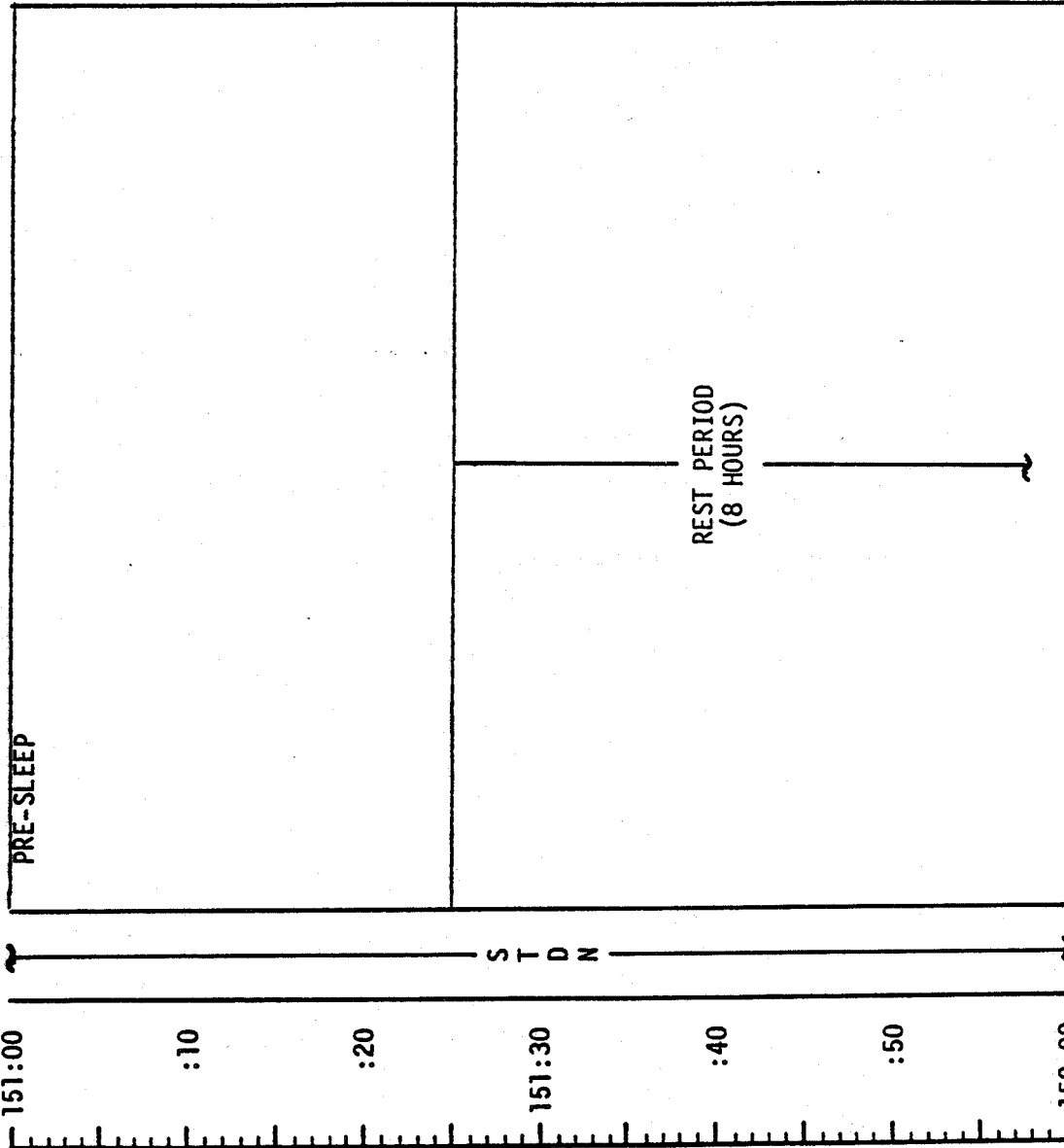
MCC-H

0353 CST

CDR

LMP

NOTES

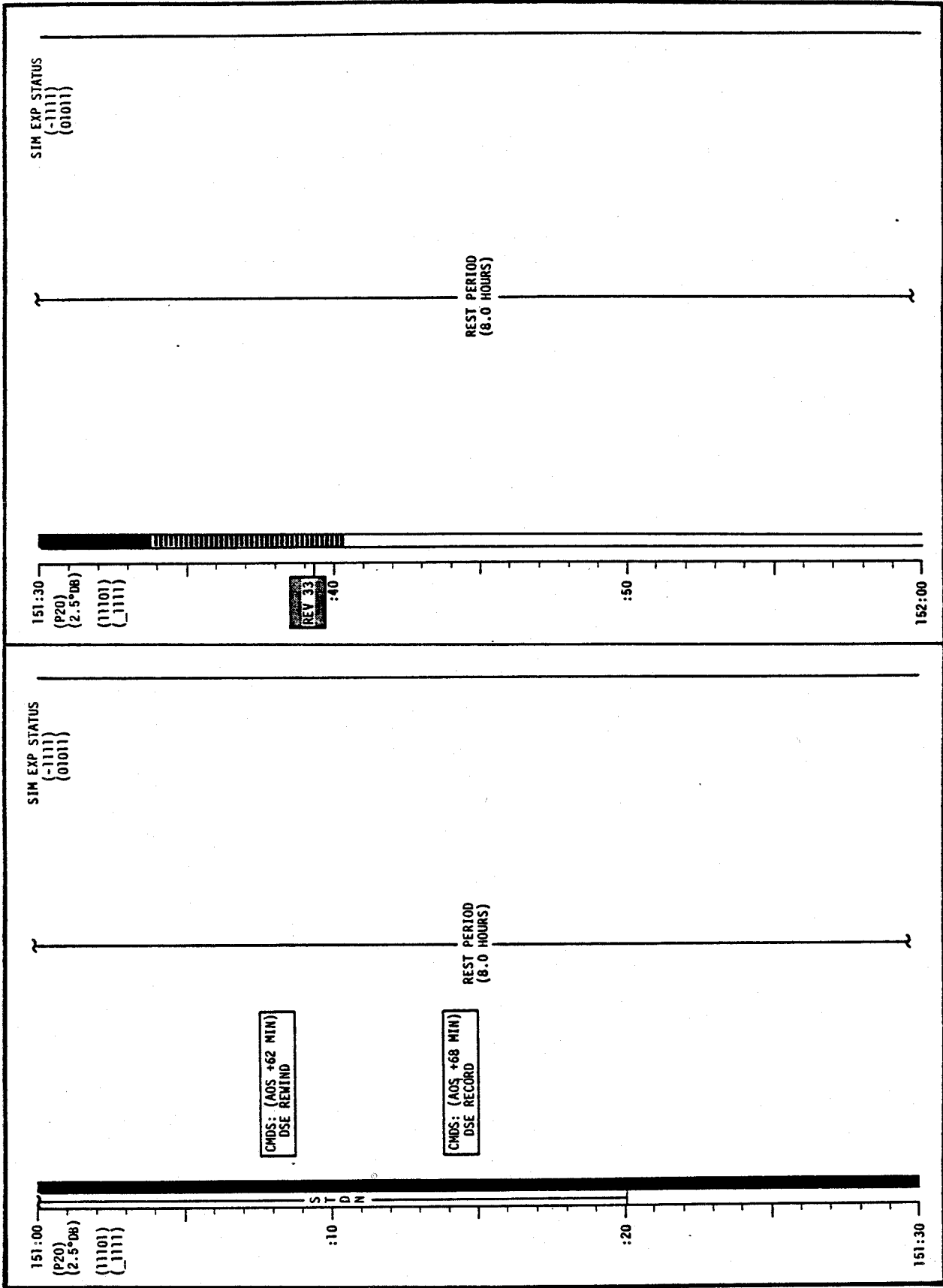


CSM REV 33

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	151:00 - 152:00	7/32-33	3-202

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

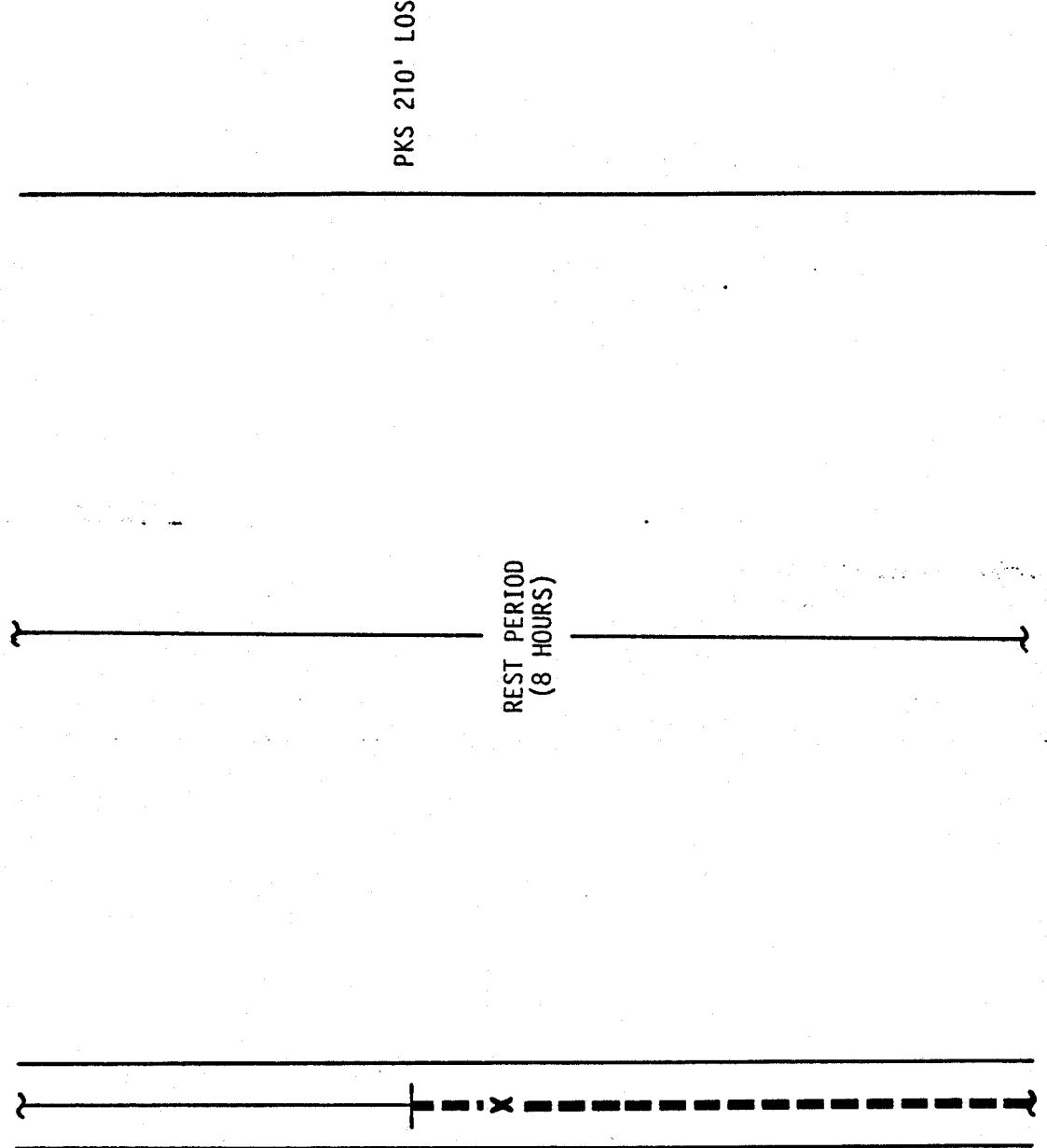
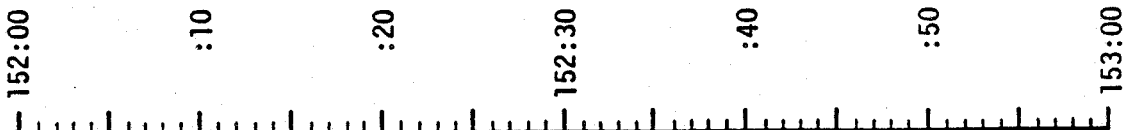
MCC-H

CDR

LMP

NOTES

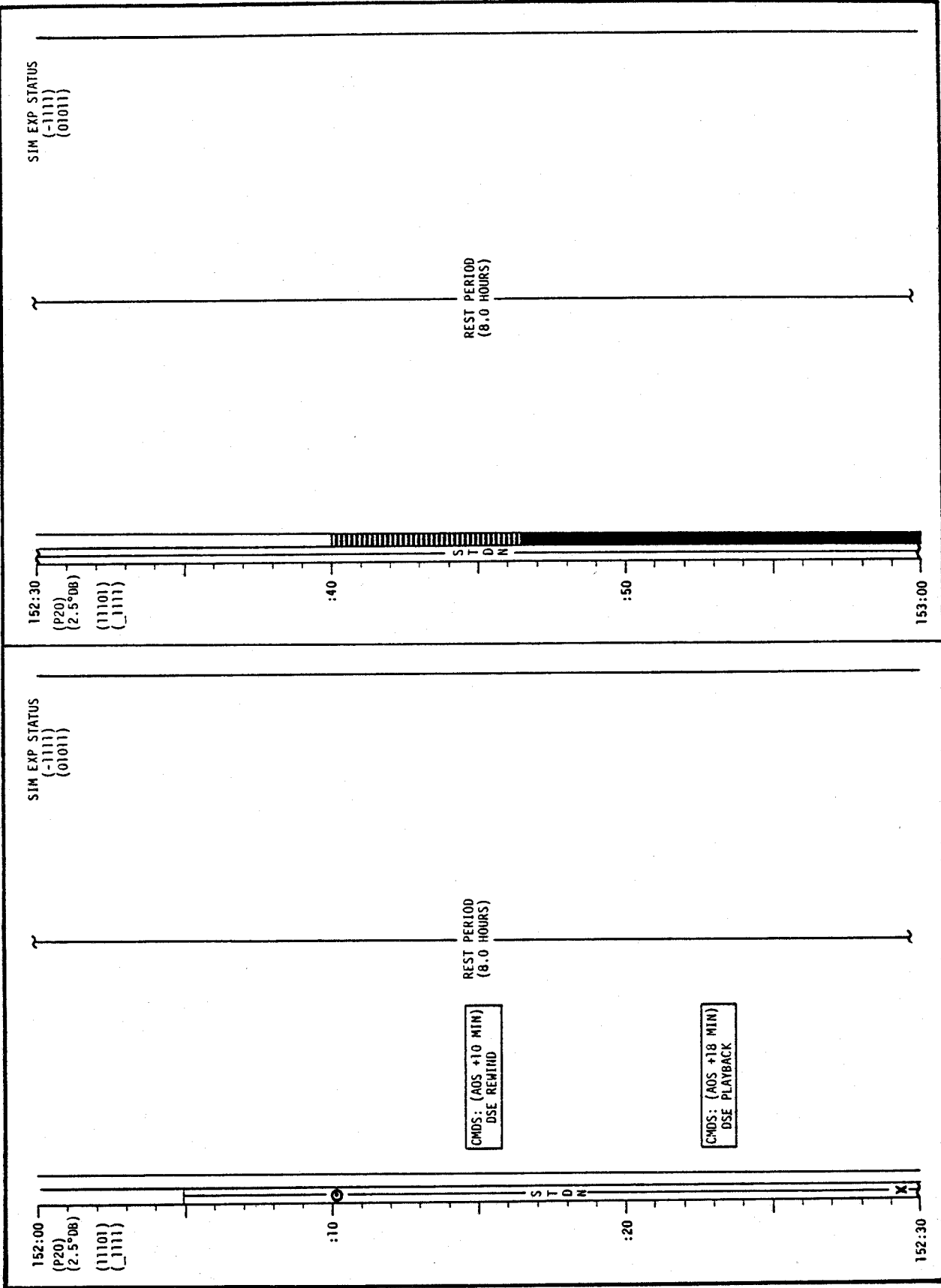
0453 CST



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	152:00 - 153:00	7/33	3-204

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-205

LM FLIGHT PLAN

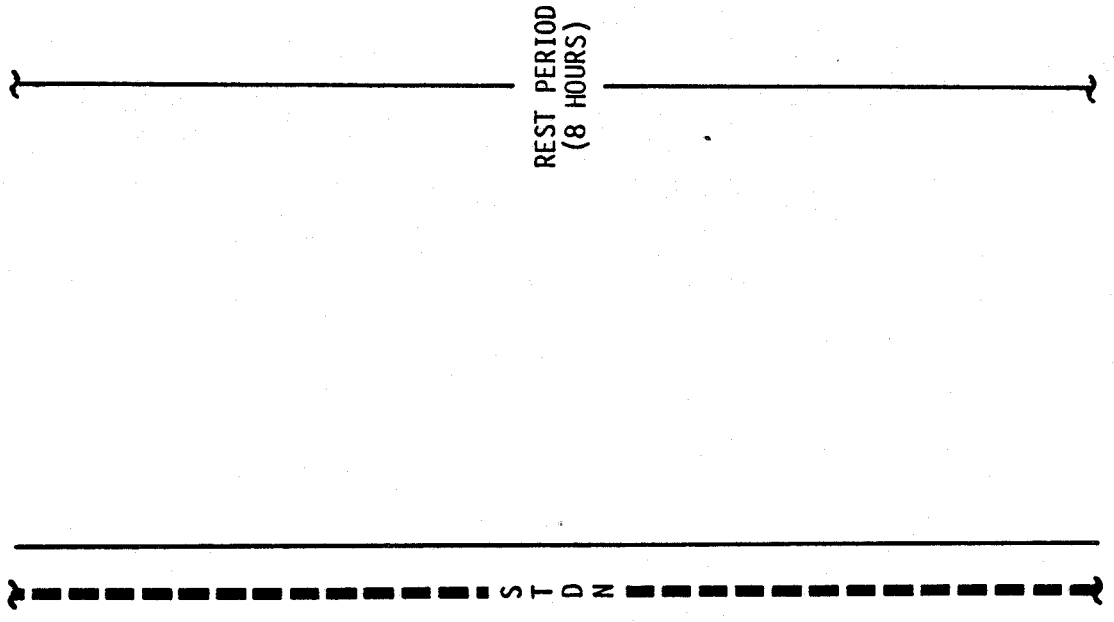
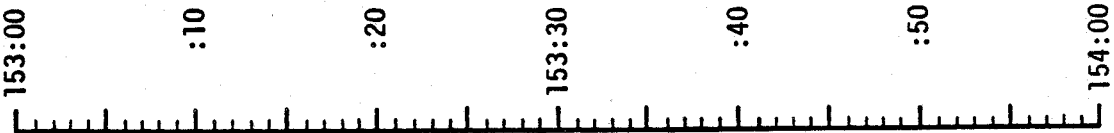
MCC-H

0553 CST

CDR

LMP

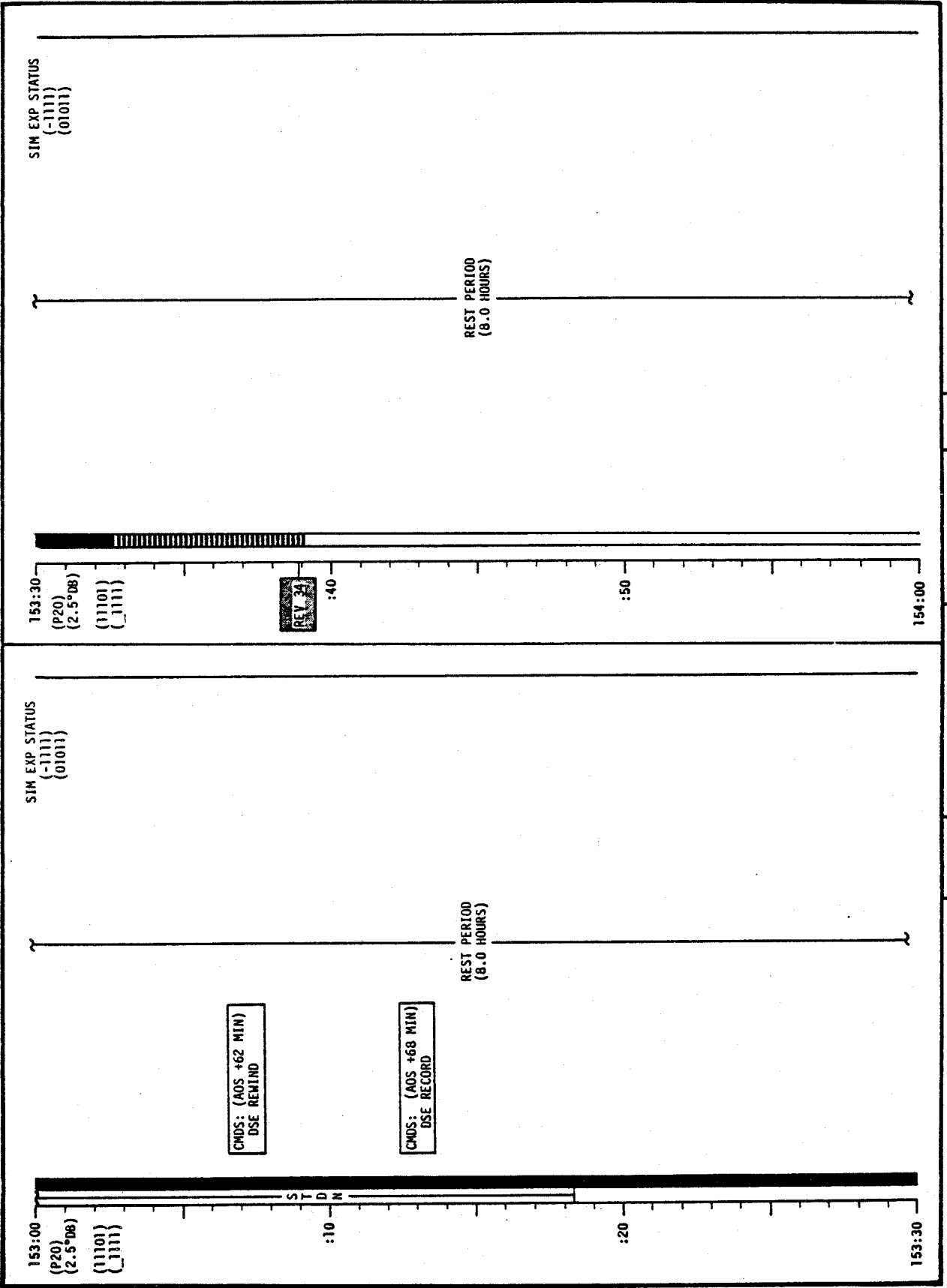
NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	153:00 - 154:00	7/33-34	3-206

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

NOTES

LMP

CDR

0653 CST

MCC-H



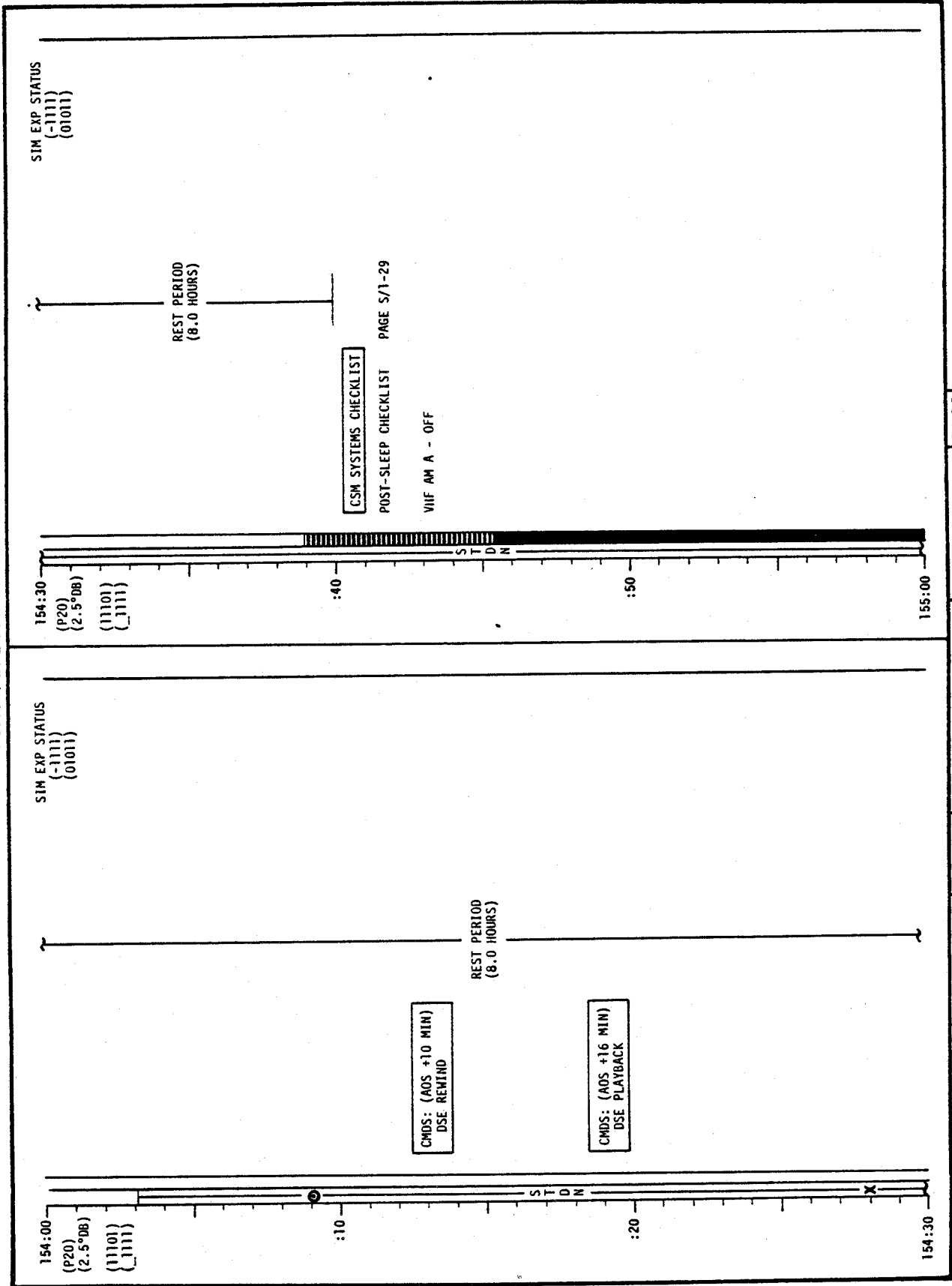
----- X ----- STDN -----

REST PERIOD
(8 HOURS)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	154:00 - 155:00	7-8/34	3-208

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



SIM EXP STATUS
(-1111)
(01011)

REST PERIOD
(8.0 HOURS)

CSM SYSTEMS CHECKLIST

POST-SLEEP CHECKLIST PAGE S/1-29

VHIF AM A - OFF

154:30
(P20)
(2.5°DB)
(11101)
(1111)

:40

:50

155:00

SIM EXP STATUS
(-1111)
(01011)

REST PERIOD
(8.0 HOURS)

CMDS: (AOS +10 MIN)
DSE REVIEW

CMDS: (AOS +16 MIN)
DSE PLAYBACK

154:00
(P20)
(2.5°DB)
(11101)
(1111)

:10

:20

154:30

LM FLIGHT PLAN

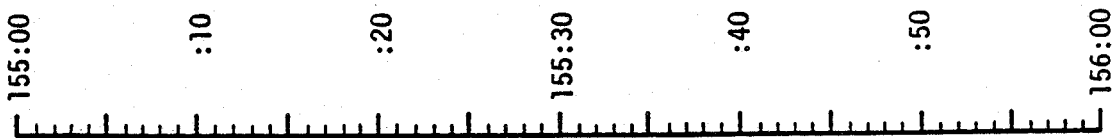
CDR

LMP

NOTES

0753 CST

MCC-H



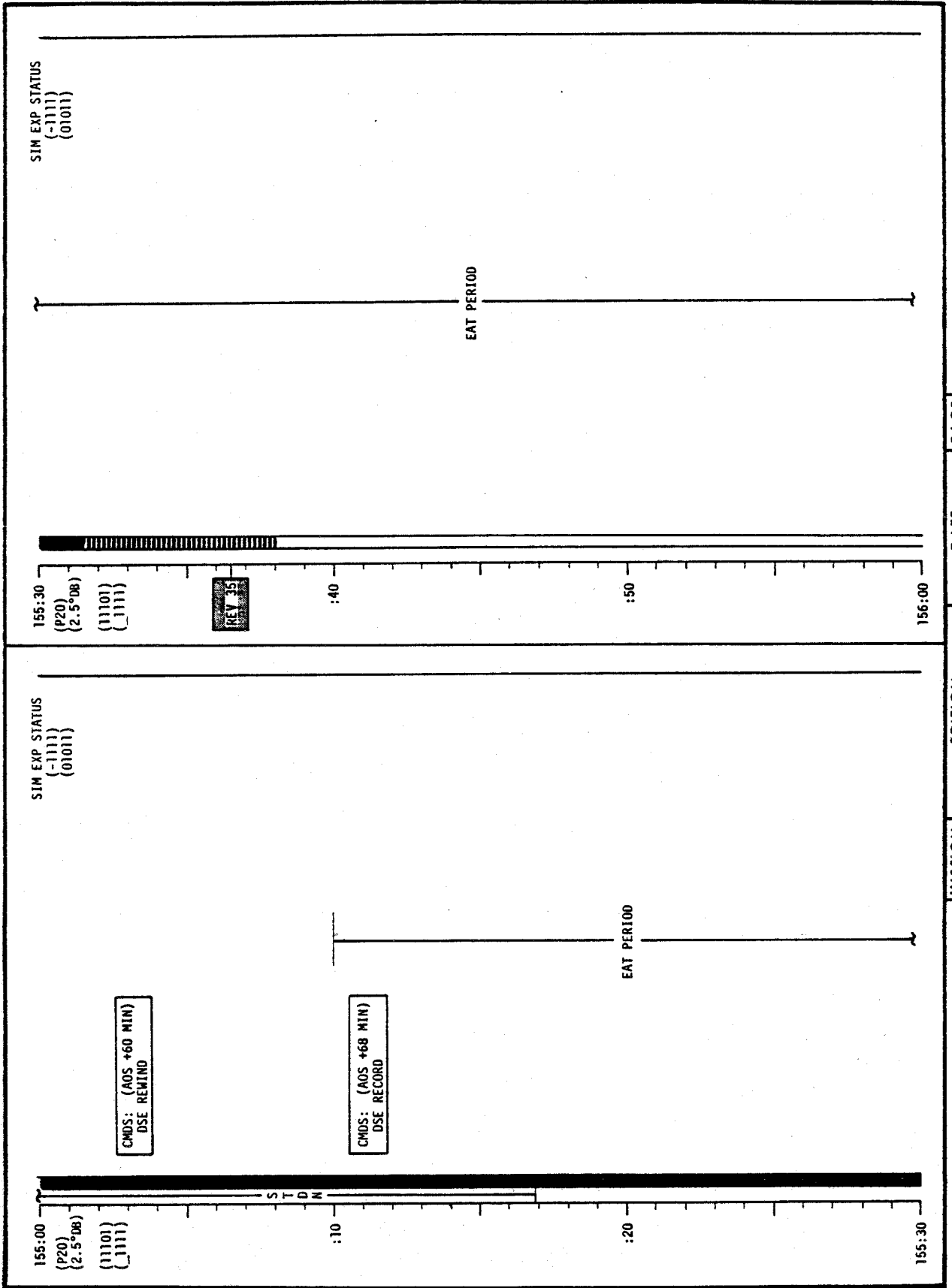
REST PERIOD
(8 HOURS)

CSM REV 35

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	155:00 - 156:00	8/35	3-210

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

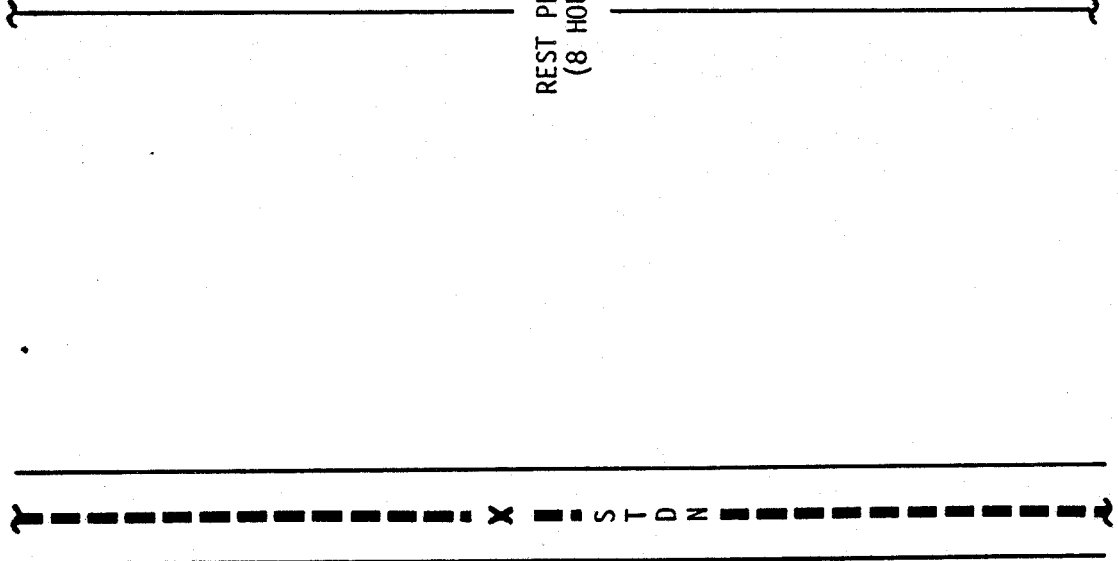
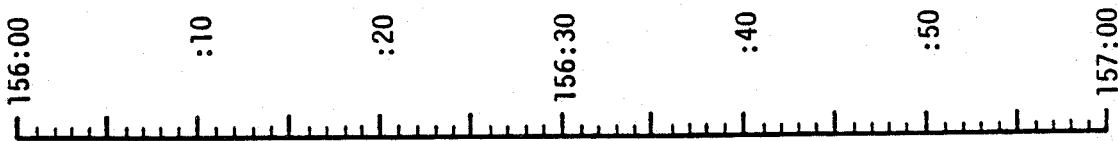
MCC-H

0853 CST

CDR

LMP

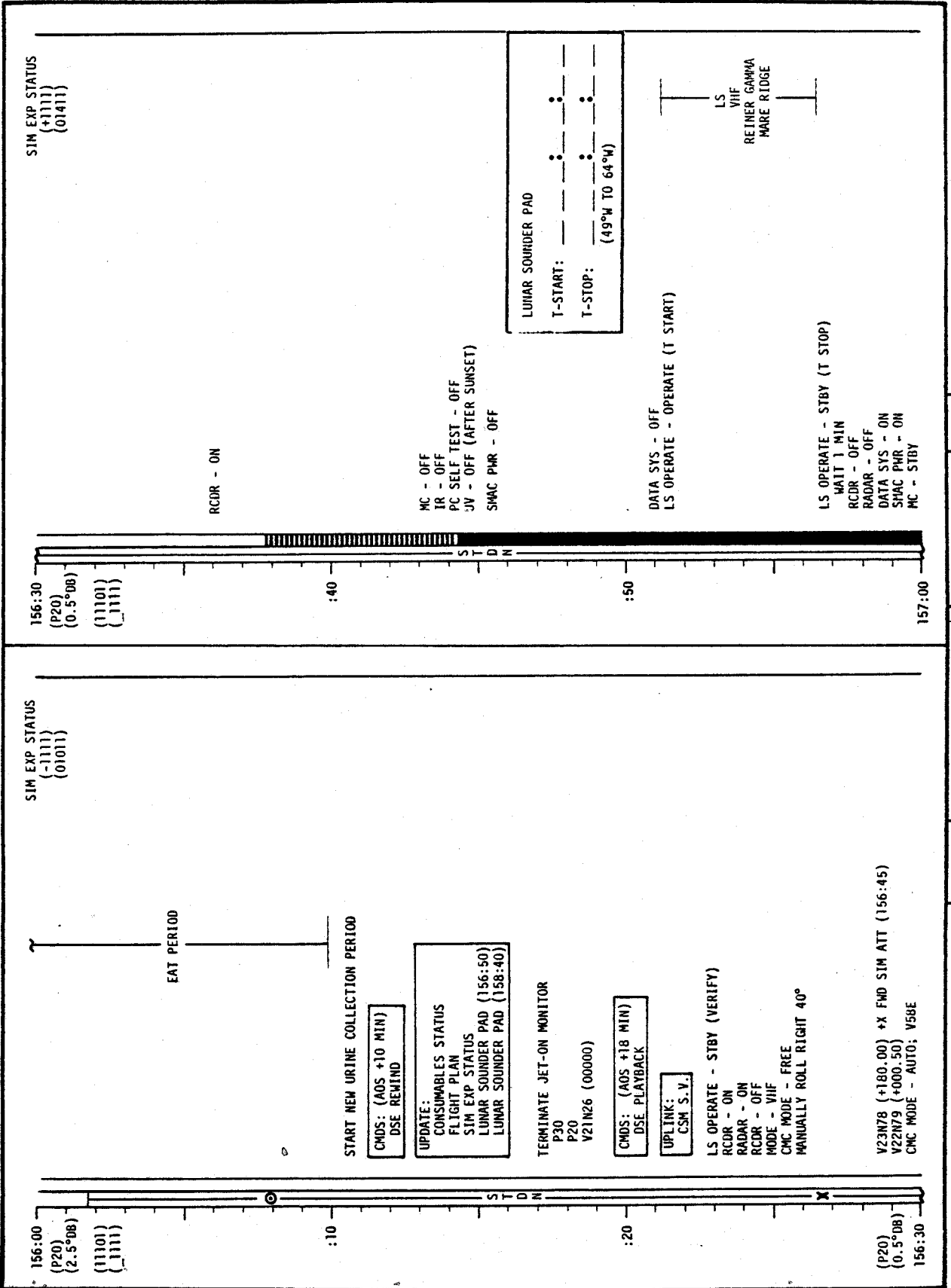
NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	156:00 - 157:00	8/35	3-212

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-213

LM FLIGHT PLAN

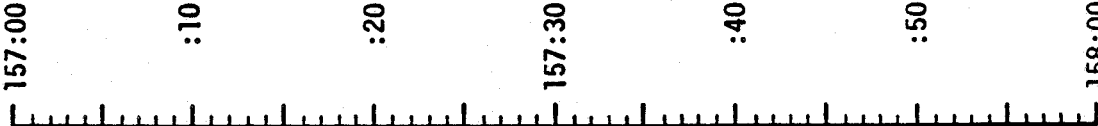
MCC-H

0953 CST

CDR

LMP

NOTES



S T D N

REST PERIOD
(8 HOURS)

CSM REV 36

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	157:00 - 158:00	8/35-36	3-214

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(+1111)
(04011)

157:30
(P20)
(0.5°DB)
(11101)
(1111)

REV 36

ORBITAL SCIENCE PHOTOS
MARE INGENIT (P36 - C1)
CH5/EL/250/CEX-IVL 8 (fs.6,1/125,*) 34 FR
CHANGE TO 1/250

RECORD FR # _____

158:00

SIM EXP STATUS
(+1111)
(01000)

IR - ON
PC SELF TEST - HTRS
UV - ON

CMC MODE - FREE
P52 (OPTION 3)
(LDG SITE ORIENT)

CMDS: (AOS +66 MIN)
DSE REWIND
REPORT: GYRO TORQUING
ANGLES

GDC ALIGN
P20, OPT 5 (40°S OBLIQUE PHOTO ATT)(157:15)
N78 (+270.00)
(+087.75)
(+180.00)
CMC MODE - AUTO; V58E
(182,000/145,001)

CONFIGURE DSE (HBR/RCD/FWD/CMD RESET)(AOS +73 MIN)
SELECT OMNI D FOR AOS
SET HGA: MAN, WIDE, P -10, Y 25 FOR AOS +10 MIN
CONFIGURE CAMERA (ORBITAL SCIENCE PHOTOS)
CH5/EL/250/CEX-IVL 8 (fs.6,1/125,*) 34 FR
MAG (MM) _____, FR # _____

IMAGE MTN - ON
MC - ON (147°W)
IMAGE MTN - INCR (BP +3 STEPS)/ON

157:00
(P20)
(0.5°DB)
(11101)
(1111)

:10

:20

157:30

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-215

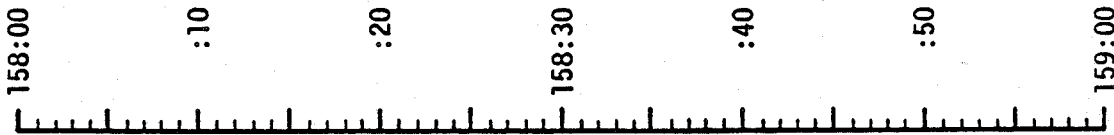
LM FLIGHT PLAN

NOTES

LMP

CDR

1053 CST

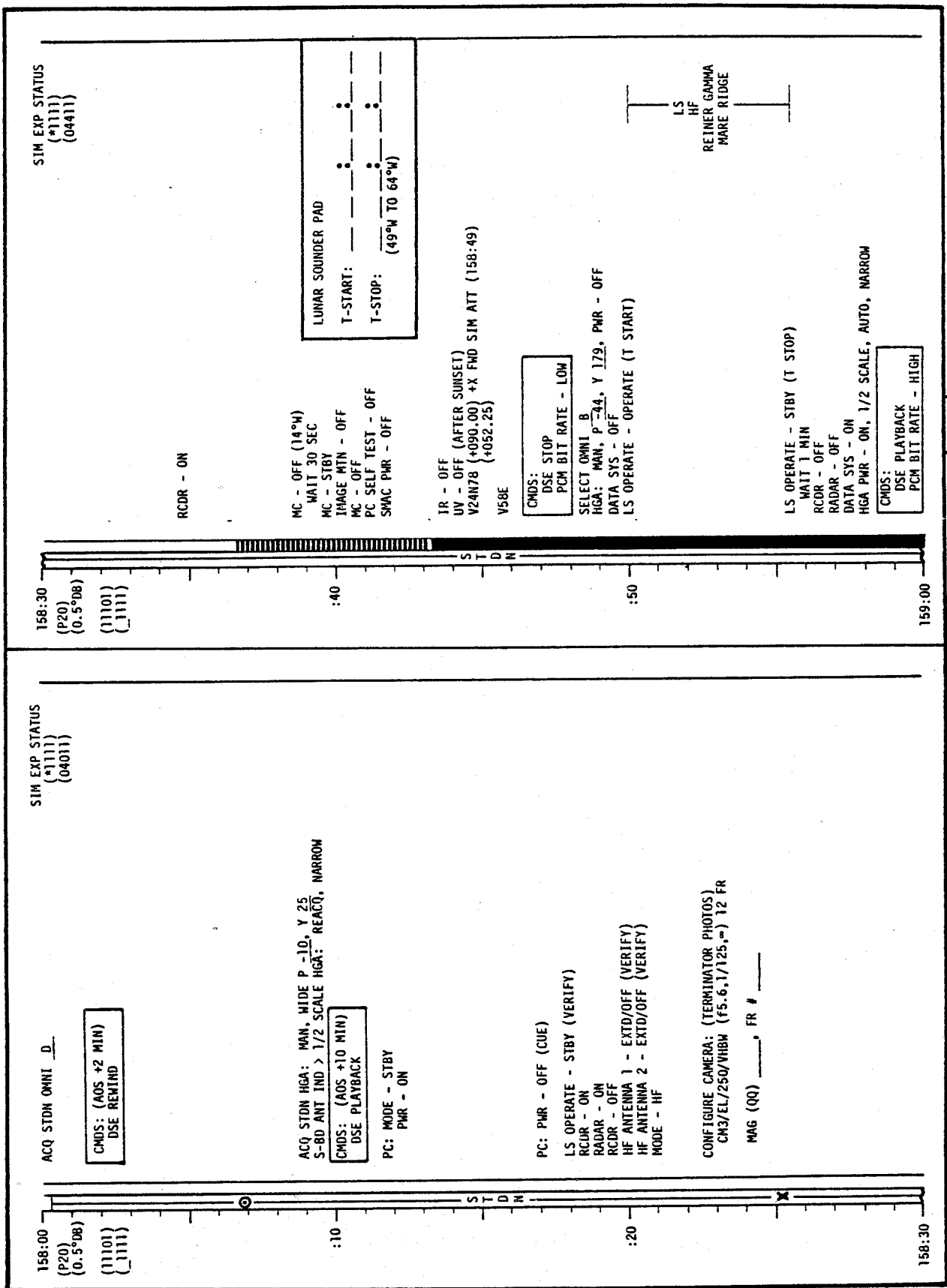


REST PERIOD
(8 HOURS)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	158:00 - 159:00	8/36	3-216

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



SIM EXP STATUS
(*1111)
(04411)

158:30
(P20)
(0.5°08)
(11101)
(1111)

RCDR - ON

MC - OFF (14°W)
WAIT 30 SEC
MC - STBY
THRAGE MTN - OFF
MC - OFF
PC SELF TEST - OFF
SMAC PMR - OFF

LUNAR SOUNDER PAD
T-START: _____
T-STOP: _____
(49°W TO 64°W)

IR - OFF
UV - OFF (AFTER SUNSET)
V24N78 (+090.00) +X FWD SIM ATT (158:49)
V58E

CMDS: DSE STOP
PCM BIT RATE - LOW

SELECT OMNI B
HGA: MAN, P -44, Y 179, PMR - OFF
DATA SYS - OFF
LS OPERATE - OPERATE (T START)

LS
HF
RETNER GAMMA
MAKE RIDGE

LS OPERATE - STBY (T STOP)
WAIT T MIN
RCDR - OFF
RADAR - OFF
DATA SYS - ON
HGA PMR - ON, 1/2 SCALE, AUTO, NARROW

CMDS: DSE PLAYBACK
PCM BIT RATE - HIGH

SIM EXP STATUS
(*1111)
(04011)

158:00
(P20)
(0.5°08)
(11101)
(1111)

ACQ STDN OMNI D

CMDS: (AOS +2 MIN)
DSE REMIND

ACQ STDN HGA: MAN, WIDE P -10, Y 25
S-8D ANT IND > 1/2 SCALE HGA: REACQ, NARROW

CMDS: (AOS +10 MIN)
DSE PLAYBACK

PC: MODE - STBY
PMR - ON

PC: PMR - OFF (CUE)

LS OPERATE - STBY (VERIFY)
RCUR - ON
RADAR - ON
RCDR - OFF
HF ANTENNA 1 - EXTD/OFF (VERIFY)
HF ANTENNA 2 - EXTD/OFF (VERIFY)
MODE - HF

CONFIGURE CAMERA: (TERMINATOR PHOTOS)
CM3/EL/250V/HIGH (f5.6,1/125,) 12 FR

MAG (QQ) _____, FR # _____

LM FLIGHT PLAN

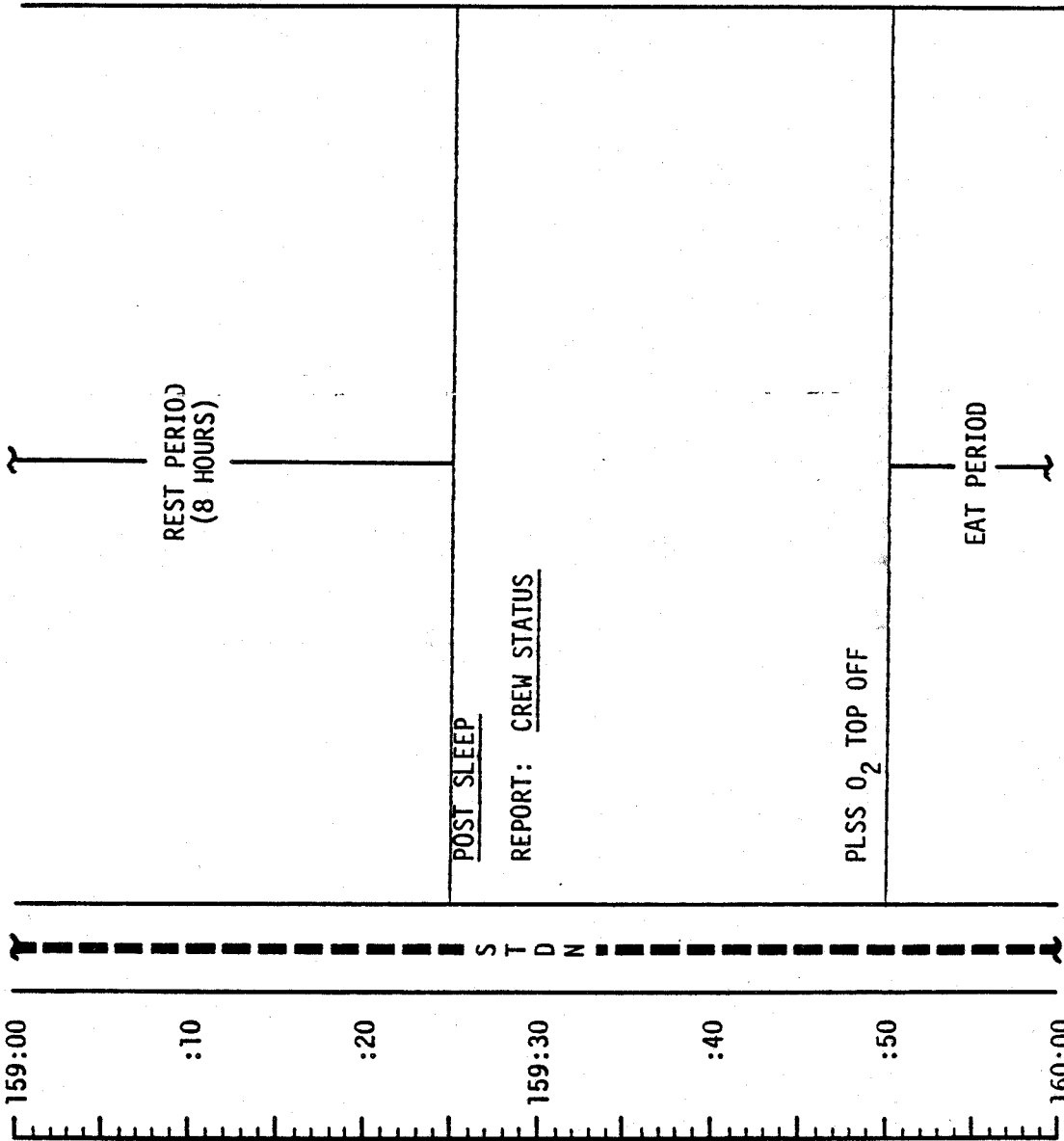
CDR

LMP

NOTES

1153 CST

MCC-H



STAY/NO-STAY FOR
EVA-3

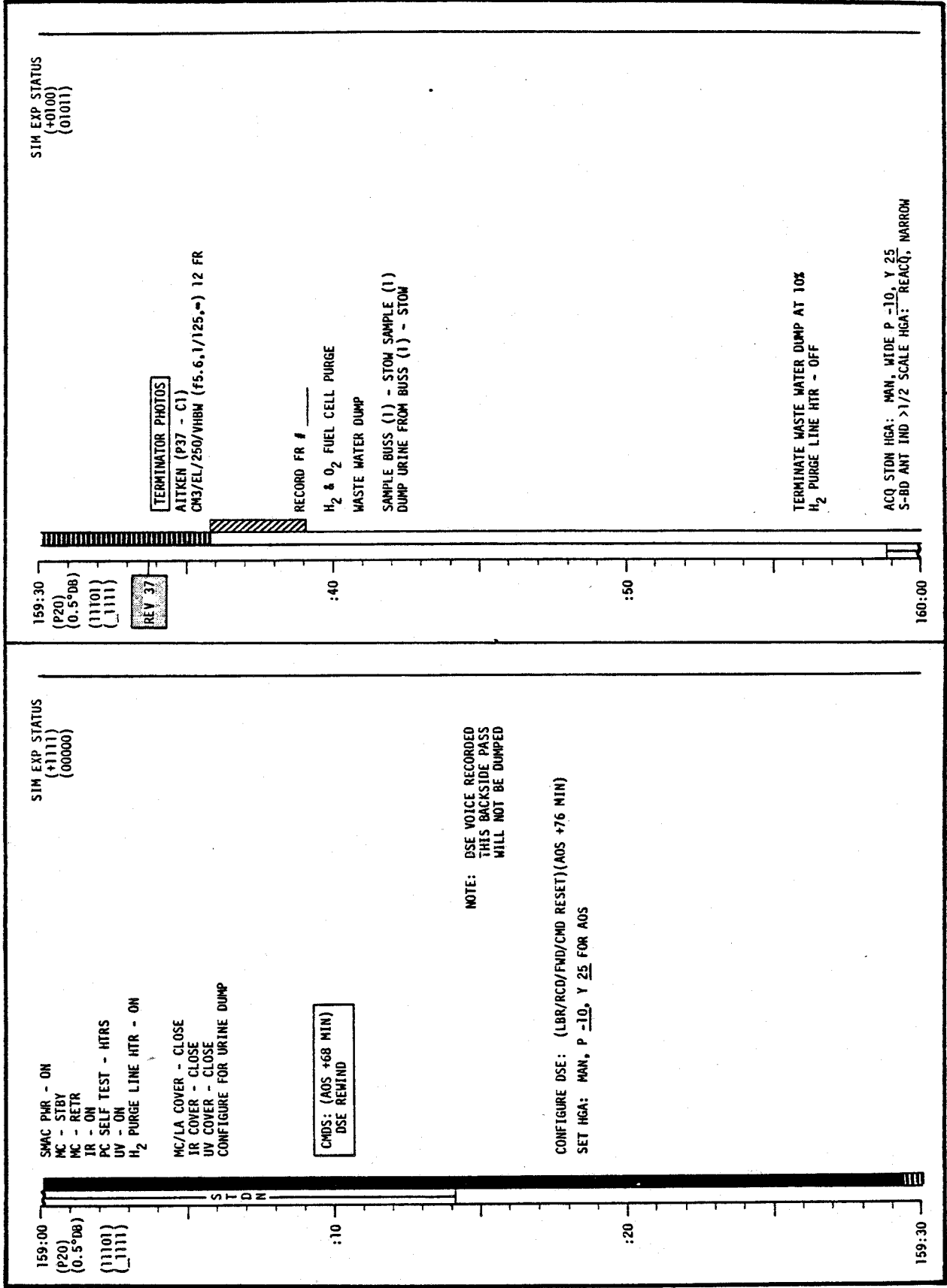
UPDATE TO LM
LIFT-OFF TIMES FOR
REVS 38-43

CSM REV 37

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	159:00 - 160:00	8/36-37	3-218

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-219

LM FLIGHT PLAN

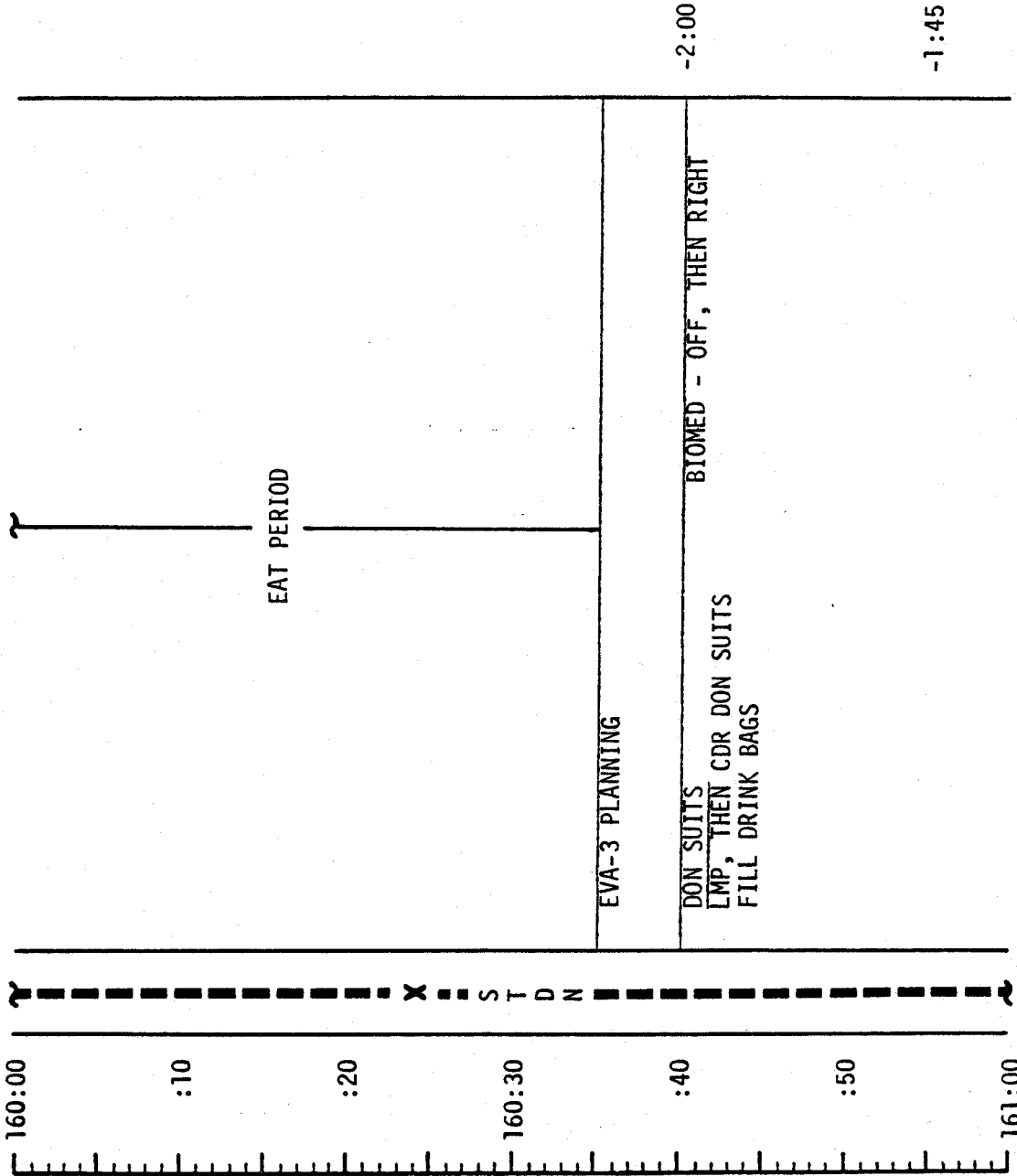
CDR

LMP

NOTES

1253 CST

MCC-H



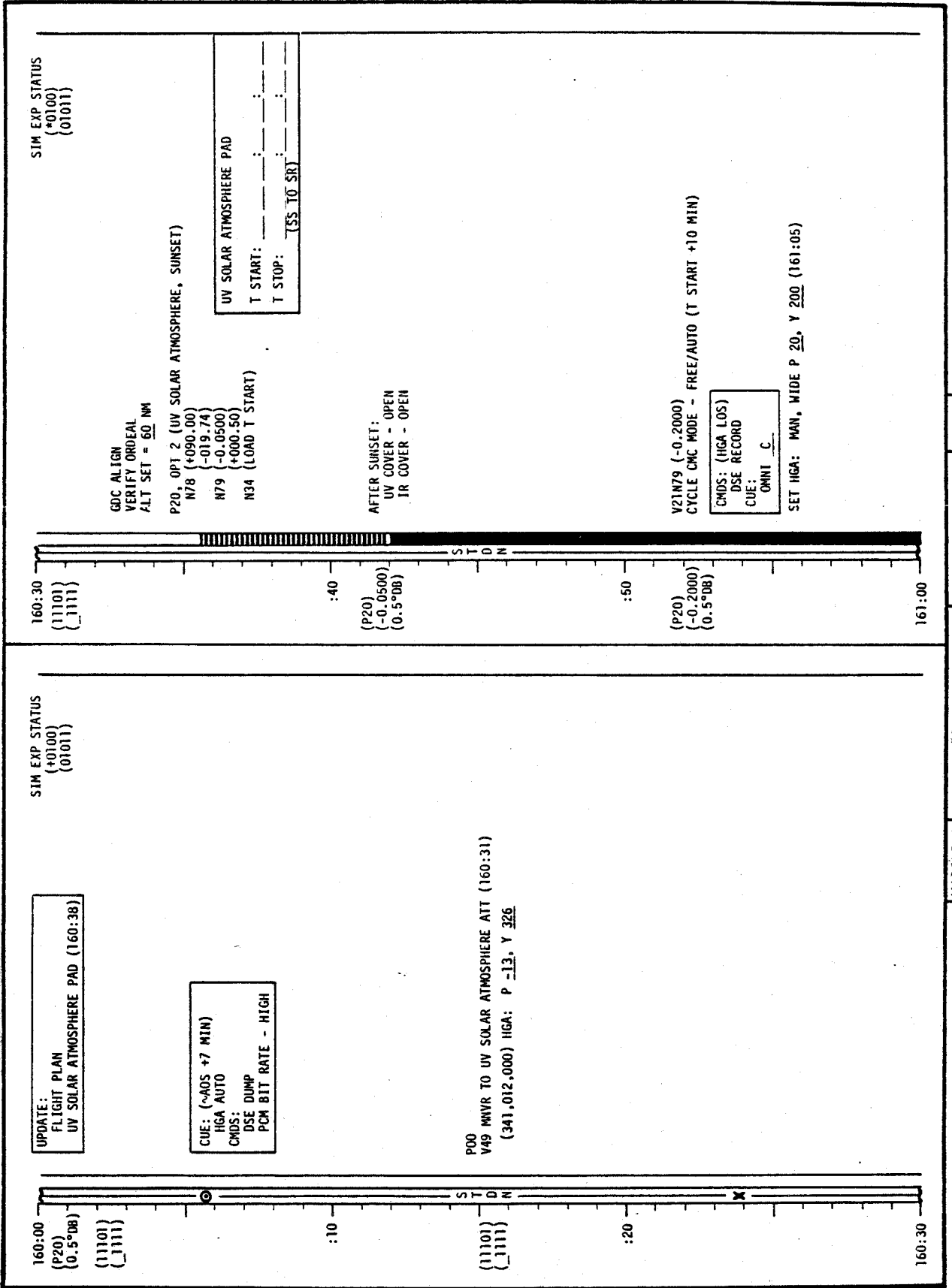
-2:00

-1:45

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	160:00 - 161:00	8/37	3-220

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-221

LM FLIGHT PLAN

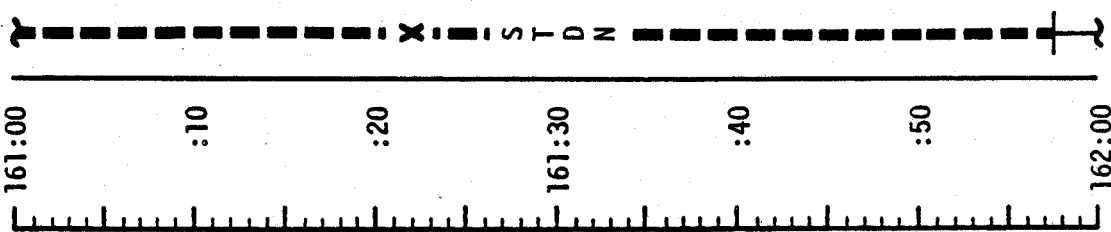
CDR

LMP

NOTES

1353 CST

MCC-H



-1:30

BATTERY MGT
 PWR AMP - ON
 BATS 3 & 4 - ON
 BAT 1 (LMP)-ON; (CDR)-OFF/RESET
 BATS 1 & 2 - OFF/RESET
 PWR AMP - OFF (ON MCC-H CUE)

-1:15

CABIN PREP FOR EVA-3

CSM REV 38

EQUIPMENT PREP FOR EVA-3

-1:00

PLSS DONNING

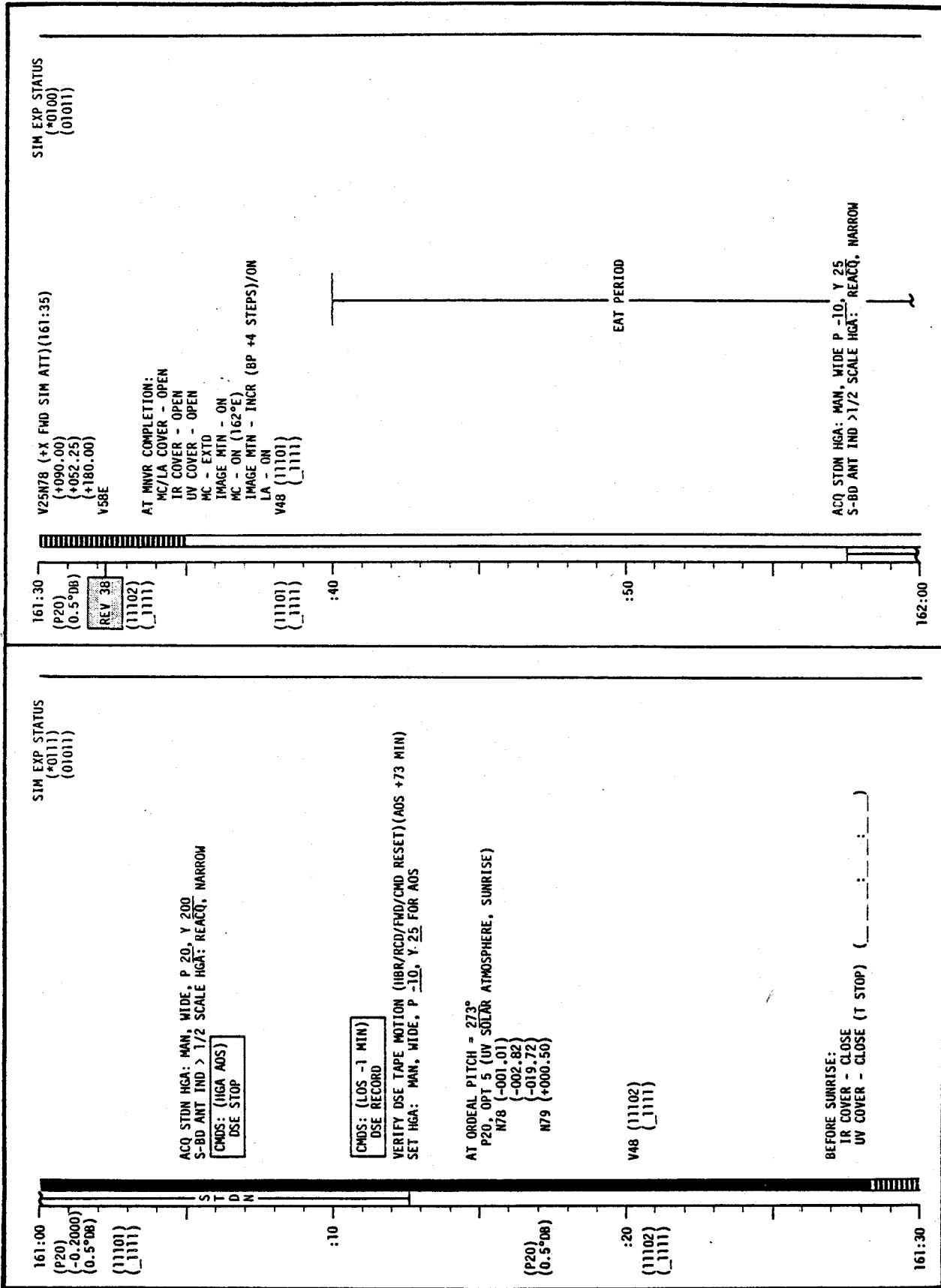
-0:45

GDS 210' AOS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	161:00 - 162:00	8/37-38	3-222

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-223

LM FLIGHT PLAN

MCC-H

CDR

LMP

NOTES

1453 CST

162:00

:10

:20

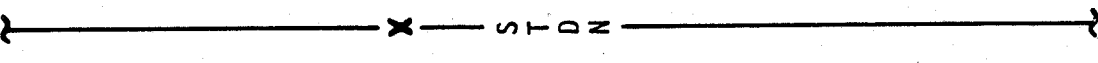
162:30

:40

:50

163:00

	PLSS COMM CHECK CONFIGURE COMM FOR EVA RECORDER - ON REPORT: PLSS O ₂ QUANTITY	-0:30
	OPS CONNECT	
	HELMET/GLOVE DOWNING	-0:15
	PRESSURE INTEGRITY CHECK	
	CABIN DEPRESS START WATCHES @ 3.5 PSIA FINAL PREP FOR EVA	0:00/START EVA-3
	EGRESS LM	+0:10
	DESCEND TO SURFACE	
	ASSIST CDR RECORDER - OFF EGRESS LM, CLOSE HATCH DESCEND TO SURFACE	+0:20

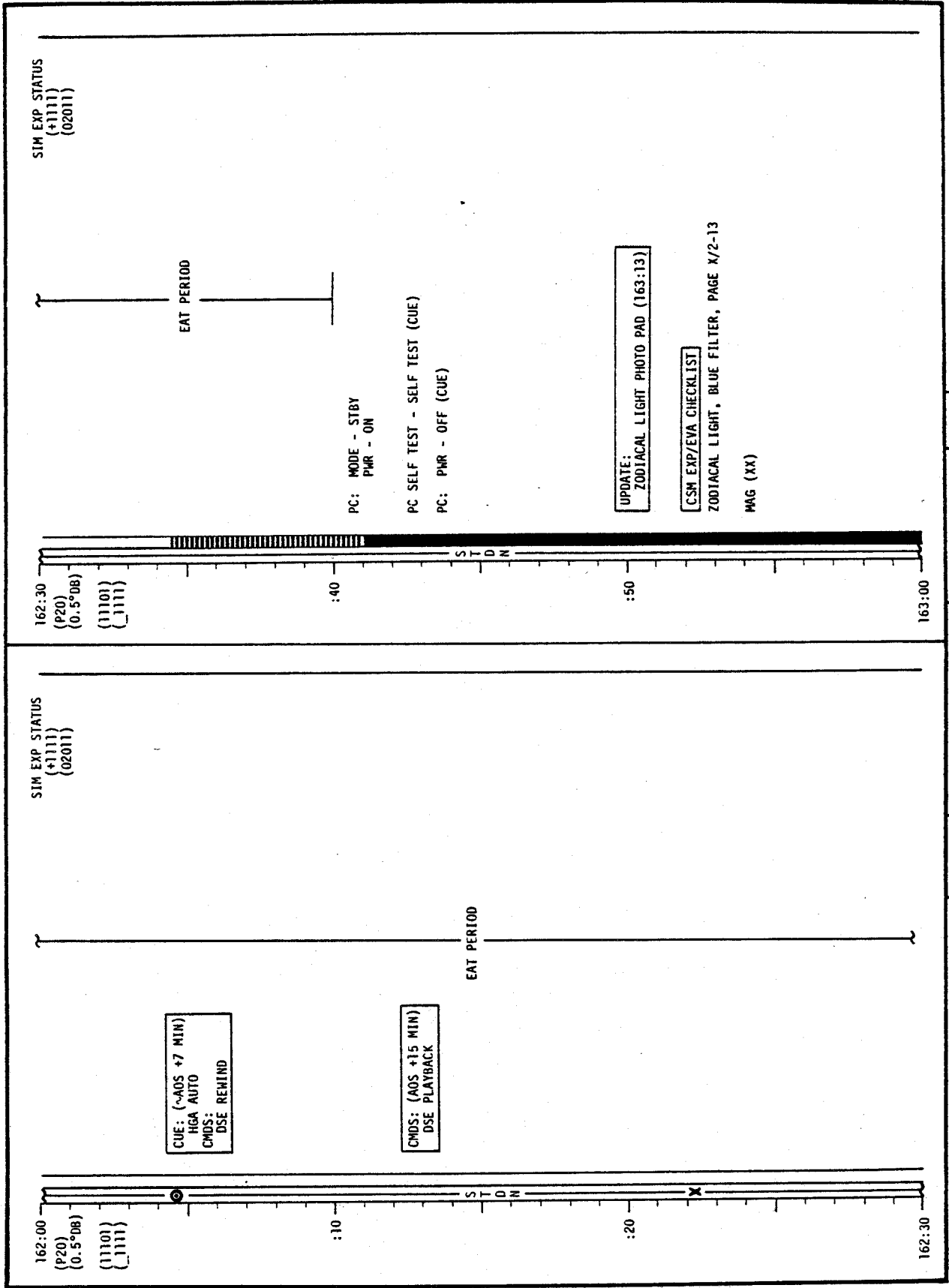


GO/NO-GO FOR
CABIN DEPRESS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	162:00 - 163:00	8/38	3-224

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



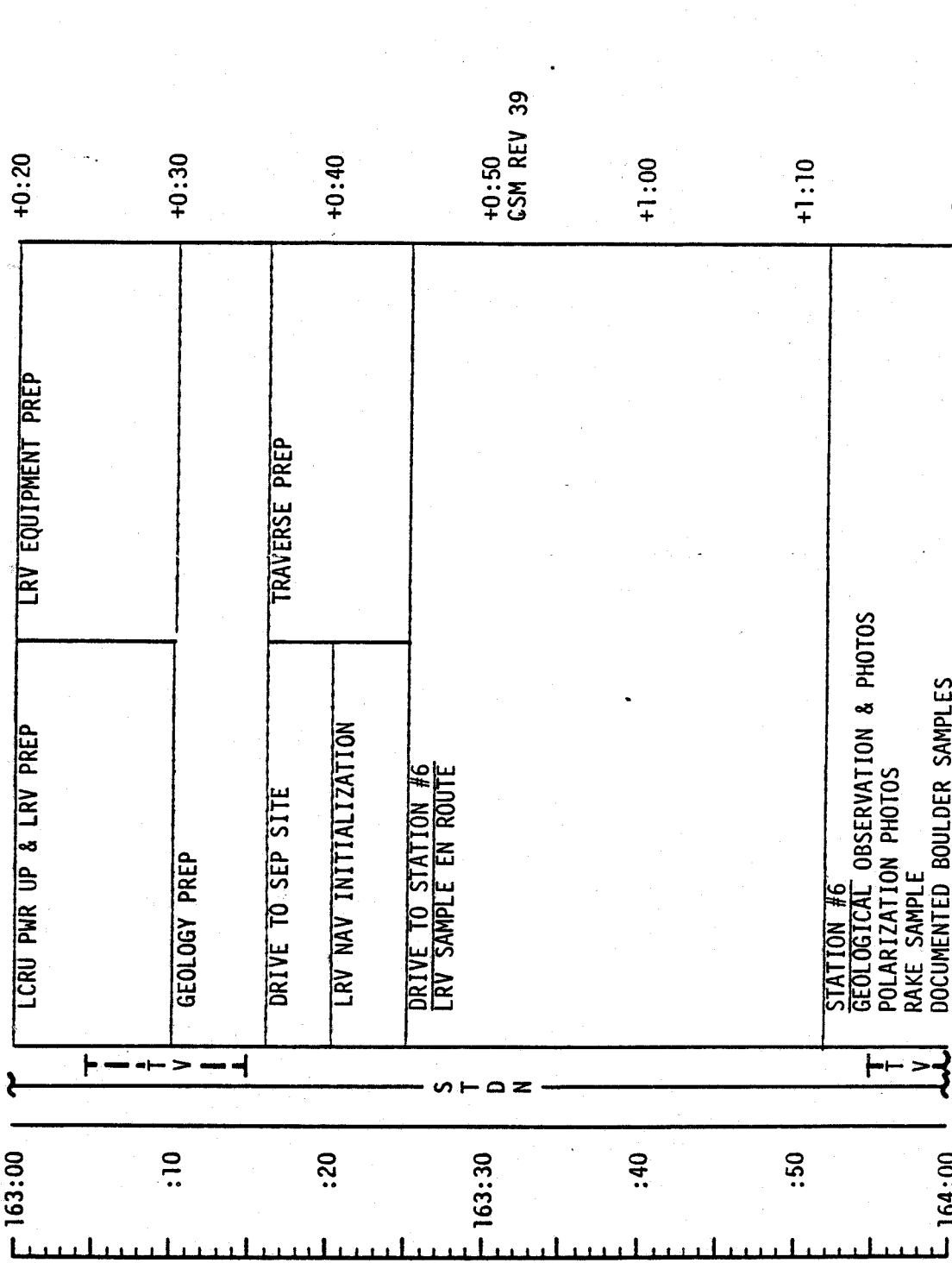
LM FLIGHT PLAN

MCC-H

CDR

LMP

NOTES



+0:20

+0:30

+0:40

+0:50
CSM REV 39

+1:00

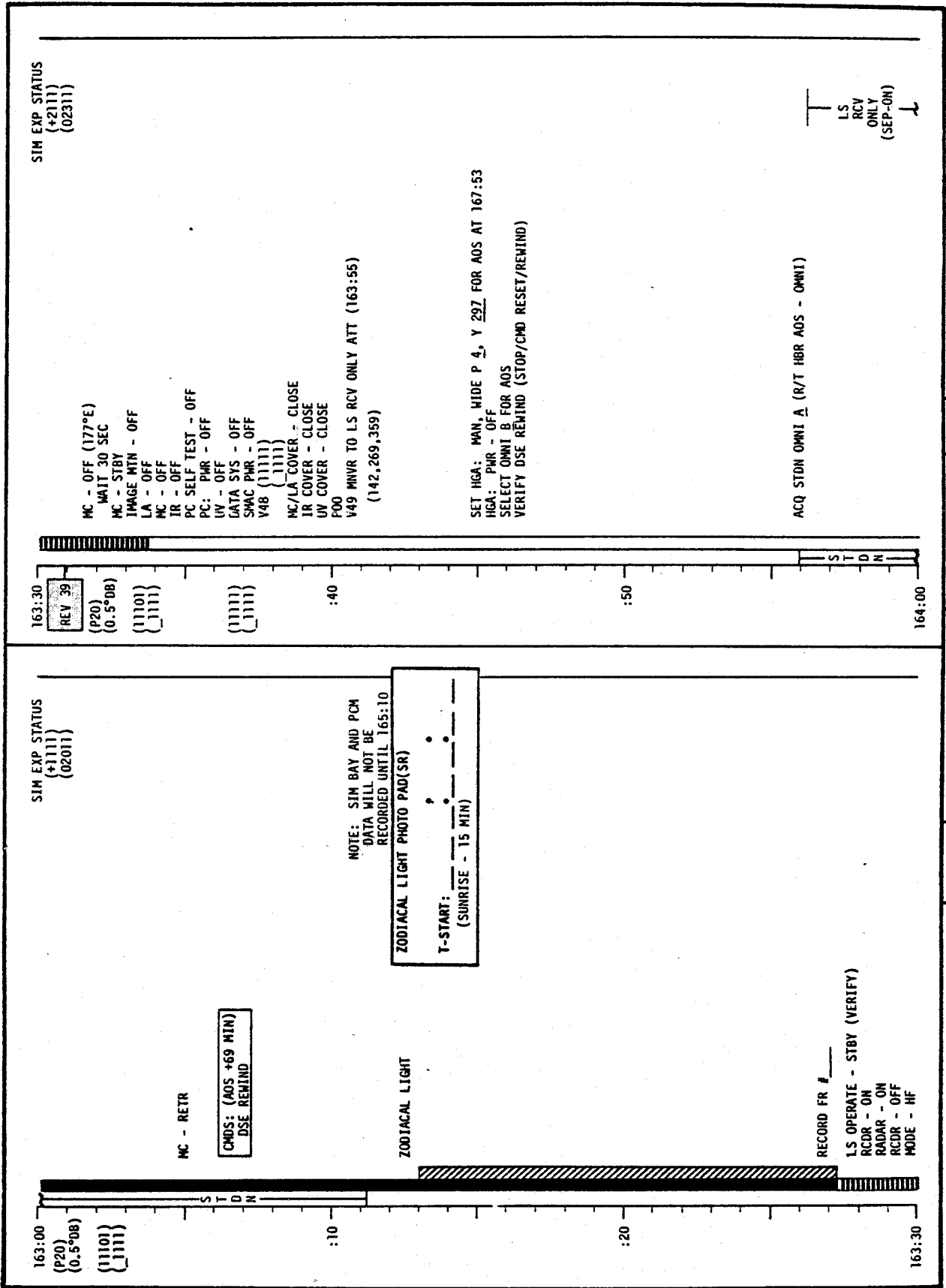
+1:10

+1:20

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	163:00 - 164:00	8/38-39	3-226

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



163:00
(P20)
(0.5°DB)
(11101)
(1111)

163:30
REV 39
(P20)
(0.5°DB)
(11101)
(1111)

MC - RETR

CMDS: (AOS +69 MIN)
DSE REMIND

ZODIACAL LIGHT

NOTE: SIM BAY AND PCM
DATA WILL NOT BE
RECORDED UNTIL 165:10

ZODIACAL LIGHT PHOTO PAD(SR)
T-START: (SUNRISE - 15 MIN)

:10

:40

:20

:50

163:30

164:00

RECORD FR #
LS OPERATE - STBY (VERIFY)
RCDR - ON
RADAR - ON
RCDR - OFF
MODE - HF

SIM EXP STATUS
(+2111)
(02311)

MC - OFF (177°E)
WAIT 30 SEC
MC - STBY
IMAGE MTN - OFF
LA - OFF
MC - OFF
IR - OFF
PC SELF TEST - OFF
PC: PMR - OFF
UV - OFF
DATA SYS - OFF
SMAC PMR - OFF
V48 (11111)
MC/LA COVER - CLOSE
IR COVER - CLOSE
UV COVER - CLOSE
FOO
V49 MNVR TO LS RCV ONLY ATT (163:55)
(142,269,359)

SET HGA: MAN, WIDE P 4, Y 297 FOR ADS AT 167:53
HGA: PMR - OFF
SELECT OMNI B FOR ADS
VERIFY DSE REMIND (STOP/CMD RESET/REMIND)

ACQ STDN OMNI A (R/T HBR ADS - OMNI)

LS
RCV
ONLY
(SEP-ON)

LM FLIGHT PLAN

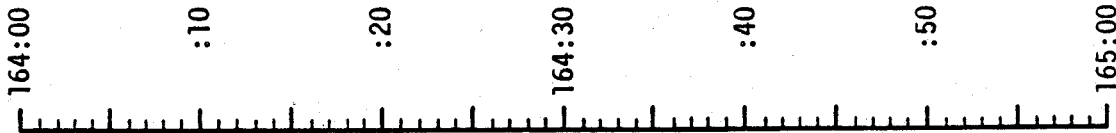
MCC-H

CDR

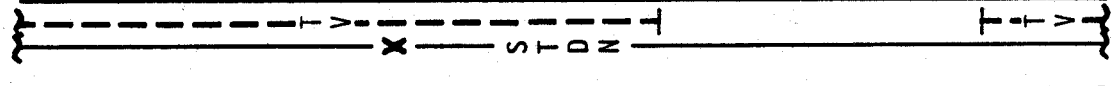
LMP

NOTES

1653 CST



STATION #6 (CONT)



+1:20
+1:30
+1:40
+1:50
+2:00
+2:10
+2:20

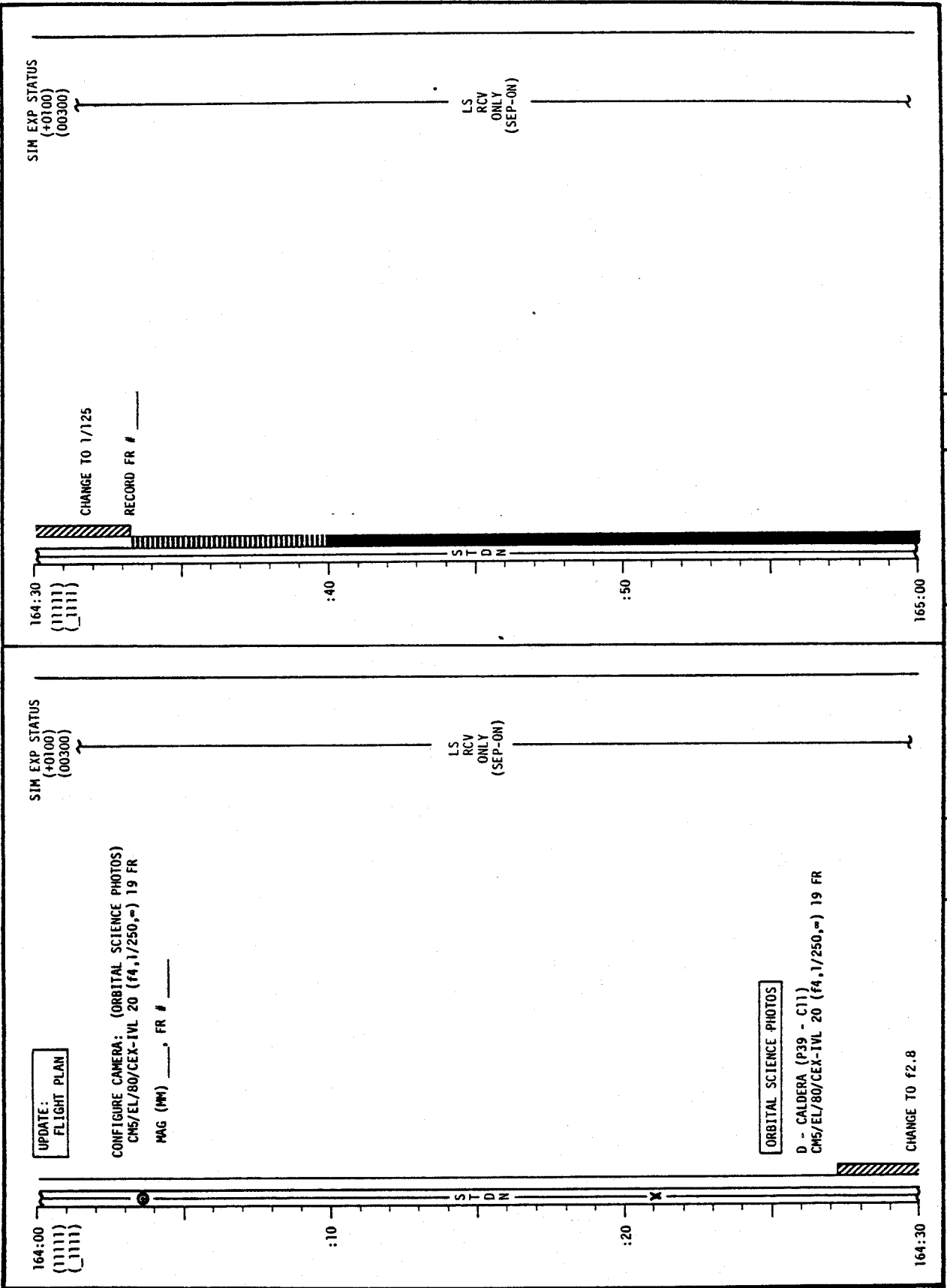
DRIVE TO STATION #7

STATION #7
GEOLOGICAL OBSERVATIONS & PHOTOS
RAKE SAMPLE
DOCUMENTED SAMPLES

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	164:00 - 165:00	8/39	3-228

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-229

LM FLIGHT PLAN

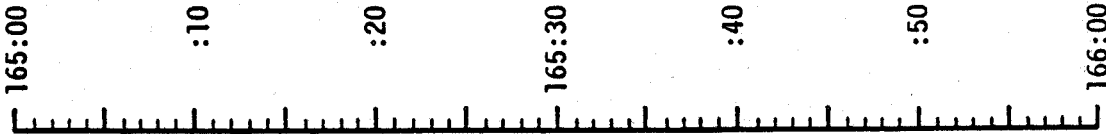
MCC-H

CDR

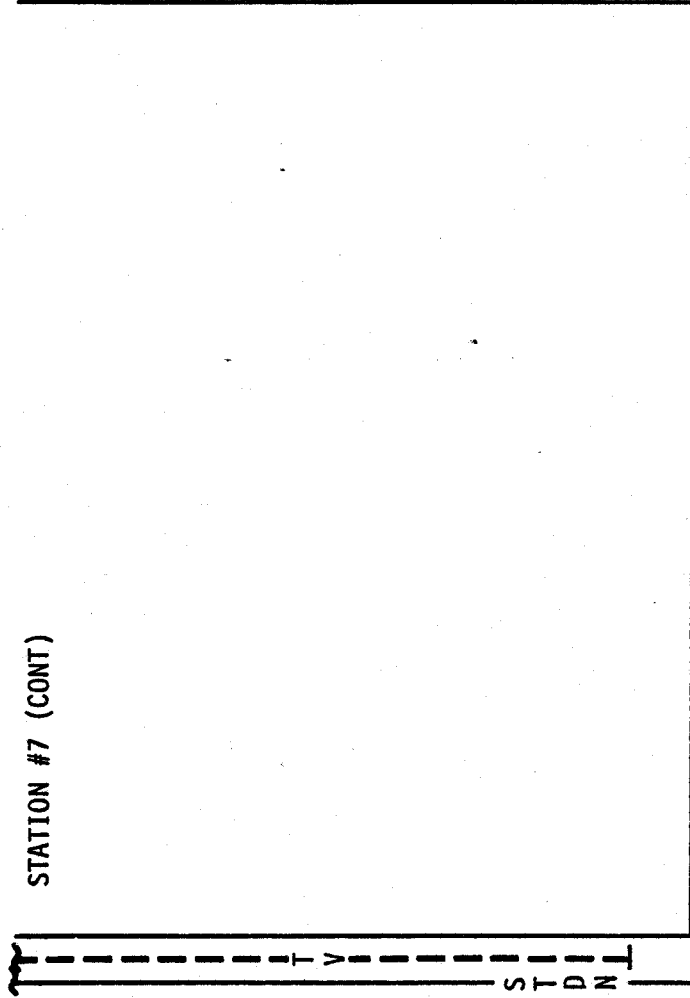
LMP

NOTES

1753 CST



STATION #7 (CONT)



+2:20

+2:30

+2:40

+2:50 CSM REV 40

+3:00

+3:10

+3:20

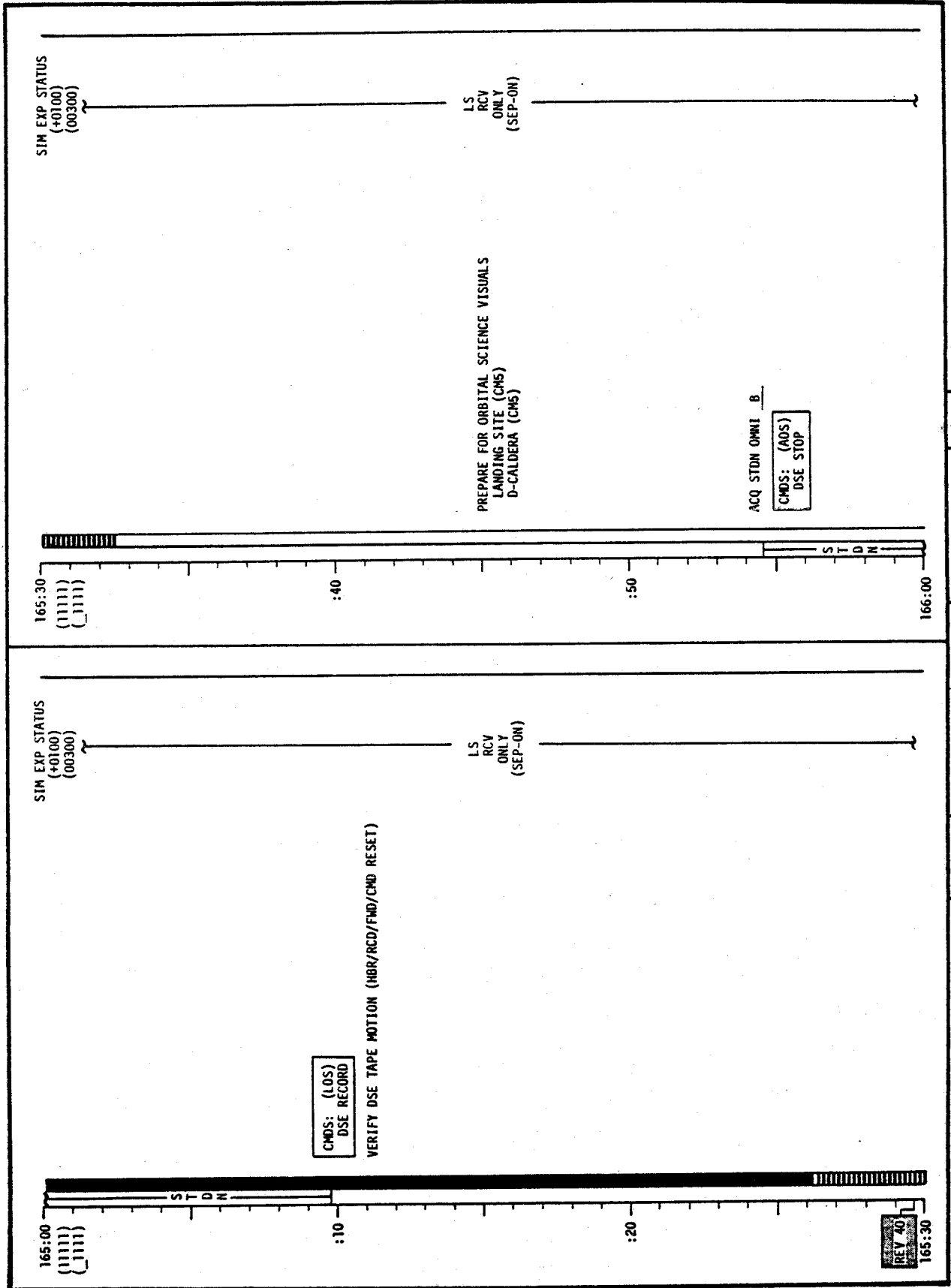
DRIVE TO STATION #8

STATION #8
 GEOLOGICAL OBSERVATIONS & PHOTOS
 POLARIZATION PHOTOS
 RAKE SAMPLES
 DOCUMENTED SAMPLES

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	165:00 - 166:00	8/39-40	3-230

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-231

REV 40
165:30

LM FLIGHT PLAN

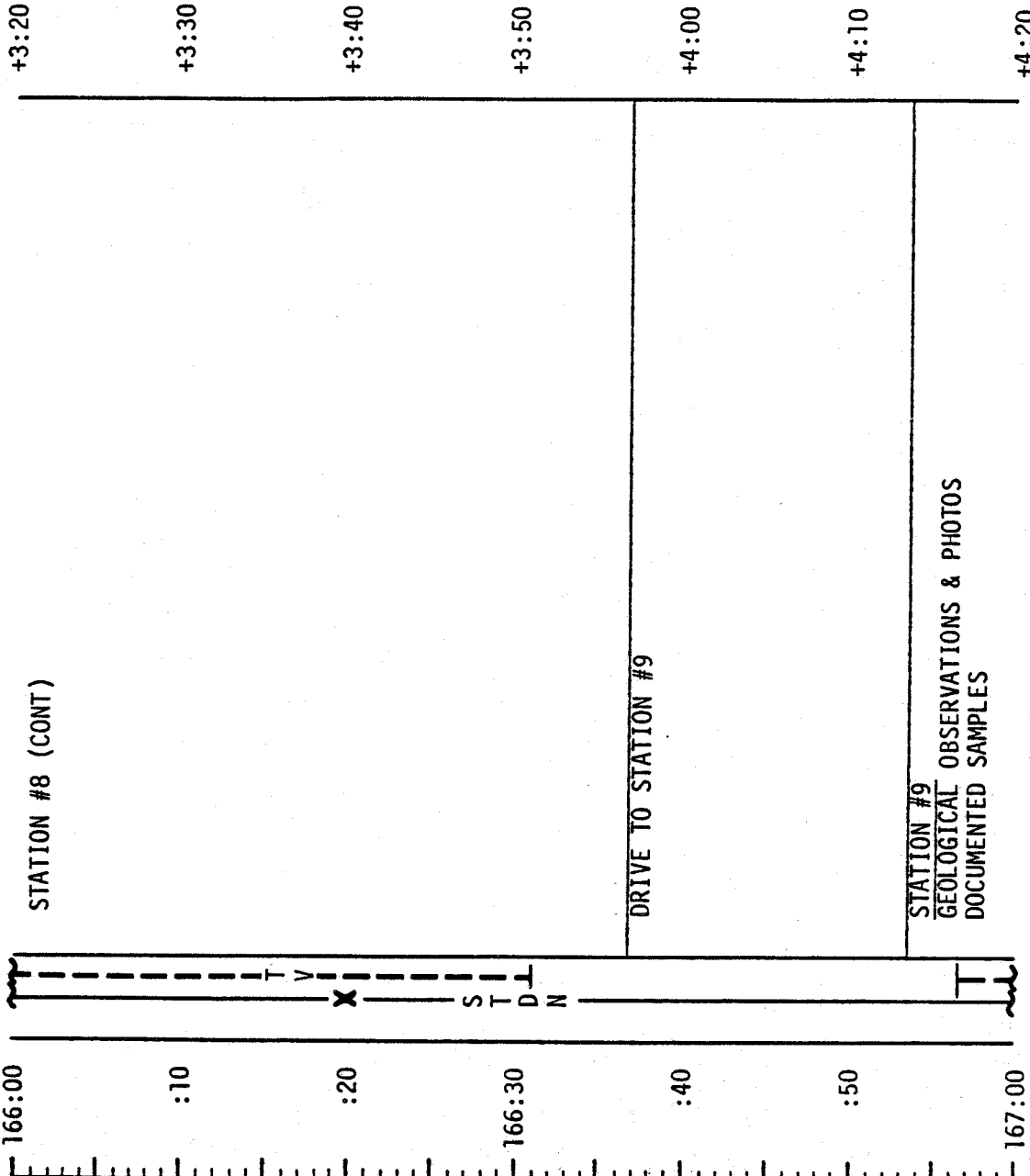
CDR

LMP

NOTES

1853 CST

MCC-H



STATION #8 (CONT)

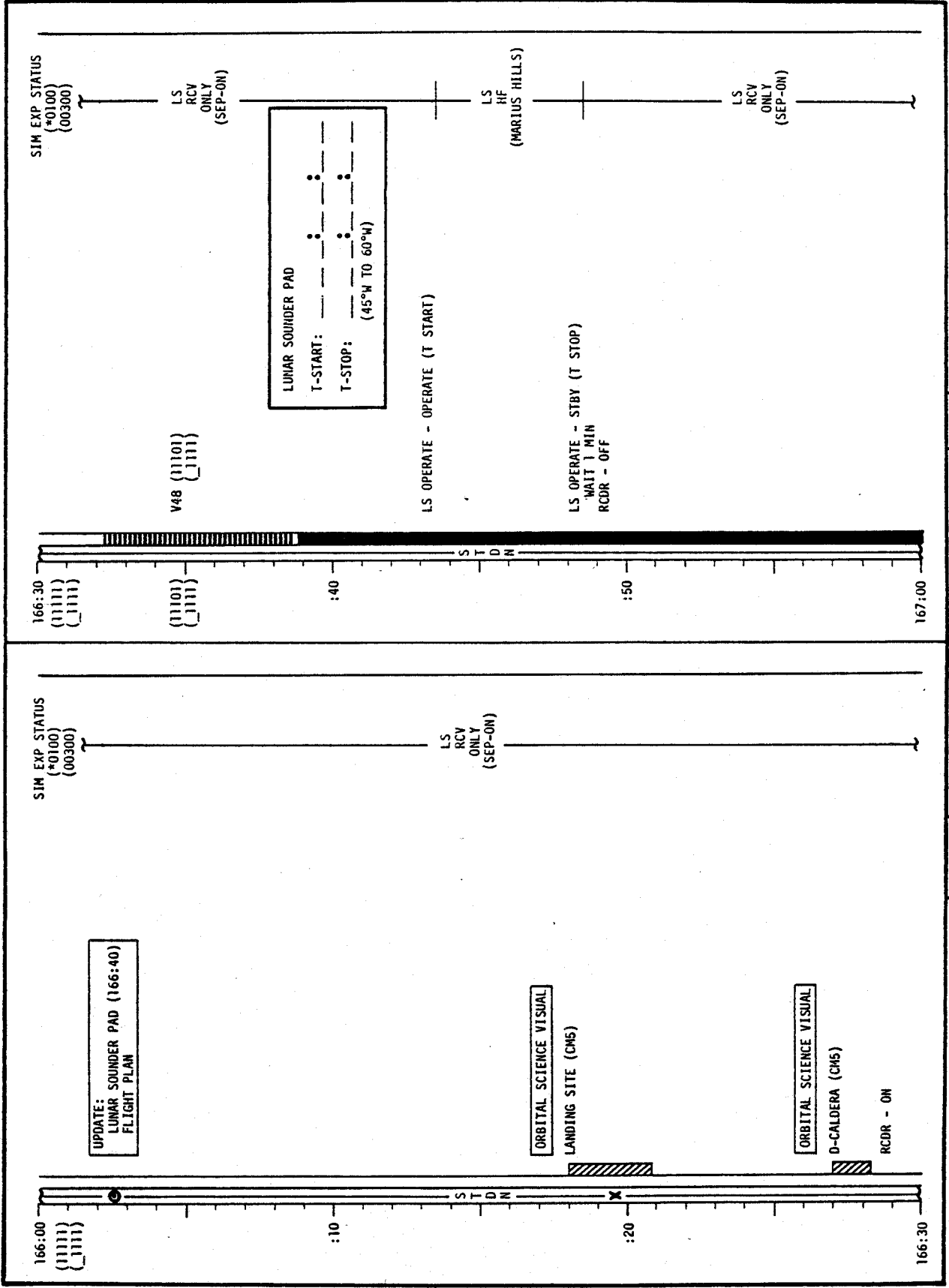
DRIVE TO STATION #9

STATION #9
GEOLOGICAL OBSERVATIONS & PHOTOS
DOCUMENTED SAMPLES

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	166:00 - 167:00	8/40	3-232

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

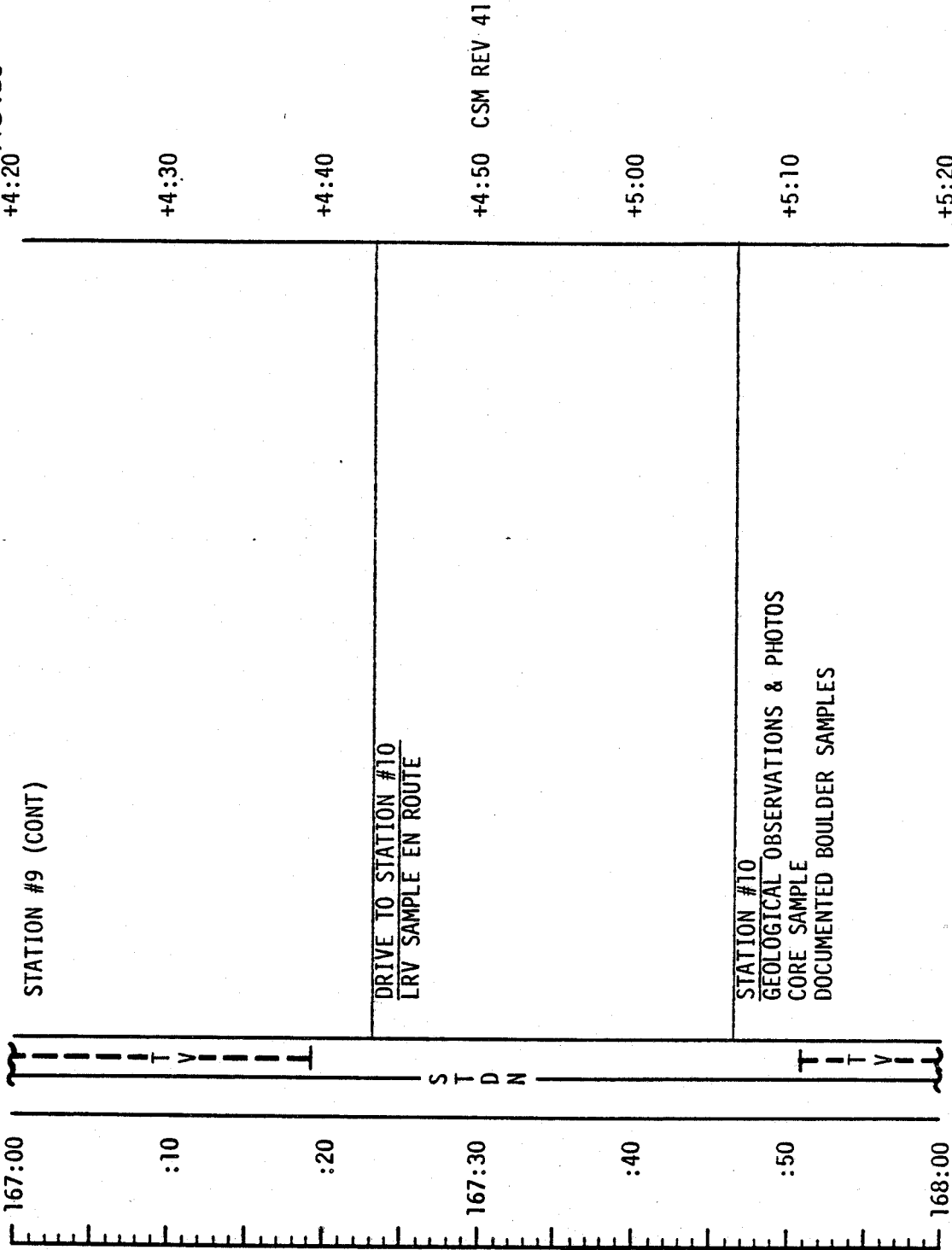
CDR

LMP

NOTES

1953 CST

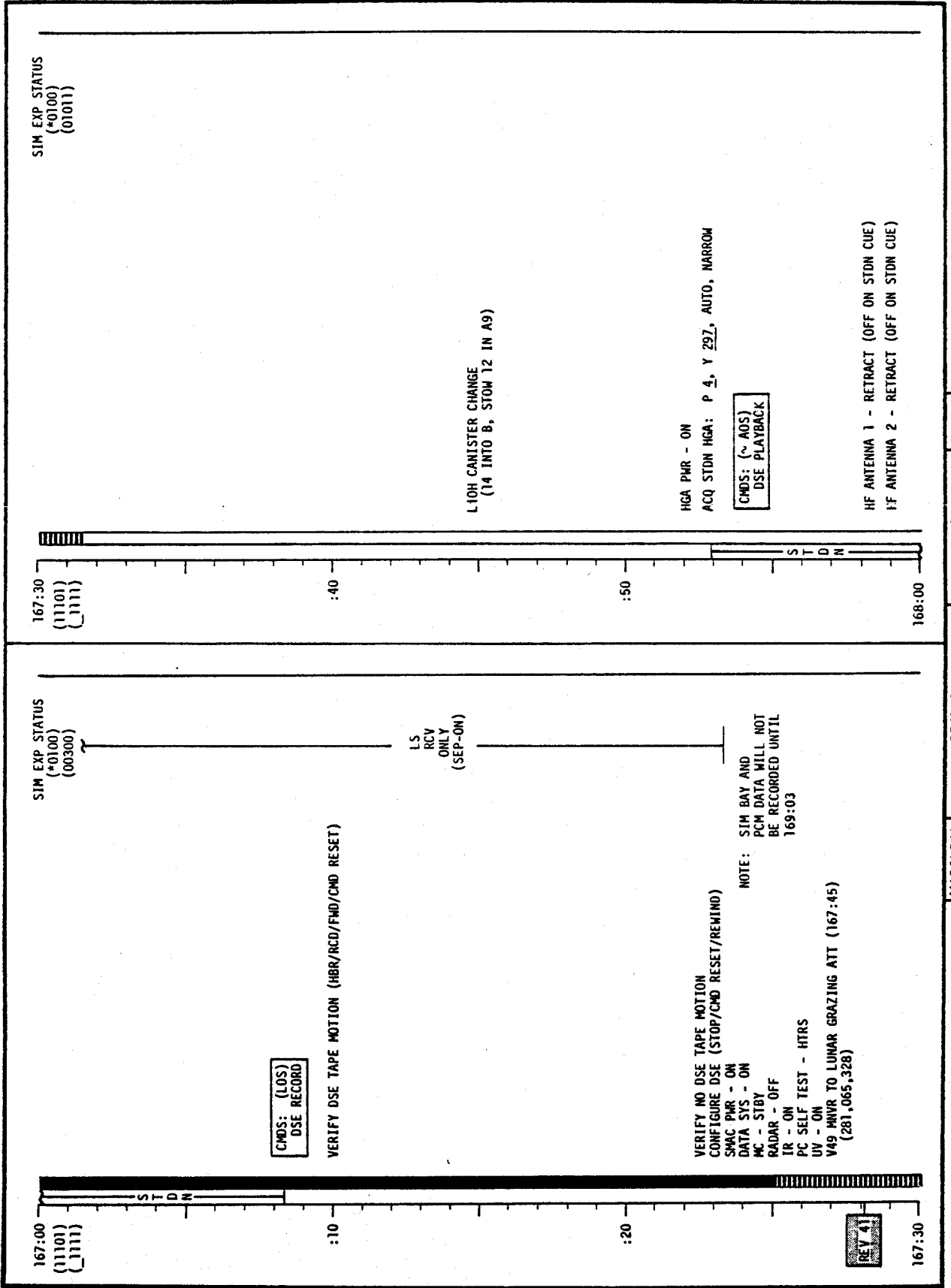
MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	167:00 - 168:00	8/40-41	3-234

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

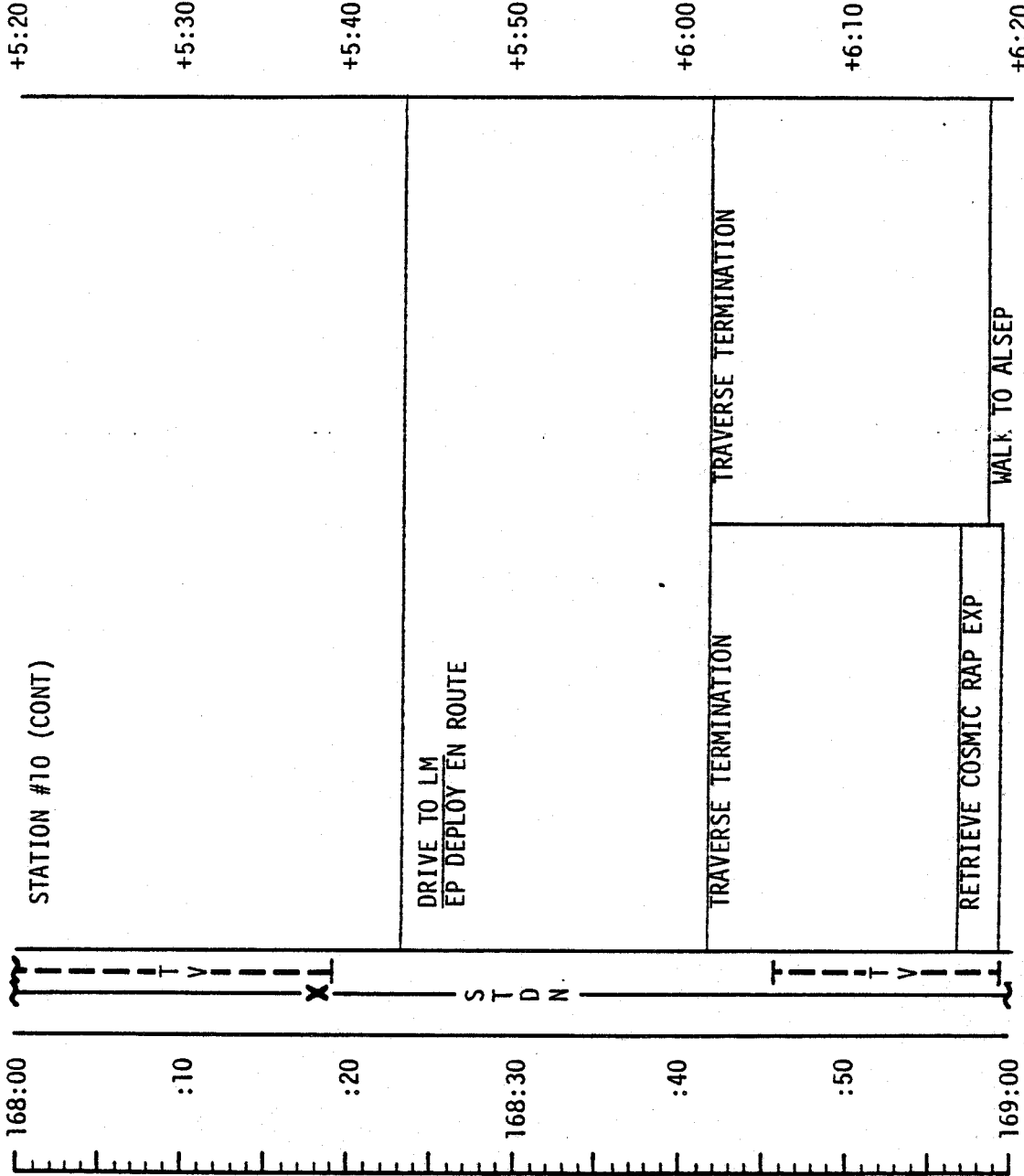
CDR

LMP

NOTES

2053 CST

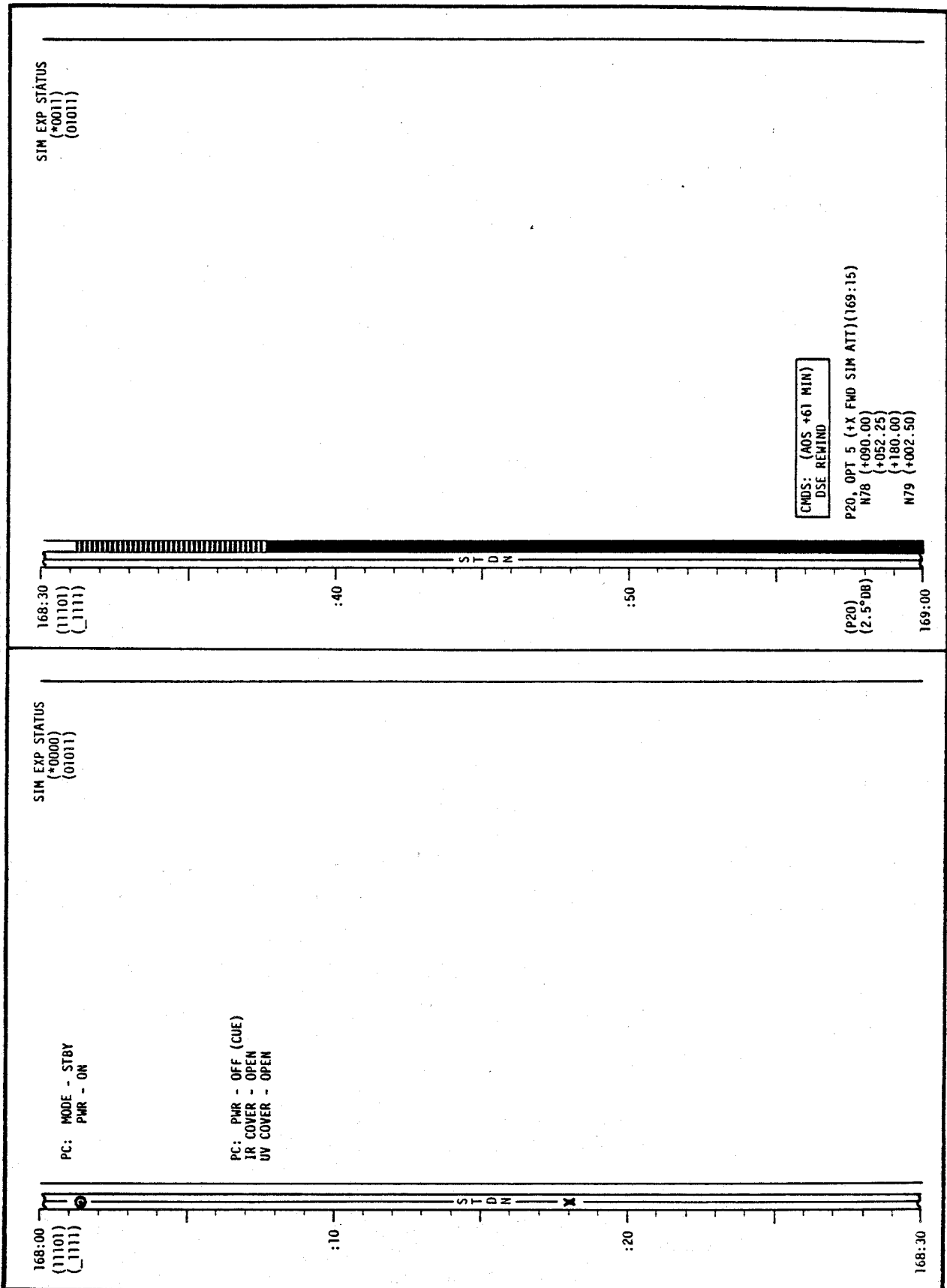
MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	168:00 - 169:00	8/41	3-236

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-237

LM FLIGHT PLAN

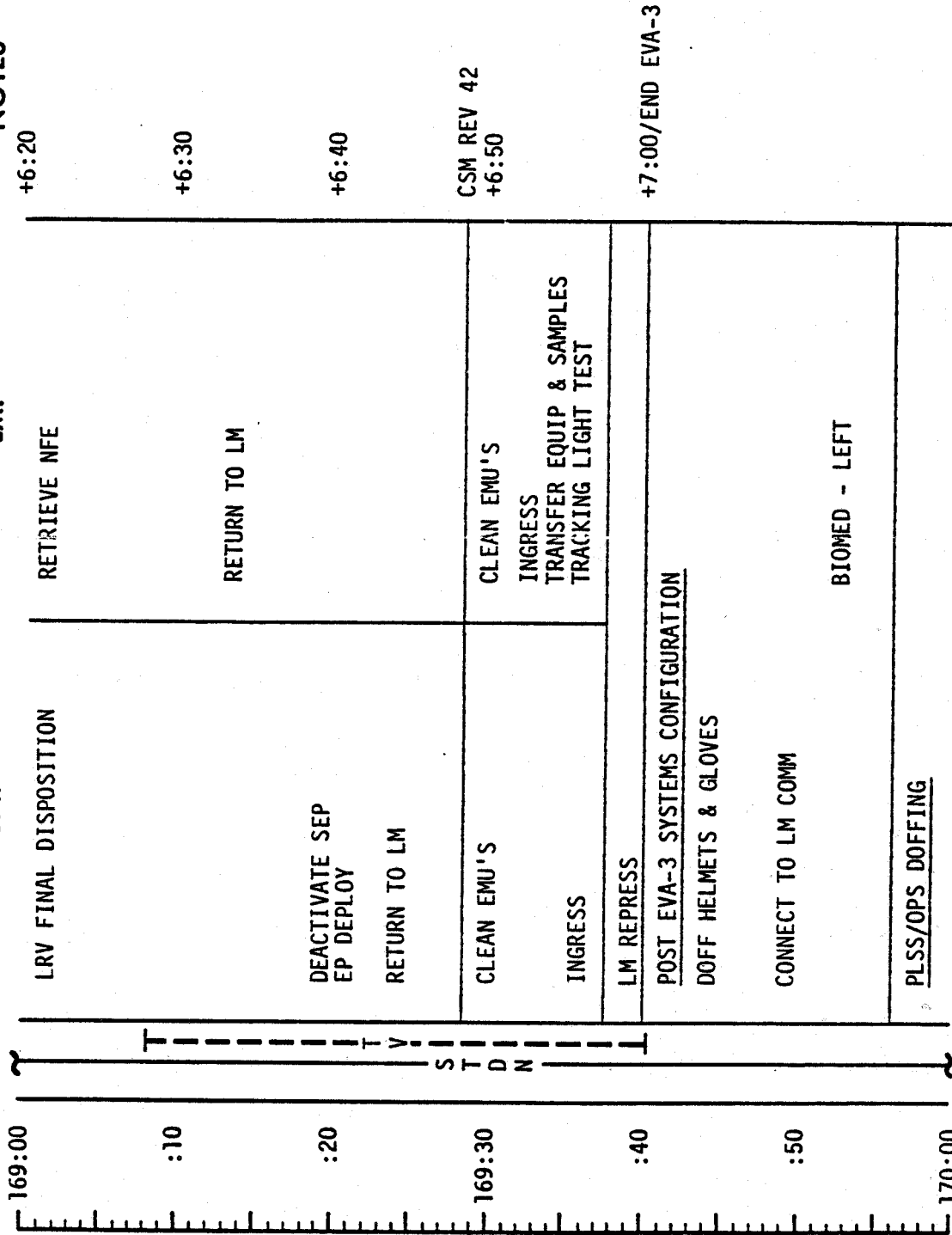
MCC-H

2153 CST

CDR

LMP

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	169:00 - 170:00	8/41-42	3-238

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

169:00
(P20)
(2.5°DB)
(11101)
(11111)

CMDS: (AOS +69 MIN)
DSE RECORD

VERIFY DSE TAPE MOTION (HBR/RCD/FWD/CMD RESET)
SET HGA: MAN, P -10, Y 25 REACQ, NARROW FOR AOS

CMC MODE - FREE
P52 (OPTION 3)
(LOG SITE ORIENT)

P20, CMC MODE - AUTO
GDC ALIGN

P52 TMU REALIGN

```

N71:  --- --
N05:  --- --
N93:  --- --
X     -  -  -
Y     -  -  -
Z     -  -  -
GET   -  -  -
    
```

169:30
(P20)
(2.5°DB)
(11101)
(11111)

:40

:50

S T D N

170:00

SIM EXP STATUS
(+0011)
(01011)

EAT PERIOD

MISSION	EDITION	PAGE
APOLLO 17	FINAL (12/6)	3-239
	DATE	10/23/72

REV 42

LM FLIGHT PLAN

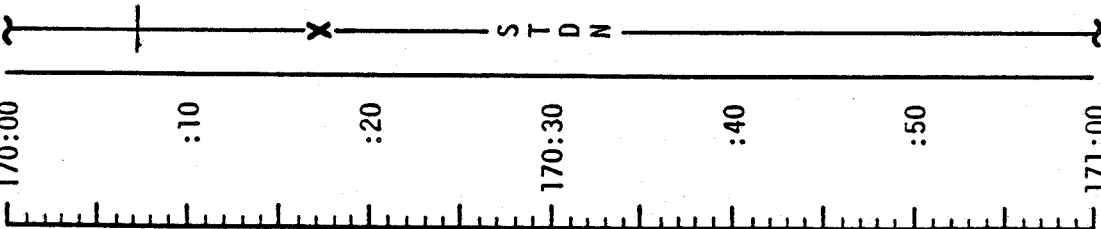
CDR

LMP

NOTES

2253 CST

MCC-H



REPORT: OPS PRESSURE

PKS 210' AOS

PREP FOR EQUIPMENT JETT

WEIGH ROCK BAG & COLLECTION BAGS, REPORT: WEIGHTS

DON GLOVES

RECORDER - ON/VOX

PRESSURE INTEGRITY CHECK

CABIN DEPRESS

JETTISON #1

CABIN REPRESS

BATTERY MGT
BATS 1 & 2 - ON
LUNAR BAT - OFF/RESET

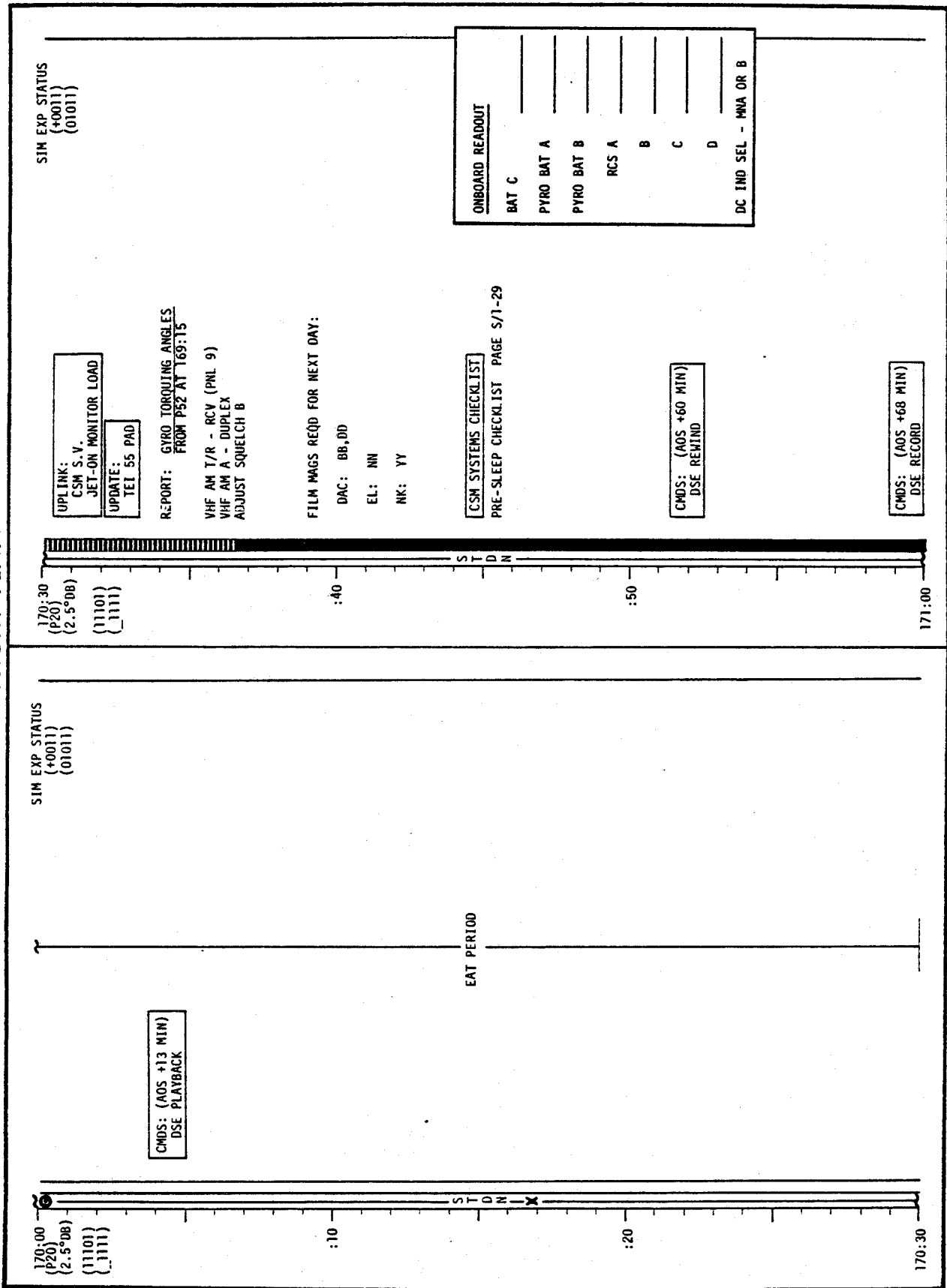
POST-EVA CABIN CLEANUP RECORDER - OFF

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	170:00 - 171:00	8/42	3-240

FLIGHT PLANNING BRANCH

GO/NO-GO FOR
DEPRESS

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-241

LM FLIGHT PLAN

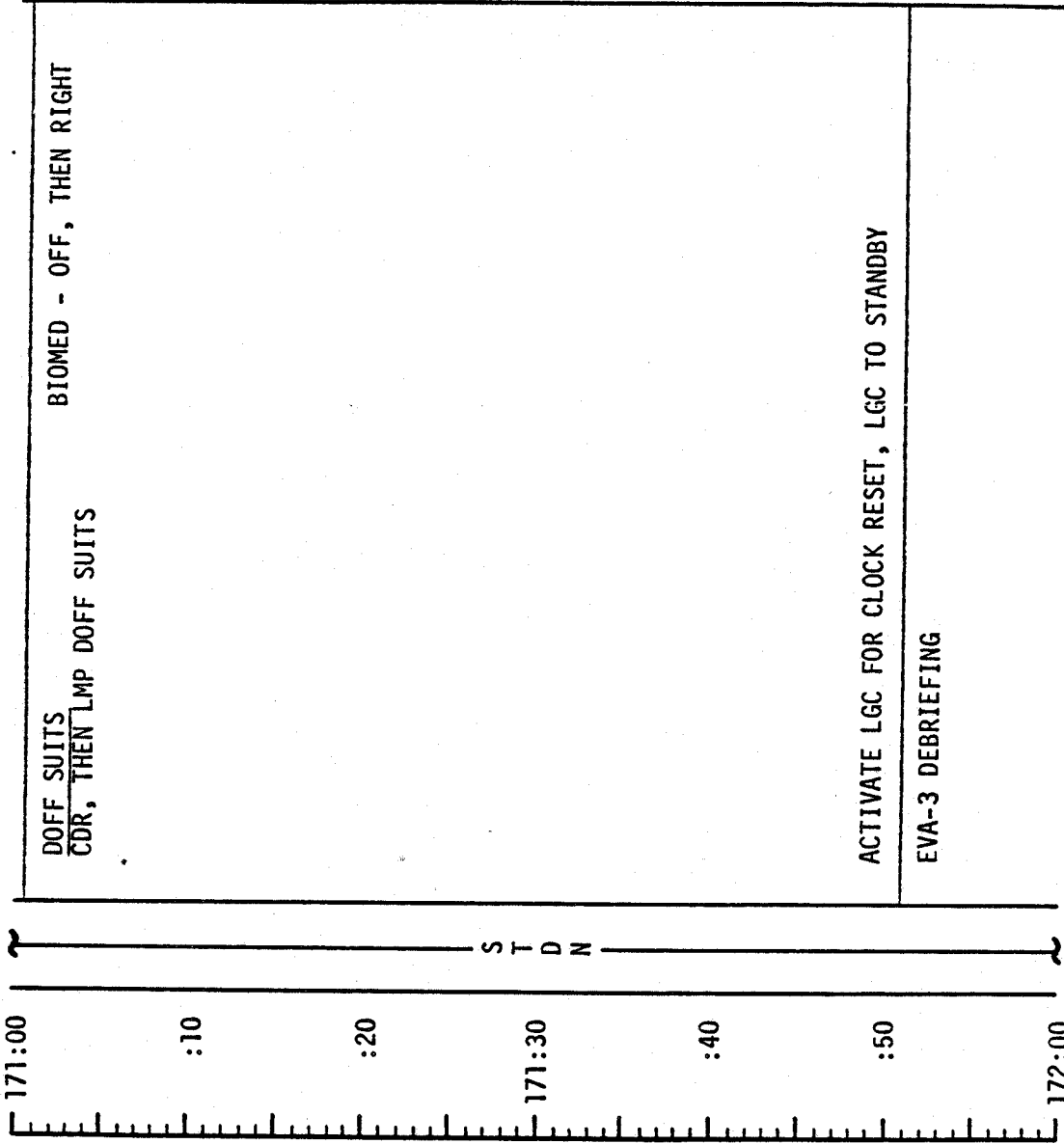
CDR

LMP

NOTES

2353 CST

MCC-H



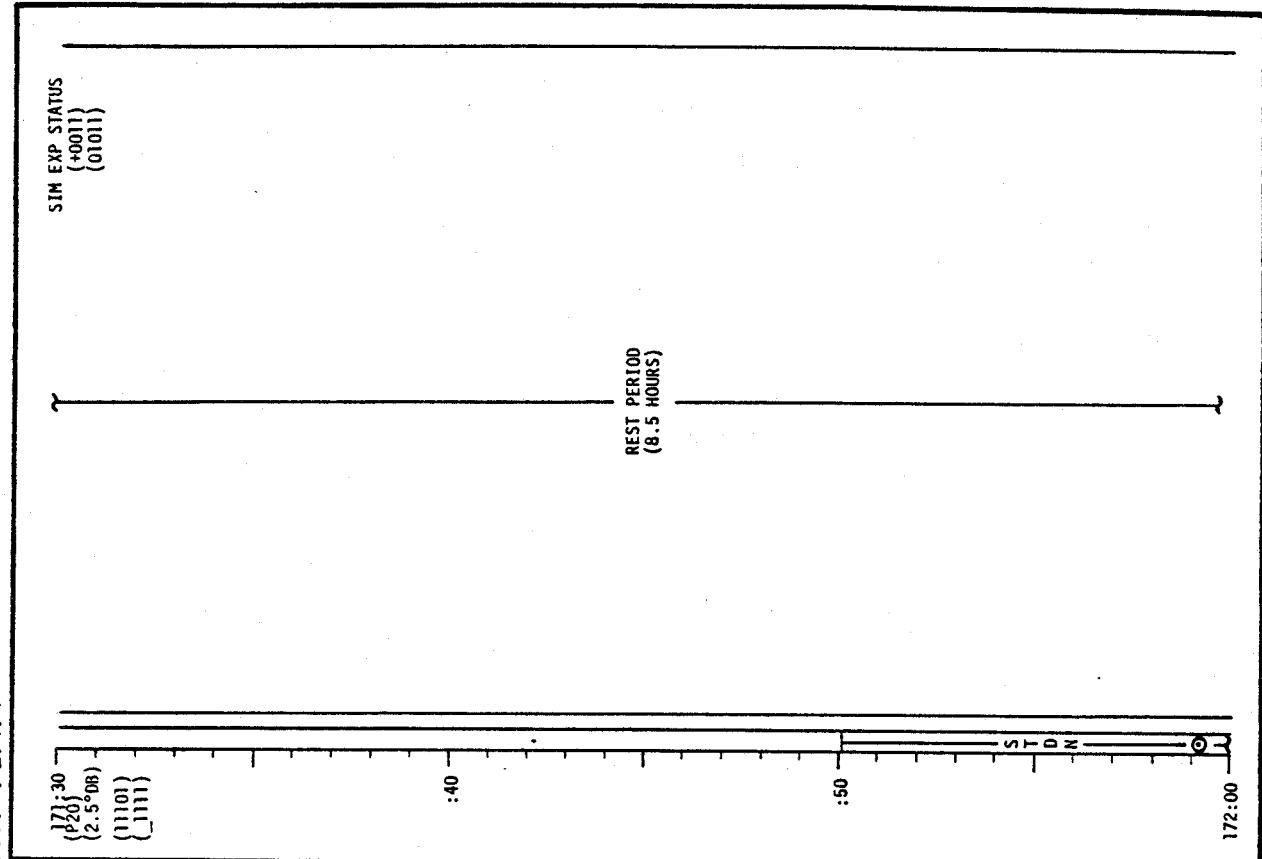
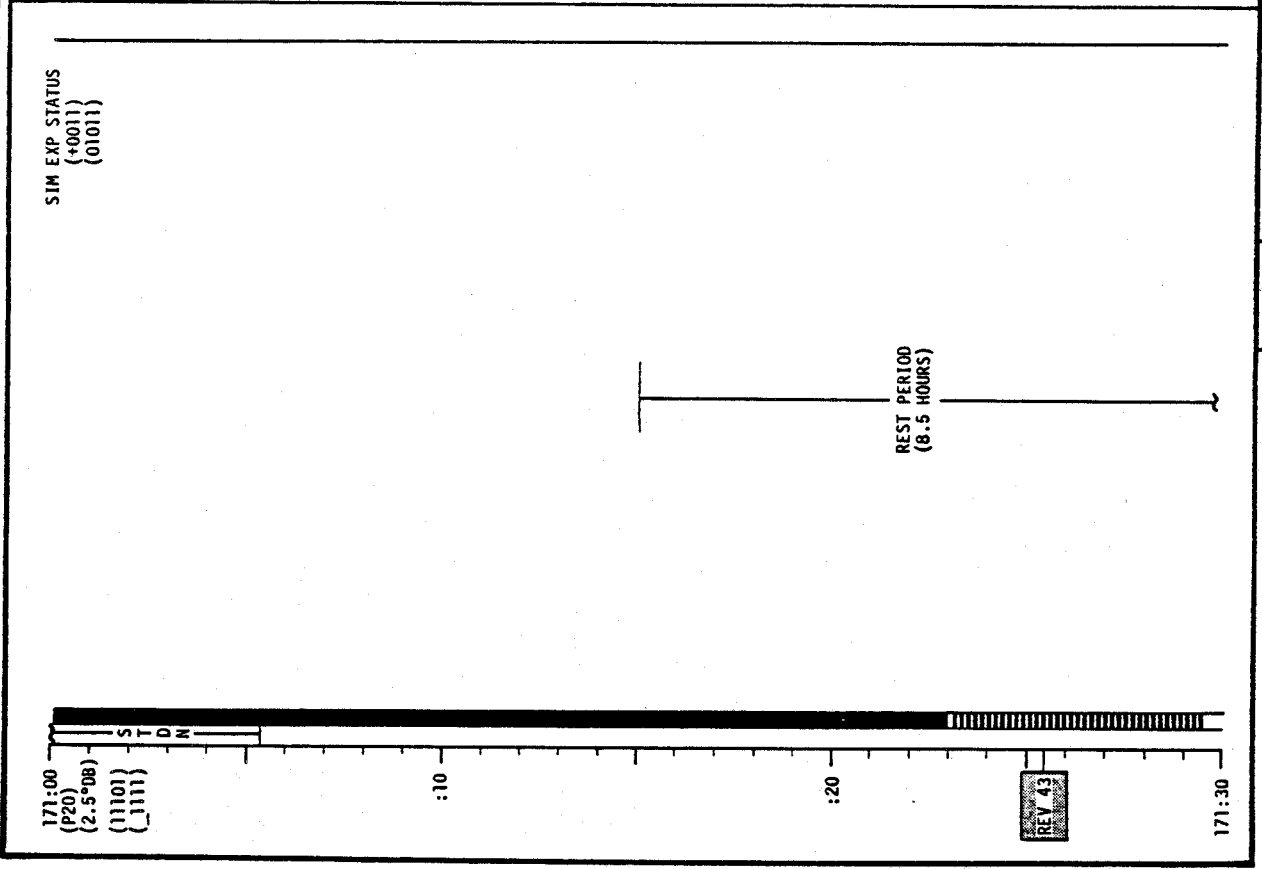
CSM REV 43

UPDATE TO LM
LIFT-OFF TIMES FOR
REVS 44-50

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	171:00 - 172:00	8/42-43	3-242

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

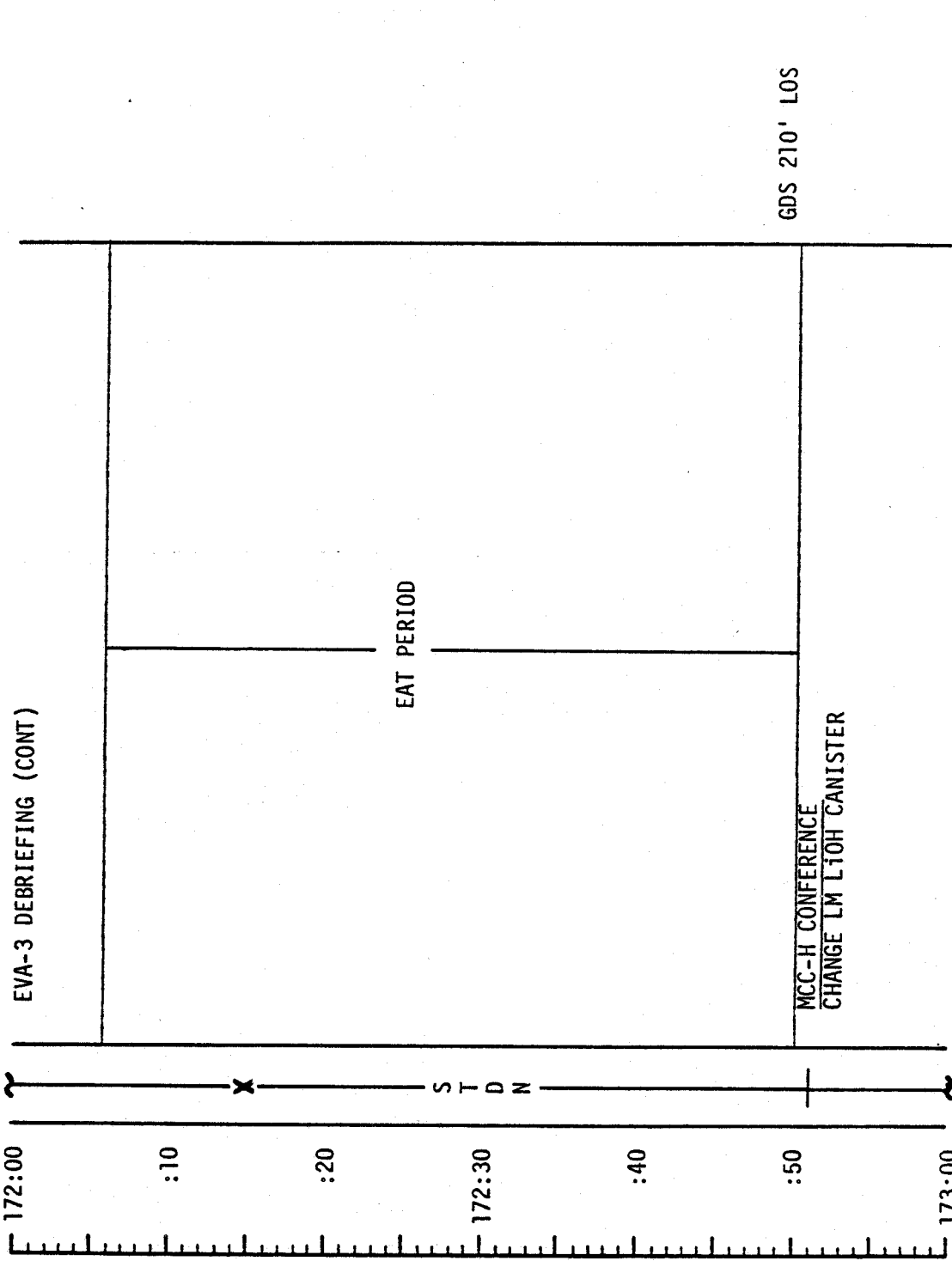
MCC-H

0053 CST, 12/14

CDR

LMP

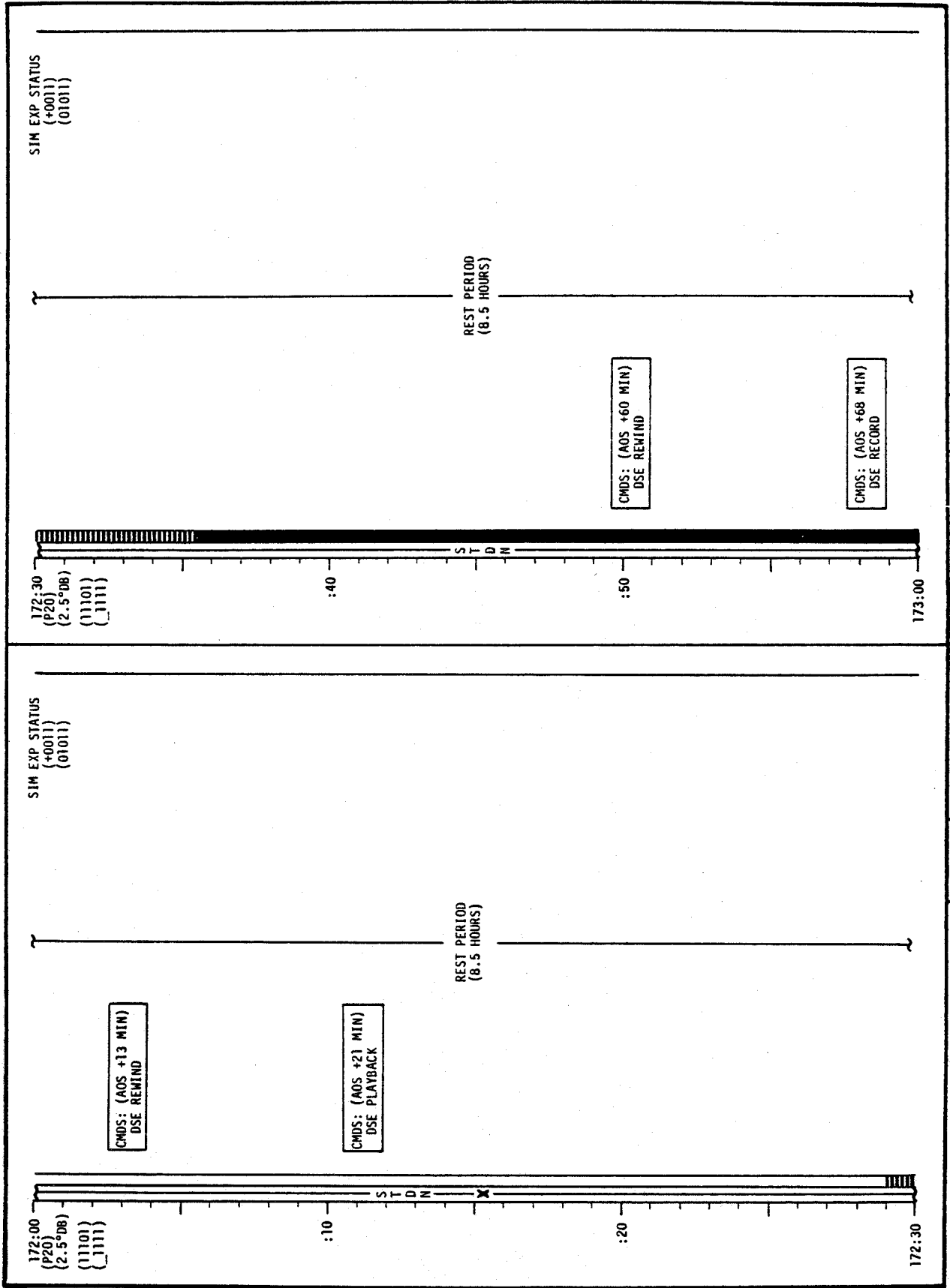
NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	172:00 - 173:00	8/43	3-244

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

0153 CST

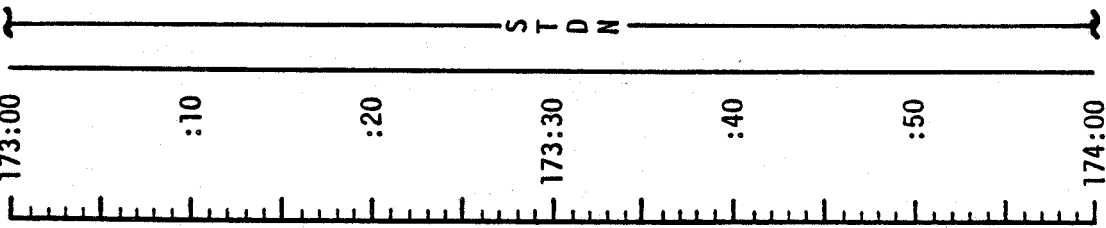
MCC-H

CDR

LMP

NOTES

MCC-H CONF (CONT)



CSM REV 44

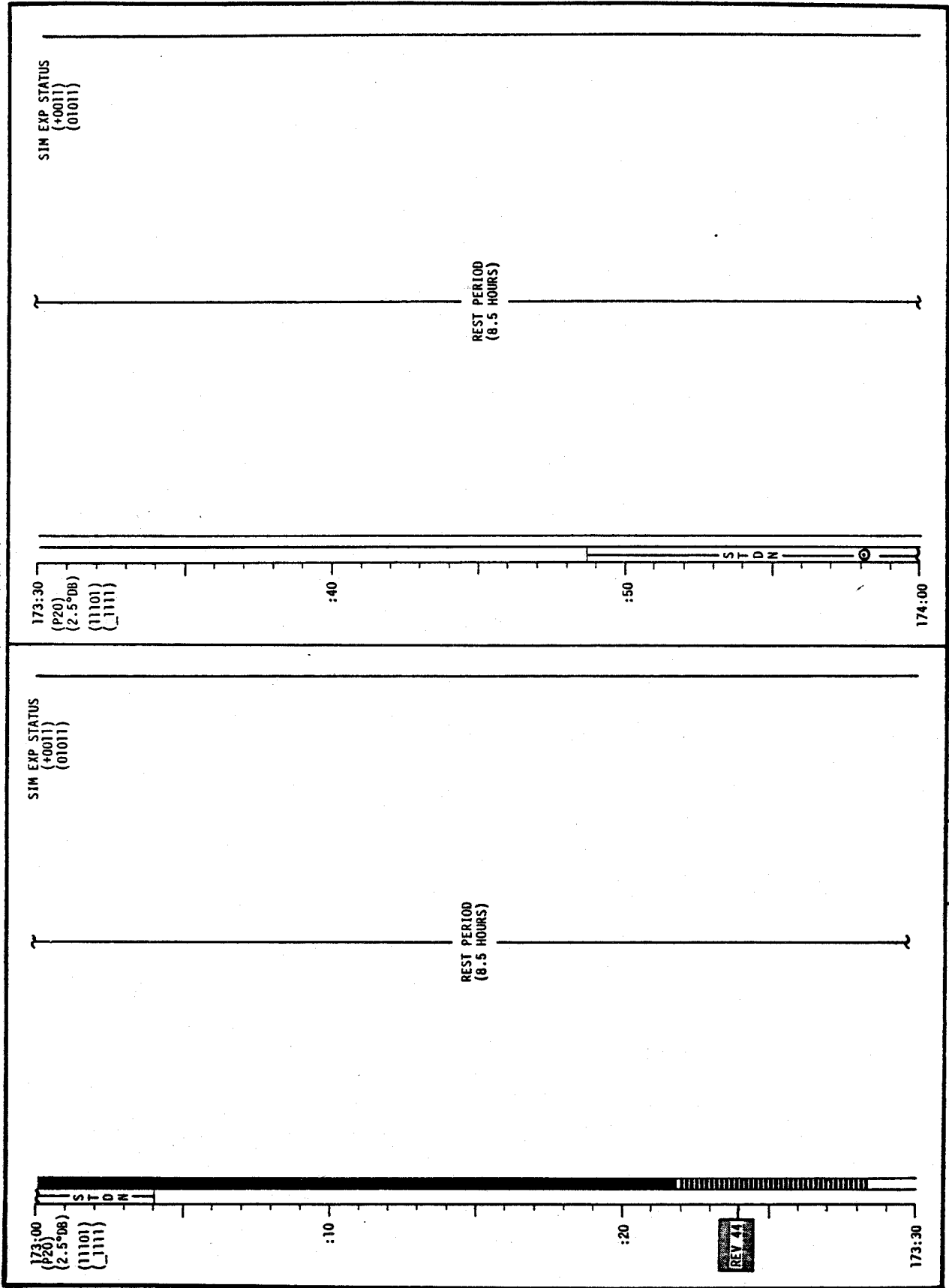
PRESLEEP

WEIGH ISA, REPORT: WEIGHT

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	173:00 - 174:00	8/43-44	3-246

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-247

REV 44

LM FLIGHT PLAN

MCC-H

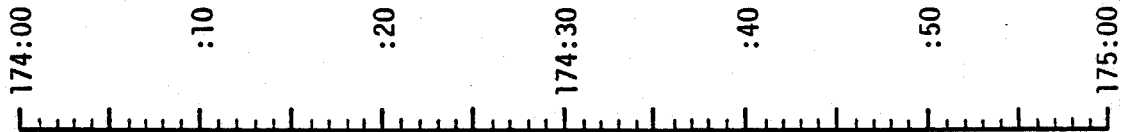
0253 CST

CDR

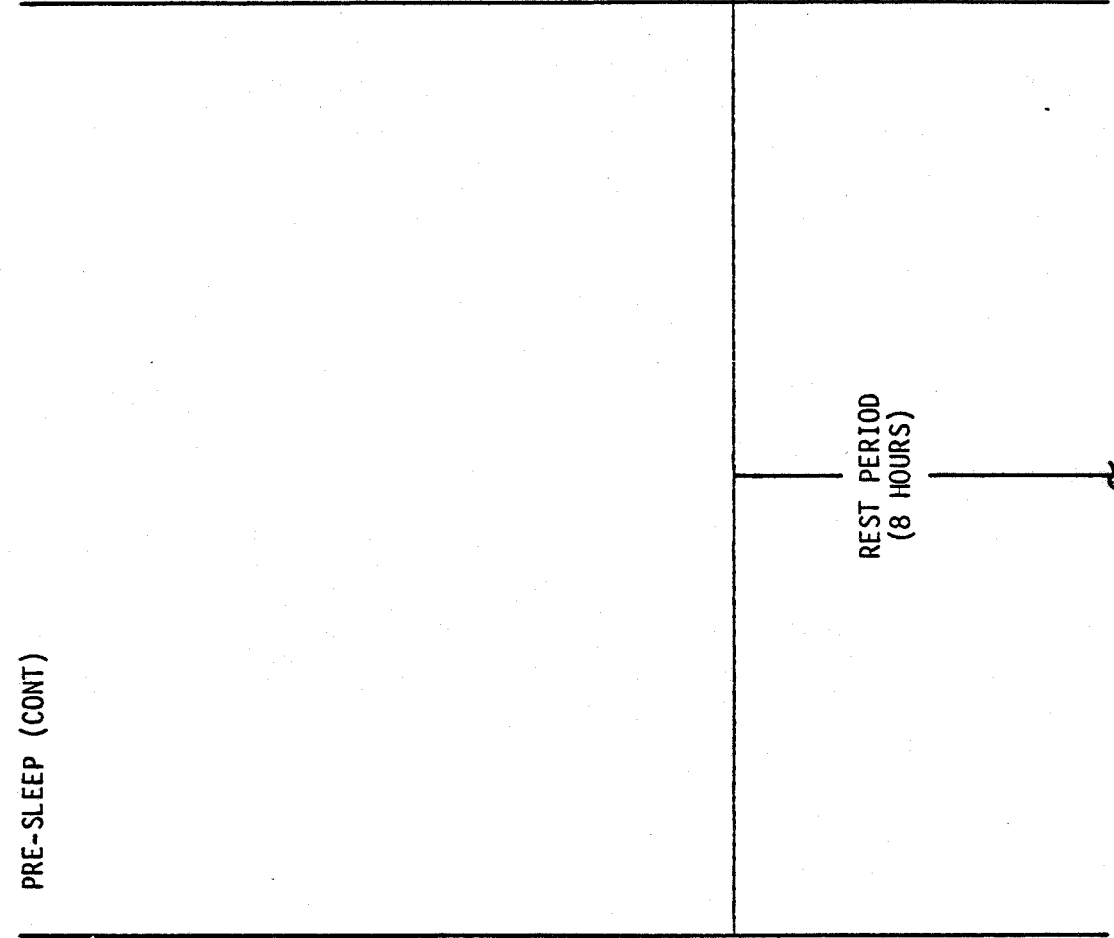
LMP

NOTES

PRE-SLEEP (CONT)



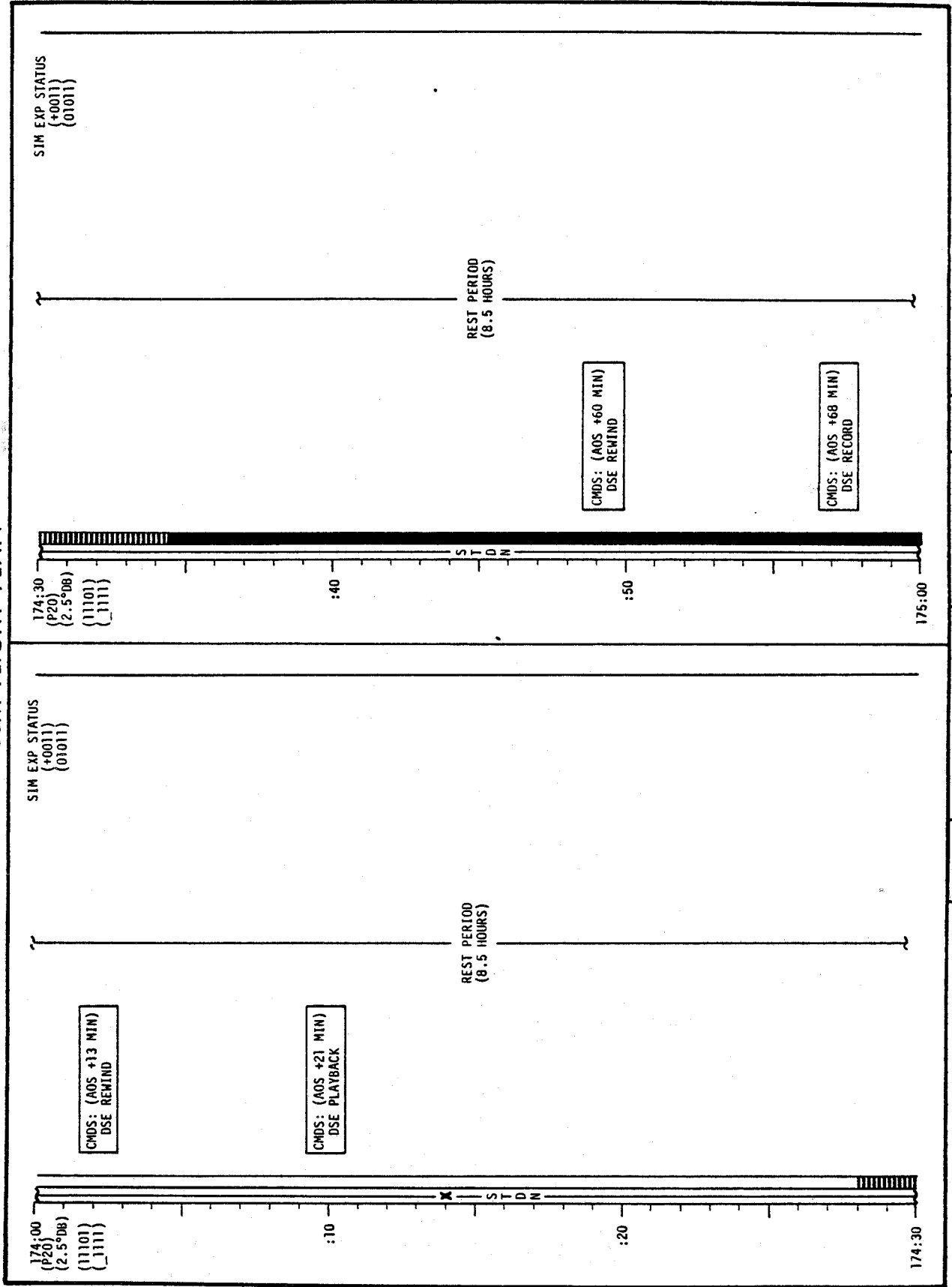
X S T D N



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	174:00 - 175:00	8/44	3-248

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

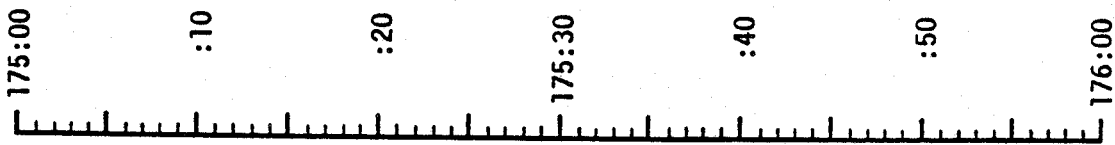
CDR

LMP

NOTES

0353 CST

MCC-H



S T D N

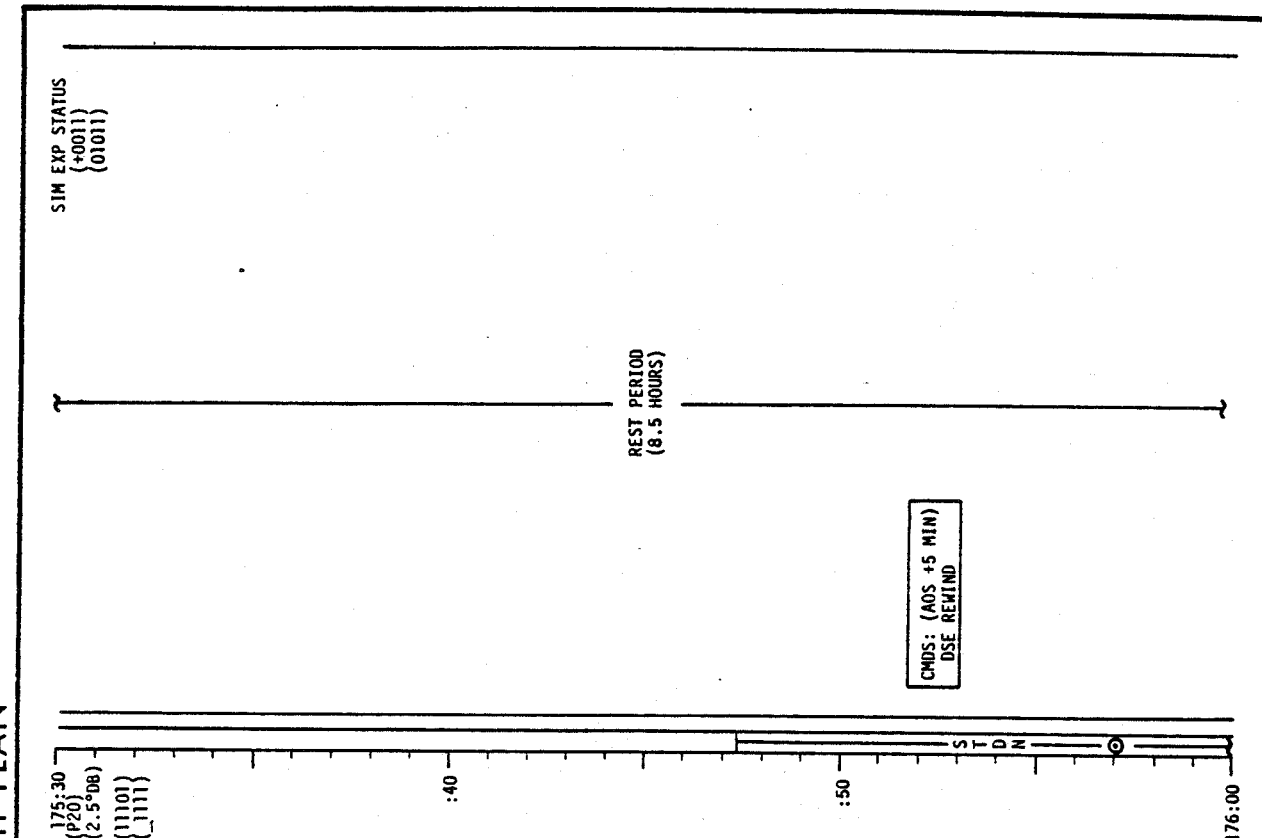
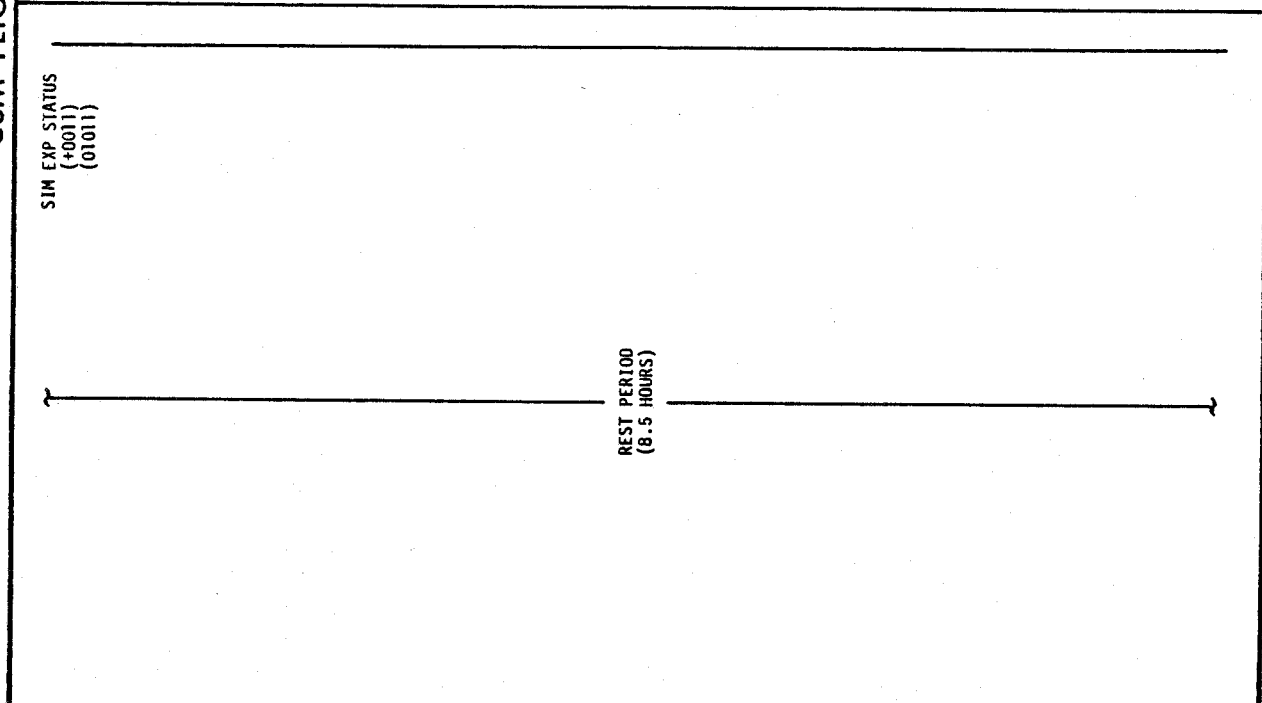
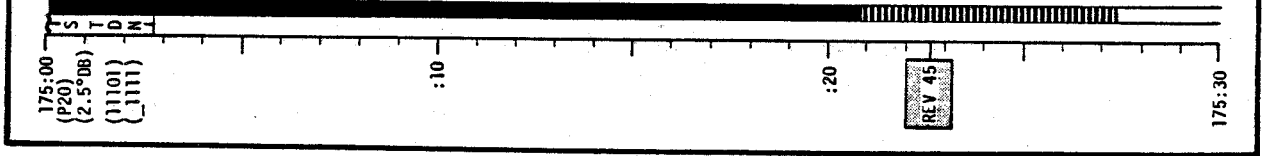
REST PERIOD
(8 HOURS)

CSM REV 45

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	175:00 - 176:00	8/44-45	3-250

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



SIM EXP STATUS
(+0011)
(01011)

SIM EXP STATUS
(+0011)
(01011)

LM FLIGHT PLAN

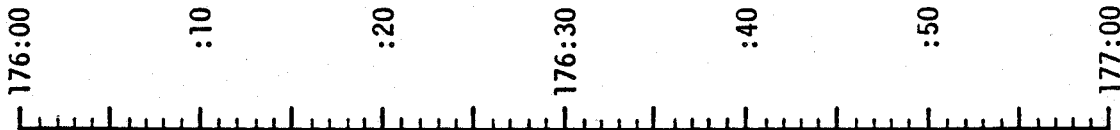
CDR

LMP

NOTES

0453 CST

MCC-H

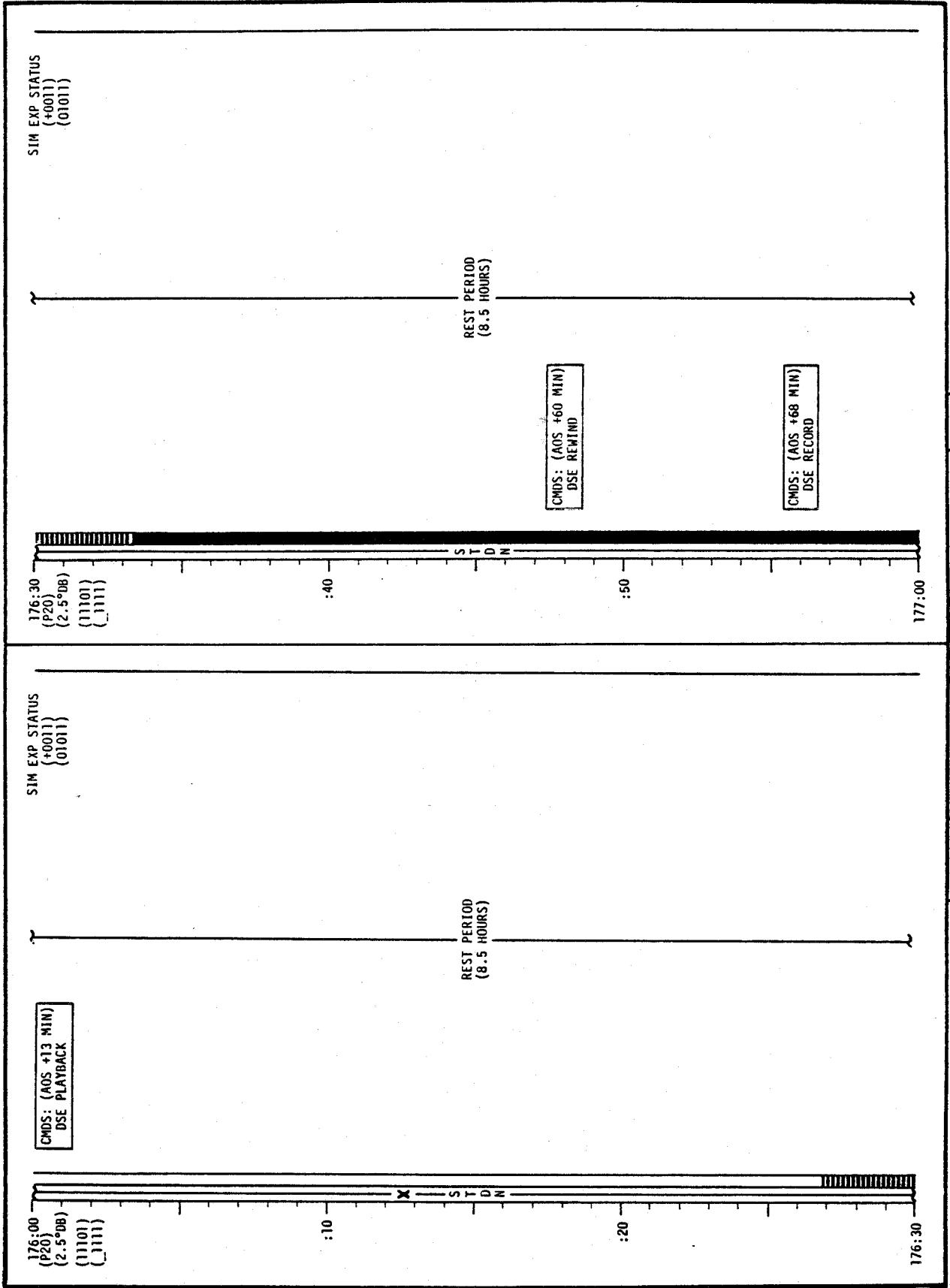


PKS 210' LOS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	176:00 - 177:00	8/45	3-252

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



LM FLIGHT PLAN

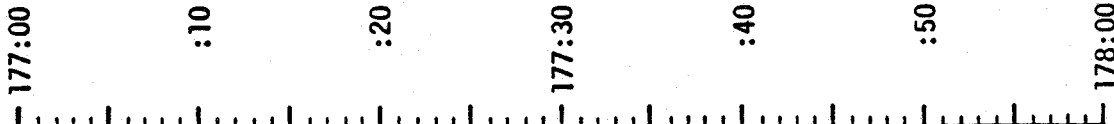
0553 CST

MCC-H

CDR

LMP

NOTES



ST D N

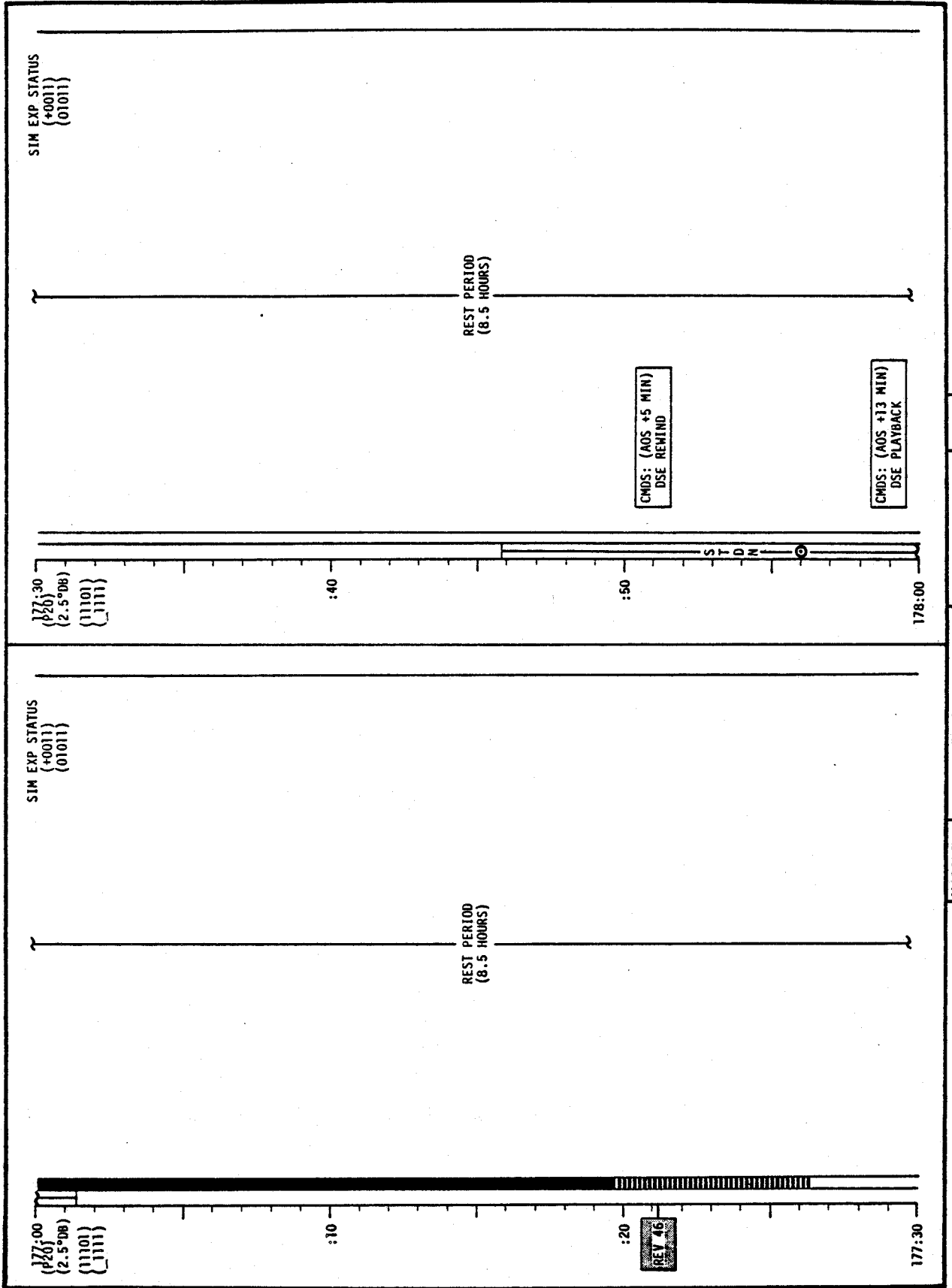
REST PERIOD
(8 HOURS)

CSM REV 46

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	177:00 - 178:00	8/45-46	3-254

FLIGHT PLANNING BRANCH

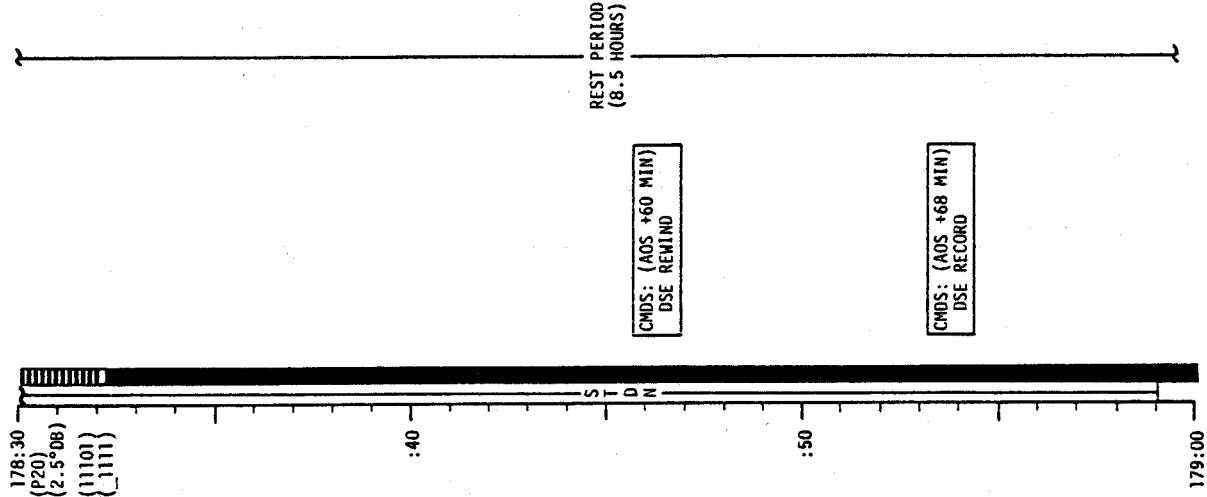
CSM FLIGHT PLAN



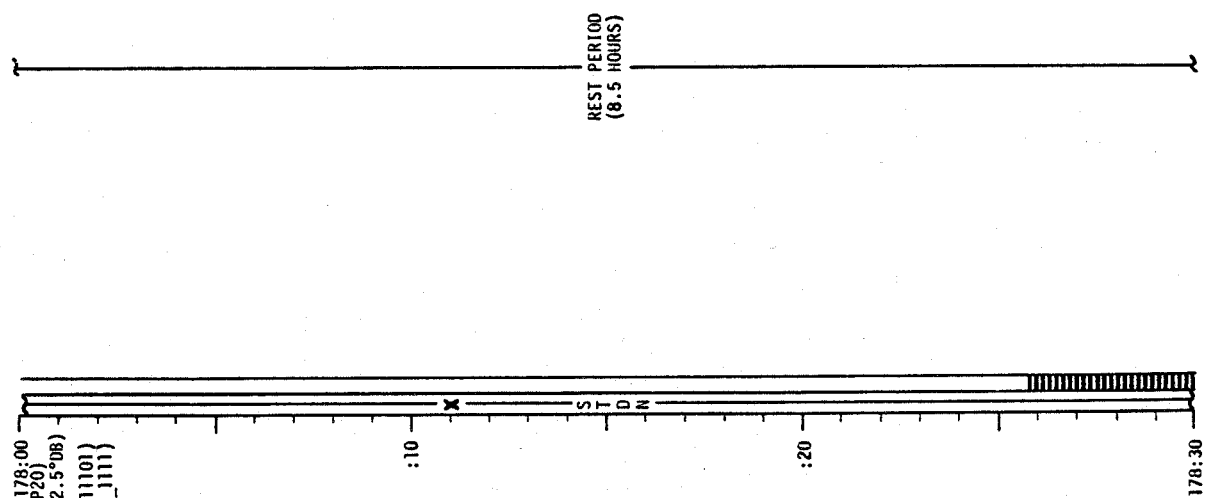
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-255

CSM FLIGHT PLAN

SIM EXP STATUS
(+0011)
(01011)



SIM EXP STATUS
(+0011)
(01011)



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-257

LM FLIGHT PLAN

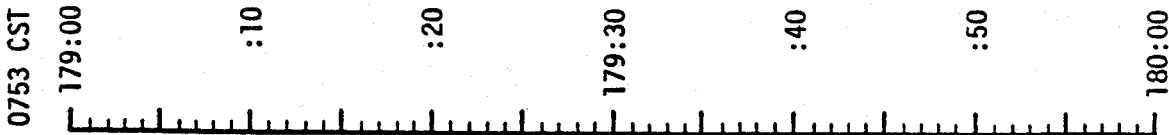
CDR

NOTES

LMP

CSM REV 47

REST PERIOD
(8 HOURS)

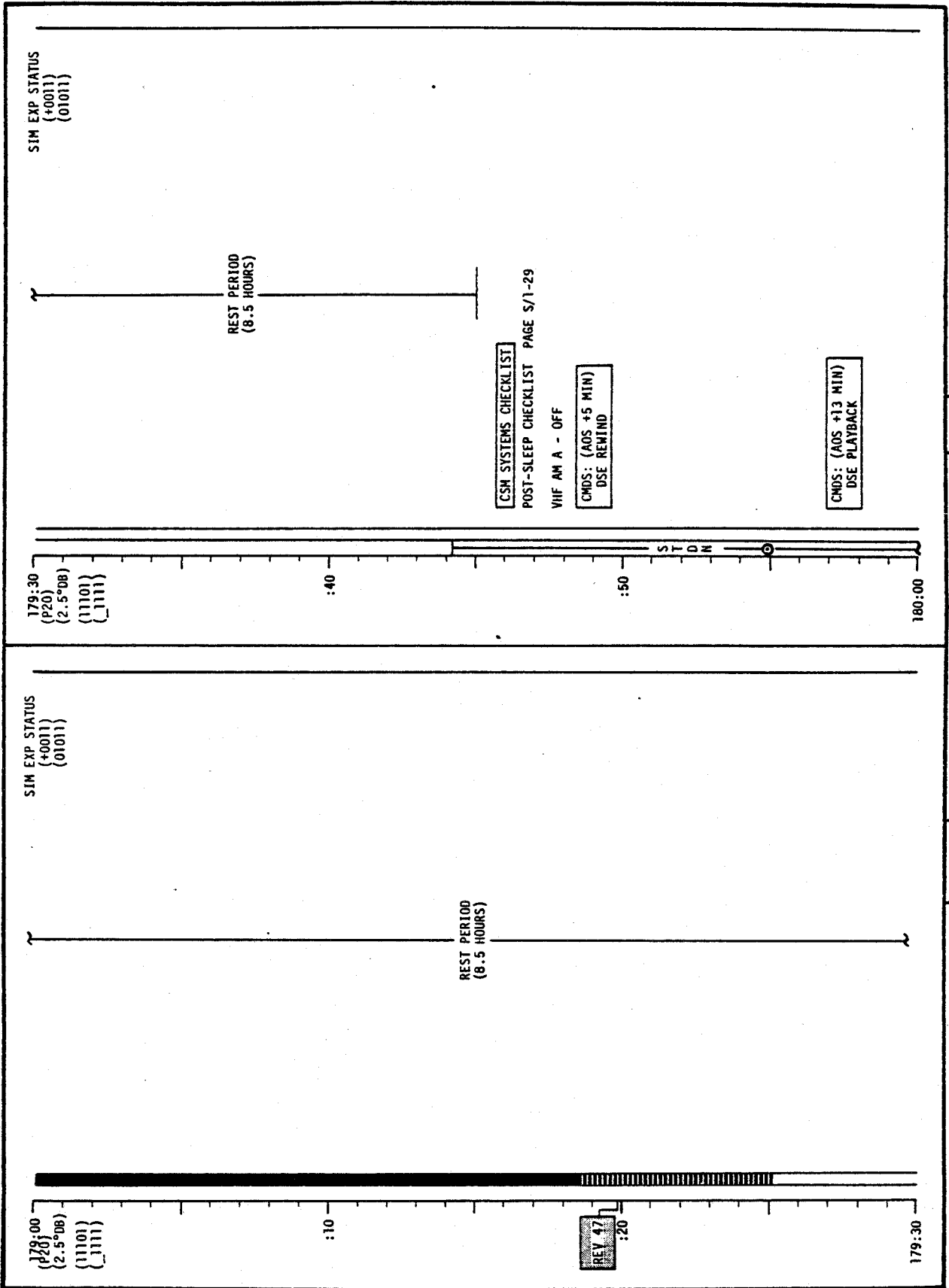


MCC-H

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	179:00 - 180:00	8-9/46-47	3-258

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-259

LM FLIGHT PLAN

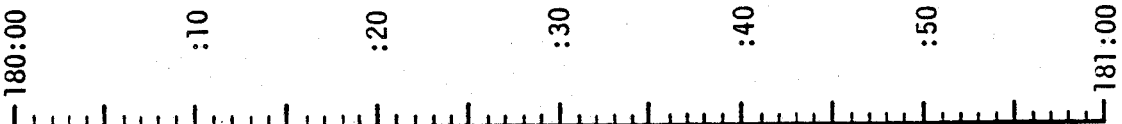
MCC-H

0853 CST

CDR

LMP

NOTES



----- X ----- STDN -----

REST PERIOD
(8 HOURS)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	180:00 - 181:00	9/47	3-260

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(+0011)
(01011)

180:00
(P20)
(2.5°DB)
(11101)
(1111)

PC: MODE - STBY
PR - ON
TERMINATE JET-ON MONITOR
P30
P20
V21N26 (00000)

UPLINK:
CSM S. V.
SPS BURN CONSTANTS
LOPC TGT LOAD
DESIRED ORIENT (LOPC)

PC: PHR - OFF (CUE)
UPDATE:
FLIGHT PLAN
LOPC MNVR PAD (182:15)
(COPY ATT AT 180:42 ALSO)

CONFIGURE FOR URINE DUMP

P00
LIMIT CYCLE - ON
ATT DEADBAND - MIN
RATE - LOW

180:30
(11101)
(1111)

BMAG (3) - ATT 1/RATE 2
SC CONT - SCS
P52 (OPTION 3)
(LOG SITE ORIENT)

STARS _____
SA _____
TA _____

REPORT: GYRO TORQUING
ANGLES
P52 (OPTION 1)
(LOPC ORIENT)

(106,133,330) ON LOPC ORIENT
SC CONT - CMC
BMAG (3) - RATE 2
GDC ALIGN

V49 MNVR TO LOPC BURN PAD ATT (180:57)

IR COVER - CLOSE
O₂ FUEL CELL PURGE

WASTE WATER DUMP
SAMPLE BUSS (1) - STOW SAMPLE (1)
DUMP URINE FROM BUSS (1)
START NEW URINE COLLECTION PERIOD

CMDS: (AOS +65 MIN)
DSE REMIND

P52 IMU REALIGN

N71: _____
N05: _____
N93: _____
X _____
Y _____
Z _____
GET _____

SIM EXP STATUS
(*0011)
(01011)

CONFIGURE DSE (HBR/RCD/FWD/CMD RESET) (AOS +73 MIN)

SET HGA: MAN, P -63, Y Z, AUTO, NARROW, FOR AOS

LM FLIGHT PLAN

NOTES

LMP

CDR

CSM REV 48

REST PERIOD
(8 HOURS)

0953 CST

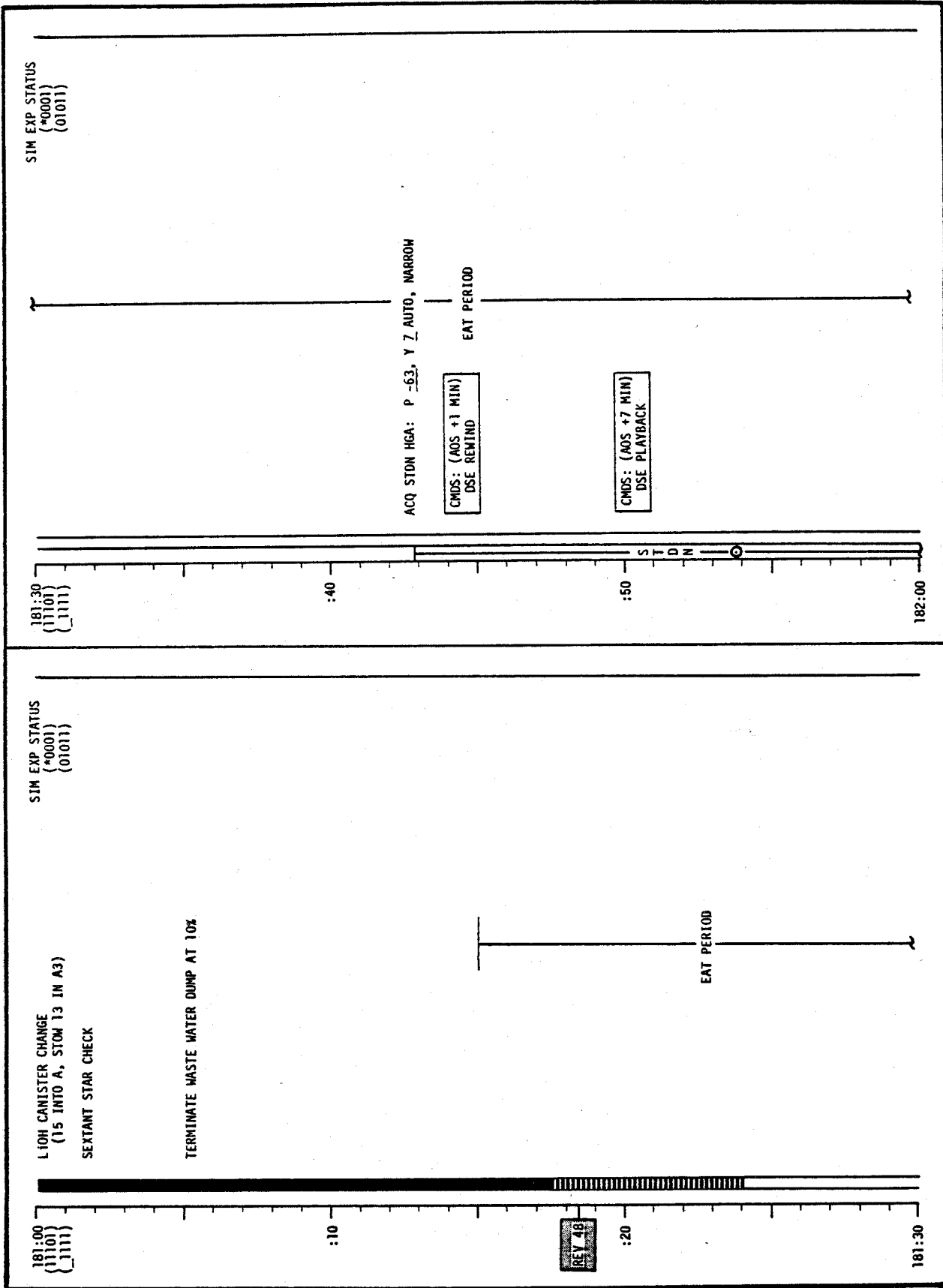


MCC-H

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	181:00 - 182:00	9/47-48	3-262

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-263

LM FLIGHT PLAN

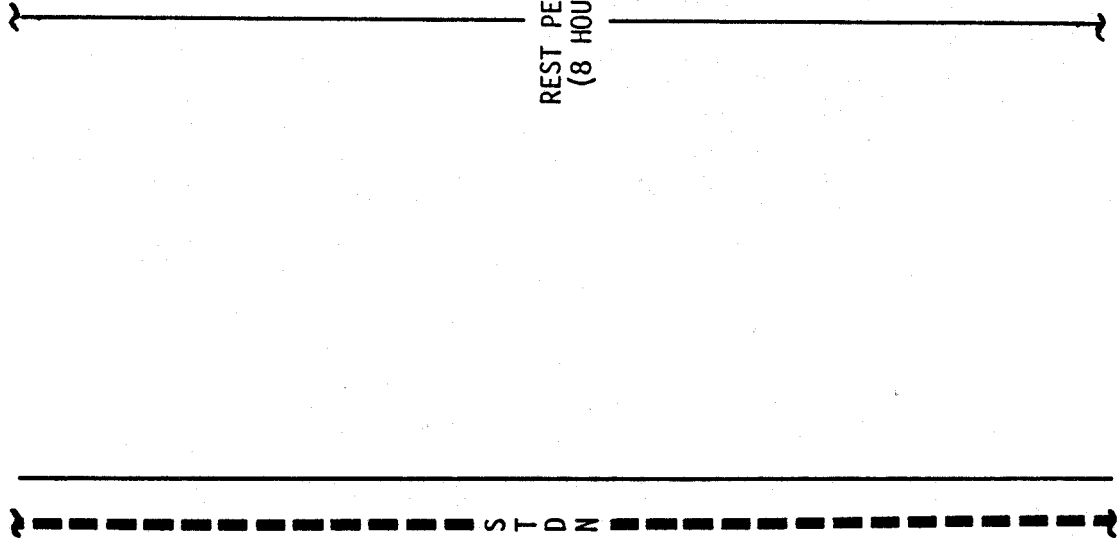
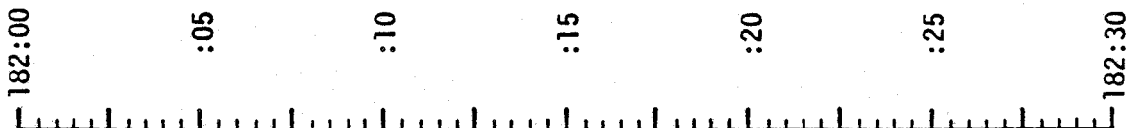
CDR

LMP

NOTES

1053 CST

MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	182:00 - 182:30	9/48	3-264

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(*0001)
(01011)

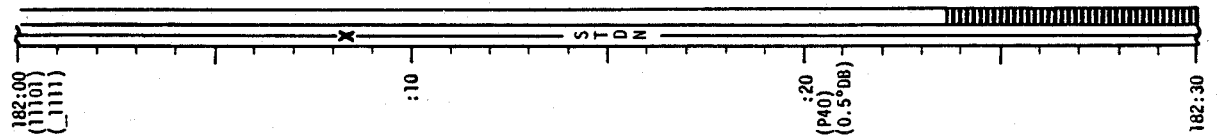
EAT PERIOD

PRE-SPS BURN SIM PREP (CUE CARD)
IR - OFF
UV - OFF
ENABLE ALL JETS
SECURE EQUIPMENT FOR LOPC

P30, VERIFY LOPC TIG AND AV
SET DET COUNTING UP TO LOPC

P40 (TRIM)

NOTE: PCM DATA WILL
NOT BE RECORDED
DURING LOPC



P30 MANEUVER

L	O	P	C	S P S G & N				PURPOSE	
				S	P	S	G	N	WT
									N47
									N48
									TRIM
									TRIM
									GET1
									N33
									SEC
									N81
									ΔV_x
									ΔV_y
									ΔV_z
									R (000)
									P (000)
									Y (315)
									N44
									H _A
									H _p
									ΔVT
									BT
									ΔVC
									SXTS
									SFT
									TRN
									BSS
									SPA
									SXP
									LAT N61
									LONG
									RT60 EMS
									V10
									GET 0.05G

SET STARS

R ALIGN
P ALIGN
Y ALIGN

ULLAGE

HORIZON/WINDOW

OTHER

LM FLIGHT PLAN

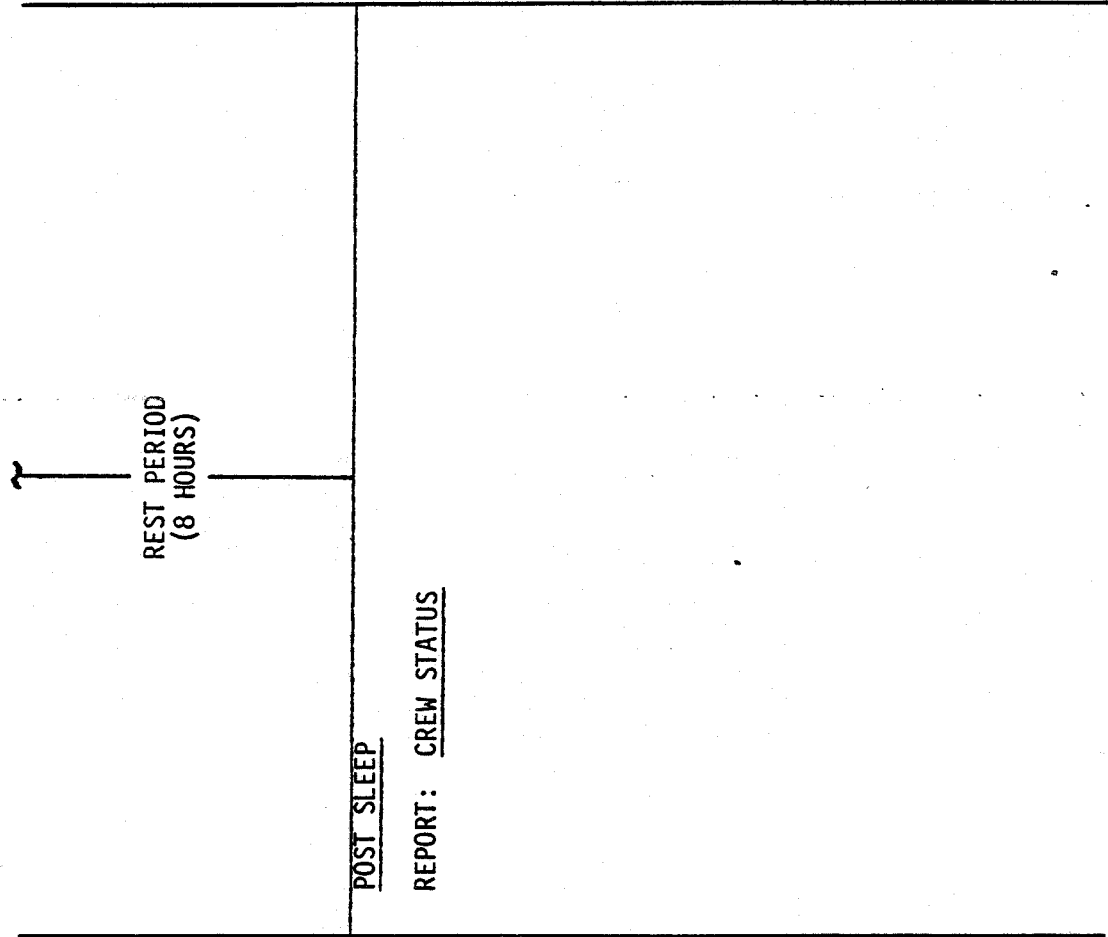
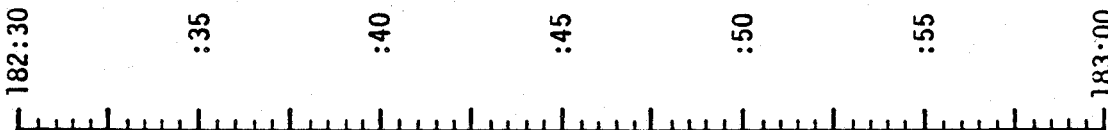
CDR

LMP

NOTES

1123 CST

MCC-H



ST D N

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	182:30 - 183:00	9/48	3-266

FLIGHT PLANNING BRANCH

STAY/NO-STAY FOR
JETTISON #2

LM FLIGHT PLAN

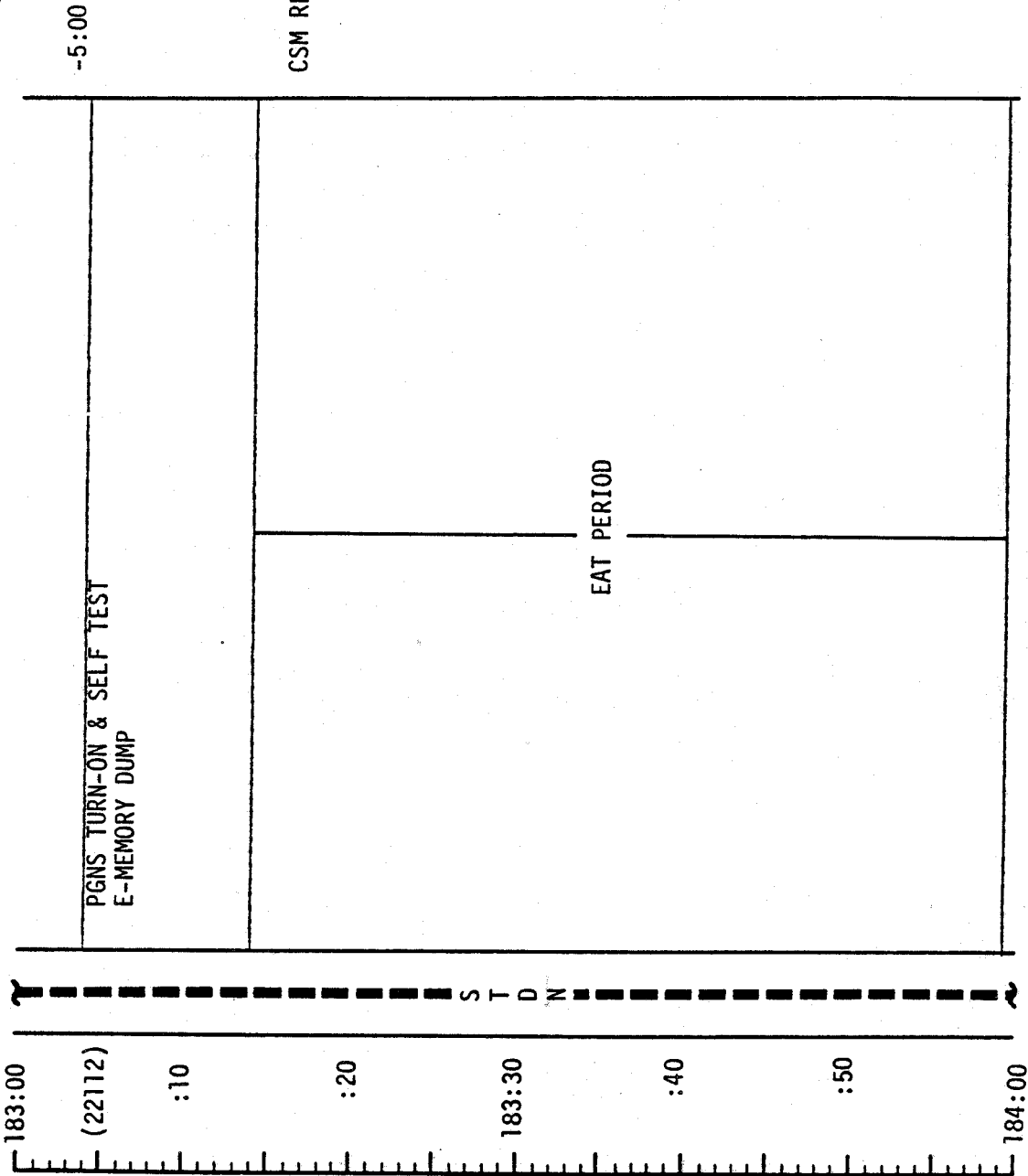
CDR

LMP

NOTES

1153 CST

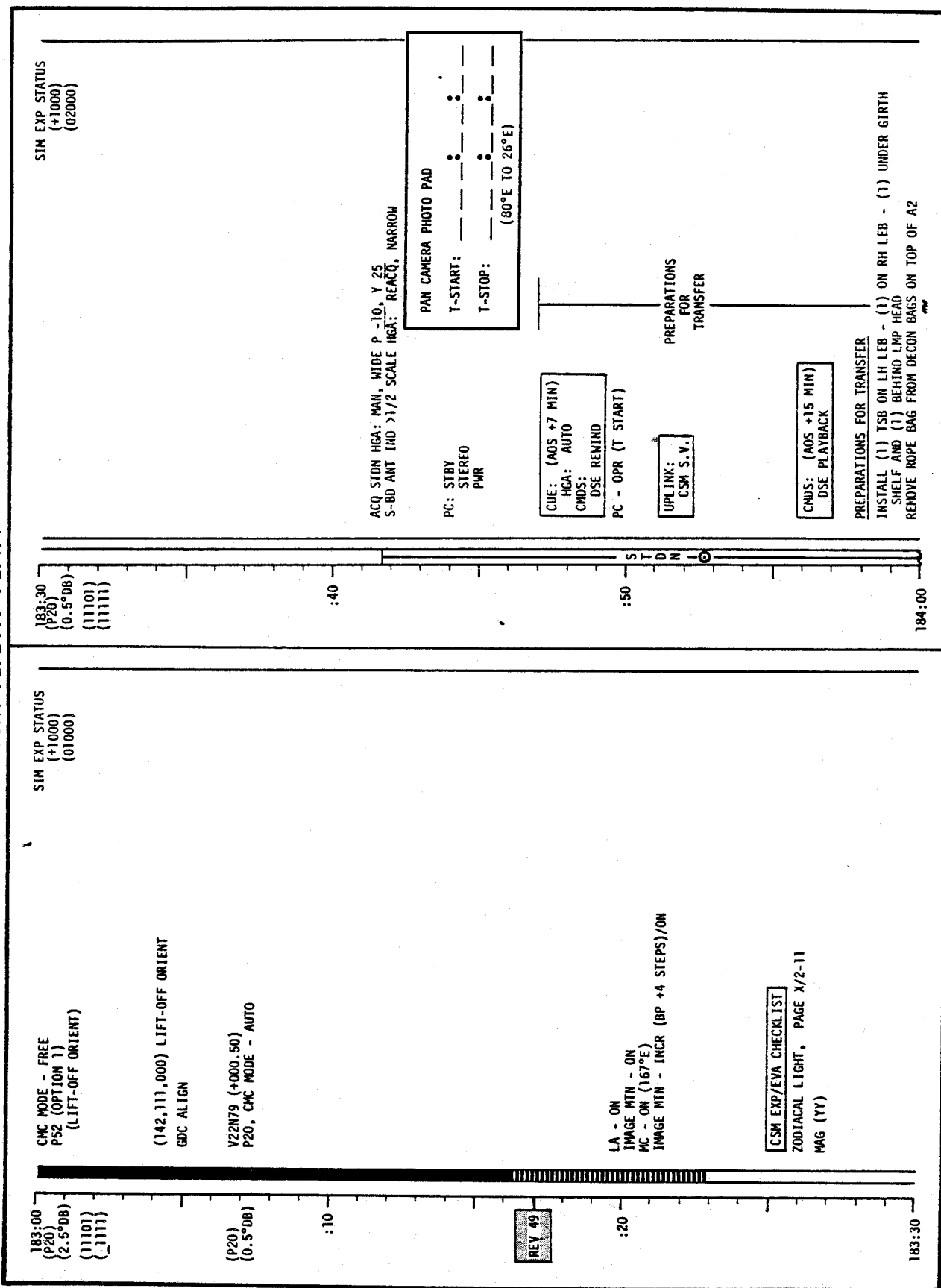
MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	183:00 - 184:00	9/48-49	3-268

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-269

REV 49

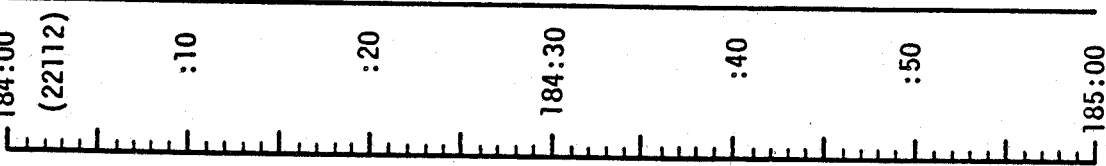
LM FLIGHT PLAN

CDR

LMP

NOTES

MCC-H
 UPDATE TO LM
 P57 LIFT-OFF TIME
 P22 ACQ TIME (28°)
 UPLINK TO LM
 CSM S.V. (L70)
 RLS



P57 LUNAR SURFACE ALIGN
 OPTION 4 LANDING SITE
 A/T 3, PLUS 4 STARS
 (LIFT-OFF ORIENT)

DON SUITS
 LMP, THEN CDR DON SUITS

BIOMED-OFF, THEN LEFT

-4:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	184:00 - 185:00	9/49	3-270

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

184:00
(P20)
(0.5 DB)
(11101)
(11111)

STOW ROPE IN RH TSB
REMOVE DECON BAG STRAPS FROM TOP OF A2 & HANG ON L3
REMOVE (2) JETTISON BAGS, (1) VACUUM BAG AND VACUUM CABLE FROM A2
STOW EMPTY JETT. BAG, VACUUM BAG & CABLE IN LH TSB
PLACE REMAINING JETT. BAG ON A2 AND LOAD WITH THE FOLLOWING:
LIQH CANS & PARTITIONS FROM A9
WASTE FOOD BAGS, FECAL BAG (12 PACK), HEAT FLOW IN BAG, FROM A7
HELMET SHIELD FROM CMP HELMET
USED CNG'S-4 FROM A8
USED ICG-1 FROM U2
USED TISSUES, TOWELS AND MISCELLANEOUS WASTE

PC - STBY (T STOP) () (CUE)

REMOVE CNG-(3) AND INTERCONNECTS (2) FROM A8 - STOW IN RH TSB AND VACUUM BRUSH FROM SIDE OF A8
UNSTOW AND ASSEMBLE:
VACUUM BRUSH - VACUUM CLEANER (SIDE A6)
POWER CABLE (LH-TSB) AND VACUUM BAG (LH-TSB)
CONNECT CABLE TO VACUUM AND TO PANEL 201
STOW ASSEMBLED VACUUM BETWEEN F2 AND MOC
INSTALL HSB'S IN LH TSB
REMOVE SPRINGS & CLIPS FROM CLOSEOUT CURTAIN AND INSTALL
REMOVE 85 & 86 CLOSEOUT CURTAIN AND STOW IN RH TSB
REMOVE R12 FROM GIRTH SHIELD & STOW
OPEN BOTTOM OF PGA BAG AND INSERT BOTTOM FLAP IN TOP POCKET

PC - OFF (CUE)
MC - OFF (28"W)
WAIT 30 SEC
MC - STBY
IMAGE MTN - OFF
LA - OFF
MC - RETR
RNDZ XPNDR - HTR

MC/LA COVER - CLOSE
POO
NOTE: ATTITUDE CONTROL
ALL AXES COUPLED
AUTO RCS SELECT: A1 & A2 - ON

184:30
(11101)
(11111)

UPDATE:
ZODIACAL LIGHT PHOTO PAD
P24 LDMK TRACK PADS (F-1 & 17-1)(185:50)

V49 MNVR TO ZODIACAL LIGHT PHOTO ATT (184:55)
(024.072.004)

RNDZ XPNDR ACTIVATION AND SELF TEST (DECAL)

CSM 114 VALUES
A ~ 1.75 AGC
B ~ 2.35 SELF TEST
C ~ 0.3 UNLOCKED
~ 4.9 LOCKED
RNDZ XPNDR - HTR

CMDS: (A05 +65 MIN)
DSE REMIND

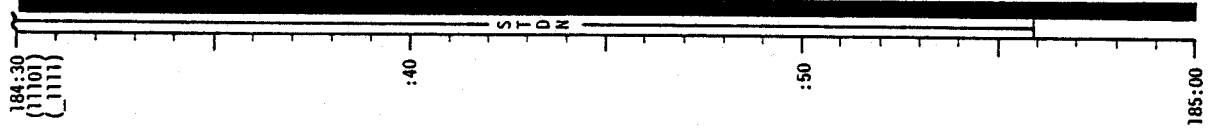
DATA SYS - OFF

CONFIGURE DSE (LBR/RCD/FND/CHD RESET)(A05 +73 MIN)
AUTO RCS SELECT: A3, B3, C4, D4 - OFF
P20 OPT 2 (ZODIACAL LIGHT)

N78 (+090.00)
N79 (+000.00)
N79 (-0.0500)
N34 (+000.50)
N34 (LOAD T START)
PRO

ZODIACAL LIGHT PHOTO PAD(SR)

T-START:
(SUNRISE - 15 MIN)



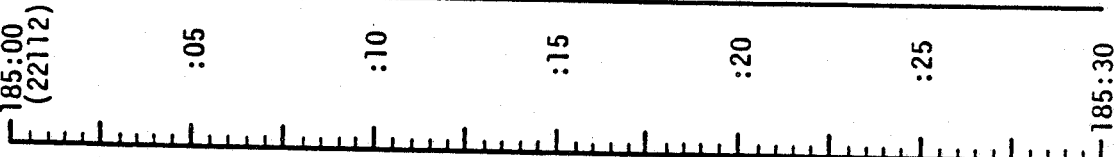
LM FLIGHT PLAN

CDR

LMP

NOTES

1353 CST



PREP FOR EQUIPMENT JETTISON	
REPORT: PRD	-3:00
HELMET/GLOVE DONNING	
PRESSURE INTEGRITY CK	RECORDER - ON/VOX
CABIN DEPRESS	
EQUIPMENT JETTISON #2	
CABIN REPRESS	
POST-JETTISON CABIN CLEANUP	RECORDER - OFF

CSM REV 50

GO/NO-GO FOR DEPRESS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	185:00 - 185:30	9/49-50	3-272

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

185:00
(P20)
(0.5°DB)
(11101)
(1111)

START AUTO PITCH RATE
ZODIACAL LIGHT (POLARIZED FILTER)

SIM EXP STATUS
(*0000)
(01000)

NOTE: ATTITUDE CONTROL
P & Y AXES UNCOUPLED
R AXIS COUPLED

:10

REV 50

AUTO RCS SELECT: A3, B3, C4, D4 - ON
P20 OPT 5 (LDMK TRK ATT) (185:26)
N78 (+000.00)
(-068.00)
(+000.00)
N79 (+000.50)
(000,338/007.000)

NOTE: ATTITUDE CONTROL
ALL AXES COUPLED

:20

SET HGA: MAN, P -2, Y 330 REACQ, NARROW FOR AOS

CONFIGURE CAMERA: (LDMK TRK)
CM/DAC/SXT/CEX (EXP PAD) 1 FPS (8% MAG)
MAG (BB) _____, MAG % _____

185:30

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-273

LM FLIGHT PLAN

MCC-H

CDR

LMP

NOTES

POST JETTISON CABIN CLEANUP (CONT)

1423 CST

185:30

(22112)

:35

:40

:45

:50

:55

186:00

STDN

P22 RR LUNAR SURFACE NAVIGATION

GDS 210' AOS

UPDATE TO LM
ASCENT PADS
CSI PAD
LM DAP WEIGHTS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	185:30 - 186:00	9/50	3-274

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(+0000)
(01000)

LOAD N89 FOR LDMK F-1

P24 (LDMK F-1)
OPT ZERO - OFF
OPT MODE - CMC

0:00 T1 (HORIZON) DET-RESET/START
ACQ STDN HGA: P 2, Y 330 REACQ, NARROW

3:50 - DAC - ON

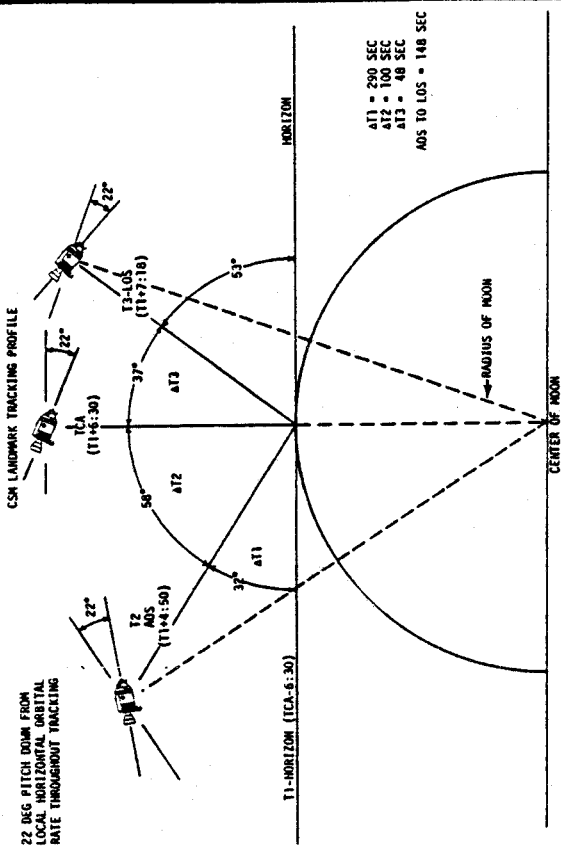
4:50 - T2 (LDMK ACQ) OPT MODE=MAN
TAKE MARKS TO SEC APART

6:30 - TCA
7:18 - T3 (LDMK LOSS) DAC - OFF
P20
LOAD N89 FOR LDMK 17-1
CONFIGURE VHF FOR COMM CHECK WITH LM
VHF AM B - DUPLEX
VHF AM - T/R (PANEL 9)
MODE - VOX
VHF ANT - RIGHT
ADJUST SQUELCH A

RNDZ XPNDR - PMR

P24 (L/S LDMK 17-1)
OPT ZERO - OFF
OPT MODE - CMC

0:00 T1 (HORIZON) DET - RESET/START



P24 LDMK TRACKING
TGT: F-1 (1/250)

T1
T2
TCA
T3
R *P *Y (T2 ACQ)
N of S NM / SA TA (T2 ACQ)
N89
LAT +01.863
LONG/2 +44.125
ALT 000.00

P24 LDMK TRACKING
TGT: 17-1 (1/250)

T1
T2
TCA
T3
R *P *Y (T2 ACQ)
N of S NM / SA TA (T2 ACQ)
N89
LAT +20.160
LONG/2 +15.405
ALT -001.96

185:30
(P20)
(0.5"DB)
(11101)
(1111)

:40

:50

186:00

LM FLIGHT PLAN

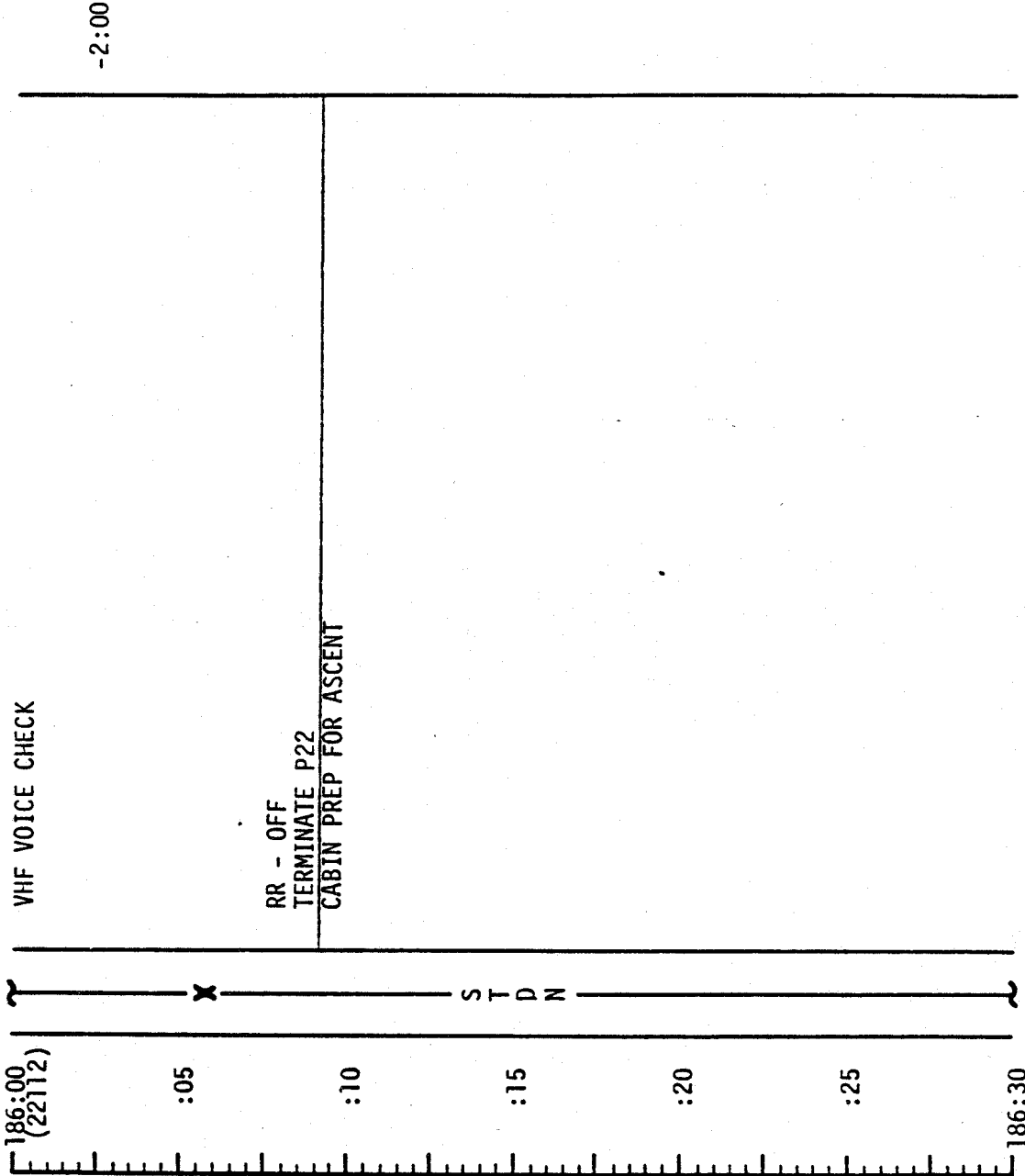
MCC-H

1453 CST

CDR

LMP

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	186:00 - 186:30	9/50	3-276

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(*0000)
(01000)

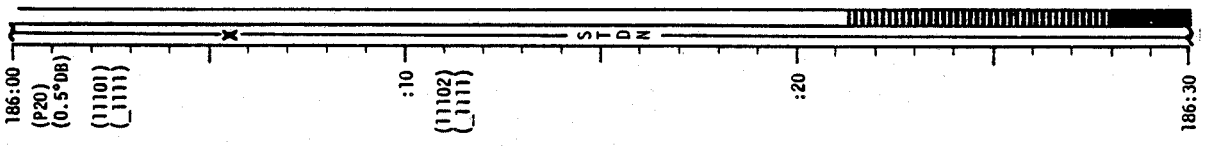
3:50 - DAC - ON
 4:50 - T2 (LDMK ACQ) OPT MODE - MAN, TAKE MARKS 10 SEC APART
 6:30 - TCA
 7:18 - T3 (LDMK LOSS) DAC - OFF
 P00
 VHF AM B - OFF (CTR)
 MODE - INTERCOM/PTT
 RNDZ XPDR - HTR
 V48 (11102)
 (1111)
 V49 MNVR TO P52/COAS CAL ATT (186:18)
 (180,244,341) HGA P -58, V 52

UPLINK:
 LM S.V. (INS +5)
 CSM S.V. (L/O)
 RESET SURFACE FLAG

UPDATE:
 CONSUMABLES STATUS
 CSM S.V. (L/O)
 LM S.V. (INS +5)
 ASCENT PADS AND CSM HEIGHT (COPY AT 187:15)
 FLIGHT PLAN

CMDS:
 DSE DUMP

P52 (OPTION 3)
 (LIFT-OFF ORIENT)
 REPORT: GYRO TORQUING ANGLES



P27 UPDATE

PURP GET	CSM				LM			
	CSH (INS+1)	V	7	1	LM (INS+1)	V	7	1
	188	:	11	: 32	188	:	11	: 32
	INDEX	2	1	INDEX	2	1	INDEX	
304 01	0	1	5	0 1	0	1	5	0 1
305 02	0	0	0	0 2	7	7	7	7 5
306 03	7	7	4	7 7	7	7	5	2 5
307 04	5	1	3	7 7	7	7	7	3 2
310 05	7	7	6	3 1	7	7	6	0 4
311 06	6	5	3	6 1	6	4	4	7 6
312 07	0	0	0	7 2	0	0	0	5 1
313 10	1	0	7	2 2	1	4	2	0 4
314 11	7	2	5	2 3	7	0	2	0 5
315 12	7	1	7	3 3	4	6	3	3 5
316 13	1	5	6	6 6	1	4	7	6 3
317 14	1	5	5	3 2	1	1	6	6 2
320 15	0	6	5	3 0	0	7	4	1 1
321 16	1	4	0	2 4	3	2	5	0 0
322 17	1	0	0	4 7	1	0	0	4 7
323 20	1	0	1	0 0	1	0	1	0 0
324 21								
325 22								
326 23								
327 24								

LM FLIGHT PLAN

NOTES

LMP

CDR

CABIN PREP FOR ASCENT (CONT)

1523 CST

186:30
(22112)

:35

:40

:45

:50

:55

187:00

STDN

FINAL LIFT-OFF PREP

CONFIGURE CB'S

CONFIGURE RR

-1:15

CONFIGURE CB'S

AGS STATUS - OPERATE

ENABLE STDN S-BAND
RELAY

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	186:30 - 187:00	9/50	3-278

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

186:30
(11102)
(1111)

CSM GDC CHECKLIST

P52 (COAS CALIB) (PG/7-6)
USE STAR NO. 16 (PROCTON)

POO
GDC ALIGN

SIM EXP STATUS
(*0000)
(01000)

P52 IMU REALIGN

N71: ---
N05: ---
N93: ---
X ---
Y ---
Z ---
GET ---

DON PGA WITHOUT HELMET AND GLOVES

CMDS:
DSE RECORD

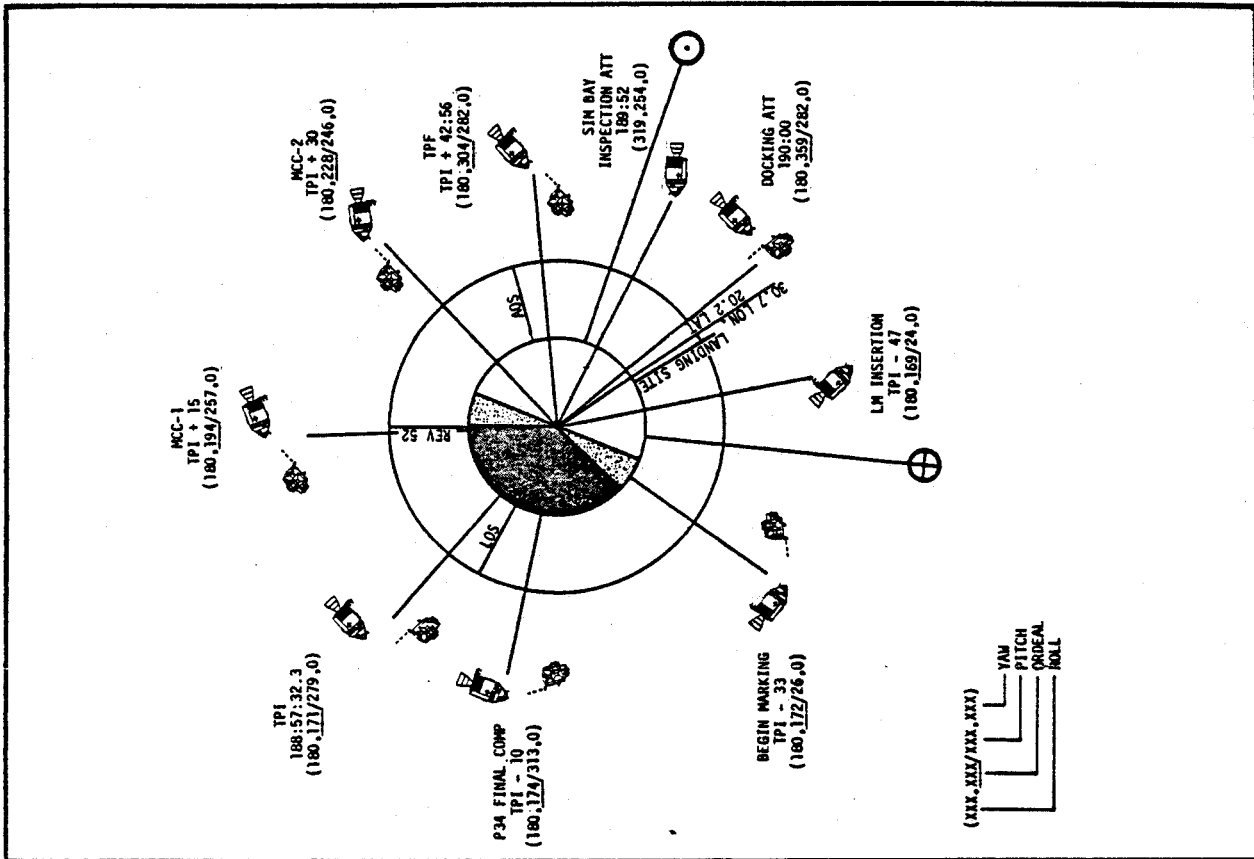
COAS CALIB - N92

SHAFT: ---
TRON: ---

STON ENABLES S-BAND RELAY

VERIFY BUSS COVER INSTALLED AND SWAPPED
STOW BUSS IN PGA BAG
INSTALL INTERCONNECTS (TSB)
SUIT FLOW VALVE CMP - FULL FLOW
SUIT FLOW VALVES CDR AND LMP - OFF

VERIFY DSE TAPE MOTION (LBR/RCD/FMD/CHD RESET)
SET HGA MAN P 58 P 58, Y 52 AUTO, NARROW FOR AOS



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-279

LM FLIGHT PLAN

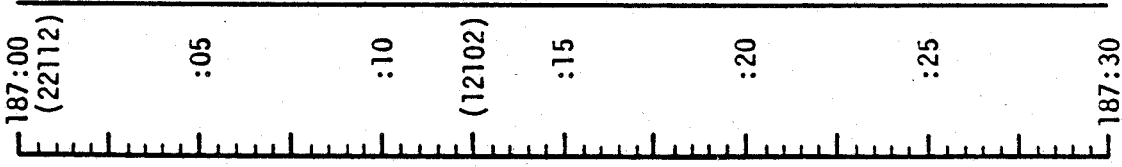
MCC-H

CDR

LMP

NOTES

1553 CST



V63 RR SELF TEST (IF REQ)	AGS GYRO CALIBRATION	-1:00
RATE GYRO TEST	LOAD AGS ASCENT TARGETING	
SET DAP RCS CHECKOUT	PGNS/AGS CLOCK SYNC	
P57 LUNAR SURFACE ALIGN OPT 4 LANDING SITE A/T 3 (LIFT-OFF ORIENT)		-0:45
LOAD DAP, LM WEIGHT	BATS 5&6-ON, 1&3-OFF/RESET	

CSM REV 51

UPLINK TO LM
ZERO POS/NEG CELLS
CSM S.V. (L/O)
(IF REQ)
RLS (IF REQ)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	187:00 - 187:30	9/50-51	3-280

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
 (*0000)
 (01000)

187:00
 (11102)
 (1111)

:10

REV 51

:20

187:30

EAT PERIOD

DIRECT ASCENT RNDZ PAD				UPDATE (IF REQ)			
GETI	HRS	MIN	SEC	+	0	0	0
LIFT-OFF	HRS	MIN	SEC	+	0	0	0
GETI	HRS	MIN	SEC	+	0	0	0
TPI	HRS	MIN	SEC	+	0	0	0
N37	HRS	MIN	SEC	+	0	0	0

CSM WT	+		
LM WT	+	0	5 9 3 5

COELLIPTIC RNDZ PAD				UPDATE (IF REQ)			
GETI	HRS	MIN	SEC	+	0	0	0
LIFT-OFF	HRS	MIN	SEC	+	0	0	0
GETI	HRS	MIN	SEC	+	0	0	0
CSI	HRS	MIN	SEC	+	0	0	0
N11	HRS	MIN	SEC	+	0	0	0
GETI	HRS	MIN	SEC	+	0	0	0
TPI	HRS	MIN	SEC	+	0	0	0
N37	HRS	MIN	SEC	+	0	0	0

LM FLIGHT PLAN

NOTES

1623 CST

MCC-H

UPDATE TO LM
 AGS K-FACTOR
 AGS 047 & 053
 LGC GYRO COMP
 (IF REQ)
 PIPA BIAS (IF REQ)

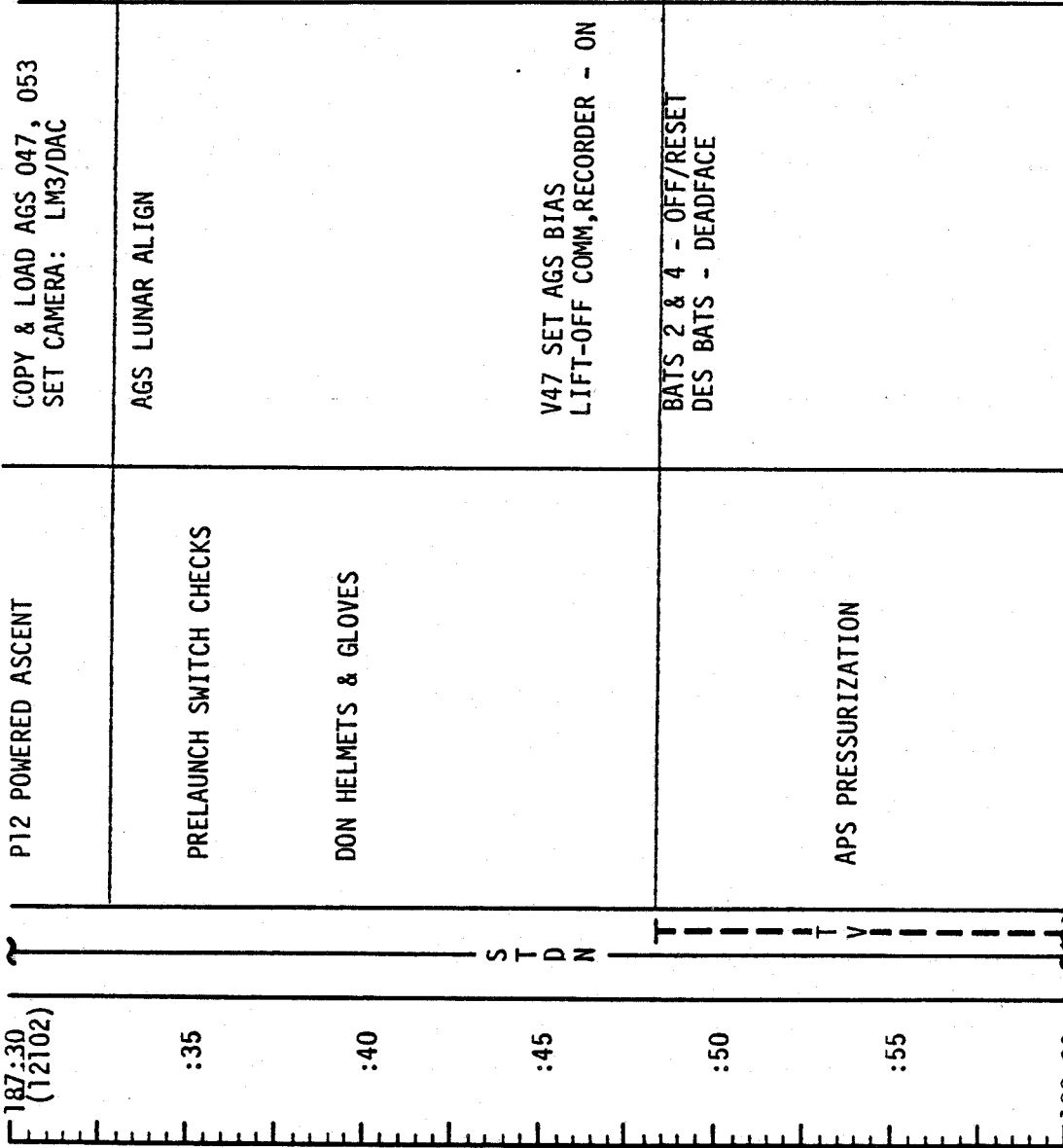
CDR

P12 POWERED ASCENT

LMP

COPY & LOAD AGS 047, 053
 SET CAMERA: LM3/DAC

187:30
 (12102)



GUIDANCE RECOMMEN-
 DATION FOR ASCENT

GO/NO-GO FOR
 LIFT-OFF

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	187:30 - 188:00	9/51	3-282

FLIGHT PLANNING BRANCH

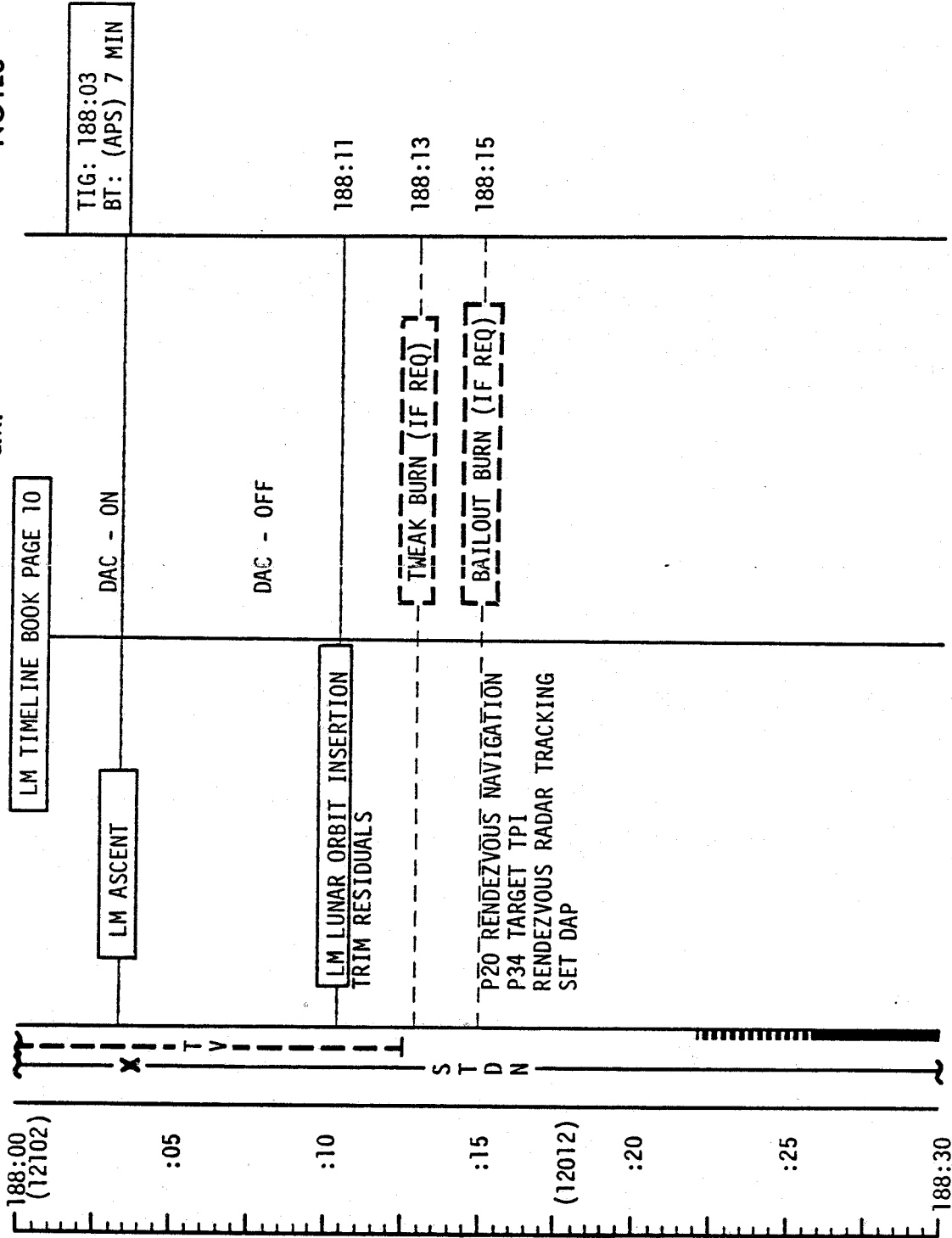
LM FLIGHT PLAN

CDR

LMP

NOTES

1653 CST



LM TIMELINE BOOK PAGE 10

TIG: 188:03
BT: (APS) 7 MIN

LM ASCENT

DAC - ON

DAC - OFF

LM LUNAR ORBIT INSERTION
TRIM RESIDUALS

UPDATE TO LM
TWEAK OR BAILOUT
INSTRUCTION
(IF REQ)

TWEAK BURN (IF REQ)

P20 RENDEZVOUS NAVIGATION
P34 TARGET TPI
RENDEZVOUS RADAR TRACKING
SET DAP

BAILOUT BURN (IF REQ)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	188:00 - 188:30	9/51	3-284

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

188:00
(11102)
(1111)

SIM EXP STATUS
(*0000)
(01000)

PRE-SPS BURN SIM PREP (CUE CARD)

LM LIFT-OFF

188:03:14.6

VHF RING - RESET

LM INSERTION

188:10:32.3

VHF VOICE CHECK

UPLINK:
LM S.V.

P34 (TRIM) (180,172/26.0)

BEFORE STEADY STATE
PRE-TPI: N49 > (+00200,+00120) REJECT/REPEAT
POST-TPI: N49 > (+00080,+00050) REJECT/REPEAT
AFTER STEADY STATE
ANYTIME: N49 > (+00030,+00020) REJECT/REPEAT

P30 MANEUVER

	C		S		M		B		O		PURPOSE	
	S	P	S	G	S	G	S	G	S	N	PROF/GUID	
N/A SET STARS												
R ALIGN N / A	+											N47
P ALIGN N / A												N48
Y ALIGN H / A												Y TRIM
												HRS GETI
												MIN R33
												SEC
ULLAGE												ΔV X R81
4 JET, 11 SEC												ΔV Y
												ΔV Z
												R
												P
												Y
ΔVC												N44

188:13:32.3 (INS +3) TWEAK
188:15:32.3 (INS +5) LM B/O
188:22:32.3 (INS +12) CSM B/O

*IF LM BAILOUT REQ: *****
* COPY P76 DATA FROM LM *****
*IF CSM BAILOUT REQ: *****
*UPDATE: *****
*CSM BAILOUT P30 PAD *****
*P30 *****
*P40; SET UP EMS *****
*SPS BURN CUE CARD *****
*CSM BAILOUT BURN *****
*GO TO RESCUE BOOK PG 4 *****

: :	:
:	:
:	:

P34 INPUT		
37	LM GETI-TPI	•
55	INTEG OPT ELEVATION	TRANSFER +130.00

LM FLIGHT PLAN

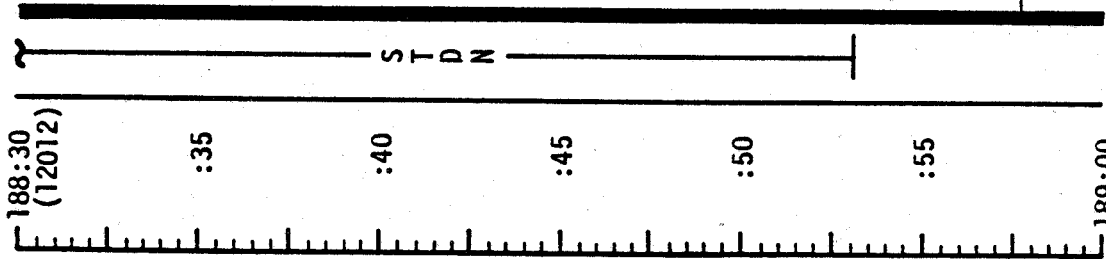
CDR

LMP

NOTES

1723 CST

MCC-H



DISABLE STDN S-BAND RELAY

P42 APS THRUSTING

MANUAL ULLAGE

LM TPI
NULL RESIDUALS
P35 TARGET MCC-1

CONFIGURE S-BD FOR LOS
PCM - HI

TIG: 188:58
BT: (APS) 2.7 SEC
ULLAGE: 4 JET, 10 SEC

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	188:30 - 189:00	9/51	3-286

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
 (+0000)
 (31000)

188:30
 (11102)
 (1111)
 83.29
 -328.4

P34 RECYCLE

-20

:40

46.66
 -167.7

P34 FINAL COMP

-10

P40 (27°) (180,152/279,0)

-8

:50

CMDS:
 DSE RECORD

COMPARE SOLUTIONS: SPS BURN CUE CARD
 VHF AM T/R-T/R (PHL 9)
 VERIFY DSE TAPE MOTION (LBR/RCD/FMD/CHD RESET)
 SET HGA MAN P -35, Y +37 AUTO, WARRON FOR ADS
 [STON DISABLES S-BAND RELAY]

188:57:32.3
 LM +75.1,-0.5,+14.1
 CSM -76.1,+0.5,-12.1
 (180,171/279,0)

TPI

P76

P35 (TRIM) (180,176/277,0)

29.37
 -129.0
 188:00

P34 RECYCLE				
	INTEG OPT	ELEVATION }	TRANSFER }	
55	+00000		+130.00	
58	PERILUNE ALT	TPI ΔV	TPF ΔV	
81	TPI ΔV-LV			
84	LM TPI ΔV-LV			

GROUND TPI FOR LM

					ΔV _X
					ΔV _Y
					ΔV _Z

P34 FINAL COMP				
	INTEG OPT	ELEVATION }	TRANSFER }	
55	+00000		+130.00	
58	PERILUNE ALT	TPI ΔV	TPF ΔV	
81	TPI ΔV-LV			
84	LM TPI ΔV-LV			
84	LM TPI ΔV-LV			

P76

LM FLIGHT PLAN

1753 CST

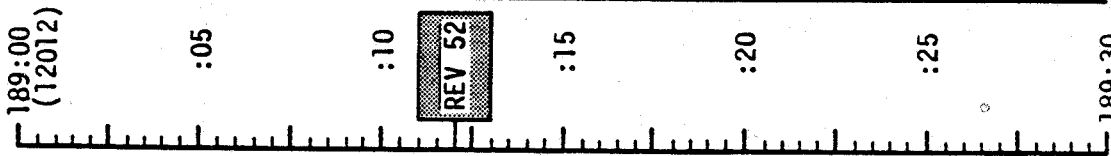
MCC-H

CDR

LMP

NOTES

RENDEZVOUS RADAR TRACKING



P41 RCS THRUSTING

LM MCC-1

P35 TARGET MCC-2

189:13

P41 RCS THRUSTING

LM MCC-2

189:28

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	189:00 - 189:30	9/51-52	3-288

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(*0000)
(31000)

189:00
+3
(11102)
(11111)
29.37
-129.0

P35 FINAL COMP

P41
MCC-1
P76
189:12:32.3
LM +0.0,+0.0,+0.0
CSM +0.0,+0.0,+0.0
180,195/258,0

P35 (TRIM) (180,196/254,0)

+15
REV 52
12.85
-88.5
+18

P35 FINAL COMP

P41
MCC-2
P76
189:27:32.3
LM +0.0,+0.0,+0.0
CSM +0.0,+0.0,+0.0
180,228/246,0

P79; P00; V49 (180,282,0)

+30
3.56
-40.8
189:30

P35 FINAL COMP		
81	MCC1 ΔV-LV	
84	LM MCC1 ΔV-LV	
84	LM MCC1 ΔV-LV	

P76

* IF CSM ACTIVE & NSB TPF ΔV > 55 FPS *
* GO TO PRE-BRACING SPS BURN PROCEDURES *
* (SEE RESCUE BOOK PG 40) *

P35 FINAL COMP		
81	MCC2 ΔV-LV	
84	LM MCC2 ΔV-LV	
84	LM MCC2 ΔV-LV	

P76

LM FLIGHT PLAN

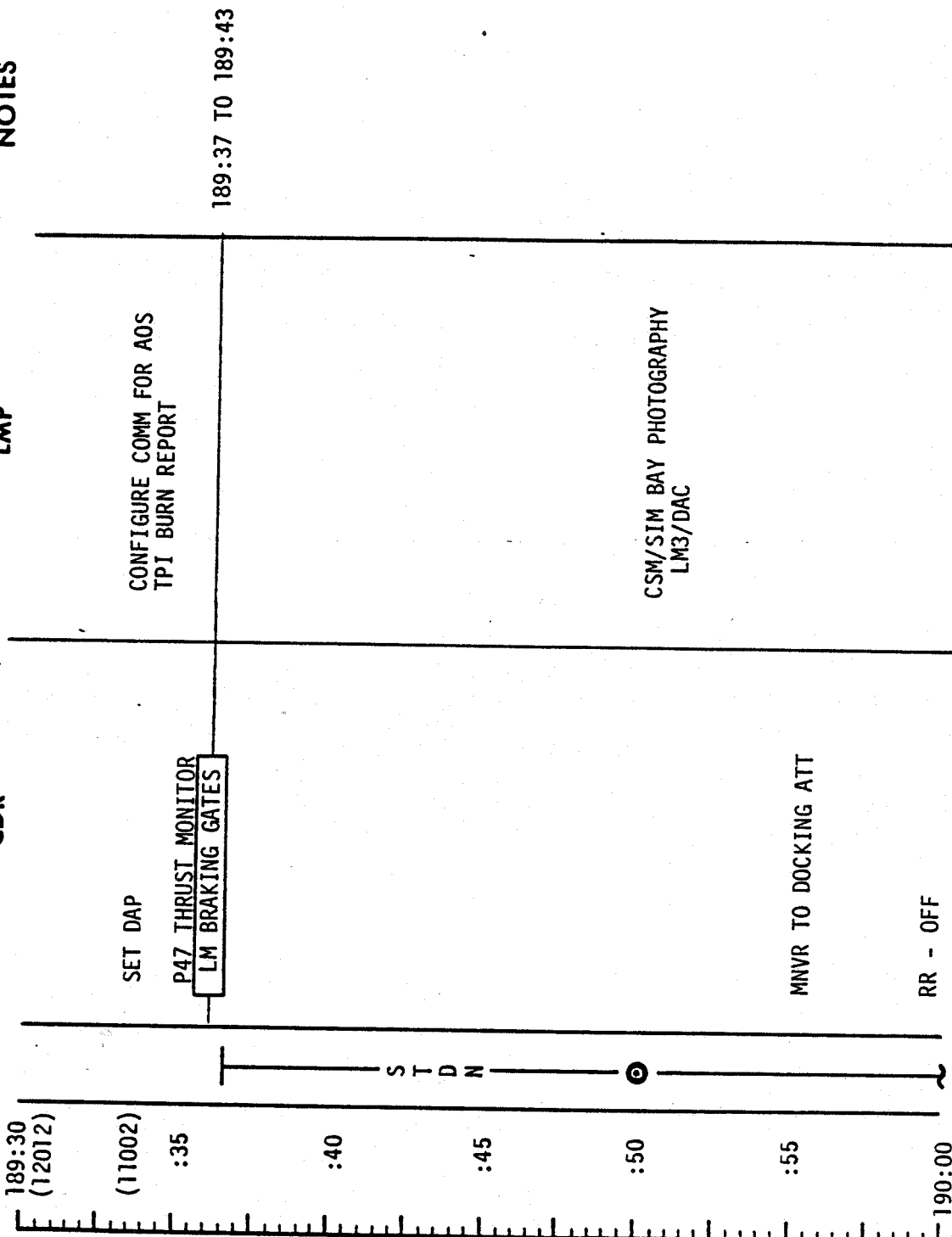
1823 CST

MCC-H

CDR

LMP

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	189:30 - 190:00	9/52	3-290

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(*00000)
(31000)

PERFORM PRE-DOCK CHECKLIST

- IF CSM ACTIVE:
- P47 AT R=1.25 NM
- SEC PRPLNT FUEL PRESS (4) - OPEN
- V83E
- N83E
- KEY REL

ACQ STDN HGA P -35, Y +37 AUTO, NARROW
UTILITY PMR - ON (VERIFY)
DAC/TV - ON
LM PHOTOS WITH DAC/TV

189:40:28.1
LM 31.5 (TOTAL)
CSM 33.6 (TOTAL)
180,304/282,0

- TPF
- EMS MODE - STBY
- EMS FUNC - OFF
- EXT LIGHT RNDZ - OFF
- LM STATION KEEP
- DAC/TV - OFF

V49 MNVR TO SIM BAY INSPECTION ATTITUDE (189:52)
(319,254,000) OMNI D

V49 MNVR TO DOCKING ATT (190:00)
(180,282,0) HGA P -35, Y +37

CUE STDN FOR LOGIC ARM
SECS LOGIC (BOTH) - ON (UP)

UPDATE:
GO/NO GO FOR PYRO ARM

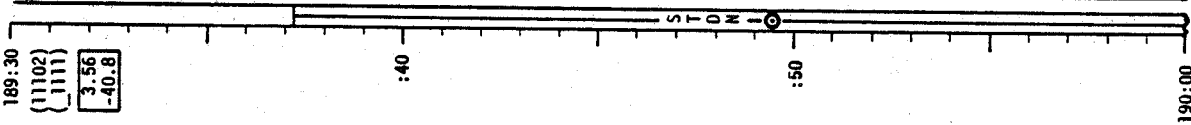
SECS PYRO ARM (2) - ON (UP)

PRE-DOCK CHECKLIST

- MAN ATT (3)-RATE CMD (VERIFY)
- LIMIT CYCLE - OFF (VERIFY)
- ATT DB - MIN
- RATE - LOW (VERIFY)
- TRANS CONTR PMR - ON (UP)
- ROT CONTR PMR DIRECT (BOTH) - MMA/MNB
- SC CONT - CMC (VERIFY)
- AUTO RCS SEL (16) - MMA/MNB
- CB DOCK PROBE (2) - CLOSE
- PROBE RETRACT (2) - OFF (VERIFY)
- PROBE EXTND/REL - RETRACT
- PROBE EXTND/REL TB (2) - GRAY (VERIFY)
(IF TB NOT GRAY, GO TO PG S/2-13.E)
- CB SECS LOGIC (2) - CLOSE (VERIFY)
- CB SECS ARM (2) - CLOSE
- EXT LIGHTS RUN/EVA - ON (UP) (VERIFY)
- COAS PMR - ON (UP) (VERIFY)

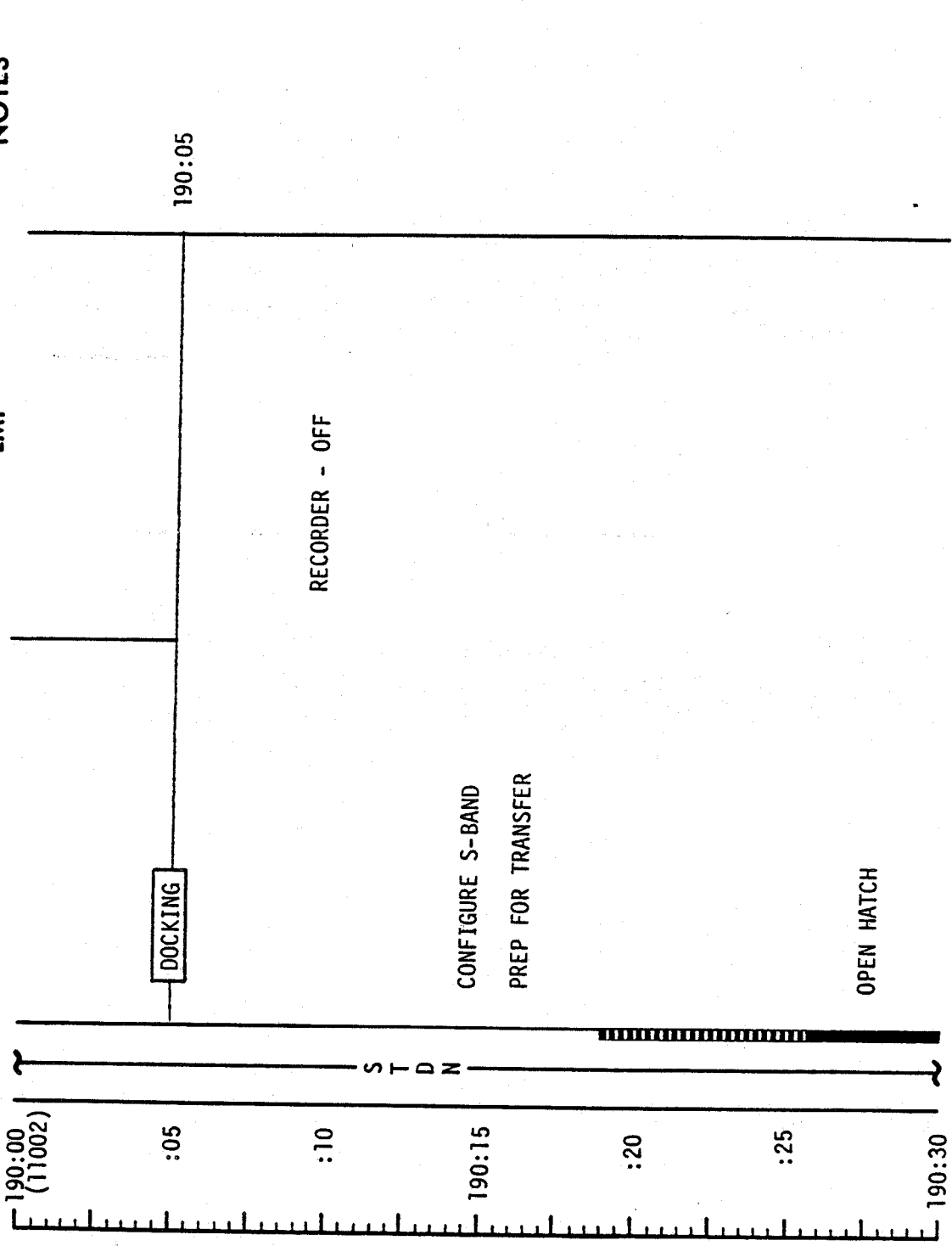
BRAKING GATES

R, NM	R, FPS	RETICLE ANG, DEG	R, FT
1.50	45	.08	9000
1.00	30	.13	6000
.50	20	.26	3000
.25	10	.54	1500
.05	5	1.60	500
.03		2.70	300
.02		4.00	200
		8.50	100



LM FLIGHT PLAN

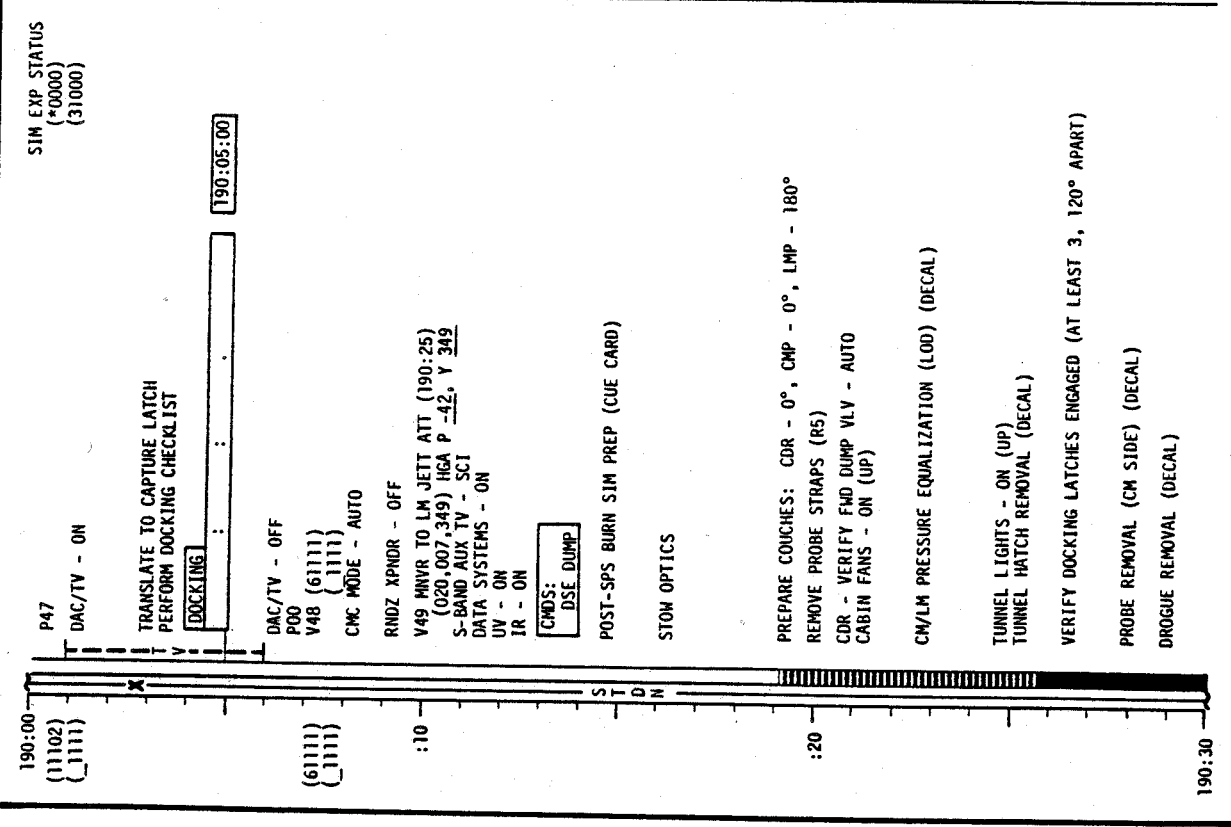
MCC-H 1853 CST CDR LMP NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	190:00 - 190:30	9/52	3-292

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN



DOCKING CHECKLIST

AT CAPTURE

PROBE EXTD/REL TB (2) - BP (VERIFY)
(IF TB NOT BP, GO TO PG 5/2-11, A)
REPORT CAPTURE TO LM
SC CONT - CMC (VERIFY)
CMC MODE - FREE
ALLOW PROBE TO DAMP SC MOTION (10 SEC)
WHEN WITHIN +3° OF DOCKING ATTITUDE
PROBE RETRACT SEC - 1 (PRIM - 2 IF REQD)

AT DOCK LATCH

PROBE EXTD/REL TB (2) - GRAY

AT HARD DOCK

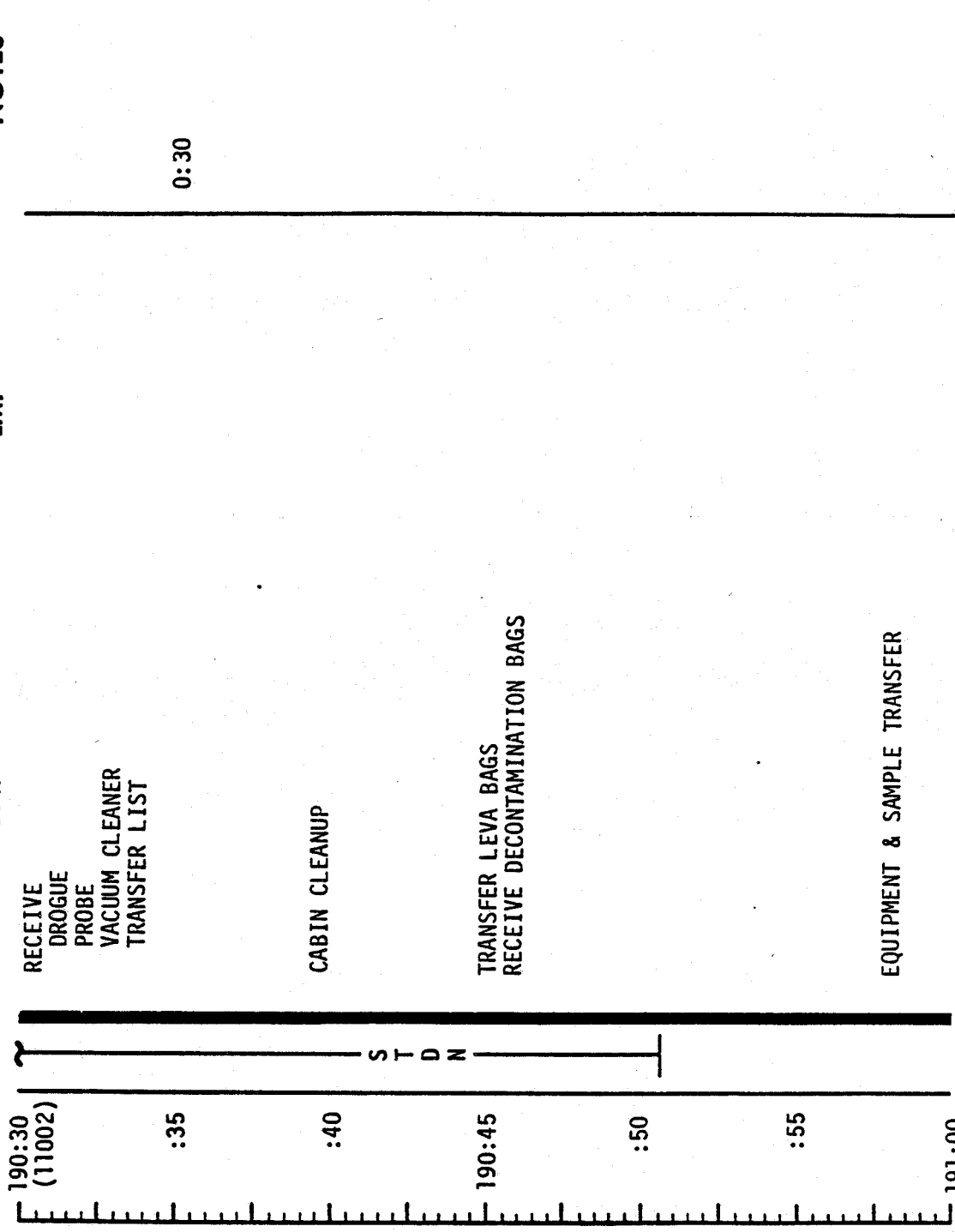
SECS PYRO ARM (2) - SAFE
SECS LOGIC (BOTH) - OFF
CB SECS ARM (2) - OPEN
CB DOCK PROBE (2) - OPEN
THC - LOCKED
RHC - LOCKED
BMAG MODE (3) - RATE 2 (VERIFY)
PROBE EXTD/REL - OFF
PROBE RETRACT (2) - OFF

EXT LIGHTS (2) - OFF
COAS PHR - OFF
AUTO RCS SEL: ROLL (4) - OFF
TRANS CONTR PHR - OFF
ROT CONTR PHR DIRECT (BOTH) - OFF
VHF RANGING - OFF

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-293

LM FLIGHT PLAN

MCC-H 1923 CST CDR LMP NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	190:30 - 191:00	9/52	3-294

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

190:30
(61111)
(1111)

TRANSFER TO CDR AT HIS REQUEST:
PROBE
DROGUE
VACUUM CLEANER (ASSEMBLED)
LM TO CM TRANSFER LIST

SIM EXP STATUS
(*0000)
(01011)

:40

S
T
D
A

RECEIVE LEVA BAGS

CMDS:
DSE RECORD

TRANSFER TO CDR:
DECONTAMINATION BAGS

:50

VERIFY DSE TAPE MOTION (HBR/RCD/FND/CMO RESET)
SET HGA MAN P -42, Y 349 AUTO, NARROW FOR AUS

RECEIVE ITEMS FROM LM AND STOW
(LM TO CM TRANSFER LIST)

191:00

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-295

LM FLIGHT PLAN

CDR

LMP

NOTES

1953 CST

191:00
(11002)

:10

REV 53

:20

191:30

:40

:50

192:00

STDN

TRANSFER SRC'S

RECEIVE B5 & B6

1:00

1:30

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	191:00 - 192:00	9/52-53	3-296

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(*0000)
(01011)

ACQ STON HGA: P -42, Y 349 AUTO, NARROW

CMDS:
DSE DUMP

TRANSFER 85, 86 CONTAINERS TO LM

191:30
(61111)
(1111)

:40

:50

192:00

S T D N

SIM EXP STATUS
(*0000)
(01011)

191:00
(61111)
(1111)

:10

REV 53

:20

191:30

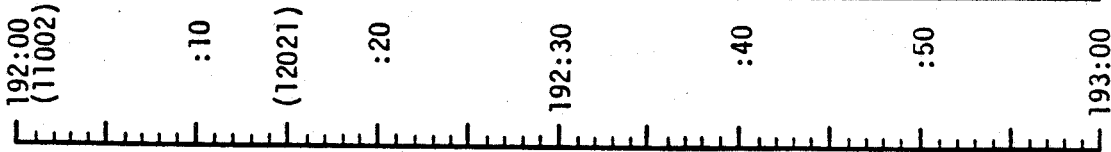
LM FLIGHT PLAN

CDR

LMP

NOTES

2053 CST



MCC-H
 UPLINK TO LM
 LM S.V. (TIG-10)
 P30 TARGET LOAD
 P99 LM DEORBIT

UPDATE TO LM
 DAP LOAD (WEIGHTS)
 DEORBIT BURN PAD

GO/NO-GO FOR LM
 CLOSEOUT

SET DAP
 P30 TARGET PGNS

CONFIGURE AGS

CONFIGURE LM FOR JETTISON

TRANSFER JETTISON ITEMS

CONFIGURE VHF FOR CLOSEOUT

2:00

2:30

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	192:00 - 193:00	9/53	3-298

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

SIM EXP STATUS
(*0000)
(01011)

192:30
(61101)
(1111)

S T D N

UPDATE:
GO/NO-GO FOR LM CLOSEOUT

CMDS:
DSE RECORD

VERIFY DSE TAPE MOTION (HBR/RCD/FWD/CMD RESET)

TRANSFER CM JETTISON ITEMS TO LM

NOTICE
NO URINE/FECES
ALL OPEN FOOD MUST
BE TREATED AND
STORED IN BETA BAG

193:00

SIM EXP STATUS
(*0000)
(01011)

192:00
(61111)
(1111)

S T D N

UPDATE:
DAP LOAD - UPDATE WEIGHTS
LM JETTISON PAD
FLIGHT PLAN

V48 LOAD CSM & LM WEIGHTS

CSM WT	+						
LM WT	+						

UPLINK:
CSM S.V. (CSM SEP-10)

V48 (61101)
(1111)

CONTINUE EQUIP & SAMPLE TRANSFER

LM JETTISON PAD			
	HRS	GET1	
+	0		
+	0	0	N33
+	0		SEC
X	X	X	R (020)N22
X	X	X	P (007)
X	X	X	Y (349)

192:30

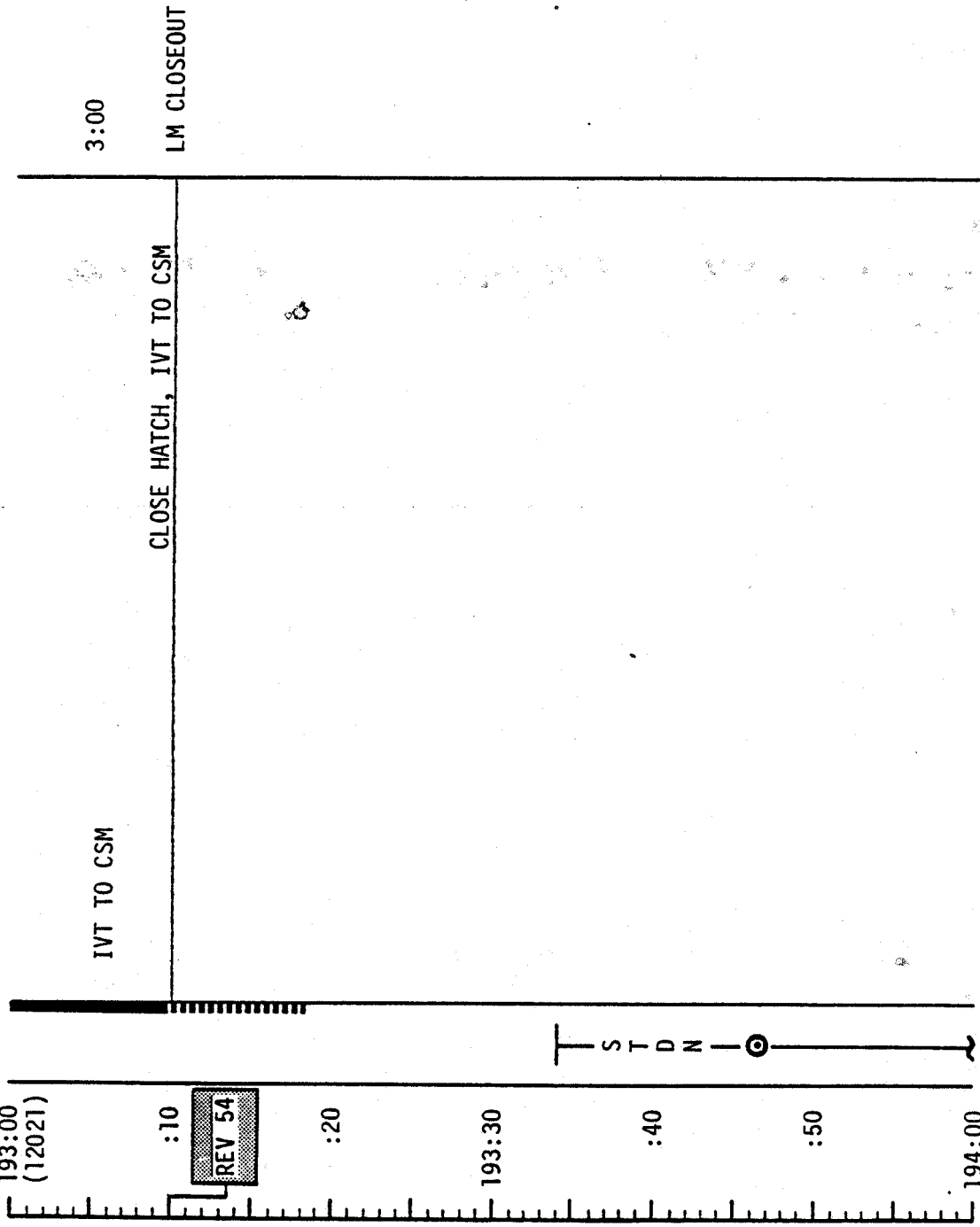
LM FLIGHT PLAN

MCC-H

CDR

LMP

NOTES



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	193:00 - 194:00	9/53-54	3-300

FLIGHT PLANNING BRANCH

CSM FLIGHT PLAN

193:00
(61101)
(1111)

CDR & LMP IVT TO CSM
VHF AM B - OFF (CTR)

:10
REV 54

LMP - CLOSE LM HATCH
STON INTERCONNECTS - AB
SUIT FLOW VALVE (3) - SUIT FULL FLOW
HATCH INSTALLATION (DECAL)
HATCH INTEGRITY CHECK (DECAL)

CONFIGURE CAMERA FOR LM JETTISON PHOTOS
CM2/DAC/18/CEX - BRKT_MIR(T8,1/250,7) 12 fps (50% MAG)
MAG (DD) _____, MAG # _____
UTILITY PHR - ON _____

SIM EXP STATUS
(*0000)
(01011)

193:30
(61101)
(1111)

P30; N33: LM JETTISON TIG +5 MIN
N81 (+2.0, +0.0, +0.0)

LM PHR - OFF (VERIFY)
cb SECS PYRO ARM (2) - CLOSE

ACQ STON HGA: P -42, Y 349 REACO, NARROW

CMDS: DSE DUMP

CUE STON FOR LOGIC ARM
SECS LOGIC (2) - ON (UP)

REPORT: LM/CM AP
DON HELMETS AND GLOVES

SUIT CKT INTEGRITY CHECK (DECAL)

PRE-JETTISON CHECKLIST	
BMAG MODE (3) - ATT 1/RATE 2	
RATE - LOW	
ATT DB - MIN	
SC CONT - SCS	
EMS FUNC - ΔV	
RHC PHR DIR - MNA/MB	
THC - ARMED	
RHC - ARMED	
cb CSM/LM FINAL SEP (2) - CLOSE	

LOAD AV IN EMS TO +100.0
CHECK NULL BIAS
GDC ALIGN

UPDATE: GO/NO-GO FOR PYRO ARM

PRE-JETTISON CHECKLIST
V48 (11102)
(1111)

SECS PYRO ARM (2) - ARM

P47 (JETT -1 MIN)
EMS MODE - NORMAL (JETT -30 SEC)
DAC - ON (JETT -25 SEC)

LM JETTISON
193:58:30
(020,090/007,349)

HOLD P47 FOR STON
P00

193:30

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-301

CSM FLIGHT PLAN

SIM EXP STATUS
(*0000)
(01011)

PRE-SEPARATION CHECKLIST

TIG: 194-03:30
BT: 12.6 SECS
ΔVT: 2.0 FPS
ORBIT: 63.9x62.3NM

CSM SEPARATION
HOLD NBS FOR STDN
POO

EMS FUNC - OFF
THC PMR - OFF
RHC PMR DIR - OFF
THC LOCKED
RHC LOCKED

INHIBIT ALL JETS EXCEPT A1 & C2 OR D1 & B2, A3, C4, B3, D4
HF ANTENNA 1 - EXTEND (OFF ON STDN CUE)
HF ANTENNA 2 - EXTEND (OFF ON STDN CUE)
V44 (SET LUNAR SURFACE FLAG)
V48 (11101)
(11111)

P20 OPT 5 (-X FWD SIM ATT) (194:30)
N78 (+090.00)
(+052.25)
(+000.00)
N79 (+002.50)
HGA P -4, Y 316

DOFF PGA'S, HELMETS AND GLOVES
UNSTON BUSS (CMP'S) FROM PGA BAG
ZIP SUITS & INSTALL ELECTRICAL COVERS PRIOR TO STOMING (PGA BAG)
CDR & LMP INSTALL LCG PLUGS (LH TSB TOP POCKET)
INSTALL NECK RING COVERS (PGA BAG)
DUMP UCTA'S OVERBOARD
CDR & LMP DUMP URINE OVERBOARD
(VIA UTS-R11) UNTIL 197:00
CMP RESUME COLLECTION IN BUSS
STOM UCTAS (PGA BAG)
TRANSFER PRO'S TO CMG'S

DOFF PGA'S

UPLINK:
CSM S.V. & V66
CDR, CMP DOFF BIOWED HARNESS

194:00
(11102)
(1111)

:10

(11101)
(11111)
(P20)
(2.5°DB)

:20

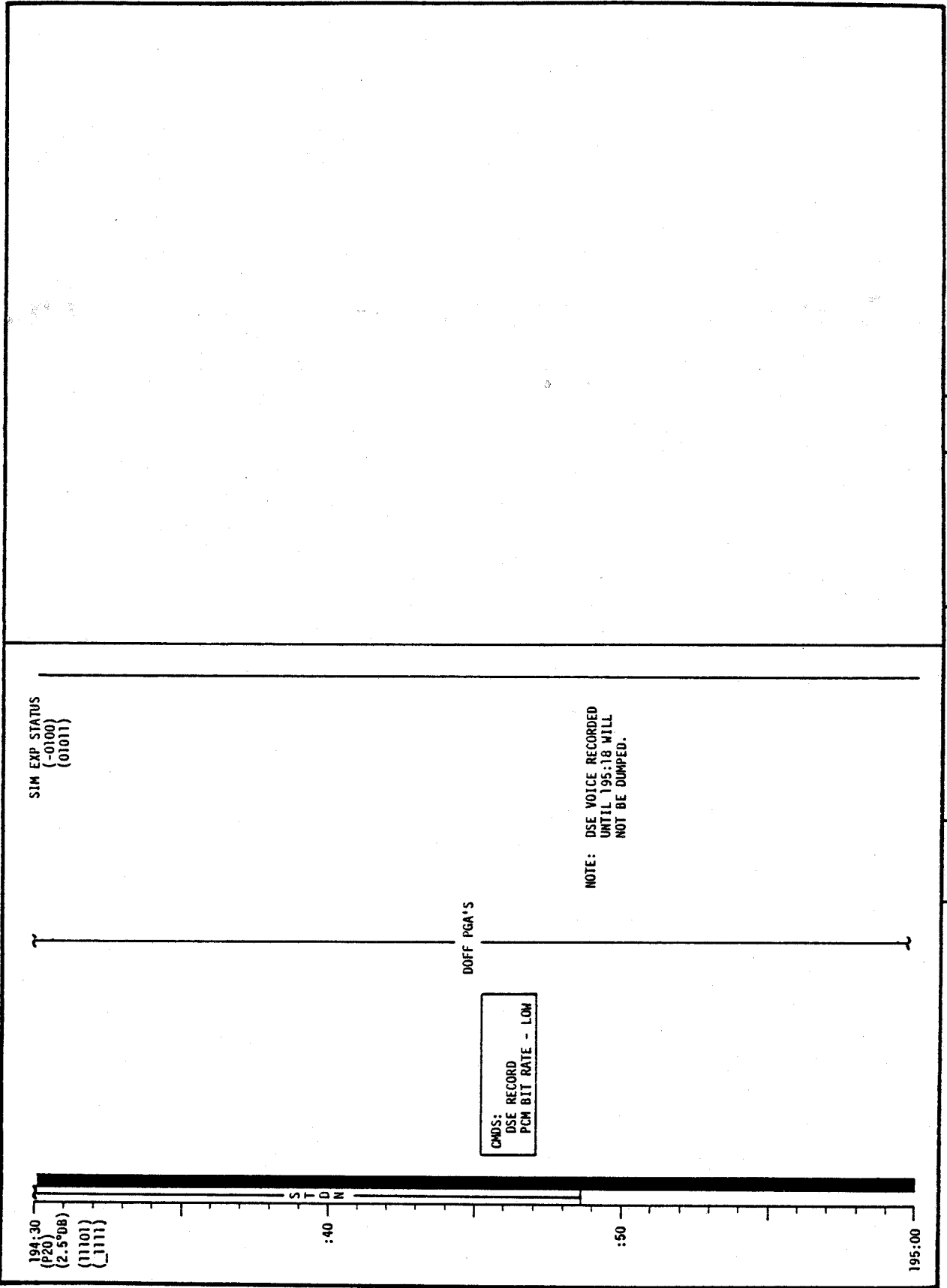
194:30

PRE-SEPARATION CHECKLIST
EMS MODE - STBY
SC CONT - CMC
BMAG MODE (3) - RATE 2
V49 MNVR RIGHT 90°
(110,007,349)
DAC - OFF
AUTO RCS SEL (16) - MNA/MNB
SECS PYRO ARM (2) - SAFE
SECS LOGIC (2) - OFF
cb SECS PYRO ARM (2) - OPEN
cb CSM/LM FINAL SEP (2) - OPEN
P41 (BYPASS MNVR)
EMS MODE - NORMAL (SEP -30 SECS)

NOTE:
LM JETTISON MAY BE
DONE IN LM JETTISON
ATTITUDE UNTIL LOS (194:48)

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-302

CSM FLIGHT PLAN

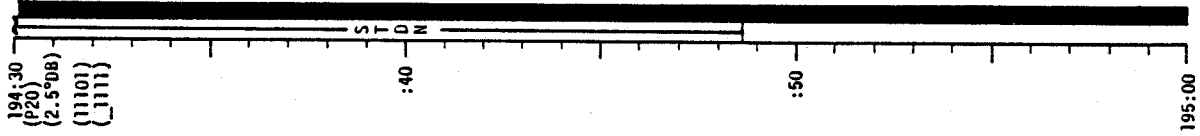


SIM EXP STATUS
 (-0100)
 (01011)

DOFF PGA'S

NOTE: DSE VOICE RECORDED
 UNTIL 195:18 WILL
 NOT BE DUMPED.

CMDS:
 DSE RECORD
 PCM BIT RATE - LOW



194:30
 (P20)
 (2.5°DB)
 (11101)
 (1111)

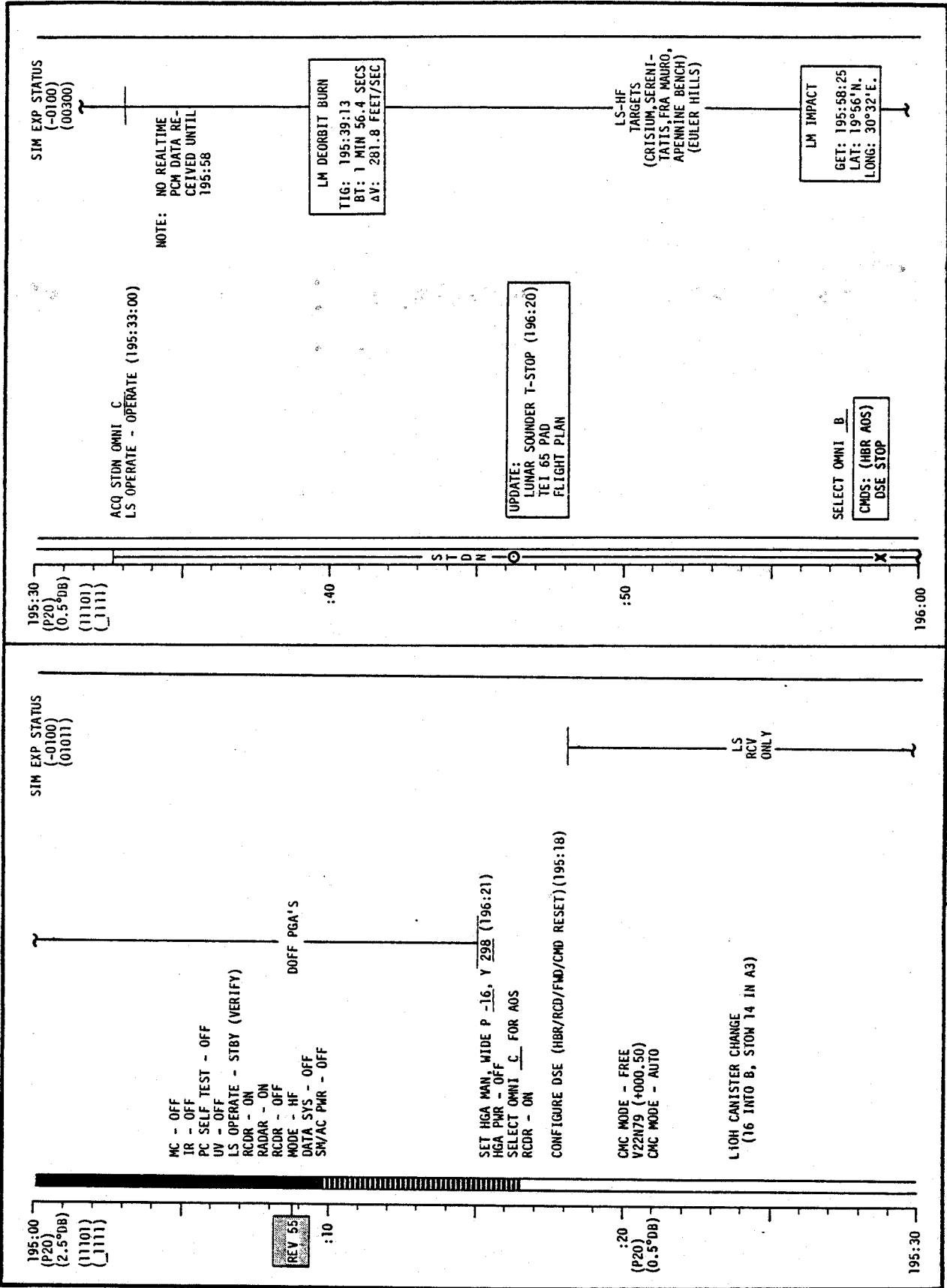
:40

:50

195:00

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-303

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-304

CSM FLIGHT PLAN

SIM EXP STATUS
(-0100)
(01011)

196:30
(P20)
(2:5'08)
(11101)
(11111)

V22H79 (+002.50)

UPLINK:
JET-ON MONITOR LOADS

S T D N

:40

NOTE: DSE VOICE RECORDED
THIS BACKSIDE WILL
NOT BE DUMPED

CMDS:
DSE RECORD
POM BIT RATE - LOW

VERIFY DSE TAPE MOTION (LBR/RCD/FND/CMD RESET) (AOS +73 MIN)
SET HGA MAN P 25, Y 195 REACQ, NARROW FOR AOS
H₂ & O₂ FUEL CELL PURGE
WASTE WATER DUMP

TERMINATE WASTE WATER DUMP AT 10%
H₂ PURGE LINE HEATERS - OFF
COR & LMP COLLECT URINE IN UTS'S UNTIL 208:00

197:00

SIM EXP STATUS
(-0100)
(00100)

196:00
(P20)
(0:5'08)
(11101)
(11111)

S T D N

:10

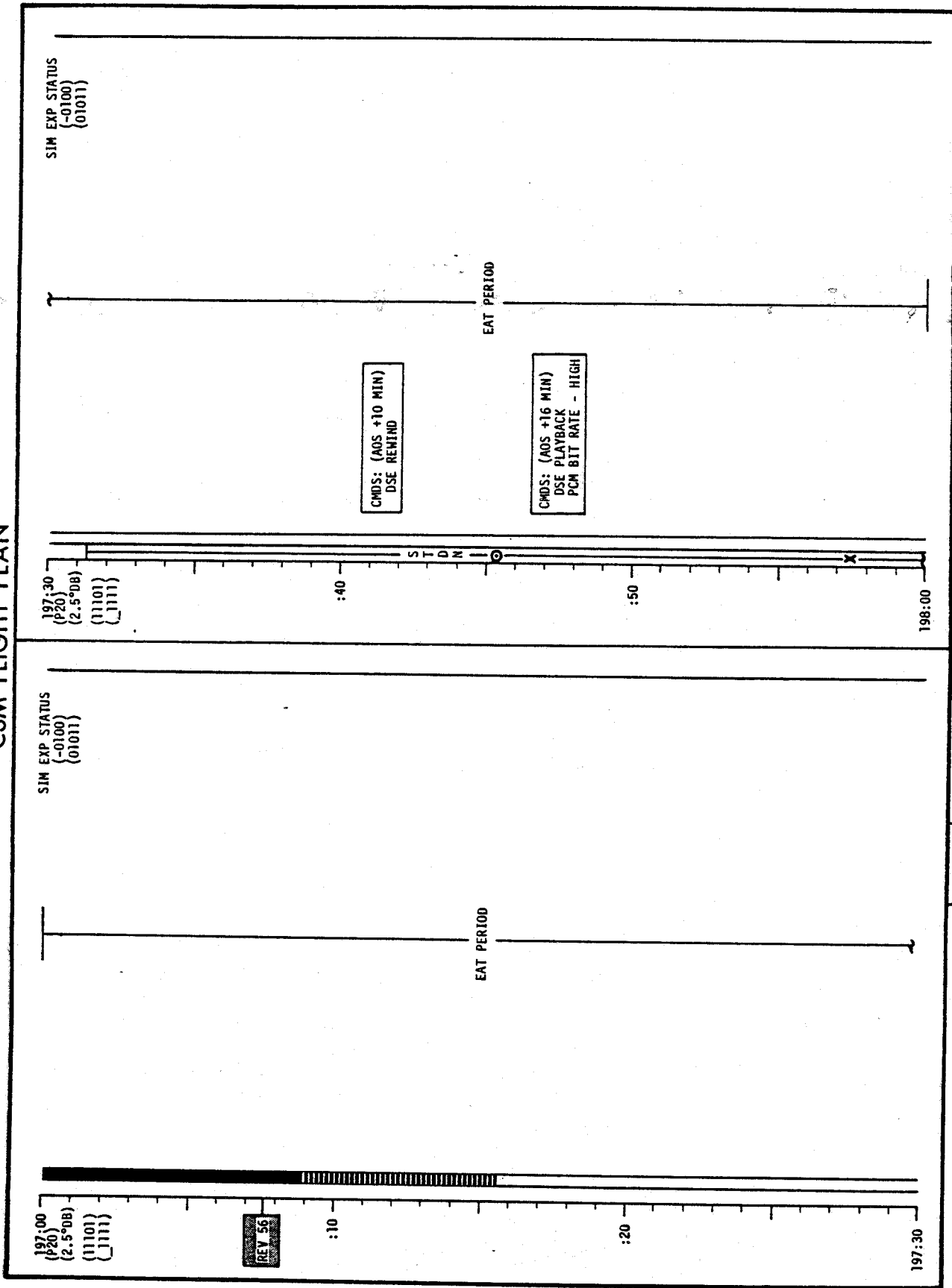
LS-HF
TARGETS
(CRISIUM, SERENI-
TATIS, FRA MAURO,
APEMNINE BENCH)
(EULER HILLS)

LS OPERATE - STBY (T STOP) (-----)
DATA SYS - ON
HGA PHR - ON
ACQ STDN HGA P -16, Y 298 AUTO, NARROW
SW/AC PHR - ON
MC - STBY
RCOR - OFF
RADAR - OFF
IR - ON
PC SELF TEST - HTRS
UV - ON

H₂ PURGE LINE HEATERS - ON

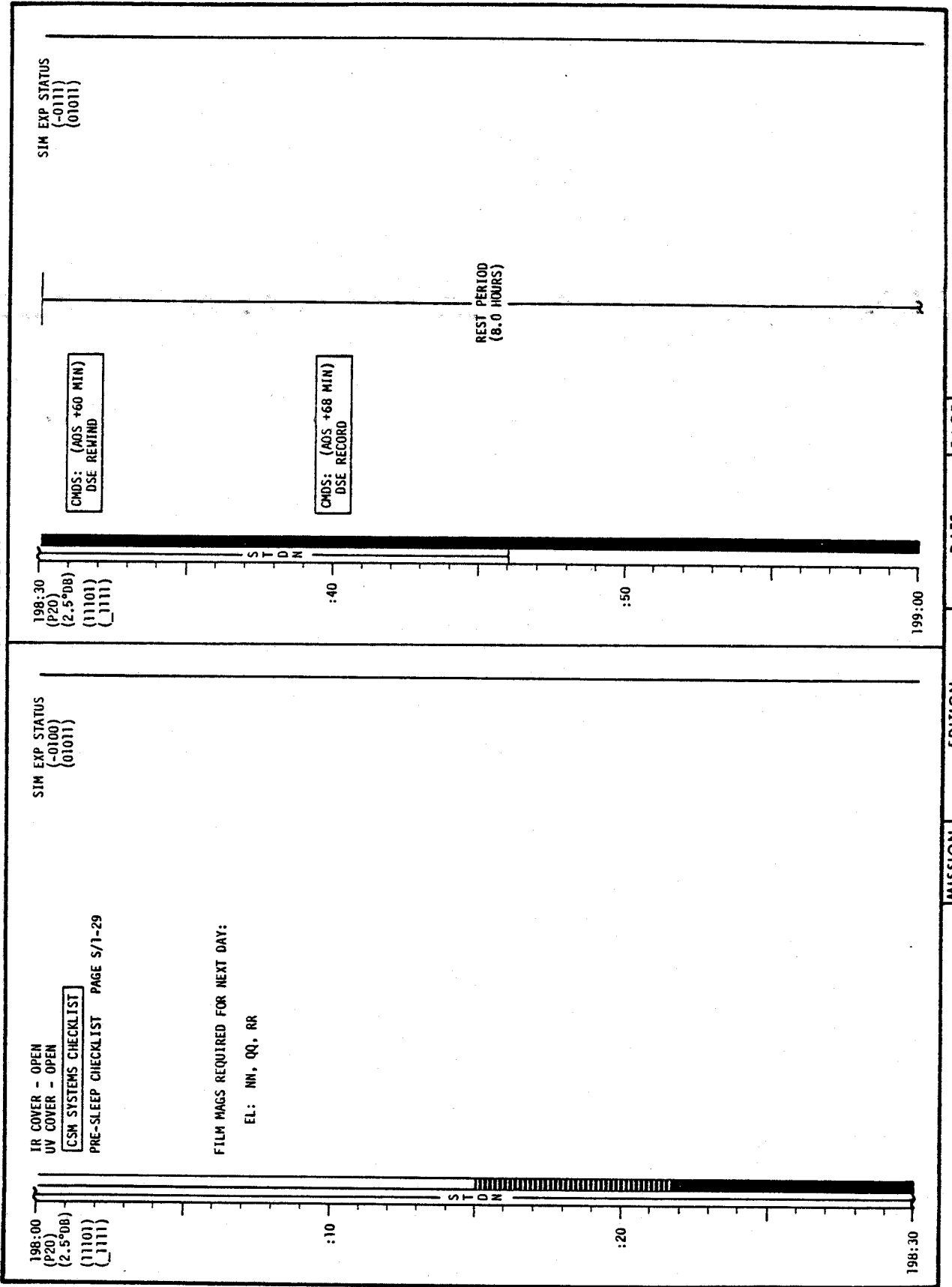
196:30

CSM FLIGHT PLAN



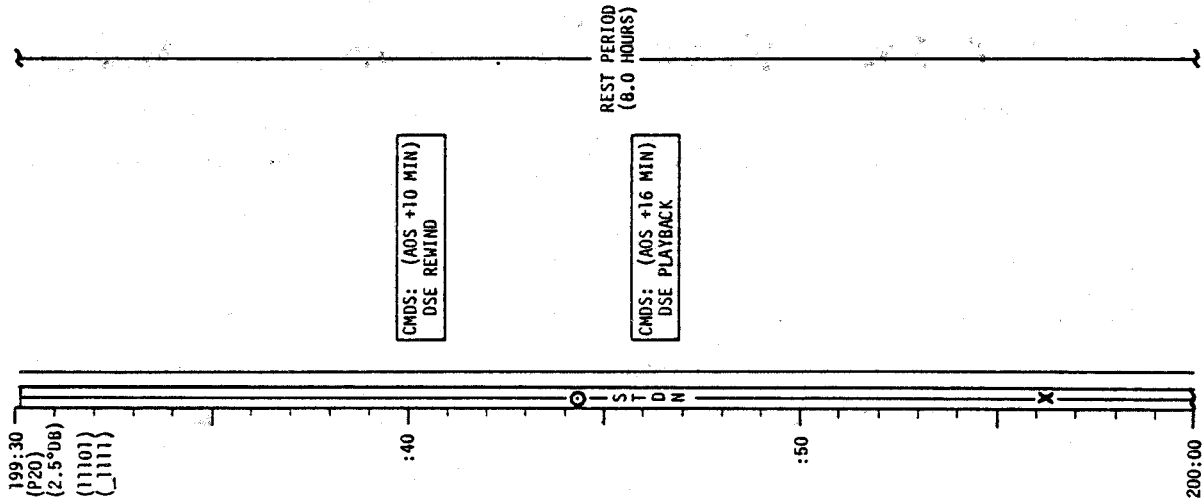
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-306

CSM FLIGHT PLAN

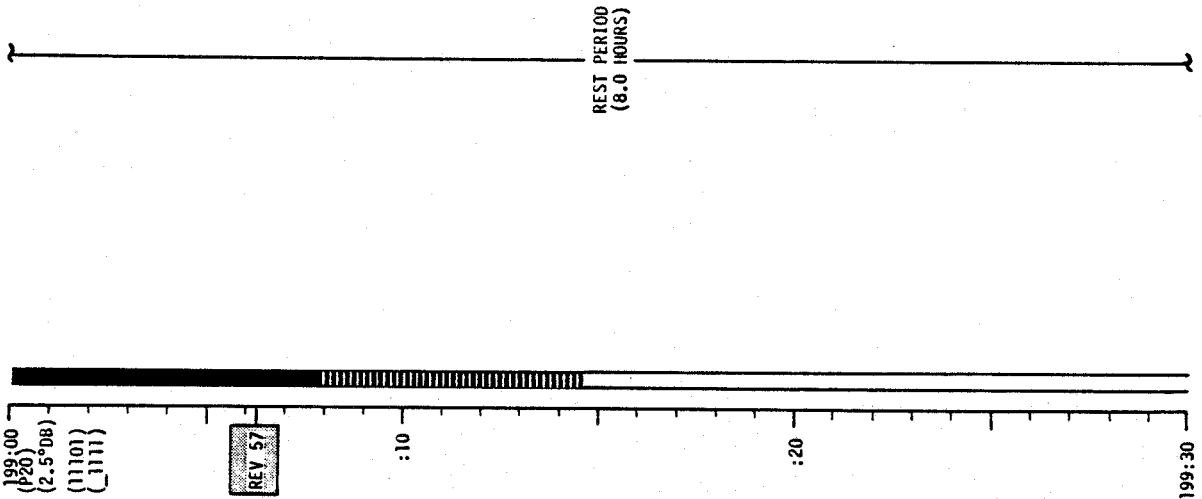


CSM FLIGHT PLAN

SIM EXP STATUS
(-0111)
(01011)

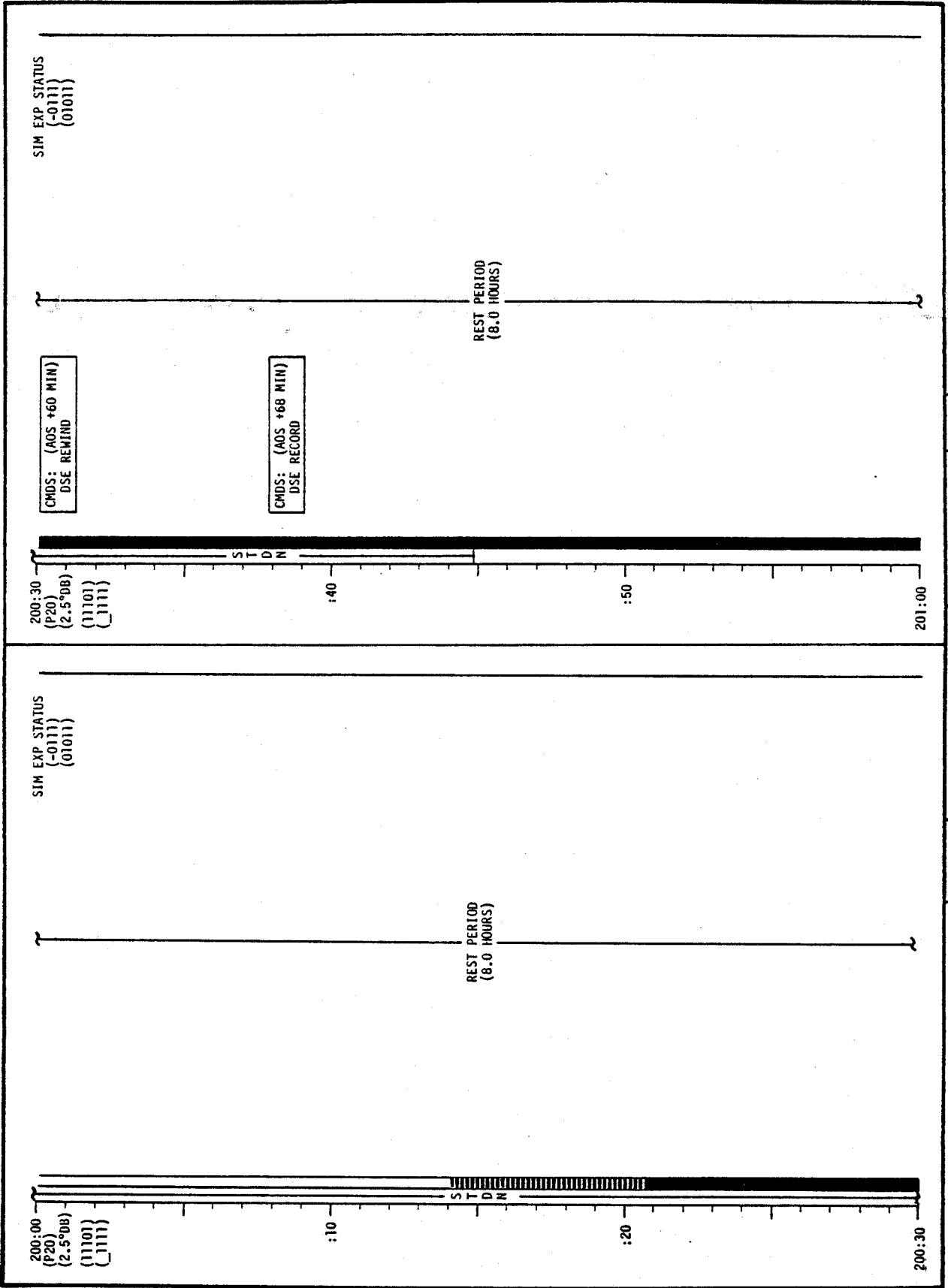


SIM EXP STATUS
(-0111)
(01011)



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-308

CSM FLIGHT PLAN



SJM EXP STATUS
(-0111)
(01011)

200:30
(P20)
(2.5°DB)
(11101)
(1111)

SJM EXP STATUS
(-0111)
(01011)

200:00
(P20)
(2.5°DB)
(11101)
(1111)

CMDS: (AOS +60 MIN)
DSE REWIND

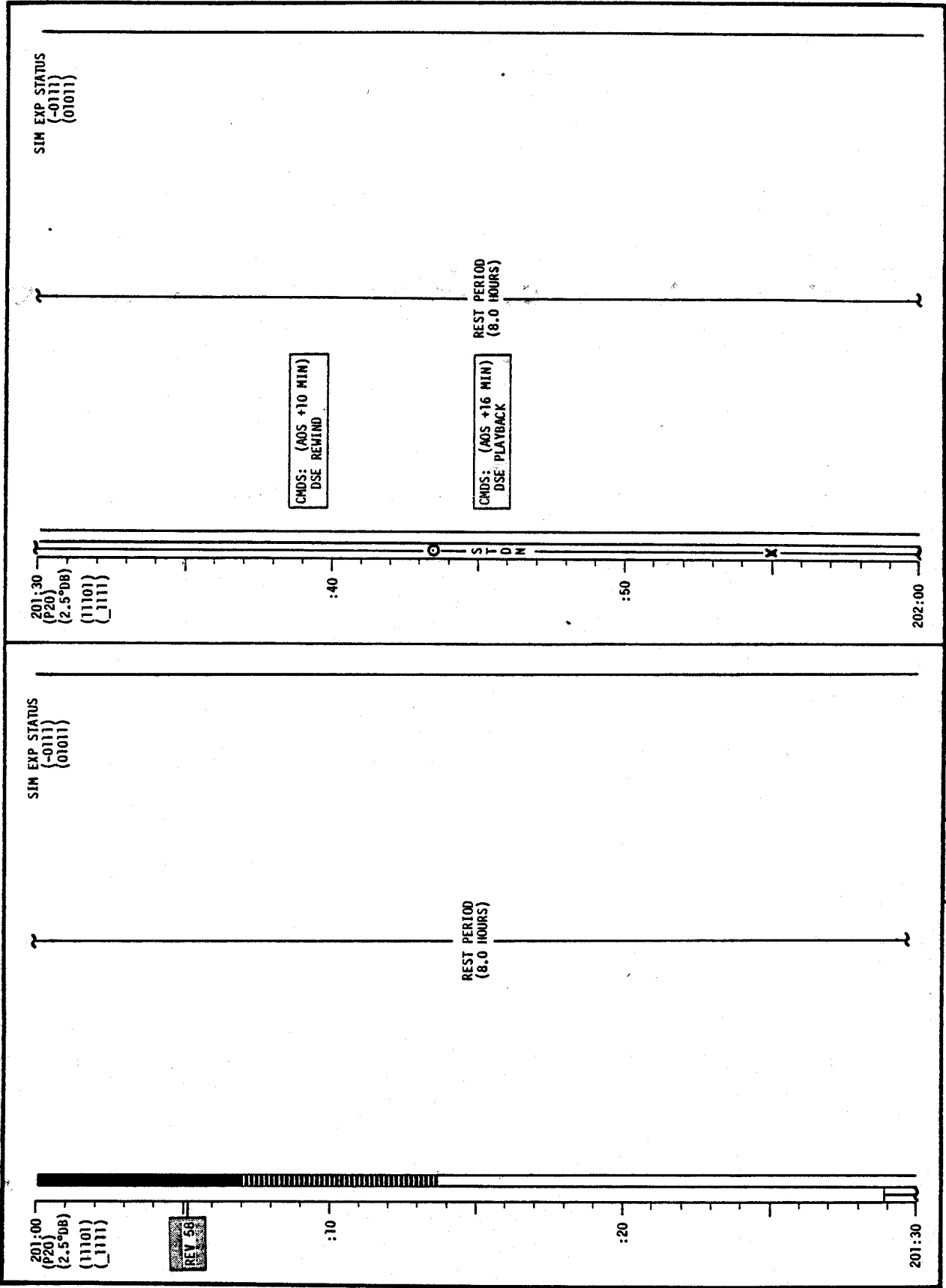
CMDS: (AOS +68 MIN)
DSE RECORD

REST PERIOD
(8.0 HOURS)

REST PERIOD
(8.0 HOURS)

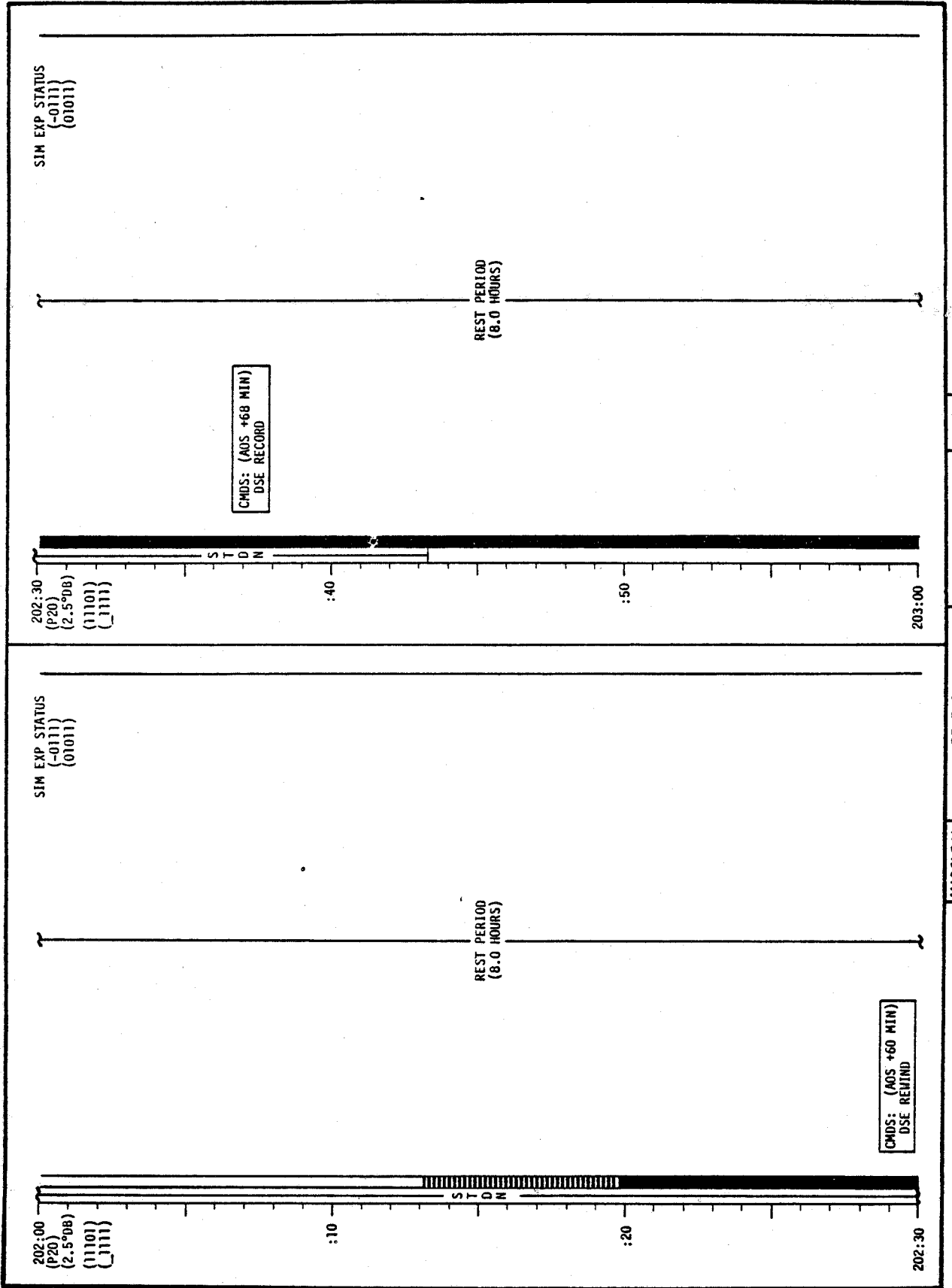
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-309

CSM FLIGHT PLAN



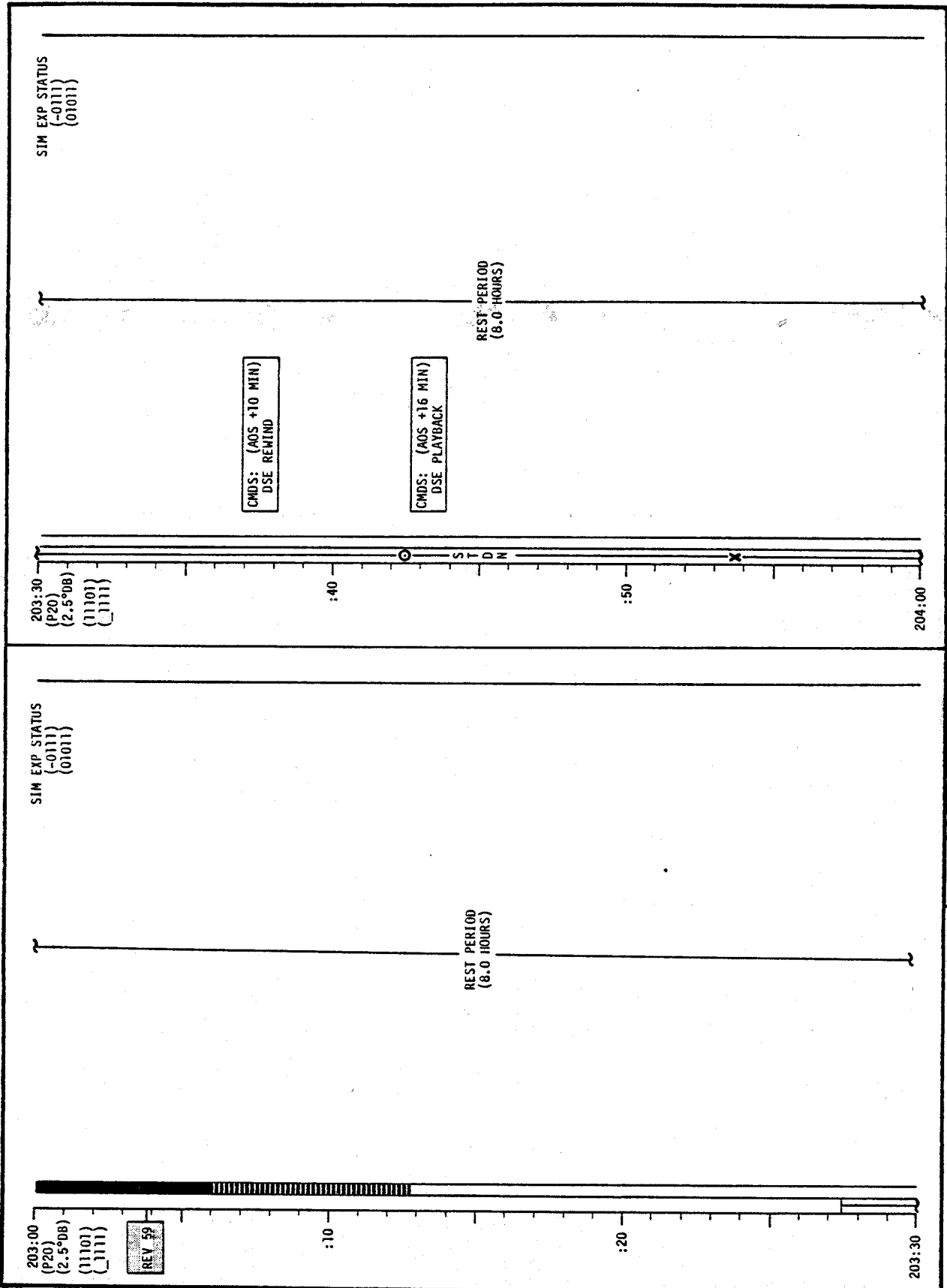
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-310

CSM FLIGHT PLAN



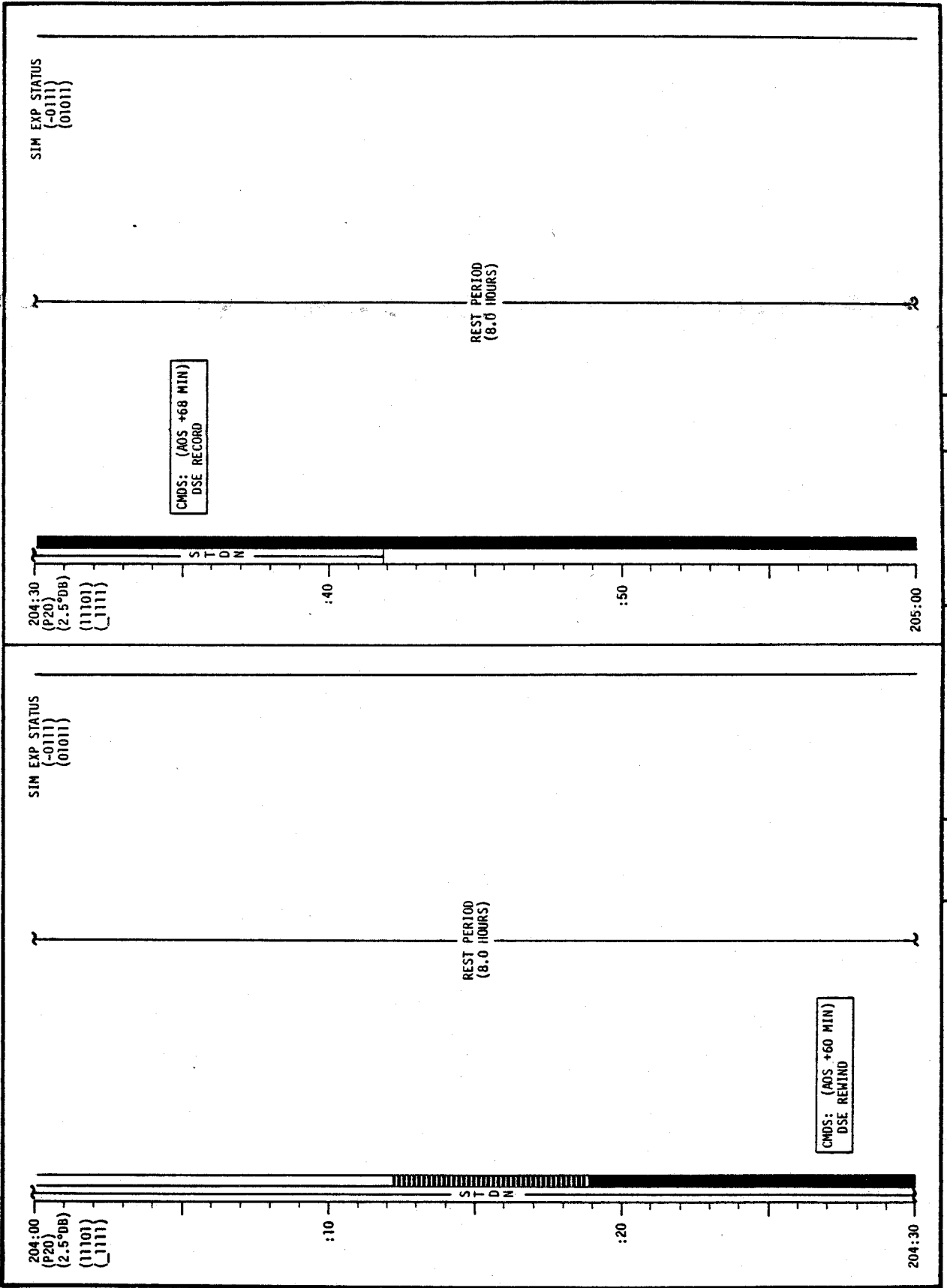
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-311

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-312

CSM FLIGHT PLAN



SIM EXP STATUS
(-0111)
(01011)

CMDS: (AOS +68 MIN)
DSE RECORD

REST PERIOD
(8.0 HOURS)

204:30
(P20)
(2.5⁰⁰⁸)
(11101)
(1111)

:40

:50

205:00

SIM EXP STATUS
(-0111)
(01011)

CMDS: (AOS +60 MIN)
DSE REMIND

REST PERIOD
(8.0 HOURS)

204:00
(P20)
(2.5⁰⁰⁸)
(11101)
(1111)

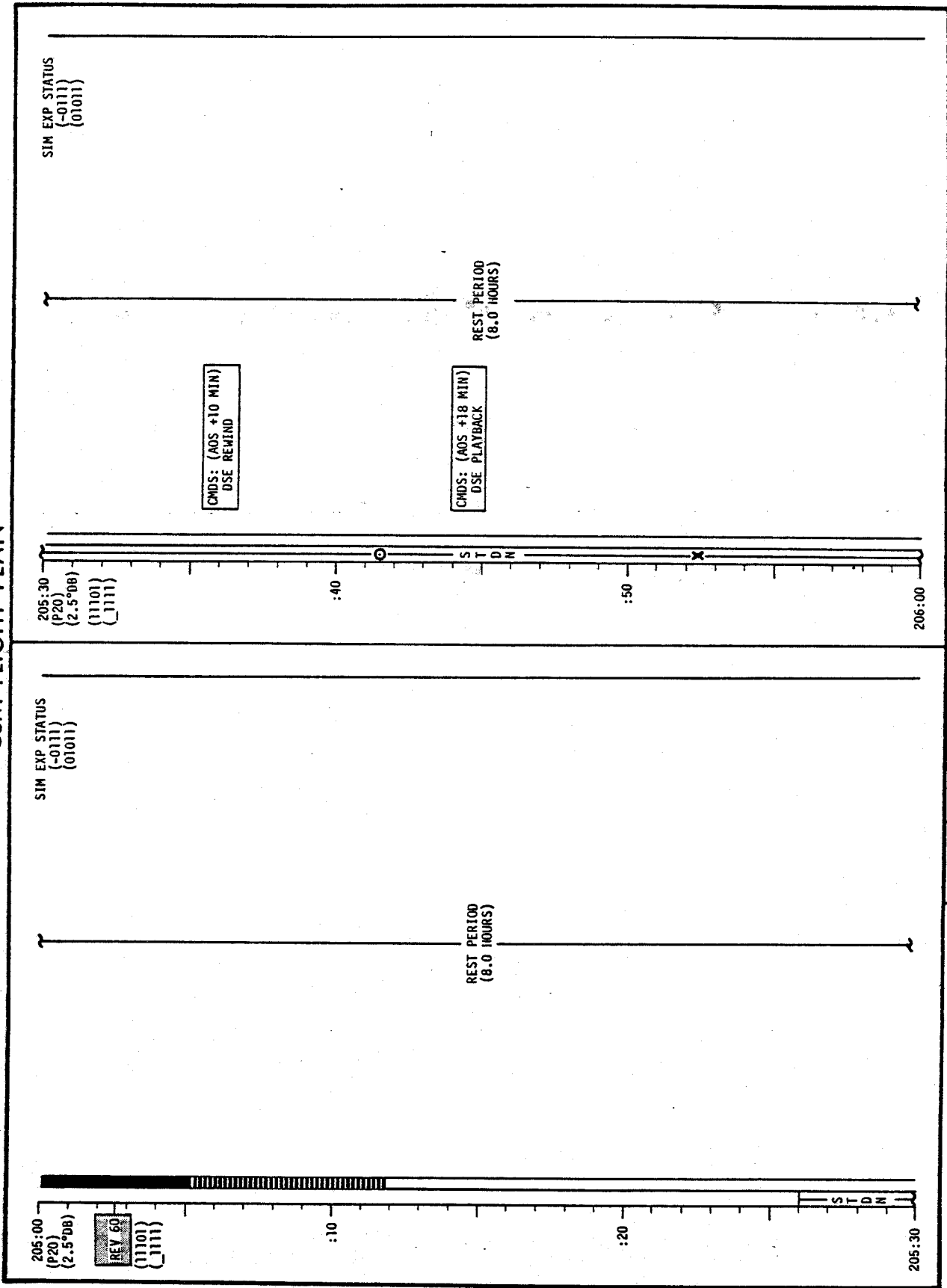
:10

:20

204:30

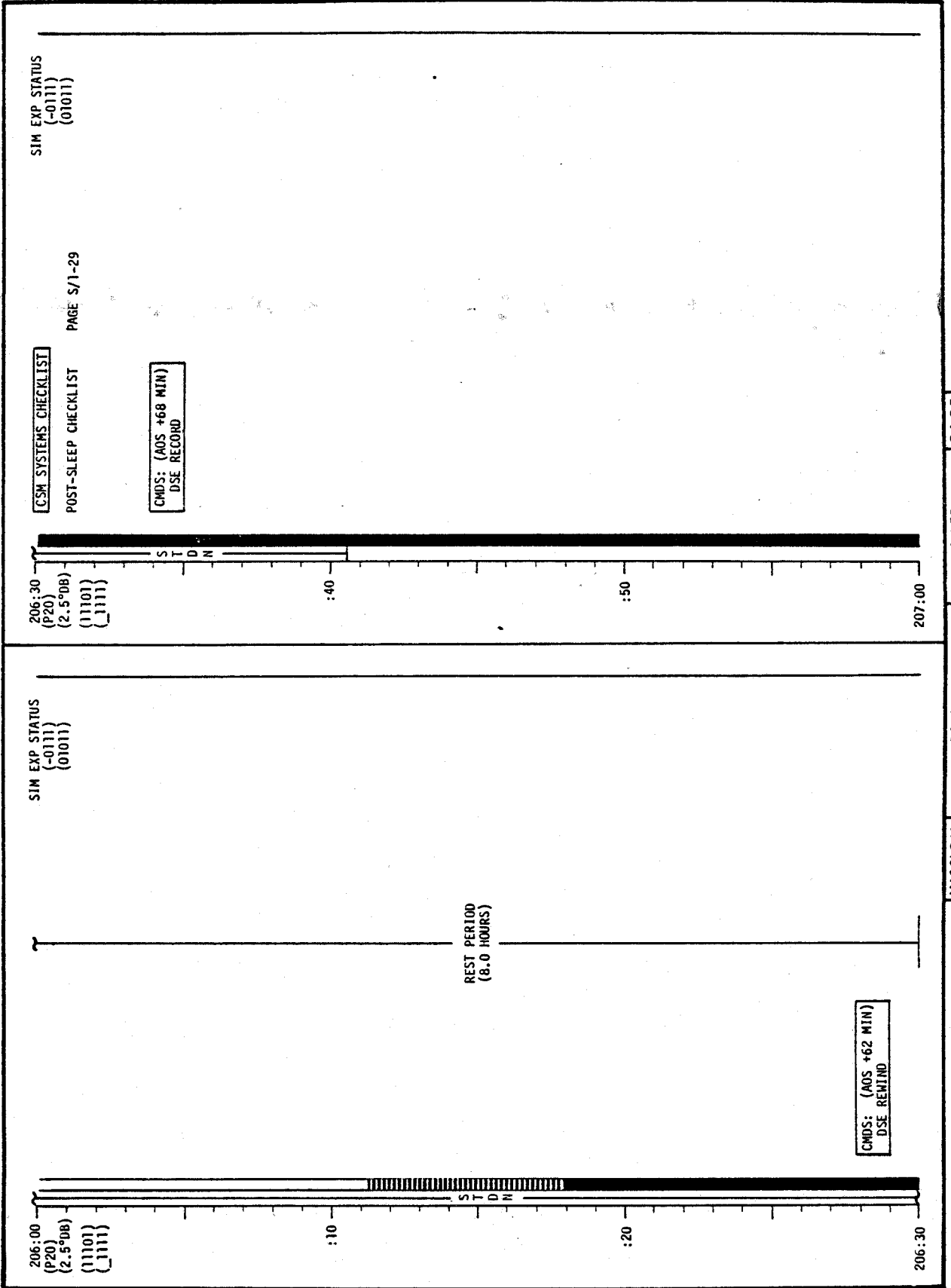
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-313

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-314

CSM FLIGHT PLAN



SIM EXP STATUS
(-0111)
(01011)

CSM SYSTEMS CHECKLIST
POST-SLEEP CHECKLIST
PAGE S/1-29

CMDS: (AOS +68 MIN)
DSE RECORD

206:30
(P20)
(2.5⁰⁰⁸)
(11101)
(1111)

SIM EXP STATUS
(-0111)
(01011)

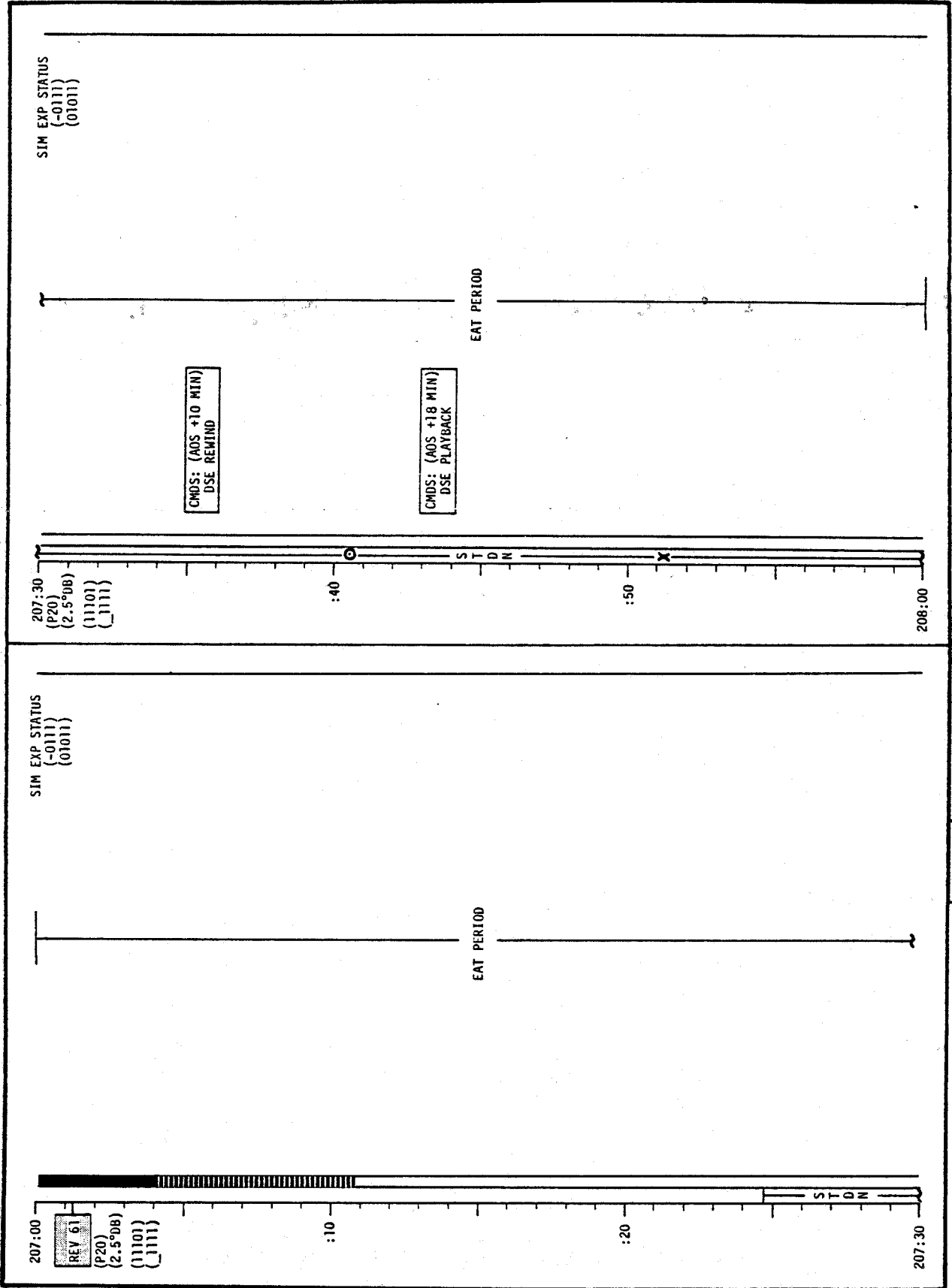
REST PERIOD
(8.0 HOURS)

CMDS: (AOS +62 MIN)
DSE REINTD

206:00
(P20)
(2.5⁰⁰⁸)
(11101)
(1111)

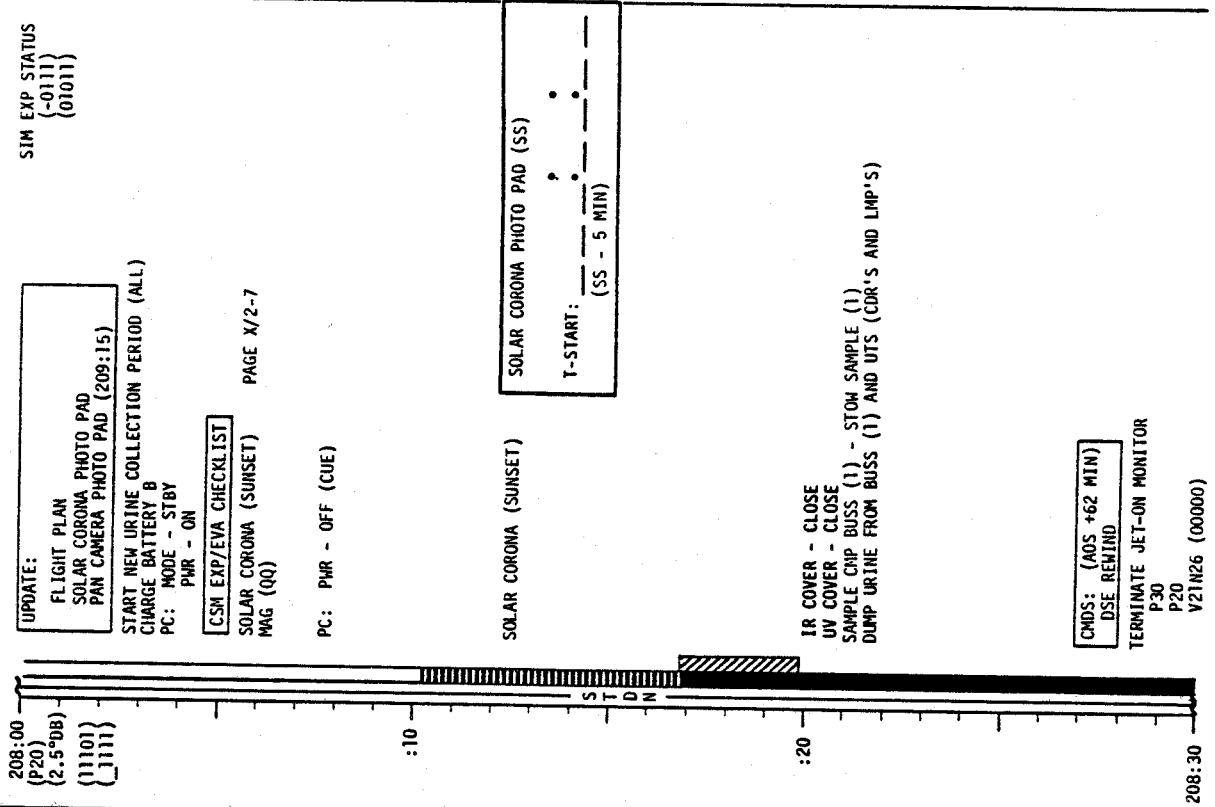
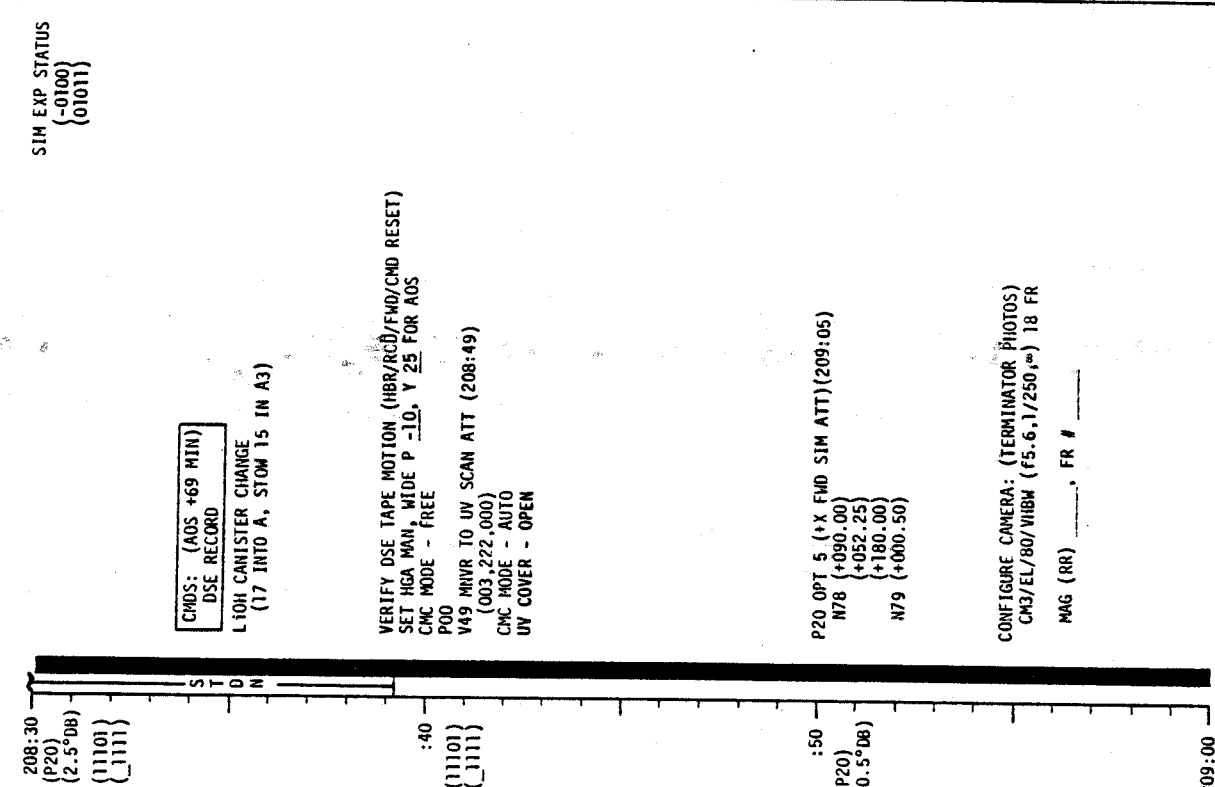
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-315

CSM FLIGHT PLAN



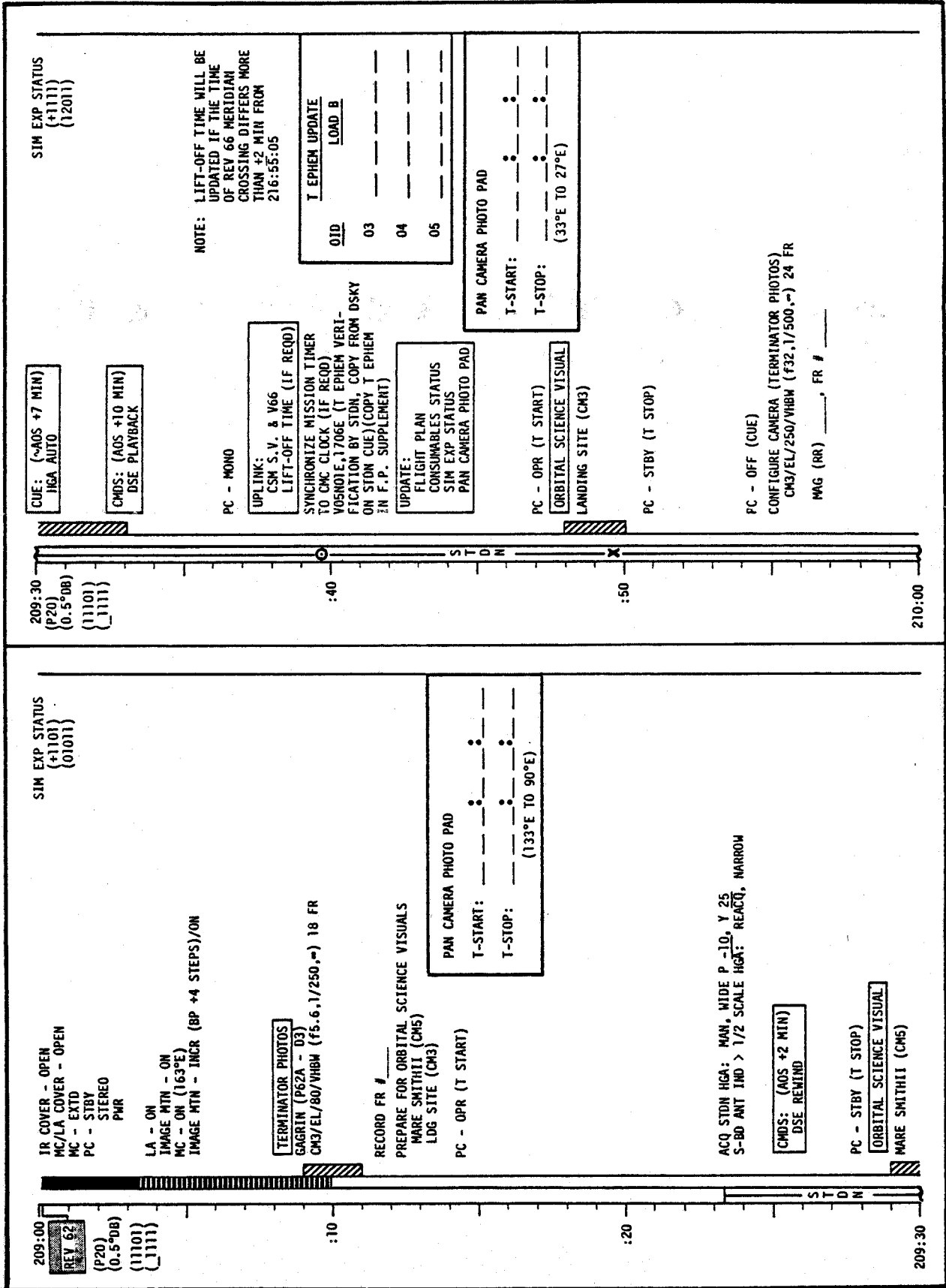
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-316

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-317

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-318

CSM FLIGHT PLAN

210:00
(P20)
(0.5°DB)
(11101)
(11111)

TERMINATOR PHOTOS

NORTH (P62B - D13)
CM3/EL/250/VHBM (F32.1/500,-) 24 FR

RECORD FR # _____

:10

S T D N

:20

210:30

SIM EXP STATUS
(+11111)
(02011)

P52 IMU REALIGN

N71:	---	---
N05:	---	---
N93:	---	---
X	•	---
Y	•	---
Z	•	---
GET	•	•

CMC MODE - FREE

P52 (OPTION 3)
(LIFT-OFF ORIENT)

REPORT: GYRO TORQUING ANGLES

P20: CMC MODE - AUTO
GDC ALIGN

CMDS: (AOS +68 MIN)
DSE REWIND

210:30
(P20)
(0.5°DB)
(11101)
(11111)

SET HGA MAN P -20, Y 30 AUTO, NARROW (215:19)
HGA PWR - OFF
SELECT OMNI B FOR AOS

NOTE: SIM BAY AND PCH
DATA IS NOT RE-
CORDED UNTIL 211:20

CHP DON BIONED HARNESS

LS OPERATE - STBY (VERIFY)
RCDR - ON
RADAR - ON
RCDR - OFF
MODE - HF

NOTE: ALL CREWMEN SKETCH SUNRISE AND
SUNSET SOLAR CORONA BEFORE TEL.

CSM EXP/EVA CHECKLIST

PPS: X/2-10 a,b (CMP)
X/2-10 c,d (CDR)
X/2-10 e,f (LMP)

REV 63

211:00

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-319

CSM FLIGHT PLAN

SIM EXP STATUS
(+1111)
(02311)

211:00
(P20)
(0.5°DB)
(11101)
(1111)

V48 (11111)
(1111)

MC - OFF (150°E)
WAIT 30 SECS
MC - STBY
IMAGE MTN - OFF
LA - OFF
POO
V49 HWVR TO LS RCV ONLY ATT (211:18)
(143,268,000)
MC - OFF
IR - OFF
PC SELF TEST - OFF
UV - OFF
DATA SYS - OFF
SM/AC PMR - OFF

:10
(11111)
(1111)

CONFIGURE DSE (HBR/RCD/FMD/CMD RESET) (AOS +116 MIN)

ACQ STDN OMNI B
CMD5: (AOS)
DSE STOP

CHECK CMP BIONED
LMP DOFF BIONED HARNESS

LS
RCV
ONLY

S T D N

211:30

211:30
(11111)
(1111)

:40

:50

S T D N

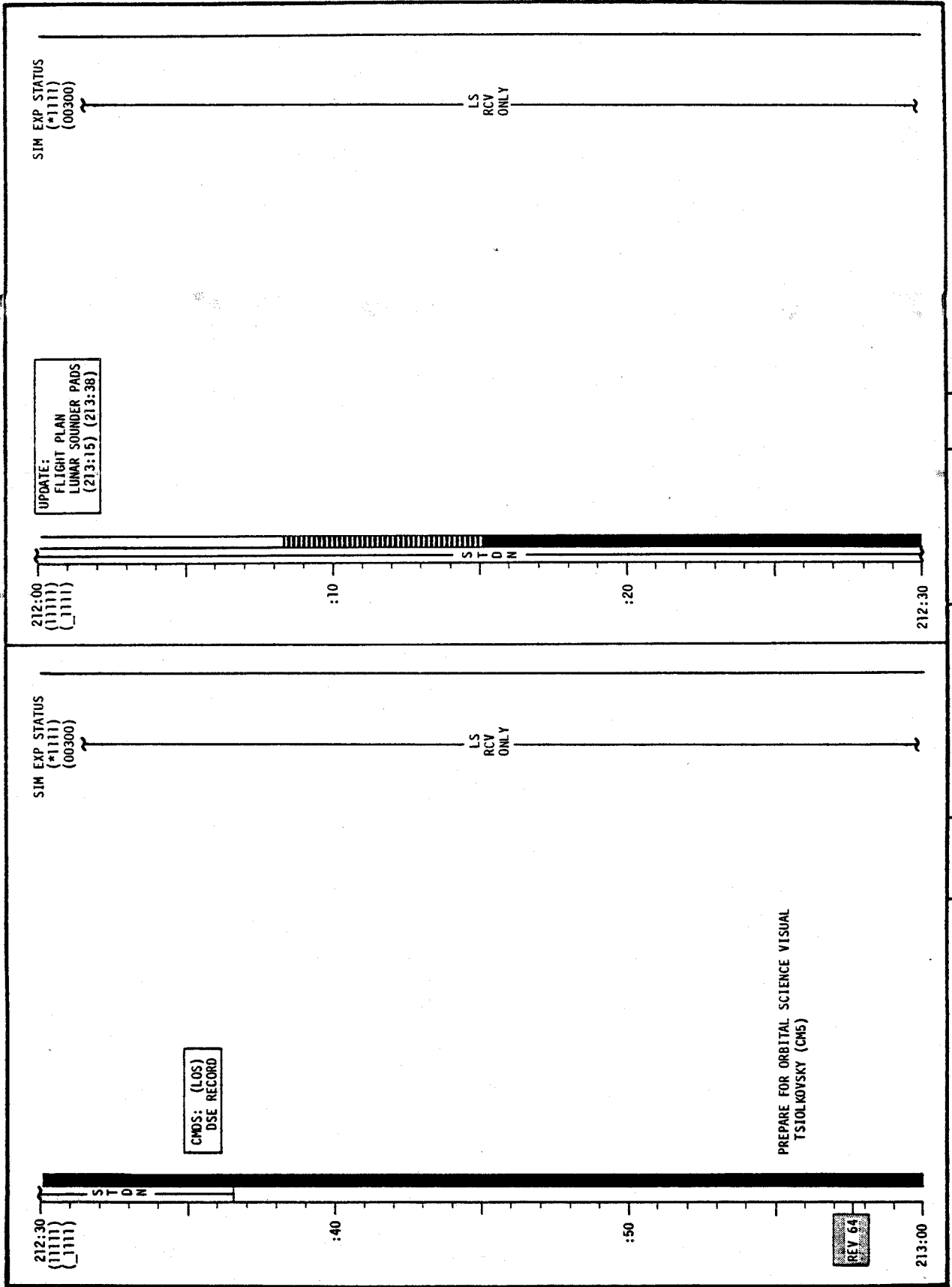
212:00

SIM EXP STATUS
(+1111)
(00300)

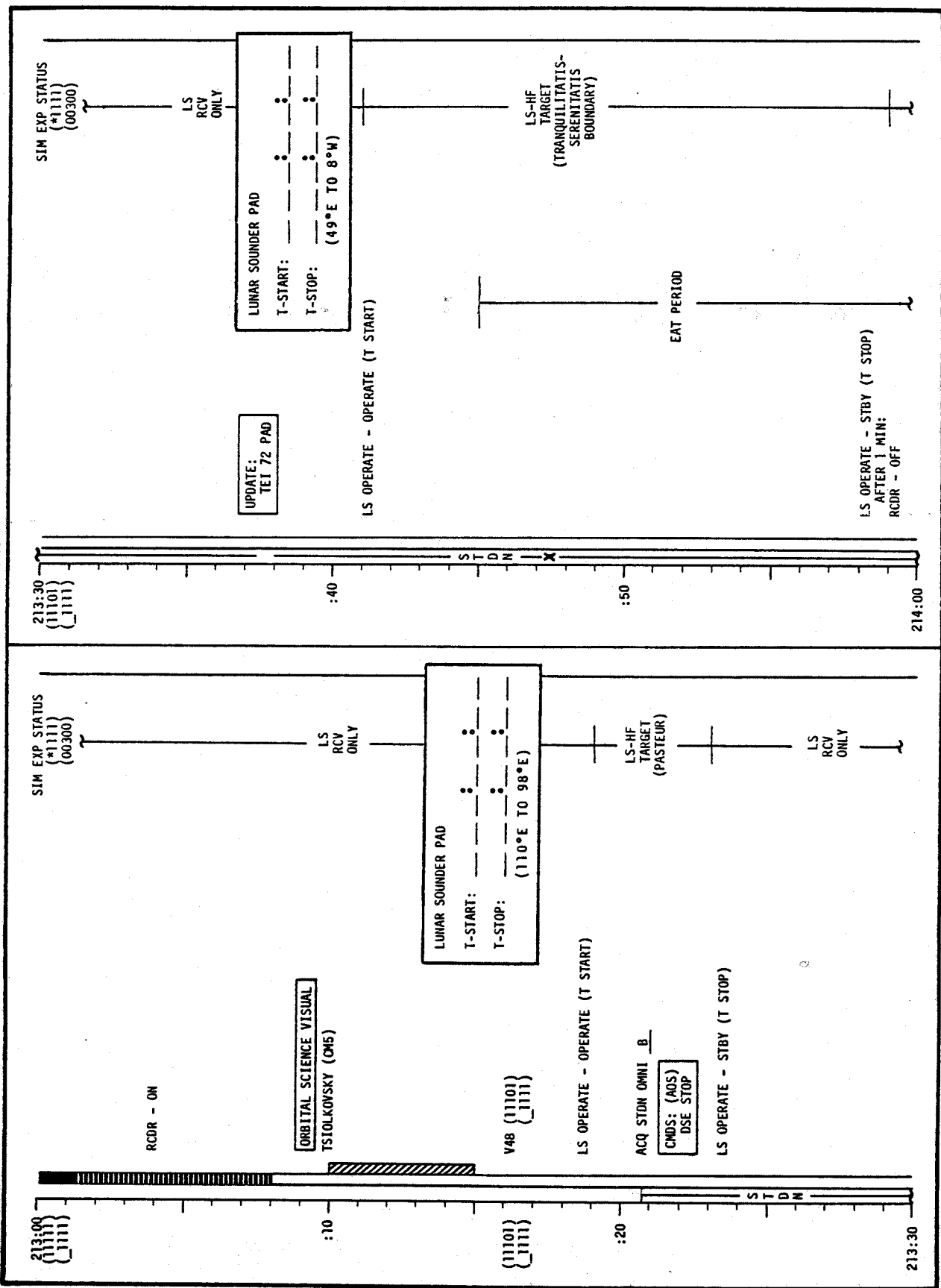
LS
RCV
ONLY

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-320

CSM FLIGHT PLAN

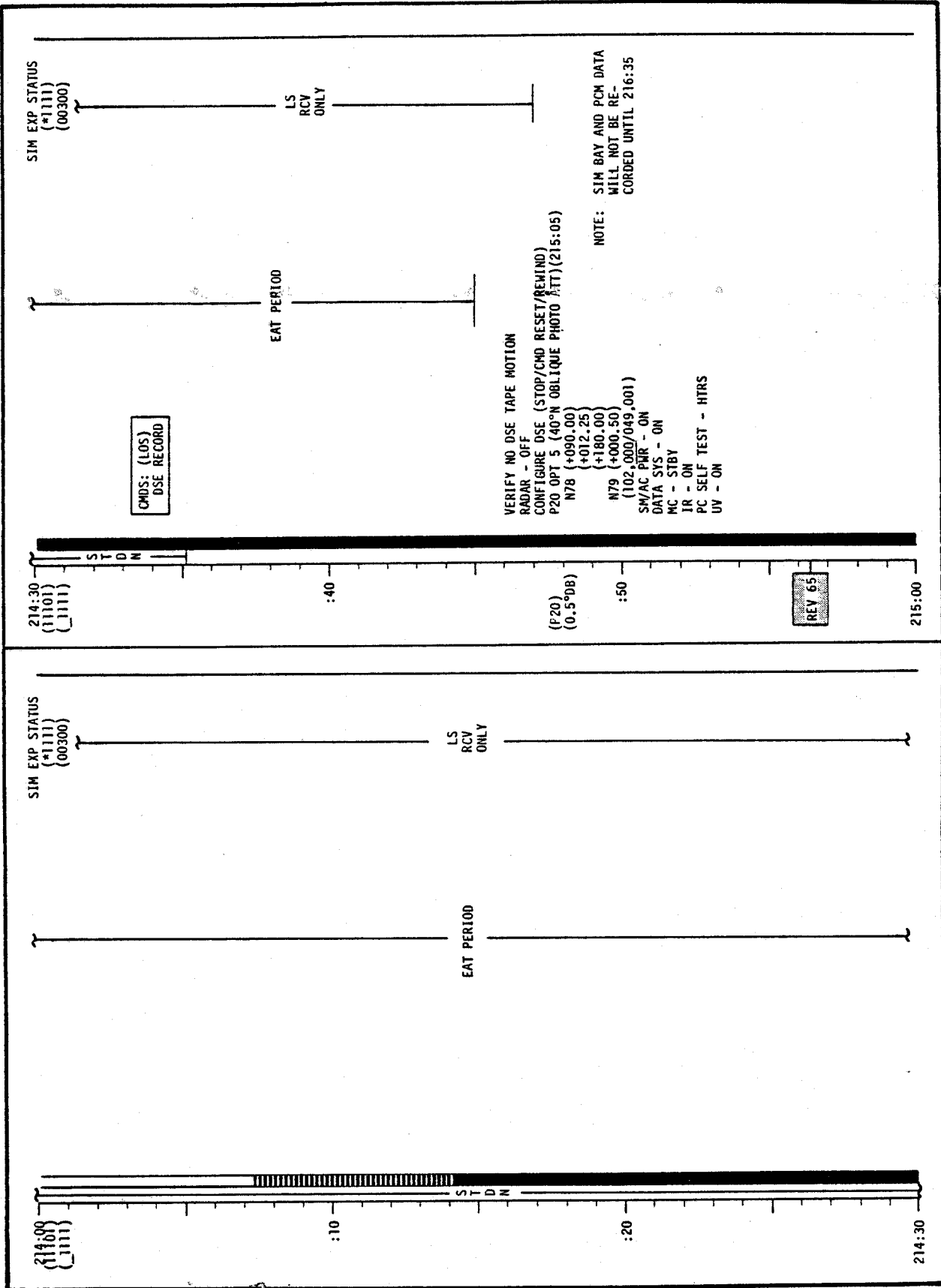


CSM FLIGHT PLAN



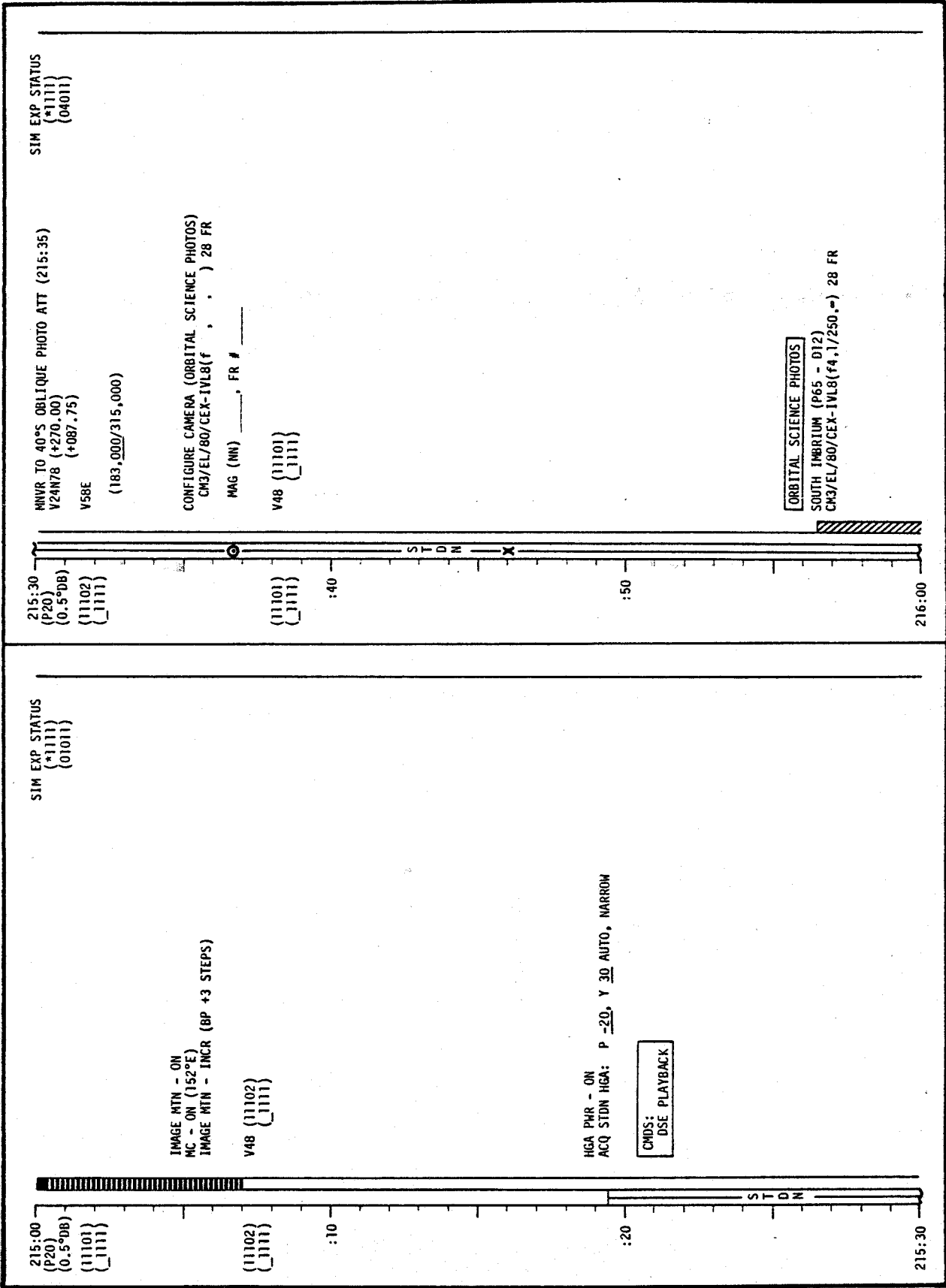
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-322

CSM FLIGHT PLAN



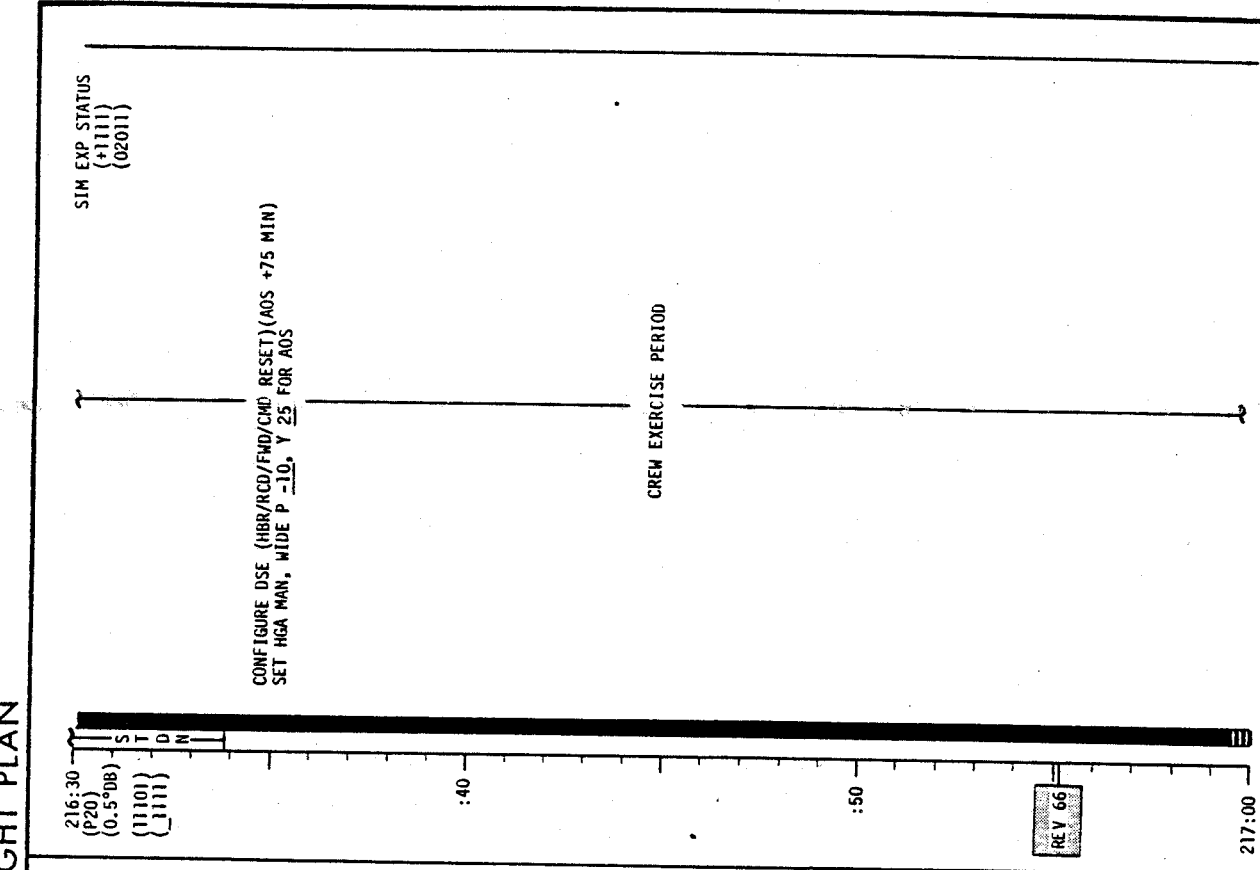
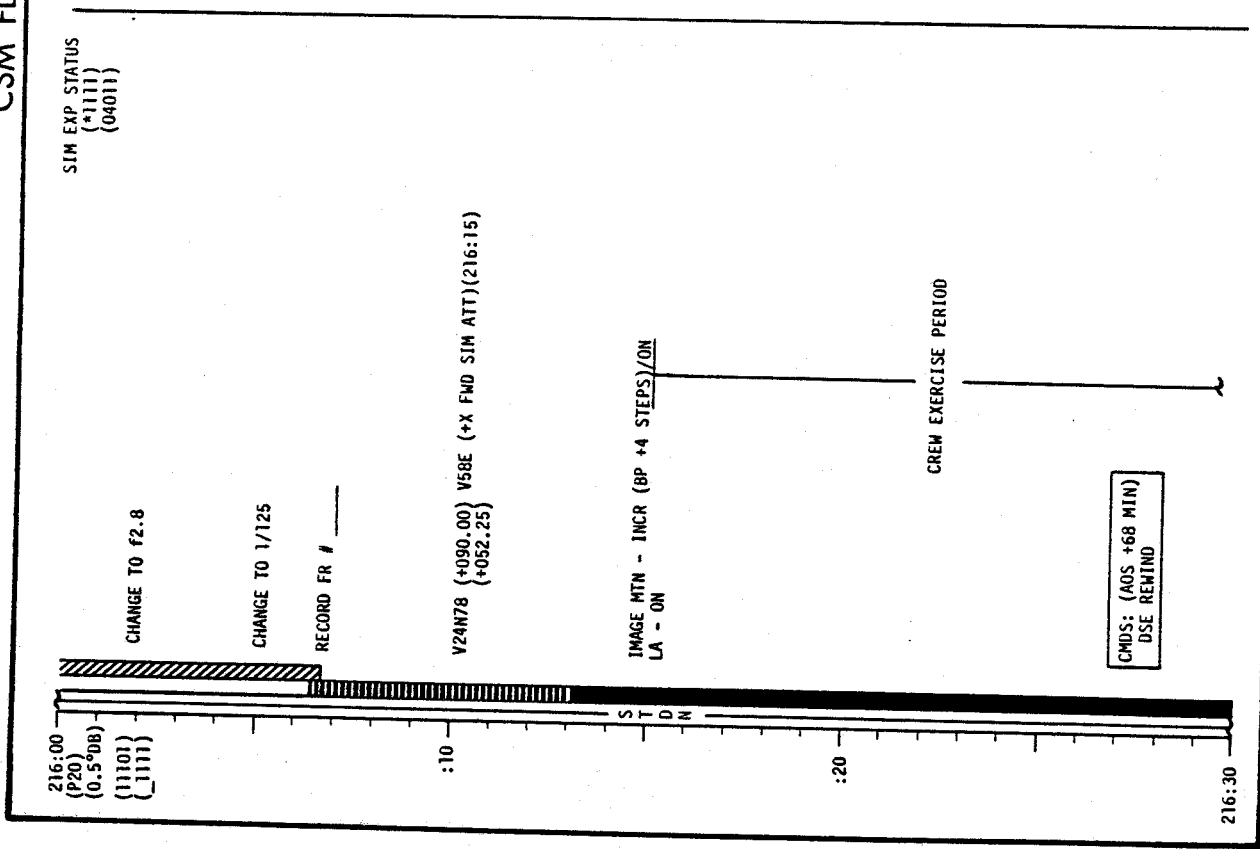
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-323

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-324

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-325

CSM FLIGHT PLAN

SIM EXP STATUS
(+1111)
(02011)

CDR DON BIOMED HARNESS

PC: MODE - STBY
PMR - ON

PC: PMR - OFF (CUE)
CONFIGURE CAMERA (TERMINATOR PHOTOS)
CMS/EL/250/VHBM (F32.1/500,-) 24 FR
MAG (RR) _____, FR # _____

CHECK CDR BIOMED
CMP DOFF BIOMED HARNESS

217:30
(P20)
(0.5°DB)
(11101)
(1111)

:40

:50

218:00

SIM EXP STATUS
(+1111)
(02011)

CREW EXERCISE PERIOD

ACQ STDN HGA: MAN, WIDE P -10, Y 25
S-BD ANT IND >1/2 SCALE HGA: REACQ, NARROW

CMS: (AOS +2 MIN)
DSE REMIND

CUE: (~AOS +7 MIN)
HGA AUTO

CMS: (AOS +10 MIN)
DSE PLAYBACK

217:00
(P20)
(0.5°DB)
(11101)
(1111)

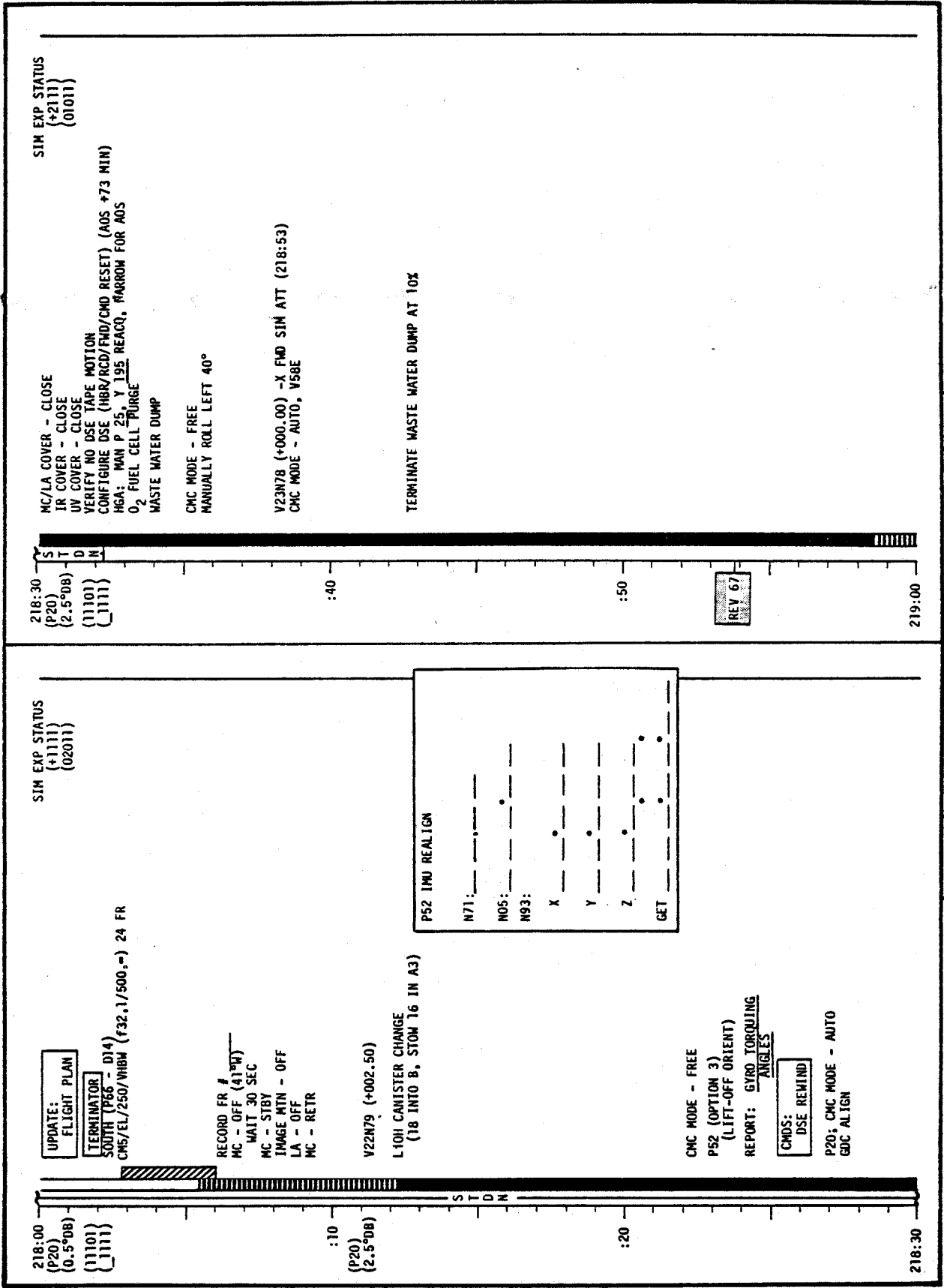
:10

:20

217:30

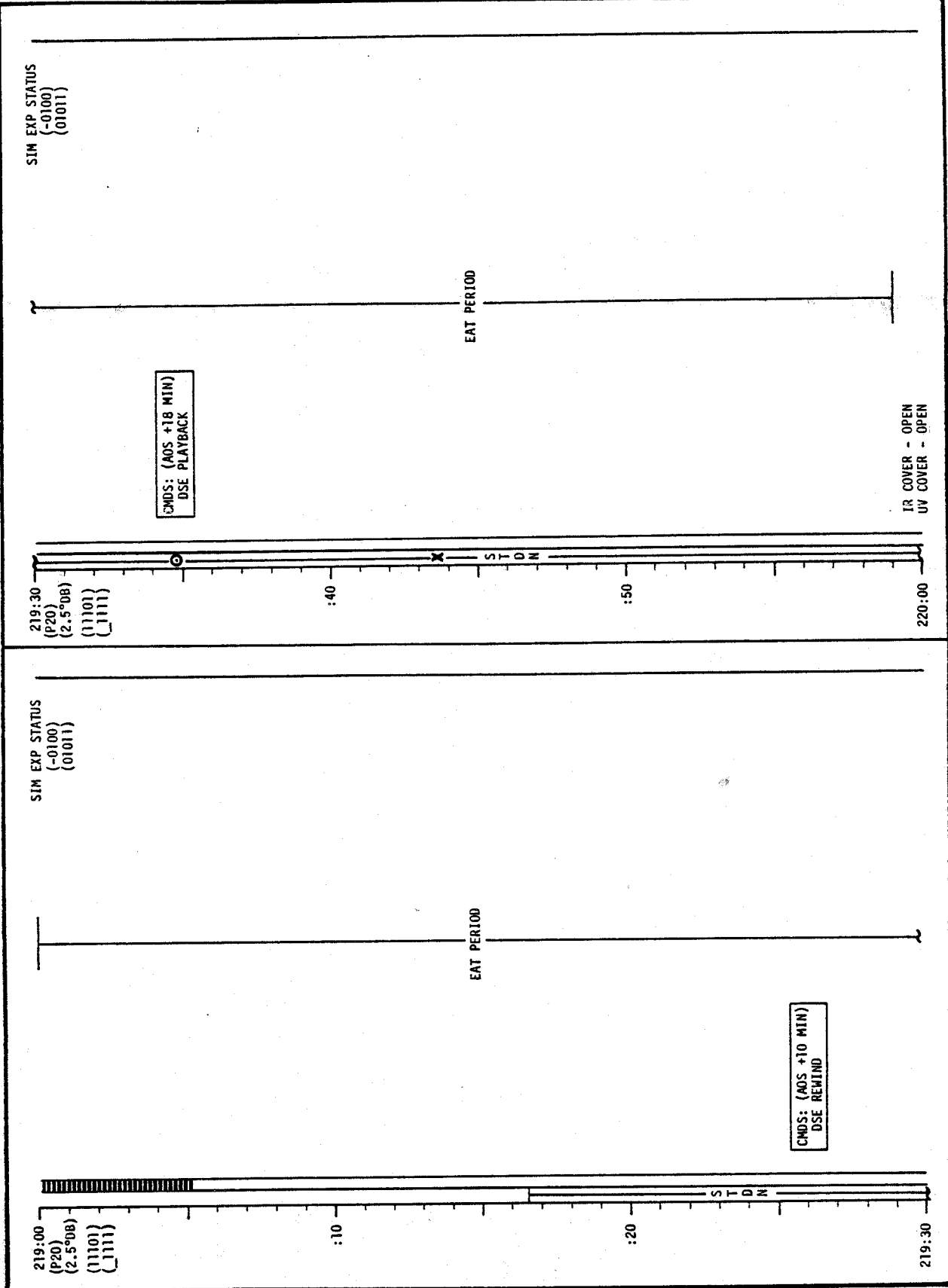
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-326

CSM FLIGHT PLAN



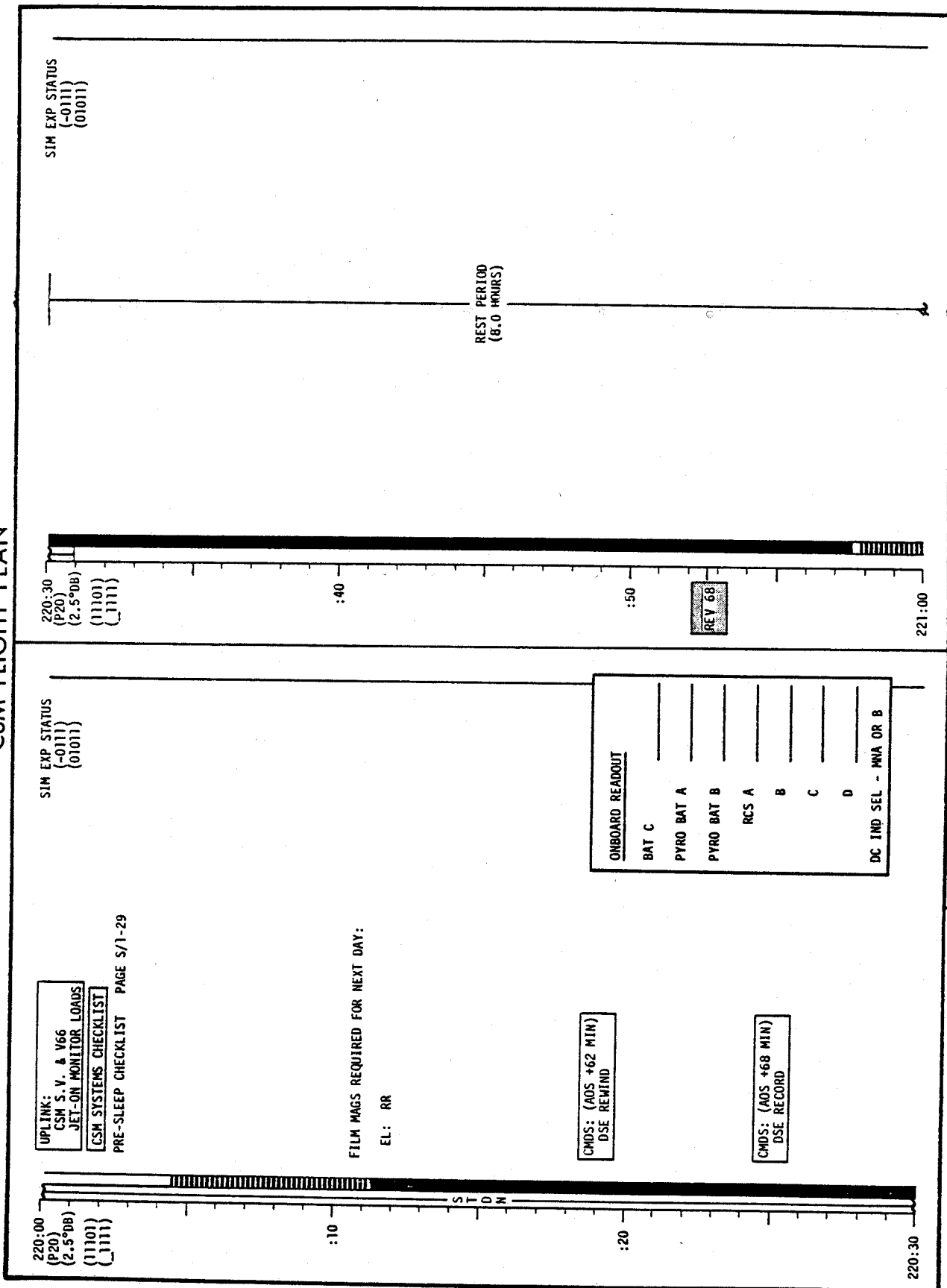
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-327

CSM FLIGHT PLAN

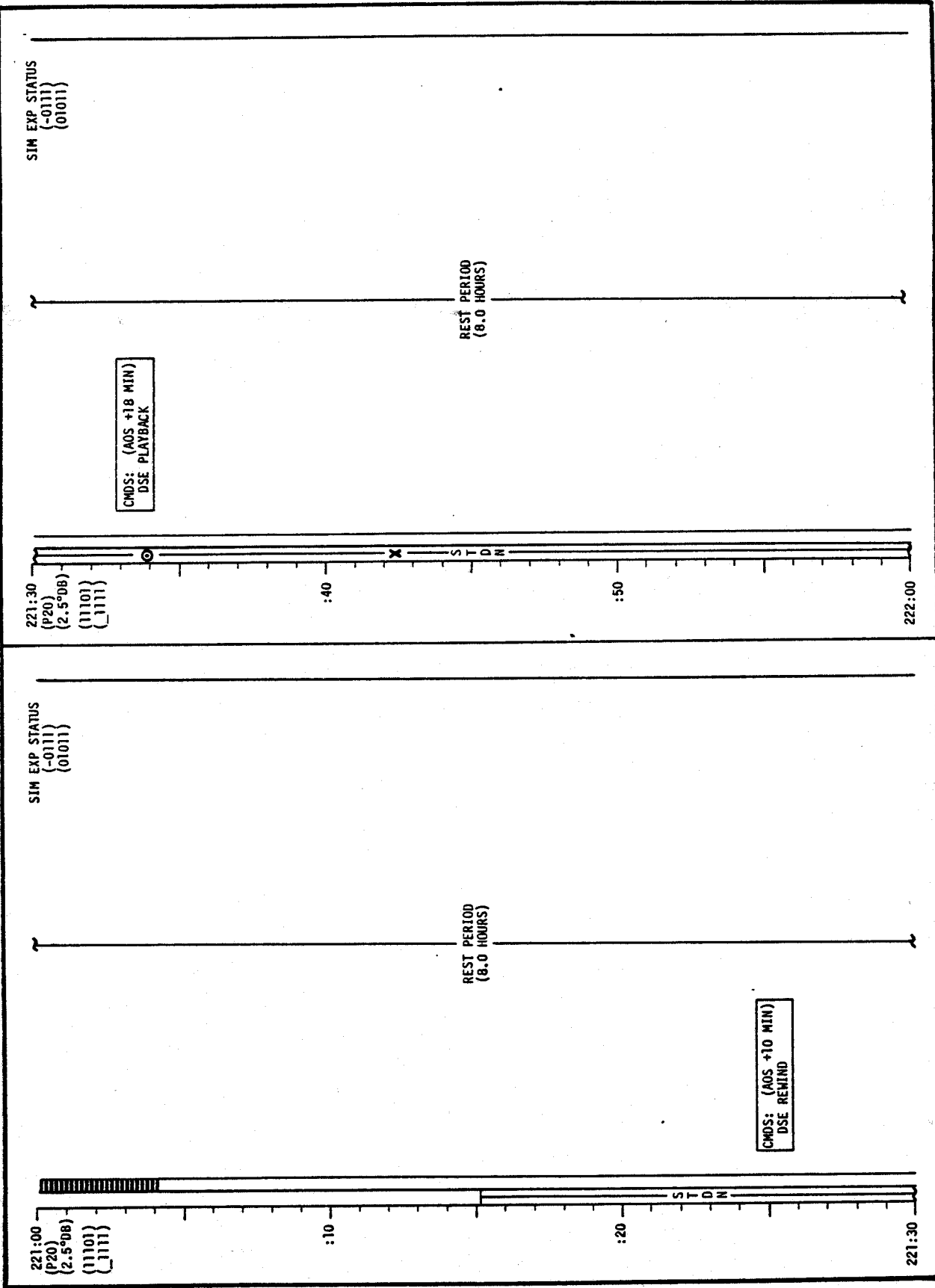


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-328

CSM FLIGHT PLAN

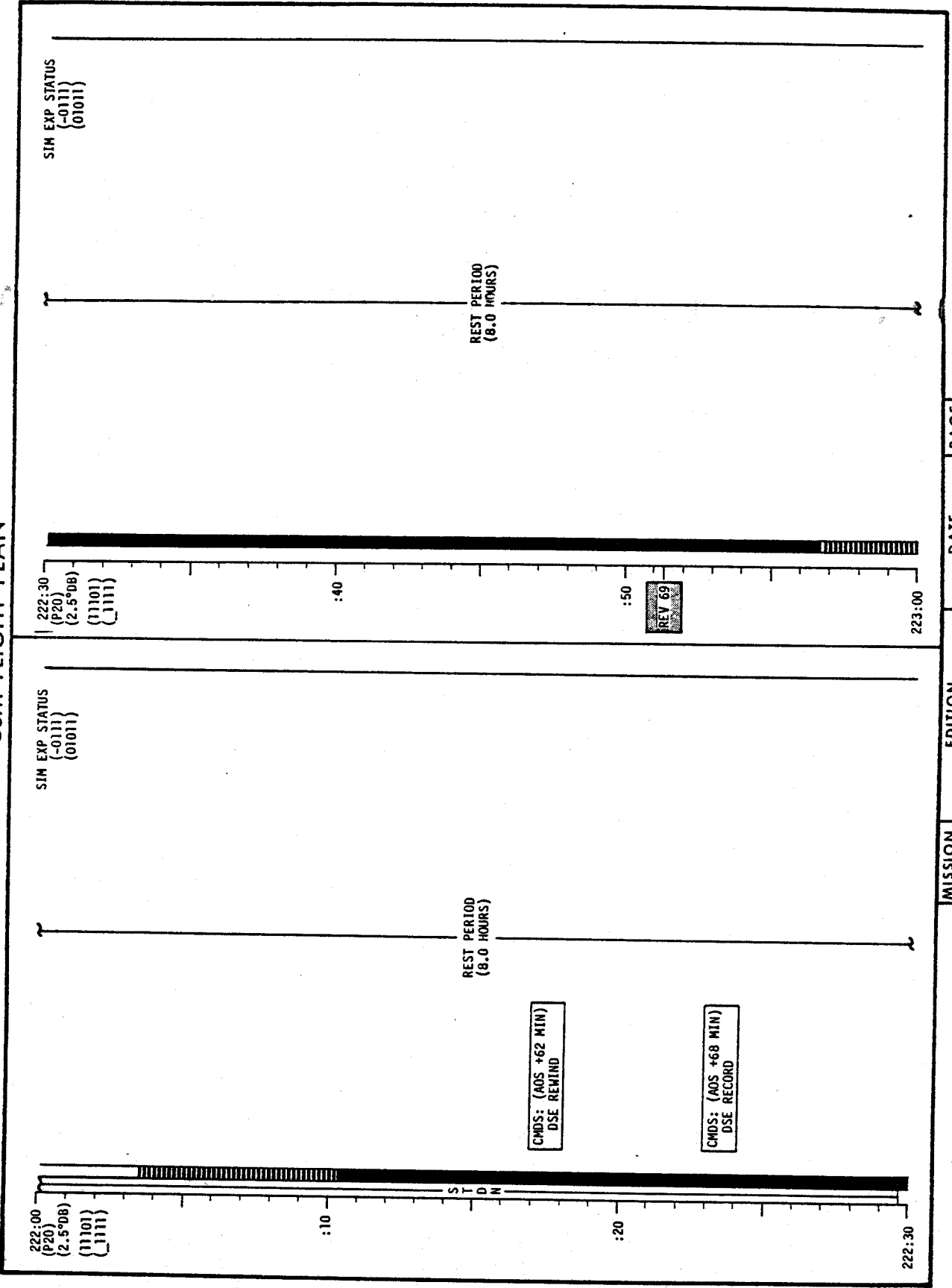


CSM FLIGHT PLAN

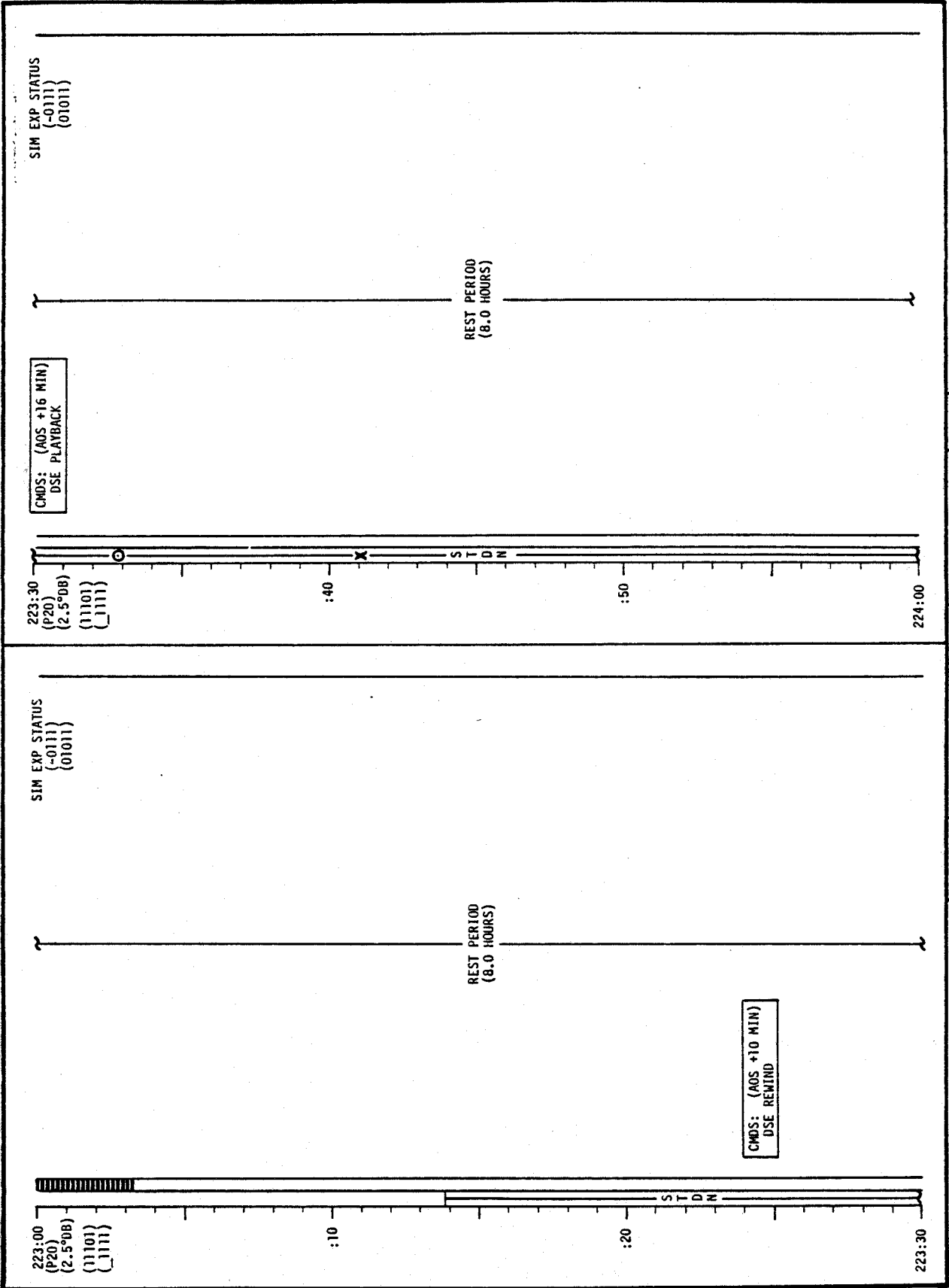


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-330

CSM FLIGHT PLAN

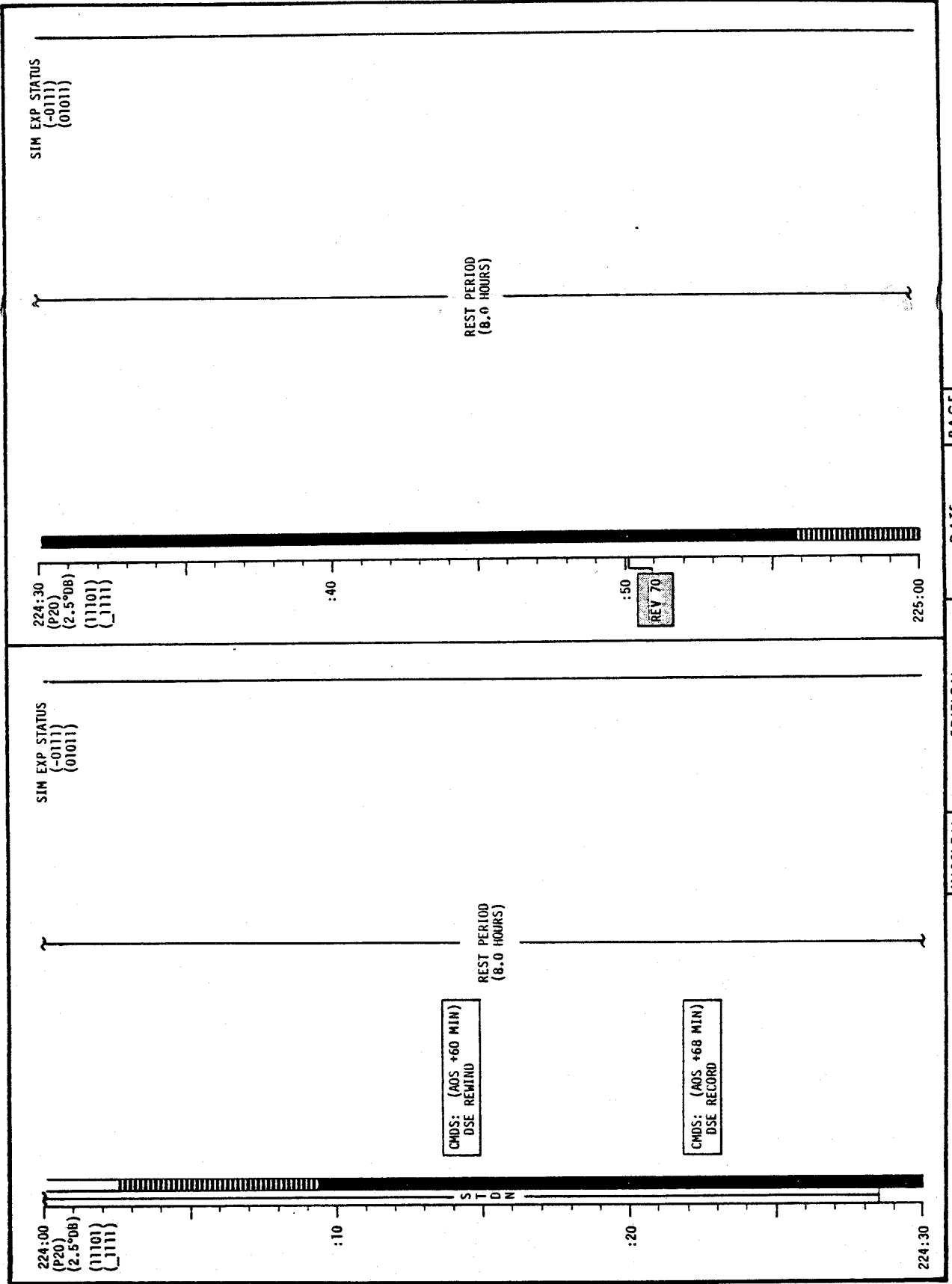


CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-332

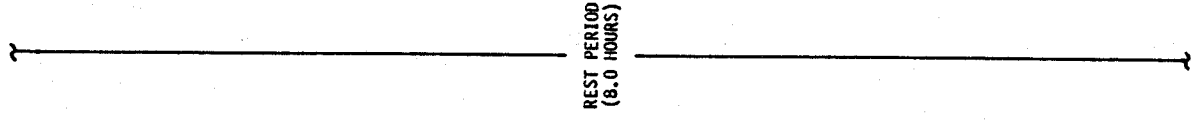
CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-333

CSM FLIGHT PLAN

SIM EXP STATUS
(-0111)
(01011)



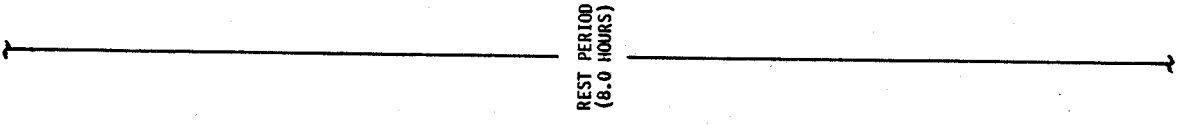
225:30
(P20)
(2.5°DB)
(11101)
(1111)

:40

:50

226:00

SIM EXP STATUS
(-0111)
(01011)



225:00
(P20)
(2.5°DB)
(11101)
(1111)

:10

:20

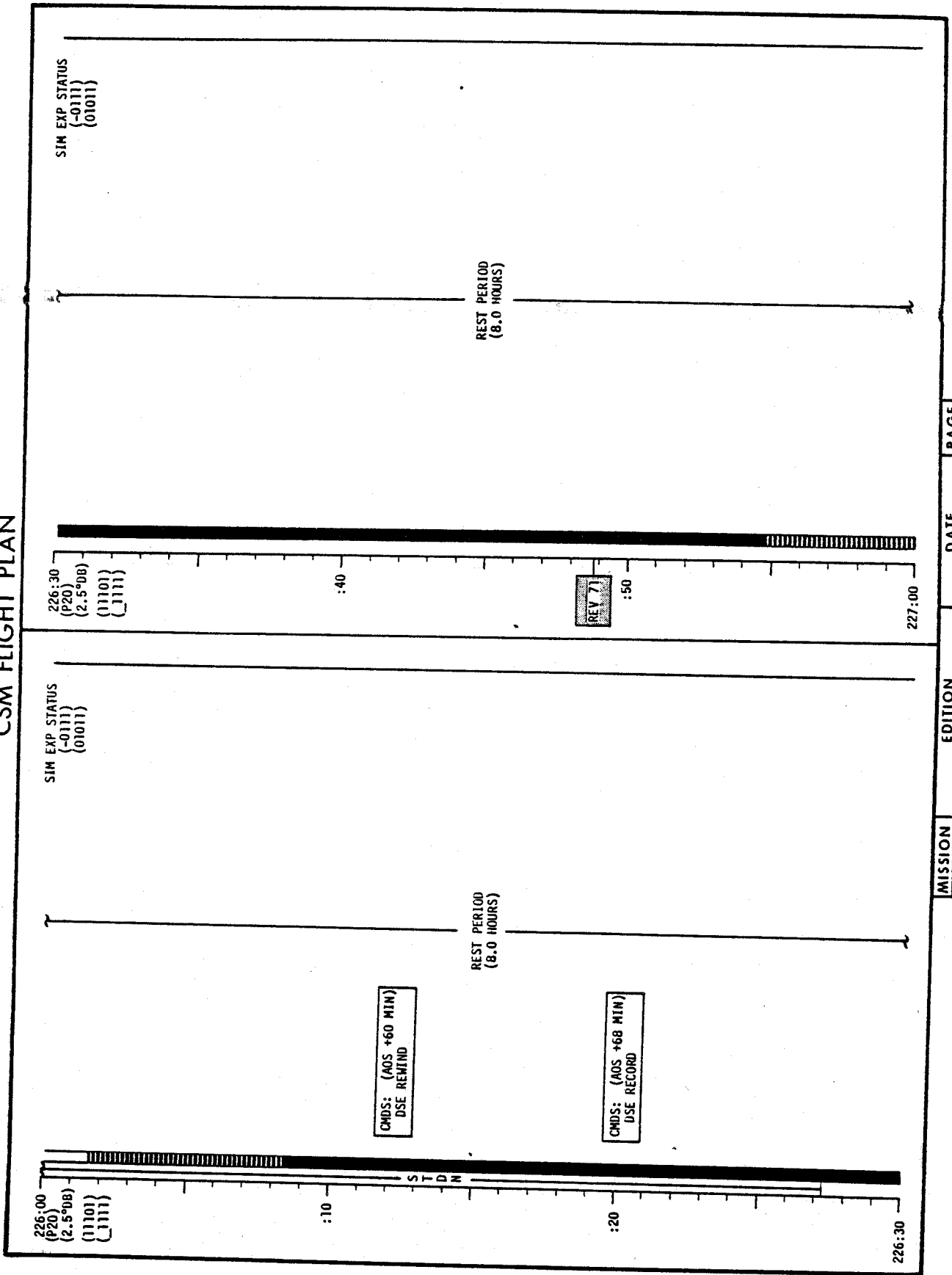
225:30

CMDS: (AOS +10 MIN)
DSE REWIND

CMDS: (AOS +16 MIN)
DSE PLAYBACK

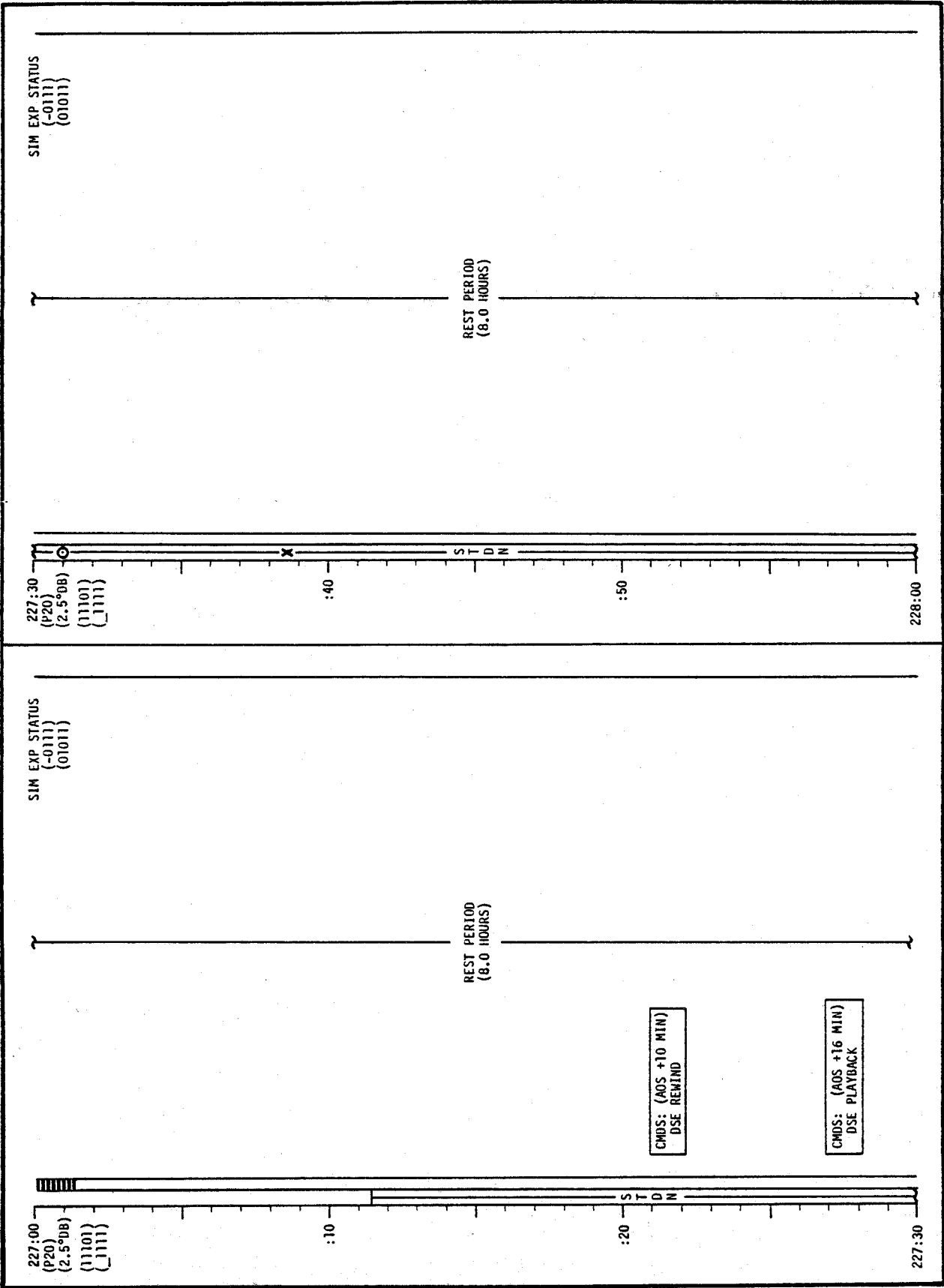
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-334

CSM FLIGHT PLAN



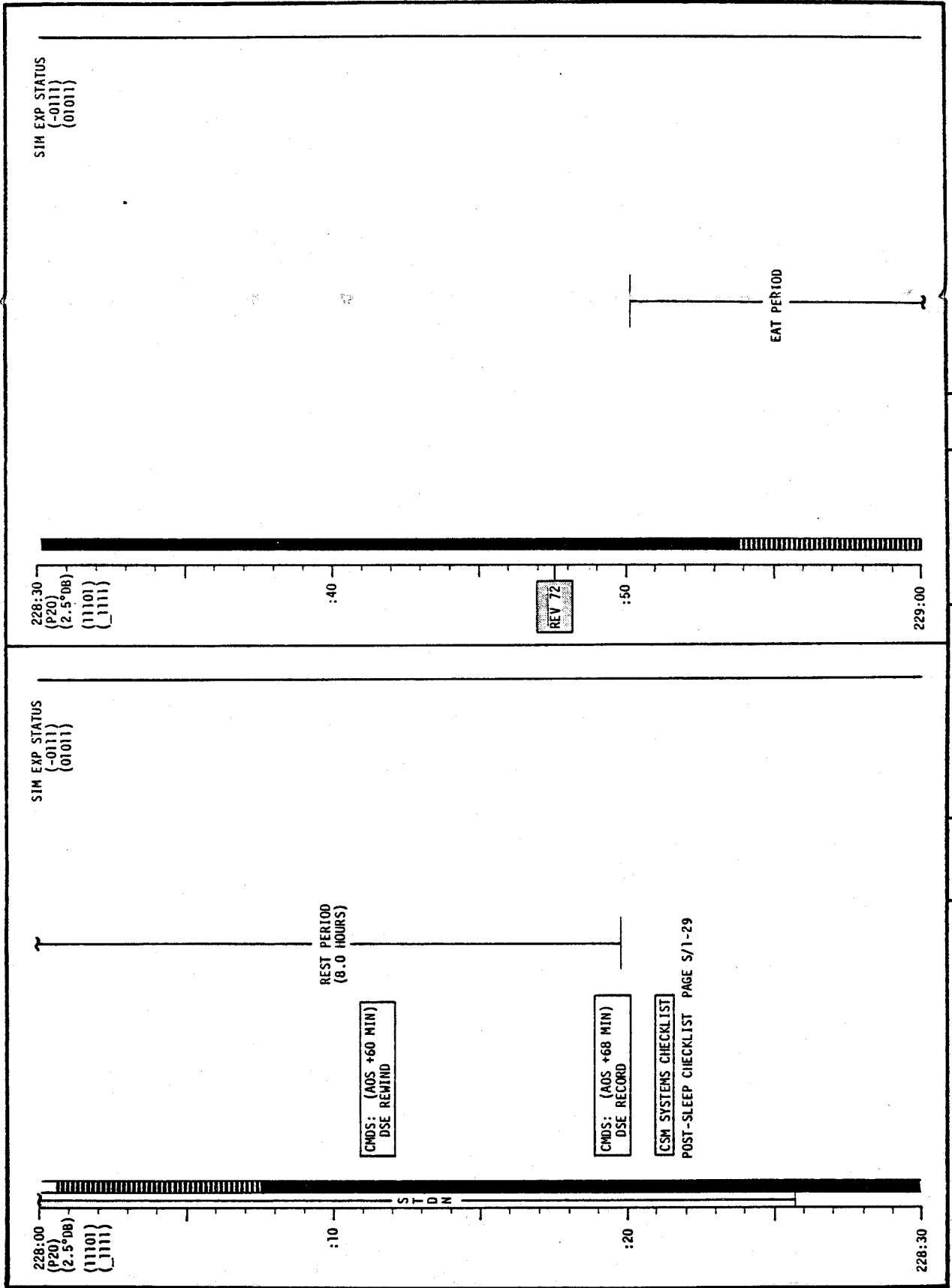
MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-335

CSM FLIGHT PLAN

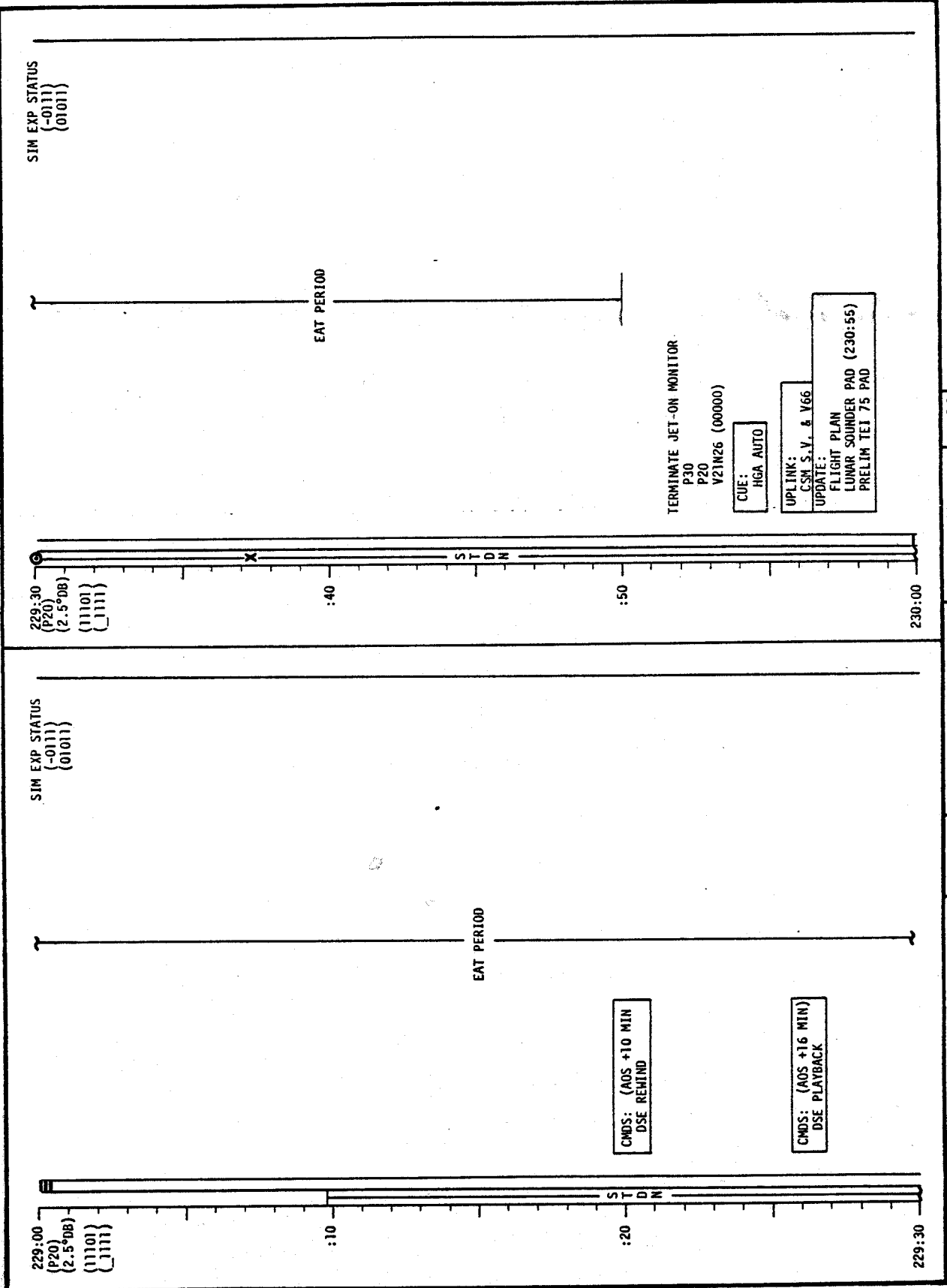


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-336

CSM FLIGHT PLAN

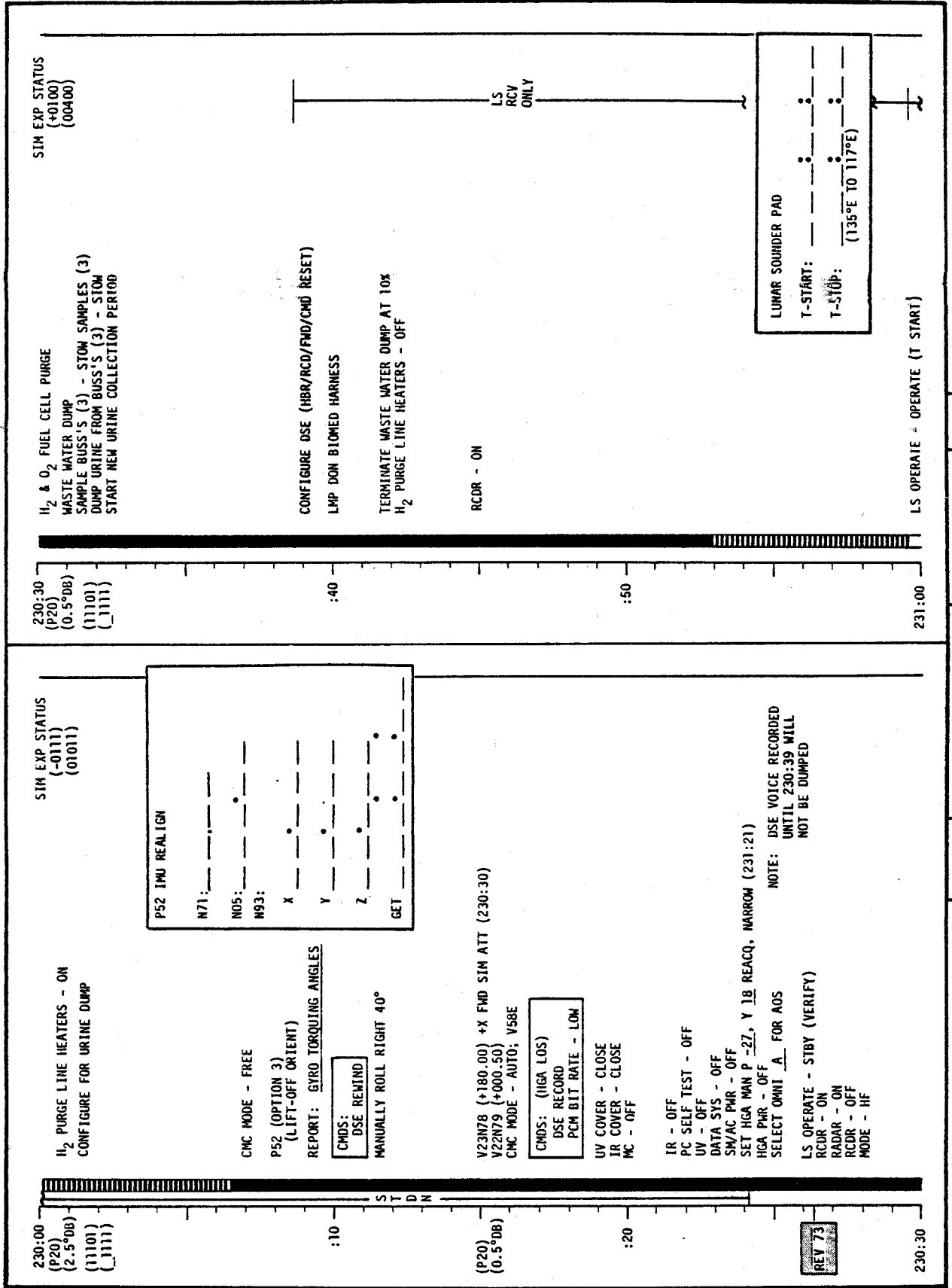


CSM FLIGHT PLAN

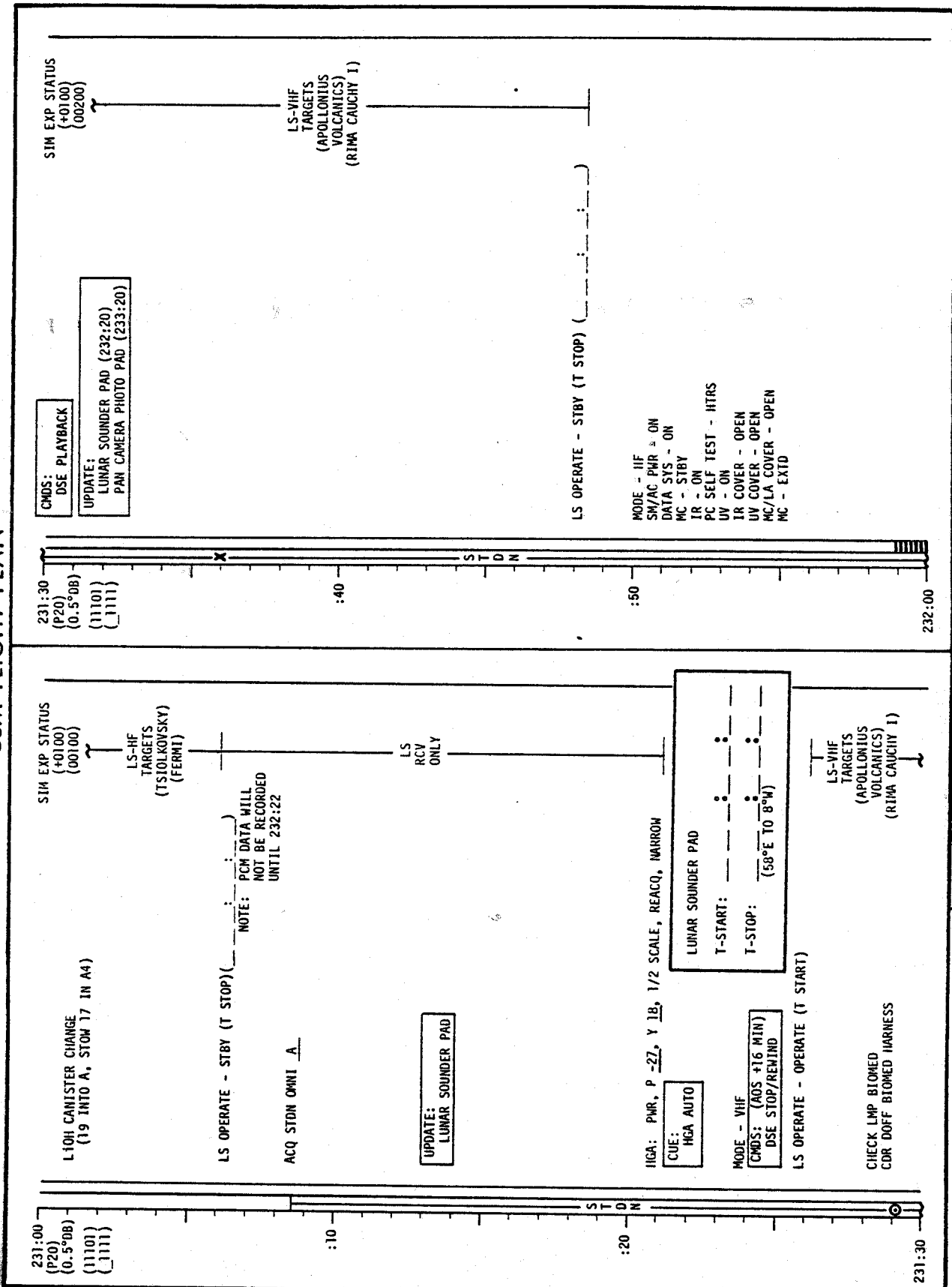


MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-338

CSM FLIGHT PLAN

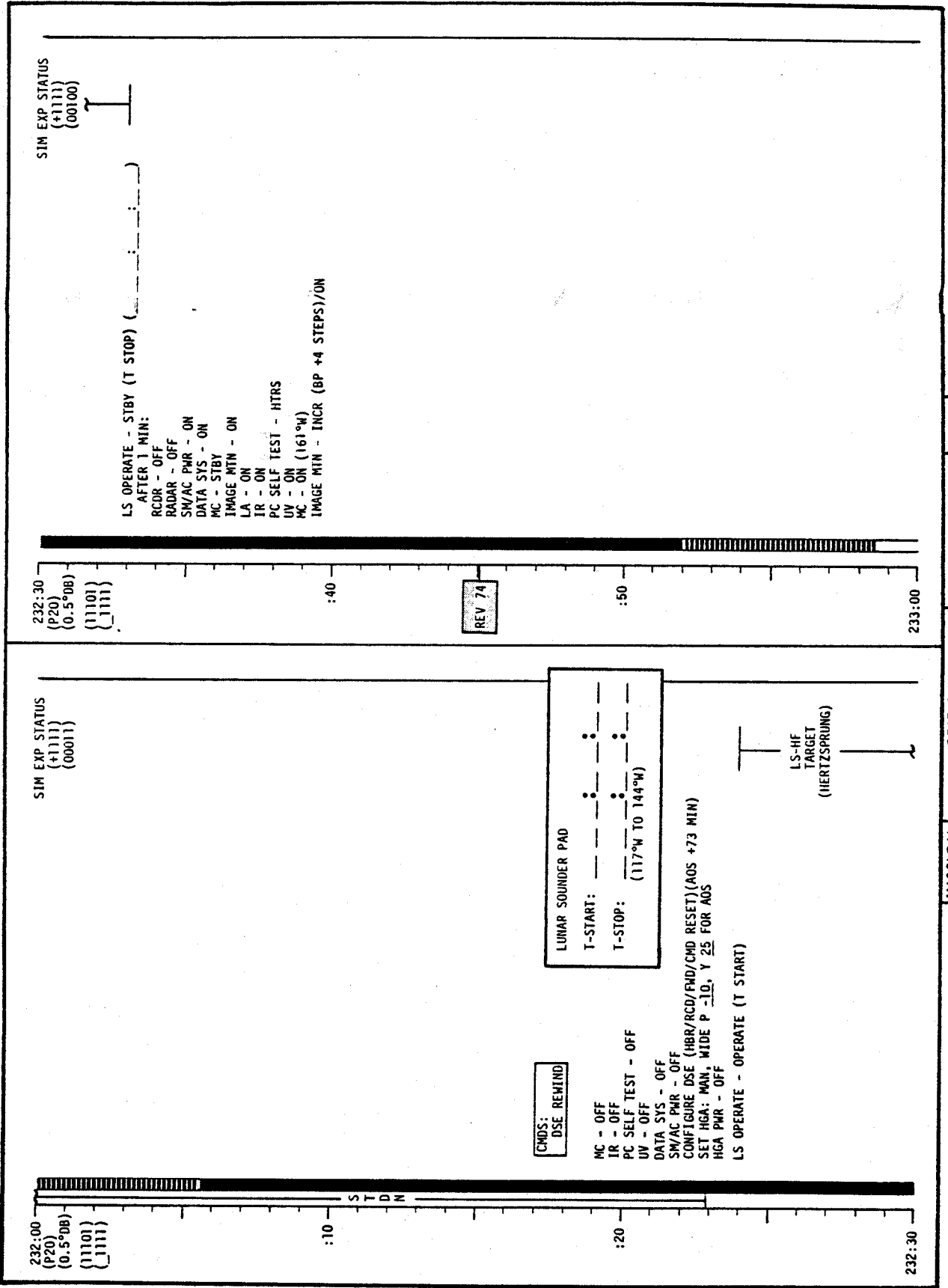


CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-340

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-341

CSM FLIGHT PLAN

SIM EXP STATUS
(+1010)
(22011)

233:30
(P20)
(0.5°DB)
(11101)
(11111)

PC - STBY (T STOP) (-----)

PAN CAMERA PHOTO PAD
T-START: -----
T-STOP: -----
(5°W TO 45°W)

PC - OPR (T START)

TERMINATOR PHOTOS
SOUTH (P74-D14)
CM5/EL/250/VHBM (f11,1/500,∞) 18 FR

PC - STBY (T STOP)
RECORD FR # _____

SIM EXP STATUS
(+11111)
(02011)

233:00
(P20)
(0.5°DB)
(11101)
(11111)

UV COVER - CLOSE

V48 (11101)
(11111)

USE A/C ROLL AND EMBLE ALL JETS EXCEPT A1 AND A2
(BEFORE AOS)
NOTE: P & Y AXES COUPLED
R AXIS UNCOUPLED

HGA PMR - ON
ACO STDN HGA: MAN, WIDE P -10, Y 25
S-BD ANT IND > 1/2 SCALE HGA: REACQ, NARROW

CMDS: (AOS +2 MIN)
DSE REMIND
PC - STBY STEREO PMR

HF ANTENNA 1 - RETRACT (OFF ON STDN CUE)
HF ANTENNA 2 - RETRACT (OFF ON STDN CUE)
CUE: (~AOS +7 MIN)
HGA - AUTO

CMDS: (AOS +10 MIN)
DSE PLAYBACK

UPDATE:
FLIGHT PLAN
PAN CAMERA PHOTO PAD (233:40)
PC - OPR (T START)

PAN CAMERA PHOTO PAD
T-START: -----
T-STOP: -----
(67°E TO 25°E)

E-MEMORY DUMP

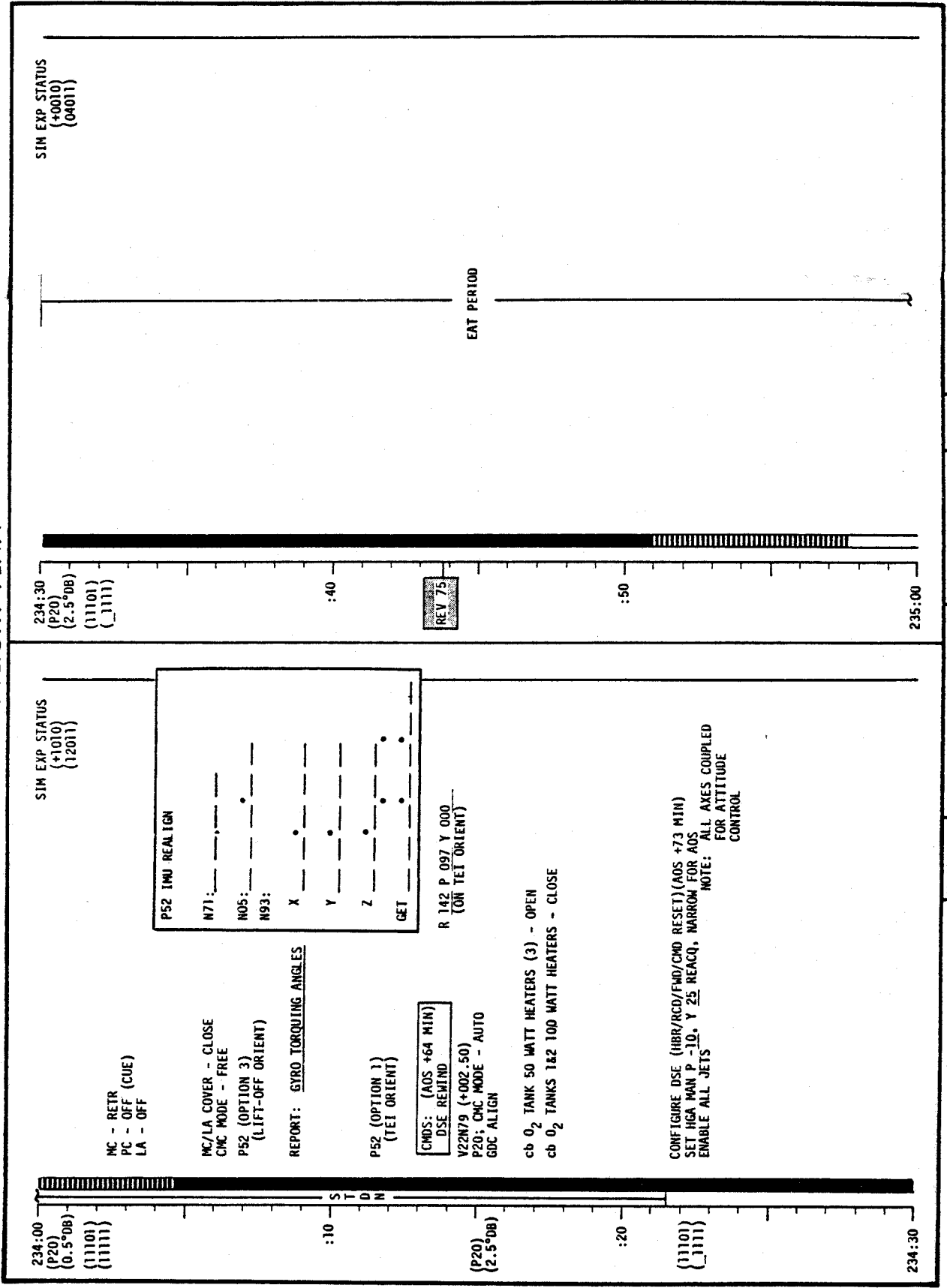
UPLINK:
DESIRED ORIENT (TET)

CONFIGURE CAMERA (TERMINATOR PHOTOS)
CM5/EL/250/VHBM (f11,1/500,∞) 18 FR
MAG (RR) _____, FR # _____

233:30

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-342

CSM FLIGHT PLAN



MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-343

CSM FLIGHT PLAN

235:00
 (P20)
 (2.5°DB)
 (11101)
 (1111)

:10

:20

235:30

SIM EXP STATUS
 (+0010)
 (04011)

EAT PERIOD

CMDS: (AOS +13 MIN)
 DSE REMIND

CMDS: (AOS +21 MIN)
 DSE PLAYBACK

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-344

CSM FLIGHT PLAN

SIM EXP STATUS
(+0010)
(04011)

UPLINK:
CSM S.V. & V66
TEI 75 TGT LOAD

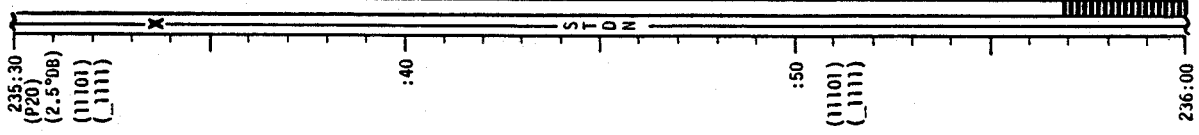
UPDATE:
TEI 75 PAD (235:45)
TEI 76 PAD
MAP UPDATE REV 76 (236:50)

CSM SYSTEMS CHECKLIST

WIPE EXCESS MOISTURE FROM TUNNEL
CAMS OPERATIONAL CHECKS PAGE S/1-20
CM RCS MONITORING CHECKS PAGE S/1-1
SM RCS MONITORING CHECKS PAGE S/1-1
SPS MONITORING CHECKS PAGE S/1-1

MC - OFF
WAIT 30 SEC
MC - STBY
IMAGE MTN - OFF
PRE-SPS BURN SIM PREP (CUE CARD) EXCEPT: IR COVER - OPEN
P30; VERIFY TEI TIG AND AV'S
CMC MODE - FREE
POO
CMC MODE - AUTO
V45 (RESET LUNAR SURFACE FLAG)
V49 MNVR TO TEI PAD BURN ATT (236:07)

CMDS: (HGA LOS)
DSE REMIND
PCH BIT RATE - LOW



P30 MANEUVER		T E I				S P S G & N			PURPOSE	
		S	P	S	G	&	N	WT	N47	PROP/GUID
SET STARS										
P ALIGN		+								
P ALIGN				0	0					
Y ALIGN				0	0					
		+		0	0					HRS GETI N33
		+		0	0					MIN N33
		+		0	0					SEC
										ΔV _X N81
										ΔV _Y
										ΔV _Z
		X	X	X	X					R (180)
		X	X	X	X					P (000)
		X	X	X	X					Y (000)
		+								H _A N44
										H _p
		+								ΔVT
		X	X	X	X					BT
		X	X	X	X					ΔVC
		X	X	X	X					SXTS
		+								SFT
		+								TRN
		X	X	X	X					BSS
		X	X	X	X					SPA
		X	X	X	X					SXP
		0								LAT N61
										LONG
		+								RTGO EMS
		+								V10
										GET 0.05G
OTHER										

CSM FLIGHT PLAN

236:00
(11101)
(1111)

SIM EXP STATUS
(*0010)
(31011)

UPDATE:
GO/NO-GO FOR TEI

V48 (11102)
(01111)

P40

:10
S T D N

CMDS:
DSE RECORD
PCM BIT RATE - HIGH

VERIFY DSE TAPE MOTION (HBR/RCD/FMD/CMD RESET)
SET HGA MAN P 47, Y 250 AUTO, NARROW FOR AOS

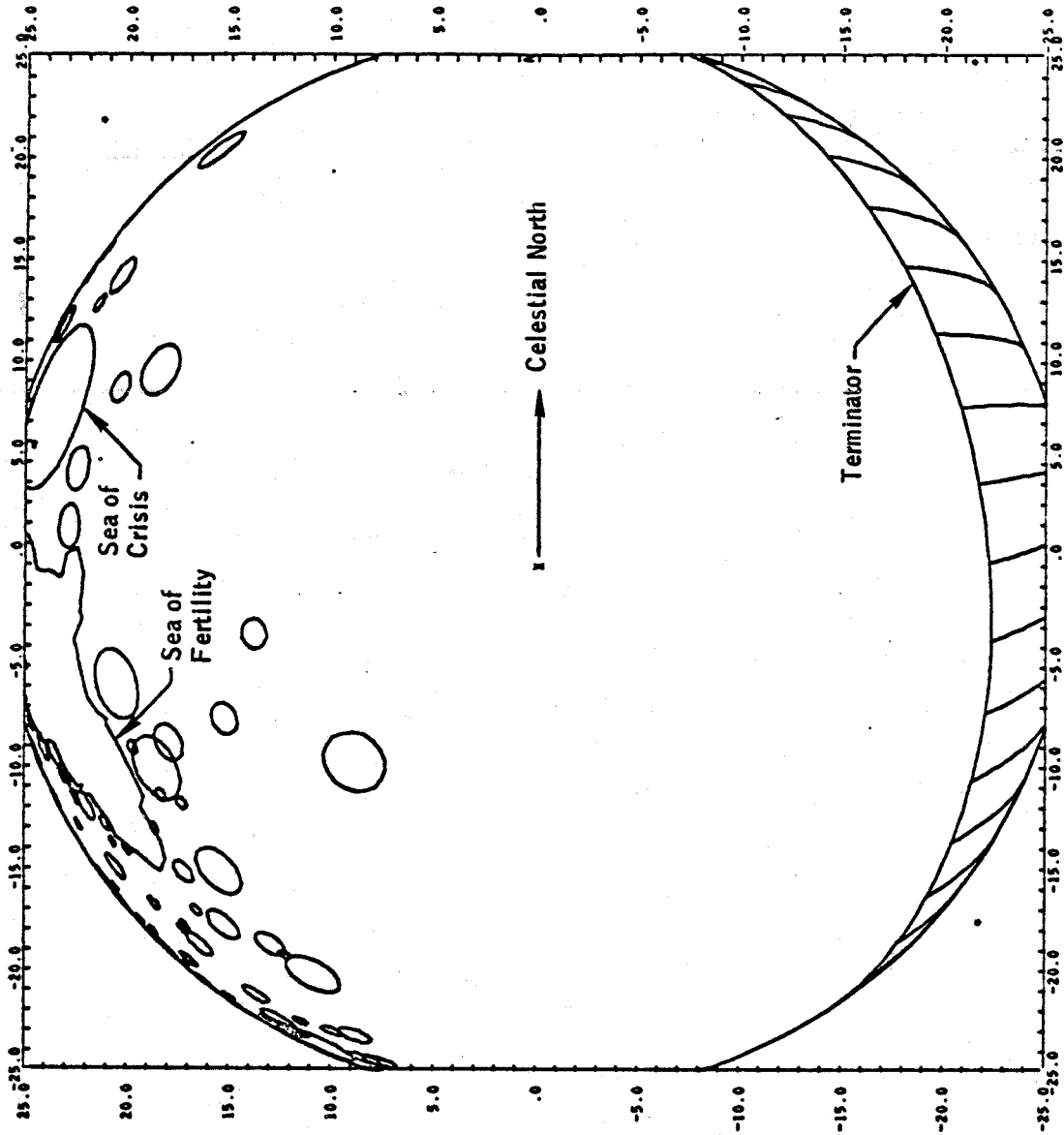
SXT STAR CHECK

(P40)
(0.5°DB)

236:30

MISSION	EDITION	DATE	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	3-346

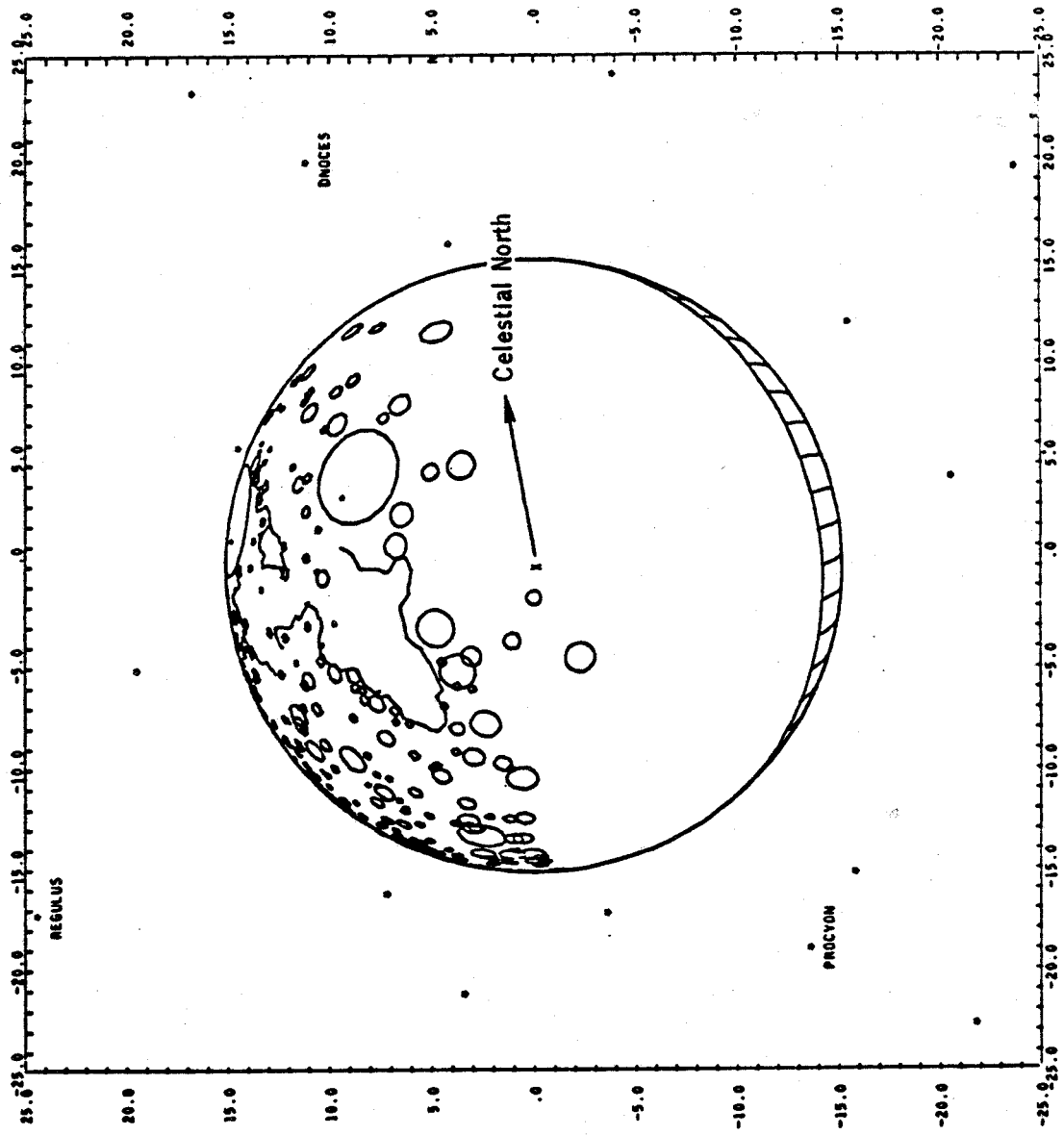
Longitude = 96.24° Latitude = -13.32° Radius = 2121.73 n. mi.



GET=237:10

TEI cutoff + 30 minutes.

Longitude = 78.28° Latitude = -6.51° Radius = 3587.53 n. mi.



GET=237:40
TEI cutoff + 1 hour.

P27 UPDATE

PURP	TEL BO +1.0MIN	7	1	V	V	V
GET	236	43	13.3	:	:	:
304 01	INDEX	2	1	INDEX		INDEX
305 02	0 1	5	0	1		
306 03	0 0	0	0	2		
307 04	0 0	2	4	7		
310 05	1 7	3	1	4		
311 06	0 0	2	2	6		
312 07	2 7	6	0	1		
313 10	7 7	7	3	6		
314 11	4 7	2	2	3		
315 12	1 7	3	5	4		
316 13	0 6	7	6	5		
317 14	5 7	5	7	1		
320 15	4 2	4	1	5		
321 16	6 3	7	6	6		
322 17	4 5	0	2	0		
323 20	1 2	1	2	1		
324 21	1 1	3	2	0		
325 22						
326 23						
327 24						
N34	HRS	X	X	X	X	X
	MIN	X	X	X	X	X
NAV CHECK SEC		X	X	X	X	X
N43	LAT		0			0
	LONG					
	ALT		+	0		+

FLIGHT PLAN

MCC-H

1753 CST

NOTES

PC - STBY AT (tb - bp)

237:00

(11102)

(01111)

(11101)

(01111)

:10

:20

:30

:40

:50

238:00

UV

IR

UV

IR

UV

IR

SIM EXP STATUS
(*1011)
(24011)

V48 (11101)(01111)

CMD
DSE REMIND

S-BD AUX TV - SCI

UPDATE
FLIGHT PLAN

PC - OFF (STDN CUE)
V49 MNVR TO UV STELLAR TGT ATT (LY α MIN) (237:45)

(137,189,000) HGA: P -72, Y 309

CMD
DSE PLAYBACK

COPY CSM S.V. FROM DSKY

UPLINK
DESIRED ORIENT
(PTC)

UV
LY α MIN

IR

UV OPTICAL AXIS
POINTED AT RA 4:35,
DEC +30° WITH CSM
+X AXIS AT RA 9:48:20,
DEC 28°51'51"

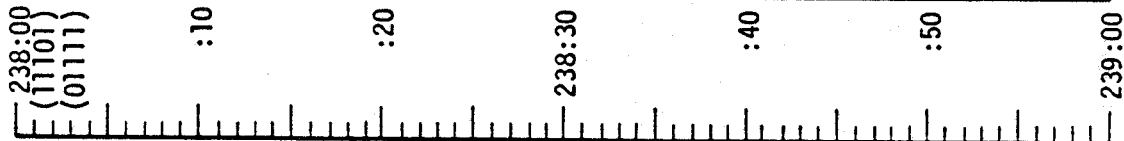
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	237:00 - 238:00	11/TEC	3-351

FLIGHT PLANNING BRANCH

FLIGHT PLAN

1853 CST

MCC-H



LIMIT CYCLE - ON
 ATT DEADBAND - MIN
 RATE - LOW
 BMAG (3) - ATT 1/RATE 2
 SCS CONT - SCS
 P52 (OPTION 3)
 (TEI ORIENT)

STARS _____
 SA _____
 TA _____

REPORT: GYRO TORQUING ANGLES

P52 (OPTION 1)
 (PTC ORIENT) PTC REFSMMAT ATT.
 GDC ALIGN R 070, P 015, Y 351
 SC CONT - CMC
 BMAG (3) - RATE 2
 CMP DON BIOMED HARNESS

CHECK CMP BIOMED
 LMP DOFF BIOMED HARNESS

V49 MNVR TO UV STELLAR TGT ATT (EARTH) (239:00)
 (248,331,342) OMNI D

NOTES

SIM EXP STATUS
 (*1011)
 (04011)

UV
 LY α MIN
 IR

P52	IMU REALIGN
N71:	_____
N05:	_____
N93:	_____
X	_____
Y	_____
Z	_____
GET	_____

SPACECRAFT REAL TIME
 DATA IS NOT AVAILABLE
 UNTIL 240:00

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	238:00 - 239:00	11/TEC	3-352

FLIGHT PLANNING BRANCH

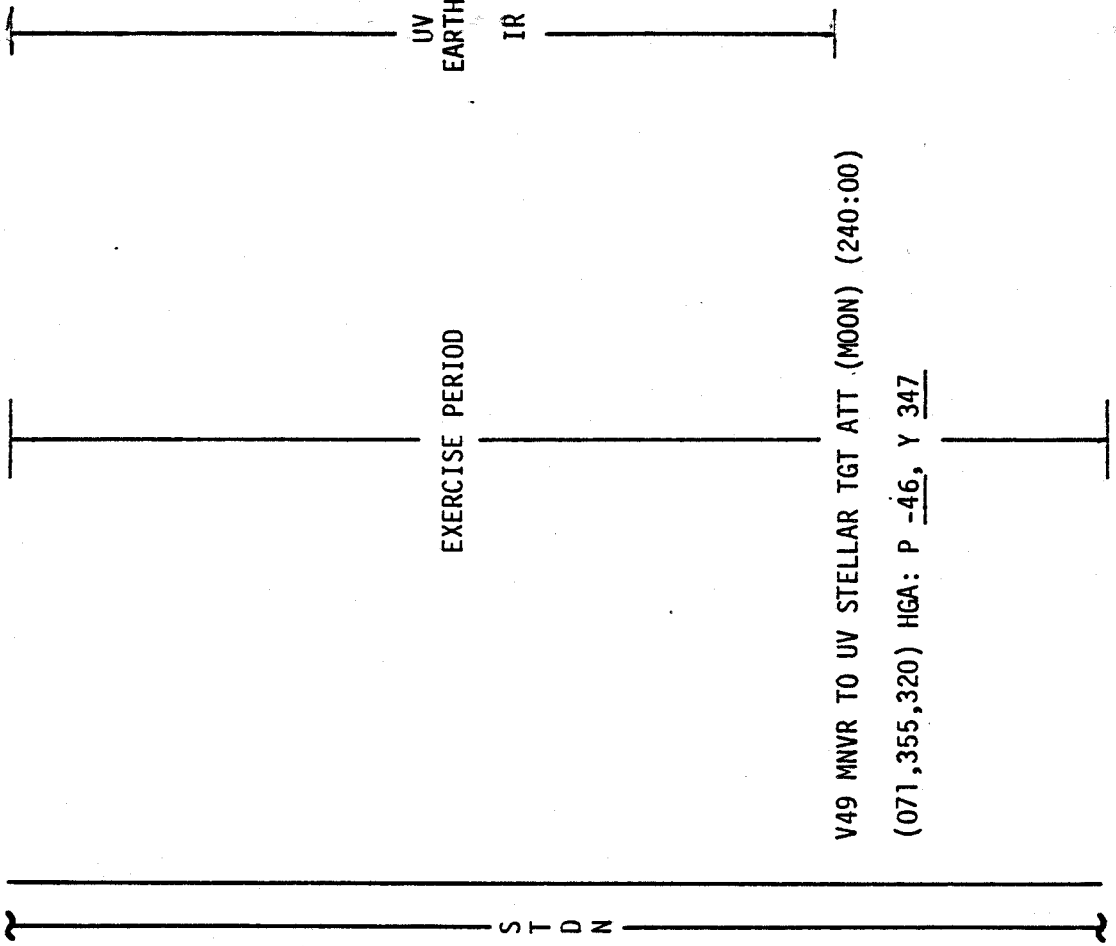
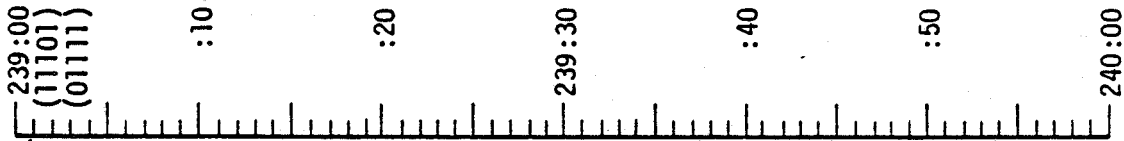
CMD
 DSE REMIND

CMD
 DSE RECORD

FLIGHT PLAN

MCC-H

1953 CST

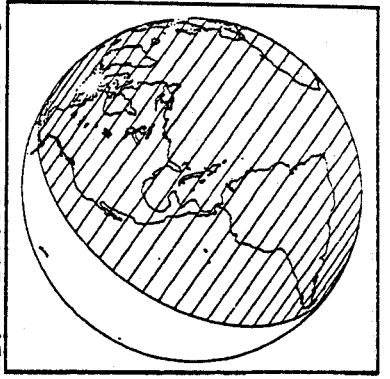


NOTES

SIM EXP STATUS
 (*1011)
 (04011)
 EARTH DISTANCE
 ~190,239 NM

UV OPTICAL AXIS
 POINTED AT EARTH
 WITH +X AXIS AT
 RA 9:31, DEC -14°

GET = 239:00 FOV = 3°



CMD
 DSE REWIND

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	239:00 - 240:00	11/TEC	3-353

FLIGHT PLANNING BRANCH

FLIGHT PLAN

2053 CST

MCC-H

CMD
DSE PLAYBACK



240:00
(11101)
(01111)

:10

:20

240:30

:40

:50

241:00

UPDATE
FLIGHT PLAN

UPLINK
CSM S.V. & V66

CMD
DSE REWIND

L10H CANISTER CHANGE
(20 INTO B, STOW 18 IN A4)
MC - OFF
WAIT 30 SEC

MC - STBY

IMAGE MTN - OFF

MC - RETR

IR - OFF

MC/LA COVER - CLOSE

IR COVER - CLOSE

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N) PAGE G/8-2
AFTER STDN CUE

V49 TO UV/PTC SLEEP ATT

(N20,357,335)

P20 OPT 2, X-AXIS

N78 (0,0,0)

N79 (-0.4200, +000.50)

N34 (0,0,0)

COMM: HGA REACQ, NARROW P -40, Y 90

STDN

UV OPTICAL AXIS
POINTED AT RA 6:58,
DEC +22° CSM + X
AXIS AT RA 11:20
DEC +4°

UV
MOON

IR

NOTES

SIM EXP STATUS
(*1011)
(04011)

D1, B2, A3, C4, B3 AND
D4 WILL BE USED FOR
PTC RATE DAMPING,
B2 & D2 FOR PTC
SPINUP

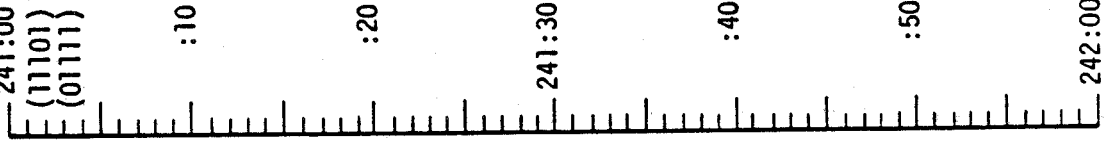
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	240:00 - 241:00	11/TEC	3-354

FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

MCC-H



SIM EXP STATUS
(*0001)
(01001)

DURING UV/PTC GALACTIC
SCAN THE CSM +X AXIS
WILL BE POINTED
AT RA 10:25, DEC.
+07°

EAT PERIOD

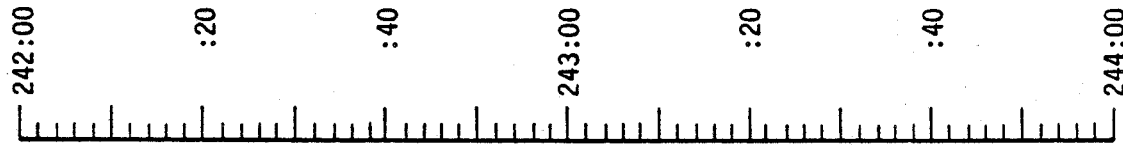
UV/PTC
GALACTIC SCAN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	241:00 - 242:00	11/TEC	3-355

FLIGHT PLAN

2253 CST

MCC-H



CSM SYSTEMS CHECKLIST

PRE-SLEEP CHECKLIST PAGE S/1-29
 COMM: HGA
 FILM MAGS REQUIRED FOR NEXT DAY
 DAC: FF

S T D N

REST PERIOD
 (8 HOURS)

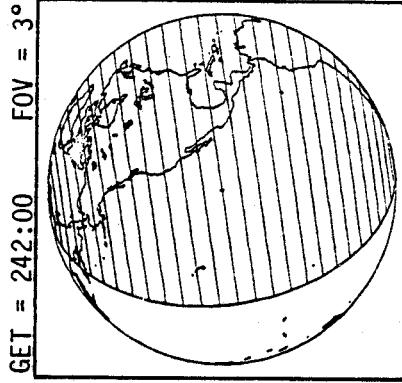
UV/PTC
 GALACTIC SCAN

NOTES

SIM EXP STATUS
 (*0001)
 (01001)

DAP LOAD STATUS
 (11101)(01111)

EARTH DISTANCE
 ~ 185,522 NM



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	242:00 - 244:00	11/TEC	3-356

FLIGHT PLANNING BRANCH

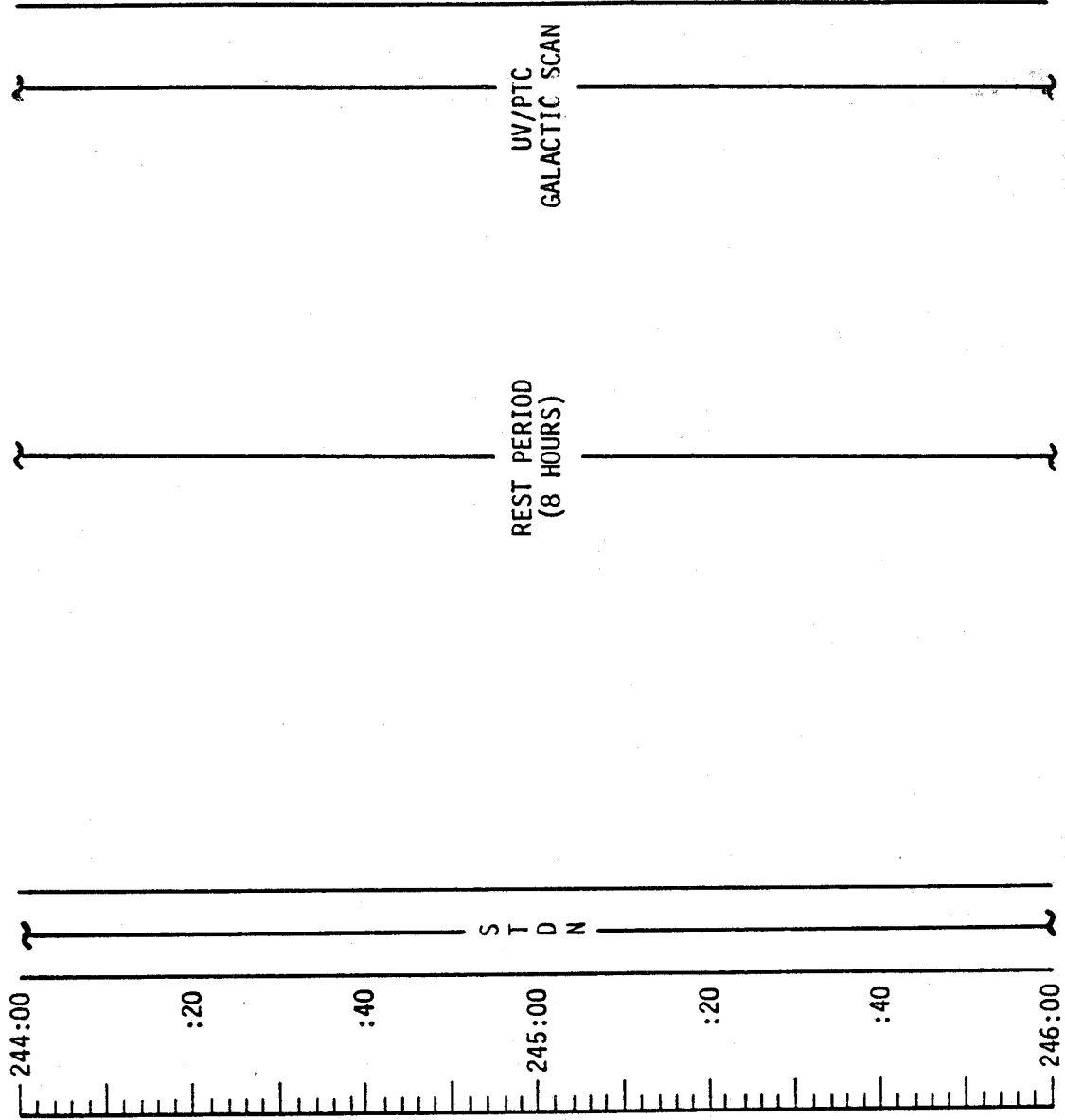
FLIGHT PLAN

0053 CST

MCC-H

NOTES

SIM EXP STATUS
 (*0001)
 (01001)
 DAP LOAD STATUS
 (11101)(01111)

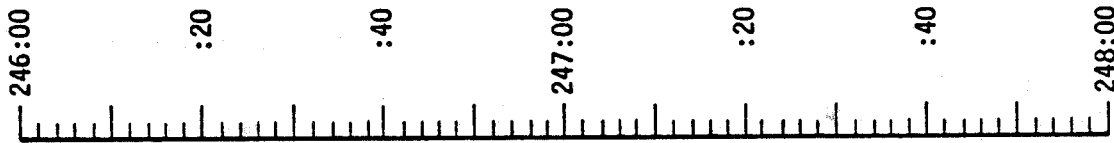


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	244:00 - 246:00	11/TEC	3-357

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H 0253 CST



NOTES

SIM EXP STATUS
(*0001)
(01001)

DAP LOAD STATUS
(111101)(01111)

REST PERIOD
(8 HOURS)

UV/PTC
GALACTIC SCAN

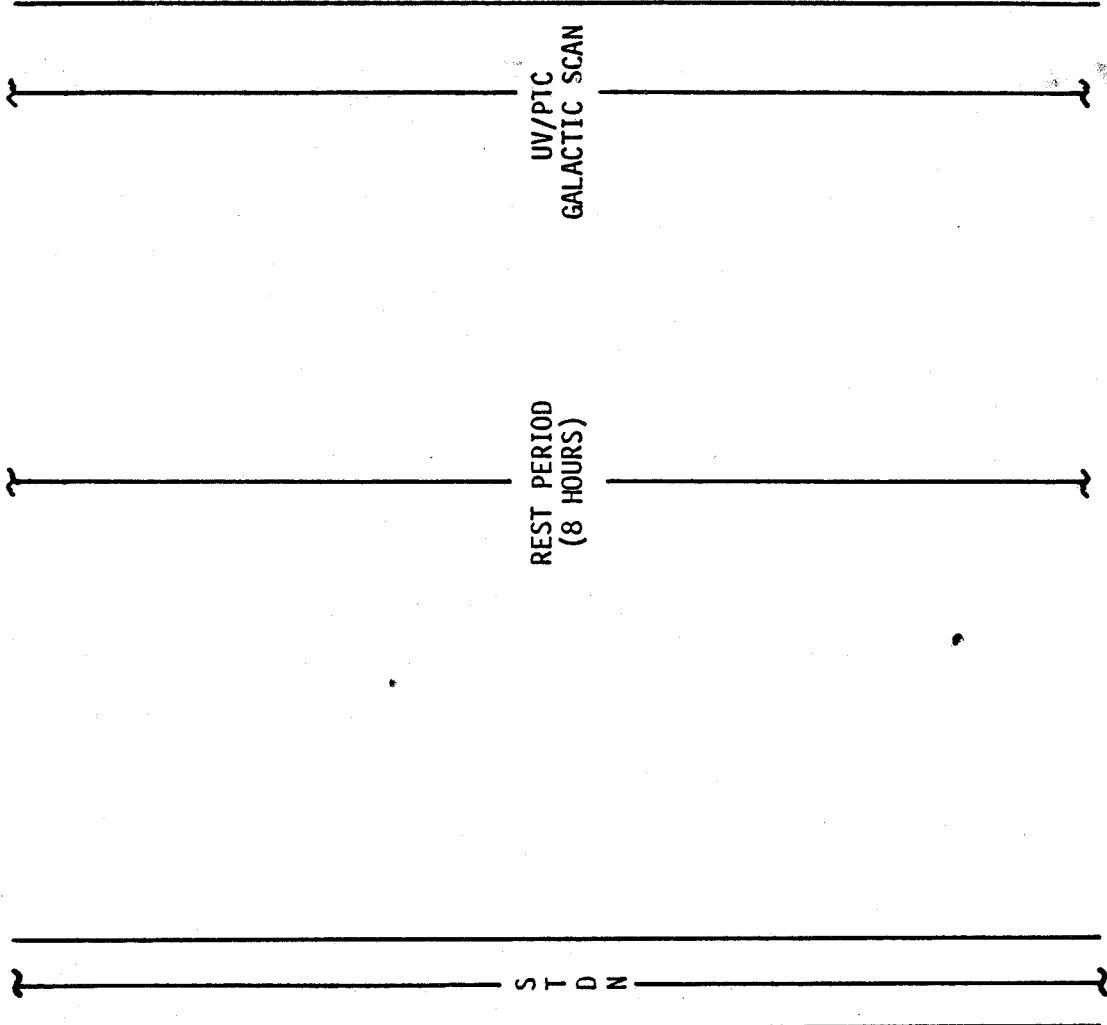
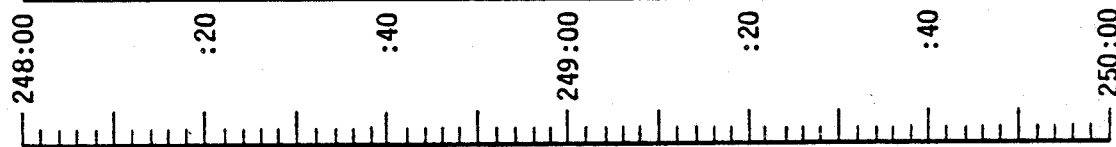
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	246:00 - 248:00	11/TEC	3-358

FLIGHT PLANNING BRANCH

FLIGHT PLAN

0453 CST

MCC-H



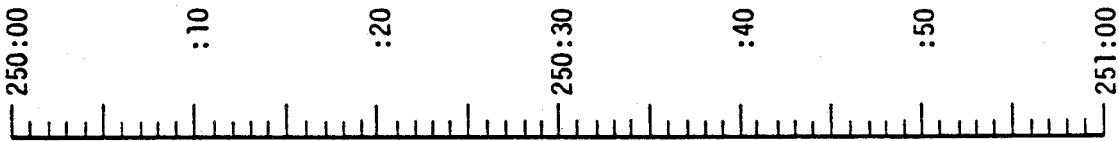
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	248:00 - 250:00	11/TEC	3-359

FLIGHT PLANNING BRANCH

FLIGHT PLAN

0653 CST

MCC-H



REST PERIOD
(8 HOURS)

CSM SYSTEMS CHECKLIST

POST-SLEEP CHECKLIST PAGE S/1-29

UV/PTC
GALACTIC SCAN

NOTES

SIM EXP STATUS
(*0001)
(01001)

DAP LOAD STATUS
(11101)(01111)

EARTH DISTANCE
~ 172,669 NM

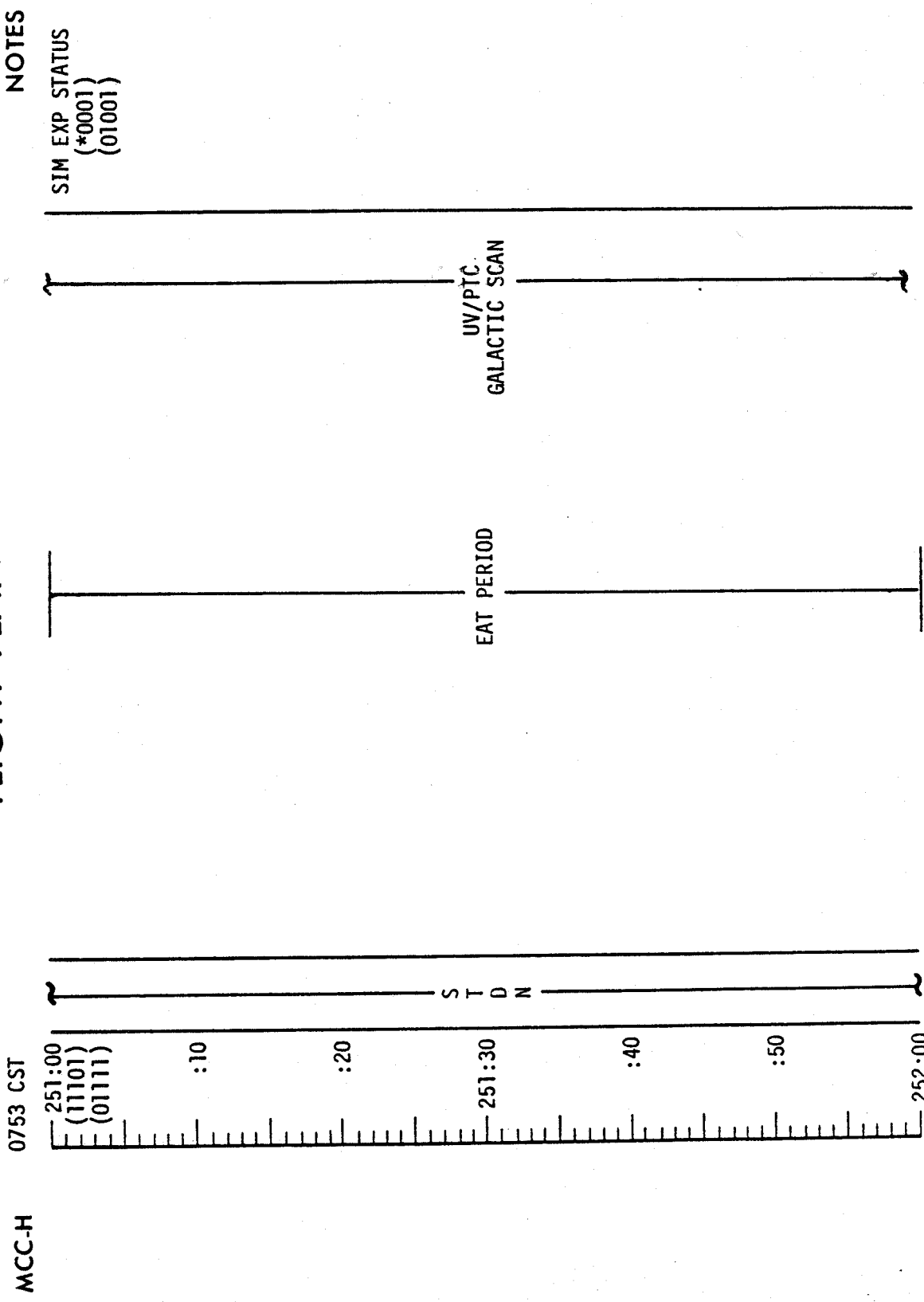
GET = 250:00 FOV = 3°



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	250:00 - 251:00	11-12/TEC	3-360

FLIGHT PLANNING BRANCH

FLIGHT PLAN



0753 CST

MCC-H

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	251:00 - 252:00	12/TEC	3-361

FLIGHT PLANNING BRANCH

FLIGHT PLAN

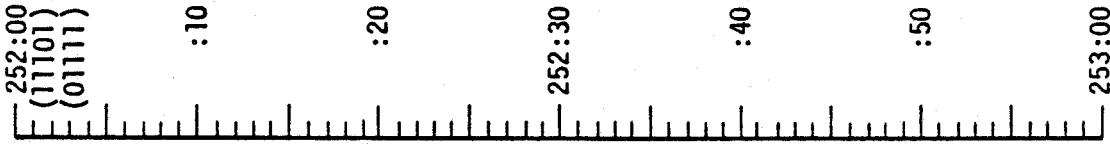
MCC-H

UPDATE
GO/NO-GO FOR MCC-5
MCC-5 MNVR PAD
(IF REQUIRED)

CONSUMABLES STATUS
FLIGHT PLAN
SIM EXP STATUS

UPLINK
CSM S.V. & V66
MCC-5 TGT LOAD
(IF REQUIRED)

0853 CST



IR - ON
P52 (OPTION 3)
(PTC ORIENT)

REPORT: GYRO TORQUING ANGLES
GDC ALIGN

L10H CANISTER CHANGE
(21 INTO A, STOW 19 IN A4)

*UV COVER - CLOSE
*EXIT G&N PTC AT ROLL ANGLE 071, HGA P -58, Y 337
(COUPLED JETS) PAGE G/8-3
IR COVER - OPEN
CONFIGURE FOR URINE DUMP

*P30 EXTERNAL ΔV
*V49 MNVR TO PAD BURN ATTITUDE

*SXT STAR CHECK

O₂ FUEL CELL PURGE
WASTE WATER DUMP

SAMPLE BUSS'S (3) - STOW SAMPLES (3)
DUMP URINE FROM BUSS'S (3) - STOW
START NEW URINE COLLECTION PERIOD

UV/PTC
GALACTIC SCAN

IR

NOTES

SIM EXP STATUS
(*0001)
(01001)

*PERFORM IF MCC-5
IS REQUIRED

IF MCC-5 IS NOT
REQUIRED EXIT G&N
PTC USING JETS D1,
B2, A3, C4, B3 AND D4,
WITH A ROLL ANGLE OF
071 AND HGA: P -58,
Y 337

P52	IMU REALIGN
N71:	---
N05:	---
N93:	---
X	---
Y	---
Z	---
GET	---

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	252:00 - 253:00	12/TEC	3-362

FLIGHT PLANNING BRANCH

THIS PAGE INTENTIONALLY BLANK

FLIGHT PLAN

MCC-5
BURN TABLE

MANEUVER	SPS LIMITS	P OR Y RATES	ATT DEVIATION	MANUAL START ACTION	OVERBURN SHUTDOWN CRITERIA	RCS TRIM GUIDELINES
CORRIDOR CONTROL	LOOSE	10°/SEC COMPLETE	±10° COMPLETE	DELAY NO RESTART	BT + 1 SEC AND $\Delta V_C = 0$	TRIM X AXIS ONLY TO 0.2 FPS
IP CONTROL	TIGHT	10°/SEC TERMINATE	±10° TERMINATE	DELAY NO RESTART	BT + 1 SEC AND $\Delta V_C = 0$	*TRIM X & Z AXIS TO 0.2 FPS

*TRIM ONLY IF $X \leq 2$ FPS
IF (+) V_{gz} ROLL RIGHT 90°
AND USE (+) Y THRUSTERS.

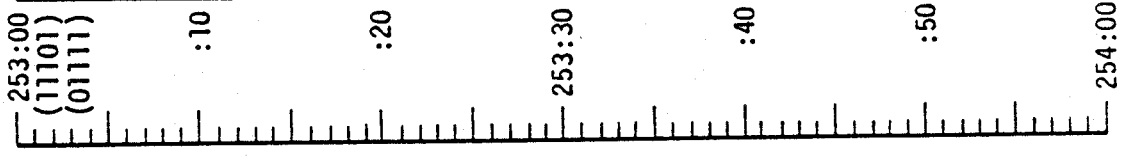
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	N/A	12/TEC	3-364

FLIGHT PLAN

NOTES

0953 CST

MCC-H



*LOGIC PWR (2) - OFF
 *P40 SPS THRUSTING OR
 *P41 RCS THRUSTING

TERMINATE WASTE WATER DUMP AT 10% LEVEL

SIM EXP STATUS
 (*0010)
 (01011)

*PERFORM IF MCC-5
 IS REQUIRED

TIG: 253:40
 BT: NOM ZERO
 ΔVT: NOM ZERO
 ULLAGE: NOM ZERO

MCC-5

*V66 SET CSM S.V. INTO LM S.V.
 *REPORT: BURN STATUS
 *LOGIC PWR (2) - DPLY/RETR

CSM EXP/EVA CHECKLIST

CM EVA PREP PAGE X/3-1
 CABIN PREP FOR EVA
 CDR & LMP DON BIOMED HARNESS AND VERIFY OPERATION

BURN STATUS REPORT		ΔTIG	BT	V gx	R	P	Y	V gx	V gy	V gz	ΔV C	OX	FUEL	UNBAL
X	X	●	●											
X	X													
X	X													
X	X													
X	X													
X	X											X	X	X
X	X											X	X	X
X	X											X	X	X

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	253:00 - 254:00	12/TEC	3-365

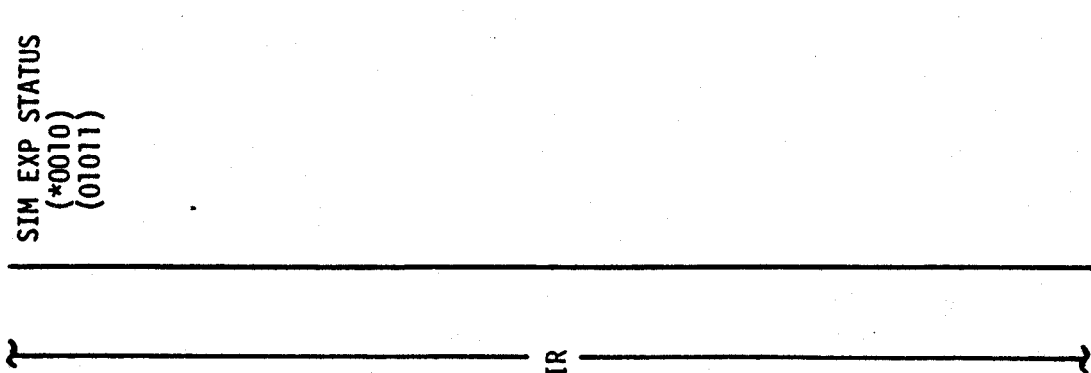
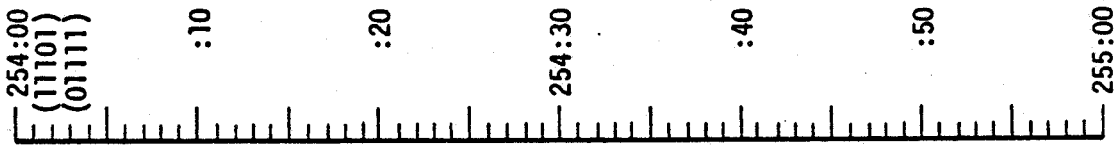
FLIGHT PLANNING BRANCH

TEI +17 HR

FLIGHT PLAN

MCC-H

1053 CST



TV AND DAC PREP
MAG (FF)

S T D N

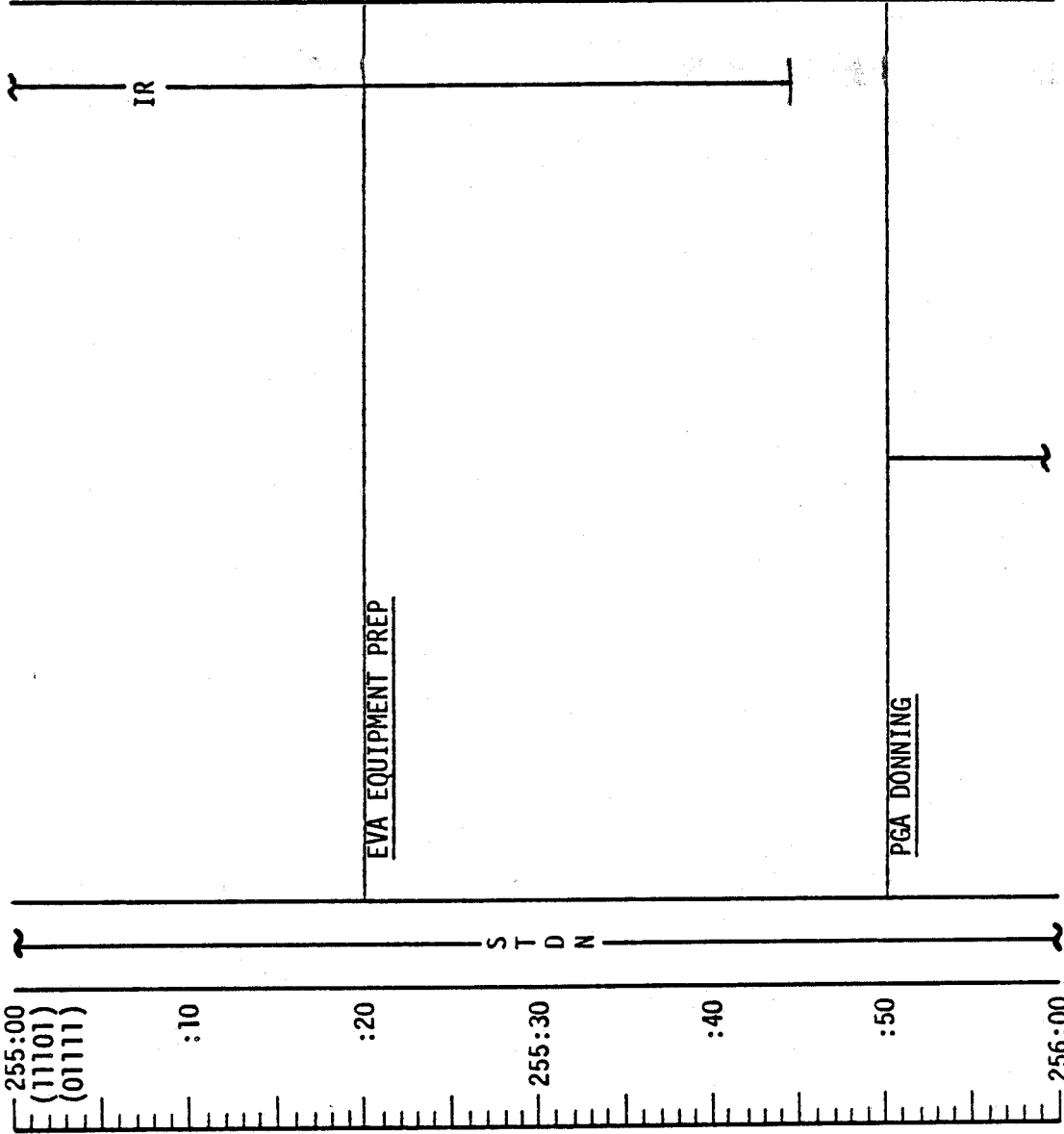
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	254:00 - 255:00	12/TEC	3-366

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H
 1153 CST
 255:00
 (11101)
 (01111)
 :10
 :20
 255:30
 :40
 :50
 256:00

MCC-H
 1153 CST



NOTES
 SIM EXP STATUS
 (*0010)
 (01011)

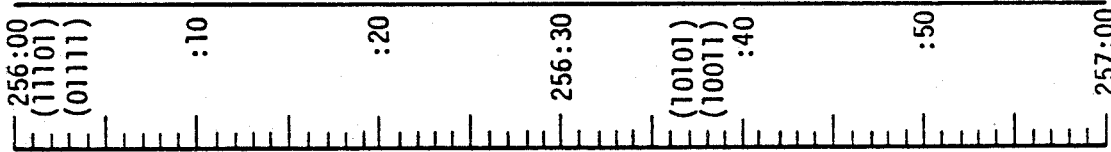
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	255:00 - 256:00	12/TEC	3-367

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1253 CST



S T D N

V49 MNVR TO EVA ATT (256:30)
PGA DONNING
(310,356,009) HGA P 43, Y 262

PRESS GAGE STATIC CHECK

COMM CHECK

SYSTEMS PREP FOR DEPRESS
V48 (10101)(10011)
INHIBIT ALL JETS EXCEPT:

C1, C2, C3, C4, D3, & D4 AT CONCLUSION OF MNVR
O₂ HEATERS 3 - AUTO

CMP EVA EQUIP DONNING

OPS DONNING

NOTES

SIM EXP STATUS
(*0000)
(00000)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	256:00 - 257:00	12/TEC	3-368

FLIGHT PLANNING BRANCH

FLIGHT PLAN

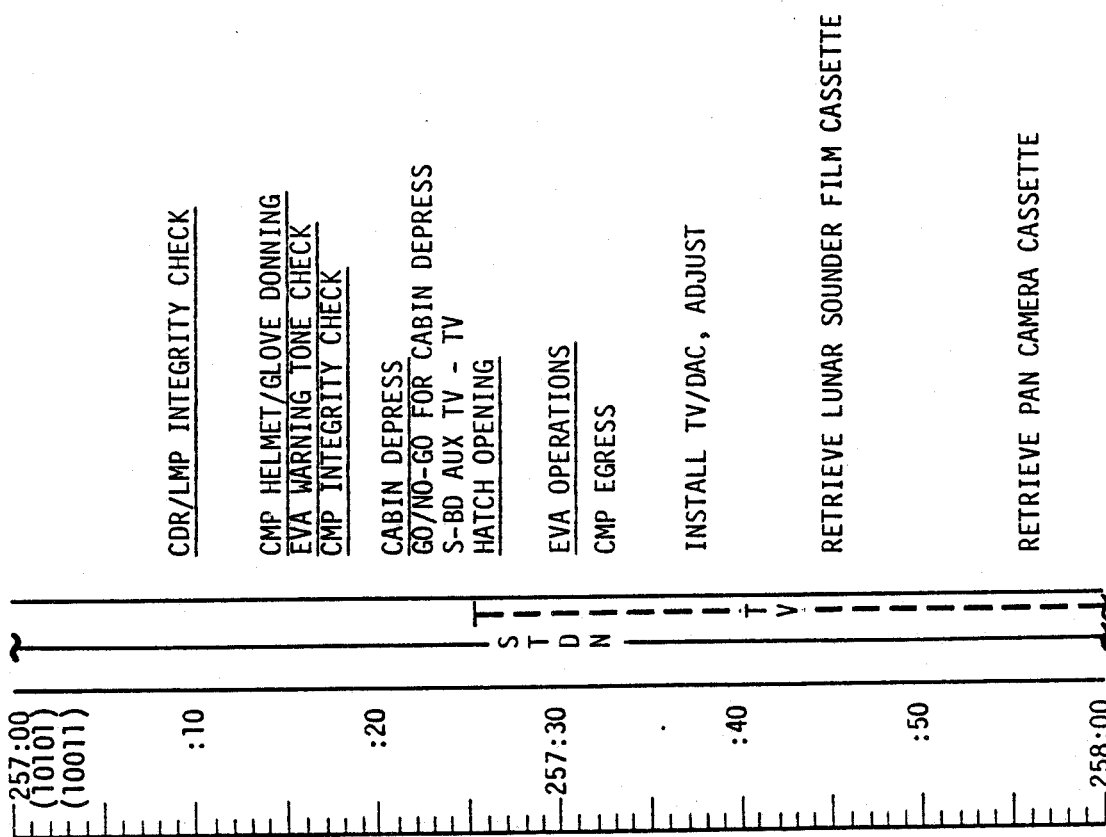
1353 CST

MCC-H

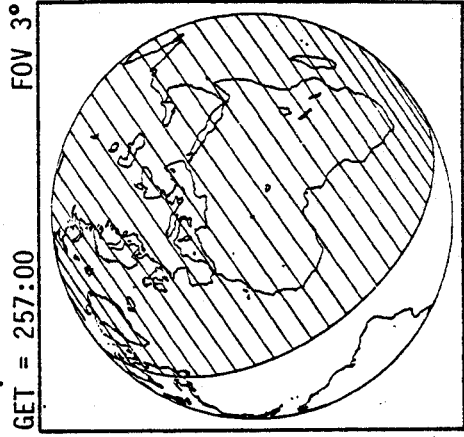
NOTES

SIM EXP STATUS
 (*0000)
 (00000)
 EARTH DISTANCE
 ~ 160,372 NM

UPDATE
 CONFIRM GO
 FOR DEPRESS



GET = 257:00



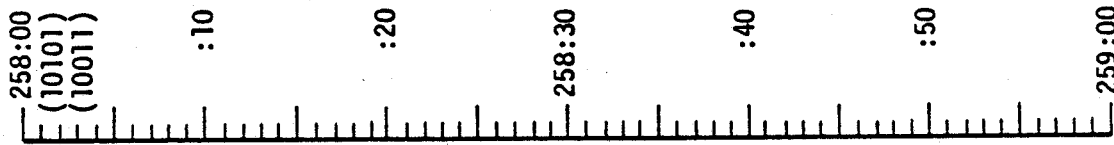
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	257:00 - 258:00	12/TEC	3-369

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1453 CST



REST
RETRIEVE MAPPING CAMERA CASSETTE

REST
REMOVE TV/DAC & INGRESS

INGRESS
CM POST EVA

HATCH CLOSING
CABIN REPRESS

POST EVA PROCEDURES

CLEANUP PROCEDURES
DOFF PGA'S
CDR VERIFY BIOMED OPERATION
CMP & LMP DOFF BIOMED HARNESS
STOW EQUIPMENT

NOTES

SIM EXP STATUS
(*0000)
(00000)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	258:00 - 259:00	12/TEC	3-370

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1553 CST



S T D N

V48 (11101)(01111)
 SIM EXP PREP
 AUTO RCS SELECT - OFF
 EXCEPT: D1, B2, A3, C4, B3, D4

PCM BIT RATE - HIGH
 S-BD AUX TV - SCI
 DATA SYS - ON
 LOGIC PWR (2) - DPLY/RETR
 cb INST SCI EQUIP SEB (2) - CLOSE
 IR - ON
 UV - ON
 IR COVER - OPEN
 UV COVER - OPEN

MANUALLY ROLL LEFT 40° TO R 270°

V49 MNVR TO UV STELLAR TGT ATT (COMA CLUSTER) (260:00)
 (206,161,301) OMNI: A
 O₂ HEATERS 3 - OFF
 CONTINUE POST EVA

NOTES
 SIM EXP STATUS
 (*0000)
 (00000)

CMD
 DSE RECORD

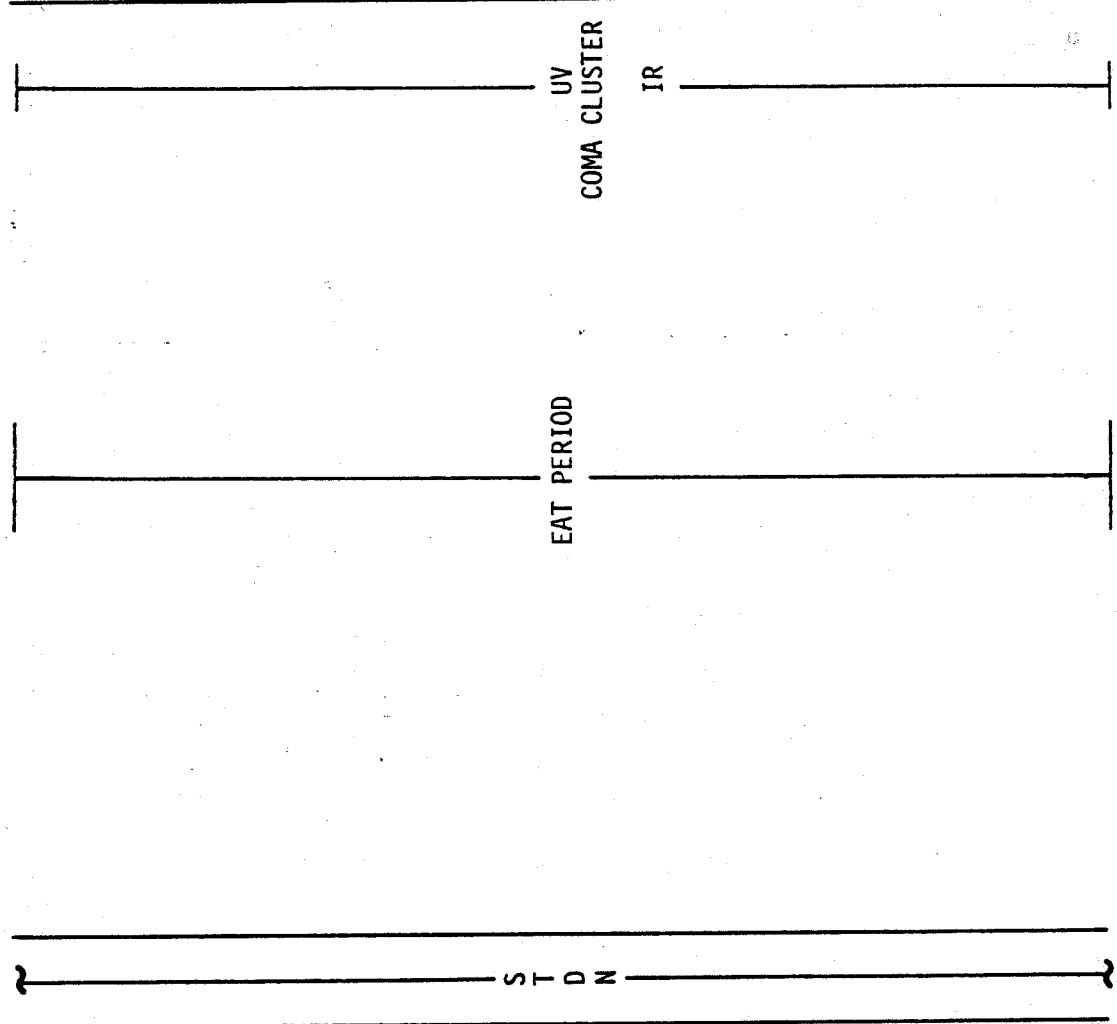
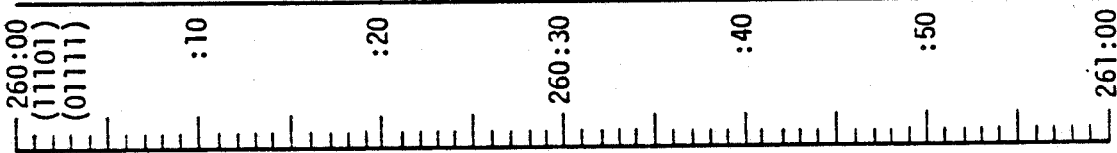
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	259:00 - 260:00	12/TEC	3-371

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1653 CST



NOTES

SIM EXP STATUS
(*0011)
(00011)

SPACECRAFT REAL TIME
PCM IS NOT AVAILABLE
UNTIL 261:20

UV OPTICAL AXIS
POINTED AT RA 12:58,
DEC +26° WITH
CSM +X AXIS AT
RA 16:37:00, DEC
-12° 24'

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	260:00 - 261:00	12/TEC	3-372

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1753 CST

NOTES

CMD
DSE REWIND

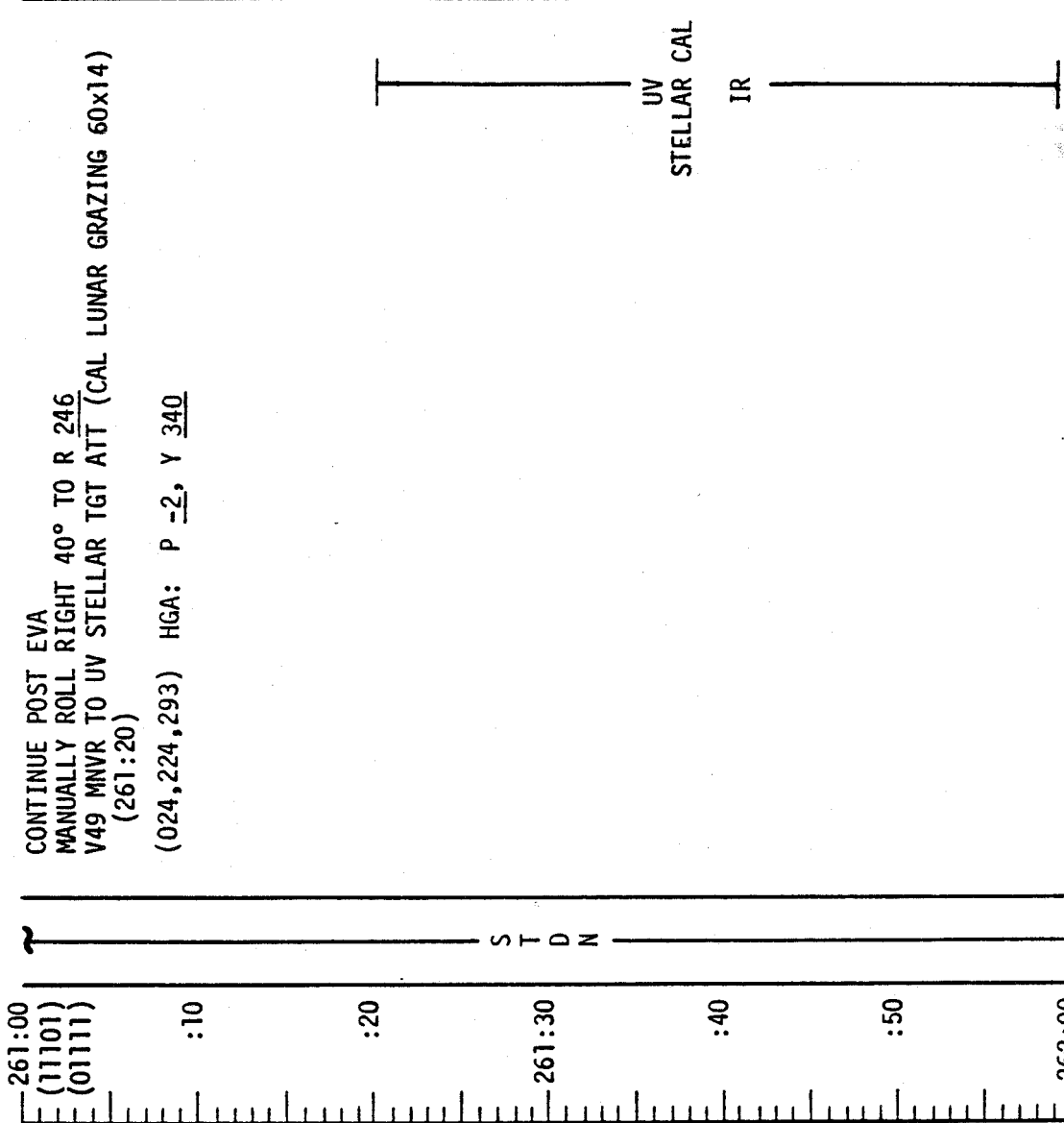
261:00
(11101)
(01111)

CONTINUE POST EVA
MANUALLY ROLL RIGHT 40° TO R 246
V49 MNVR TO UV STELLAR TGT ATT (CAL LUNAR GRAZING 60x14)
(261:20)

SIM EXP STATUS
(*0011)
(00011)

(024,224,293) HGA: P -2, Y 340

CMD
DSE PLAYBACK



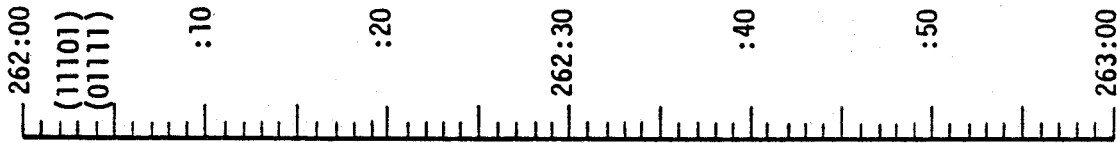
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	261:00 - 262:00	12/TEC	3-373

FLIGHT PLANNING BRANCH

FLIGHT PLAN

1853 CST

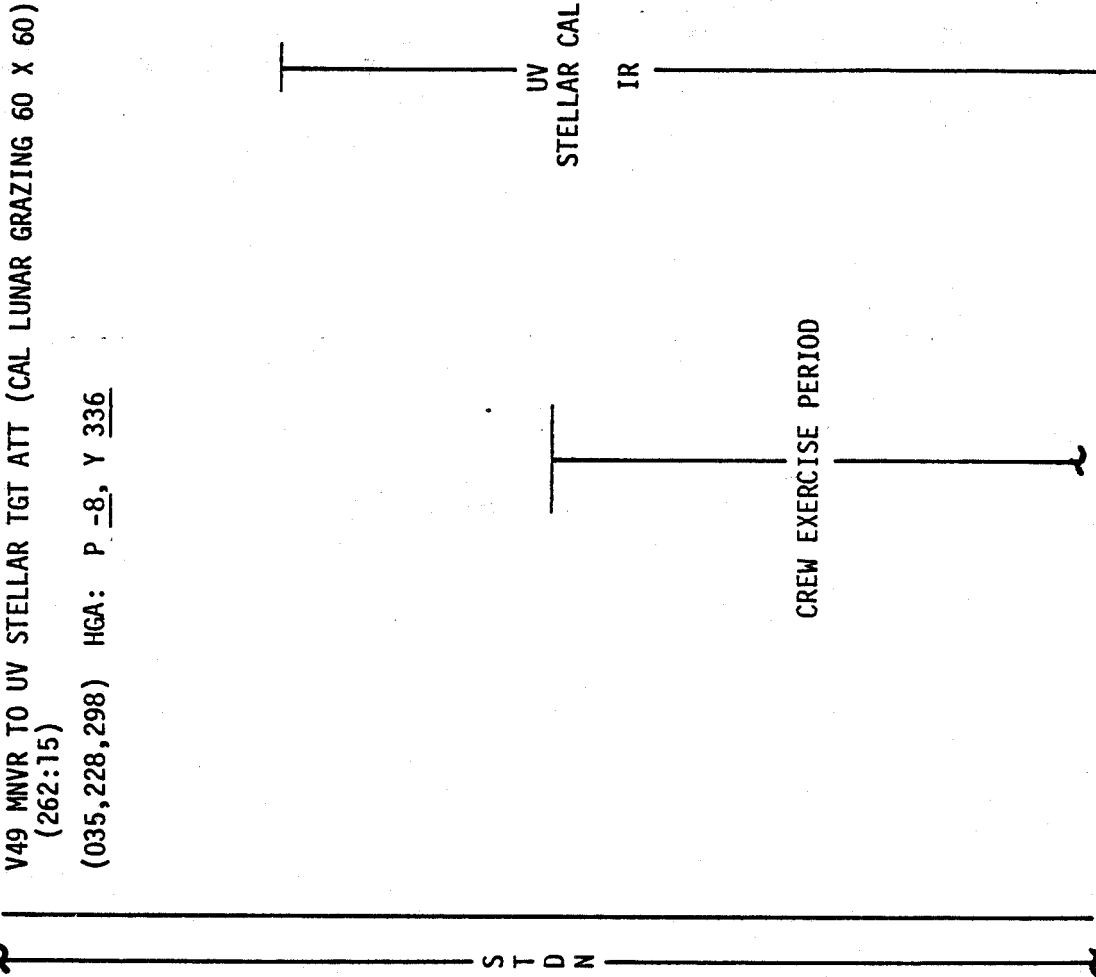
MCC-H



(11101)
(01111)

V49 MNVR TO UV STELLAR TGT ATT (CAL LUNAR GRAZING 60 X 60)
(262:15)
(035,228,298) HGA: P -8, Y 336

SIM EXP STATUS
(*0011)
(00011)



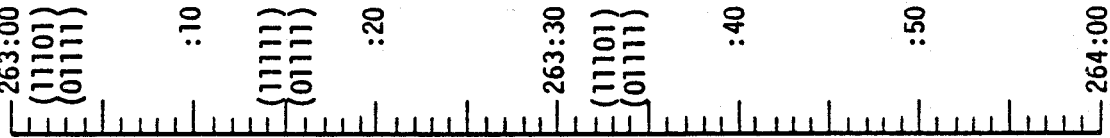
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	262:00 - 263:00	12/TEC	3-374

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1953 CST



V49 MNVR TO UV STELLAR TGT ATT (α ERIDANII) (263:15)
(014,192,333) HGA P -5, Y 296

CREW EXERCISE PERIOD

V48 (111111)(011111)

UV
α ERIDANII
IR

V48 (11101)(011111)

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N) G/8-2
V49 TO UV/PTC ATT

(014,175,066)
IR COVER - CLOSE
IR - OFF
P20, OPT 2, X-AXIS
N78 (0,0,0)
N79 (-0.4200, +000.50)
N34 (0,0,0)
COMM: HGA REACQ NARROW P -40, Y 90

D1, B2, A3, C4, B3 AND
D4 WILL BE USED FOR PTC
RATE DAMPING.
B2 & D2 FOR PTC SPINUP

NOTES

SIM EXP STATUS
(*0011)
(00011)

UPLINK
CSM S.V. & V66

UV OPTICAL AXIS
POINTED AT RA
01:38:33.0, DEC
-58°10'28"
WITH CSM +X
AXIS AT RA 19:00,
DEC -33°

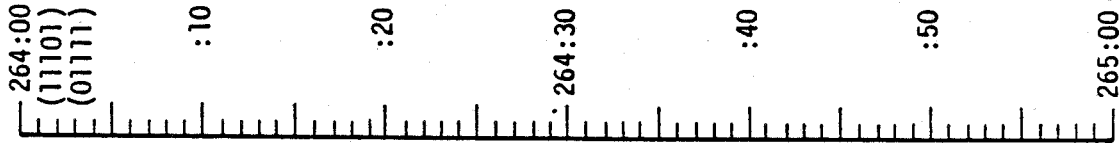
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	263:00 - 264:00	12/TEC	3-375

FLIGHT PLANNING BRANCH

FLIGHT PLAN

2053 CST

MCC-H



LiOH CANISTER CHANGE
(22 INTO B, STOW 20 IN A4)

P52 (OPTION 3)
(PTC ORIENT)

REPORT: GYRO TORQUING ANGLES
GDC ALIGN

UV/PTC
α ERI, α GRU

SIM EXP STATUS
(*0001)
(00001)

DURING UV/PTC
GALACTIC SCAN THE
CSM +X AXIS WILL
BE POINTED AT RA
00:55, DEC +08°

P52 IMU REALIGN
N71: _____
N05: _____
N93: _____
X _____
Y _____
Z _____
GET _____

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	264:00 - 265:00	12/TEC	3-376

FLIGHT PLANNING BRANCH

NOTES

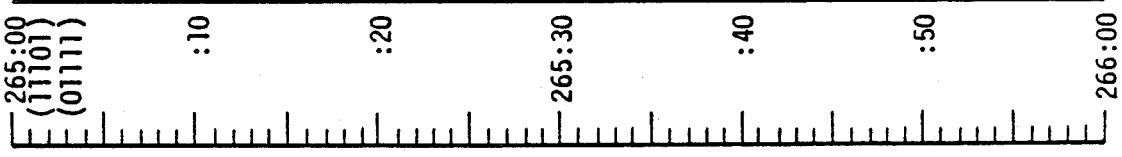
FLIGHT PLAN

MCC-H

2153 CST

NOTES

UPDATE
FLIGHT PLAN



EXIT G&N PTC AT ROLL ANGLE 014, HGA: P 02, Y 203
USING JETS D1, B2, A3, C4, B3, D4 PAGE G/8-3

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N) PAGE G/8-2
AFTER STDN CUE
V49 MNVR TO UV/PTC SLEEP ATT

(014, 074, 015)
P20 OPT 2, X-AXIS
N78 (0, 0, 0)
N79 (-0.4200, +000.50)
N34 (0, 0, 0)
COMM: HGA REACQ NARROW
P -40, Y 90

D1, B2, A3, C4, B3
AND D4 WILL BE USED
FOR PTC RATE
DAMPING, B2 & D2
FOR PTC SPINUP

EAT PERIOD

UV/PTC
GALACTIC SCAN

DURING UV/PTC
GALACTIC SCAN
THE CSM +X AXIS
WILL BE POINTED
AT RA 20:20, DEC
+88°

SIM EXP STATUS
(*0001)
(00001)

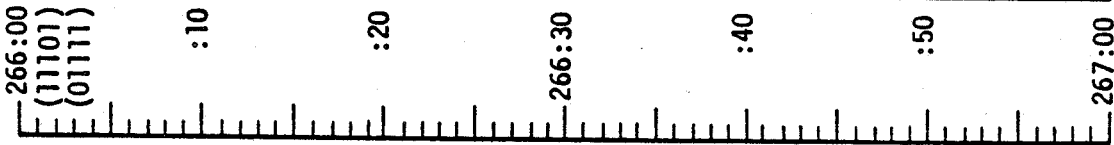
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	265:00 - 266:00	12/TEC	3-377

FLIGHT PLANNING BRANCH

FLIGHT PLAN

2253 CST

MCC-H



EAT PERIOD

CSM SYSTEMS CHECKLIST

PRE-SLEEP CHECKLIST PAGE S/1-29

COMM - HGA

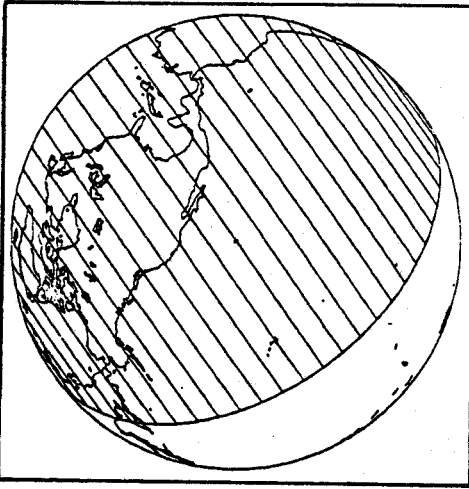
NO FILM MAGS REQD FOR NEXT DAY

NOTES

SIM EXP STATUS
(*0001)
(00001)

GET = 266:00

FOV = 3°



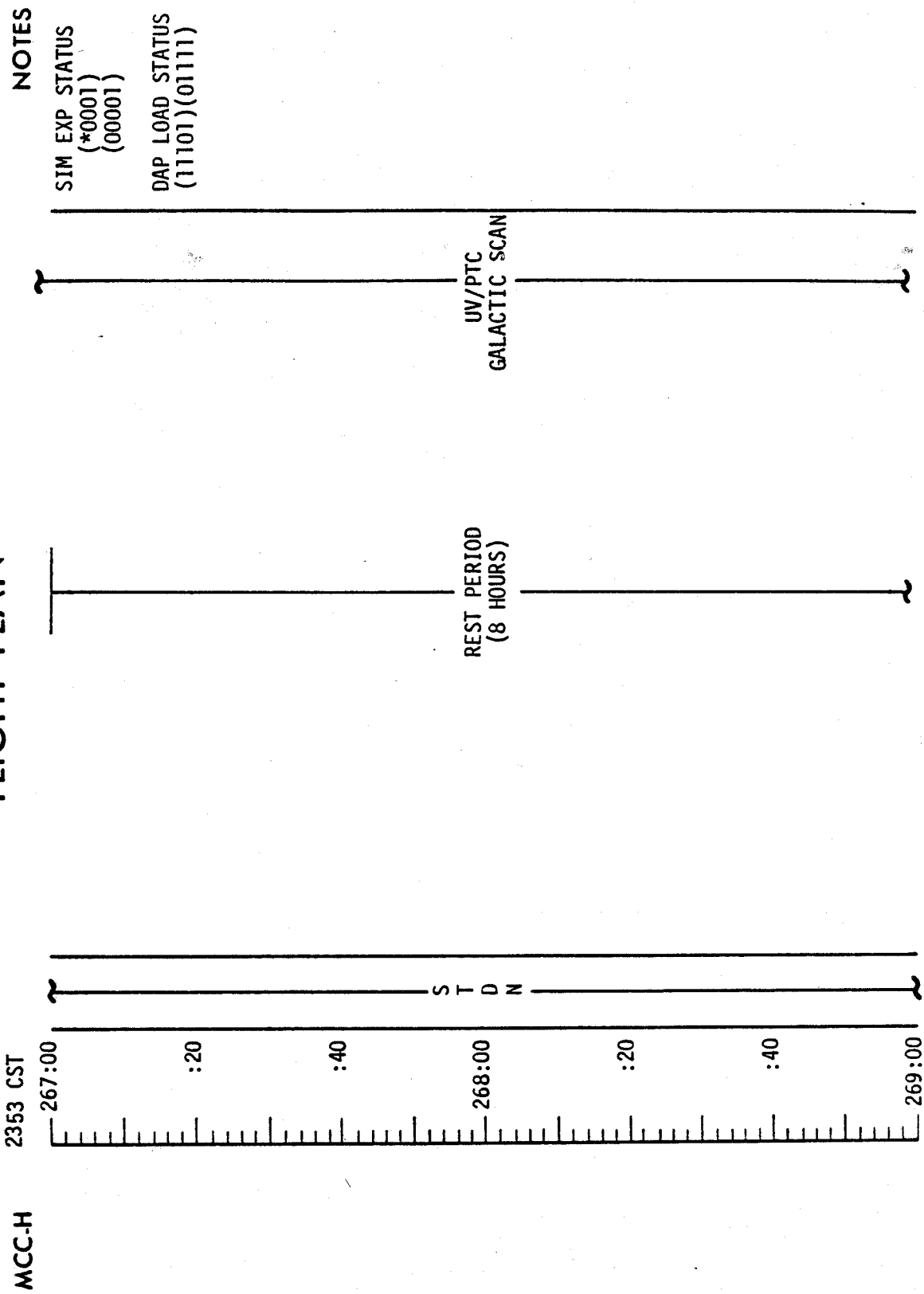
ONBOARD READOUT	
BAT C	
PYRO BAT A	
PYRO BAT B	
RCS A	
B	
C	
D	
DC IND SEL - MNA OR B	
EARTH DISTANCE	
~ 140,423 NM	

UV/PTC
GALACTIC SCAN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	266:00 - 267:00	12/TEC	3-378

FLIGHT PLANNING BRANCH

FLIGHT PLAN

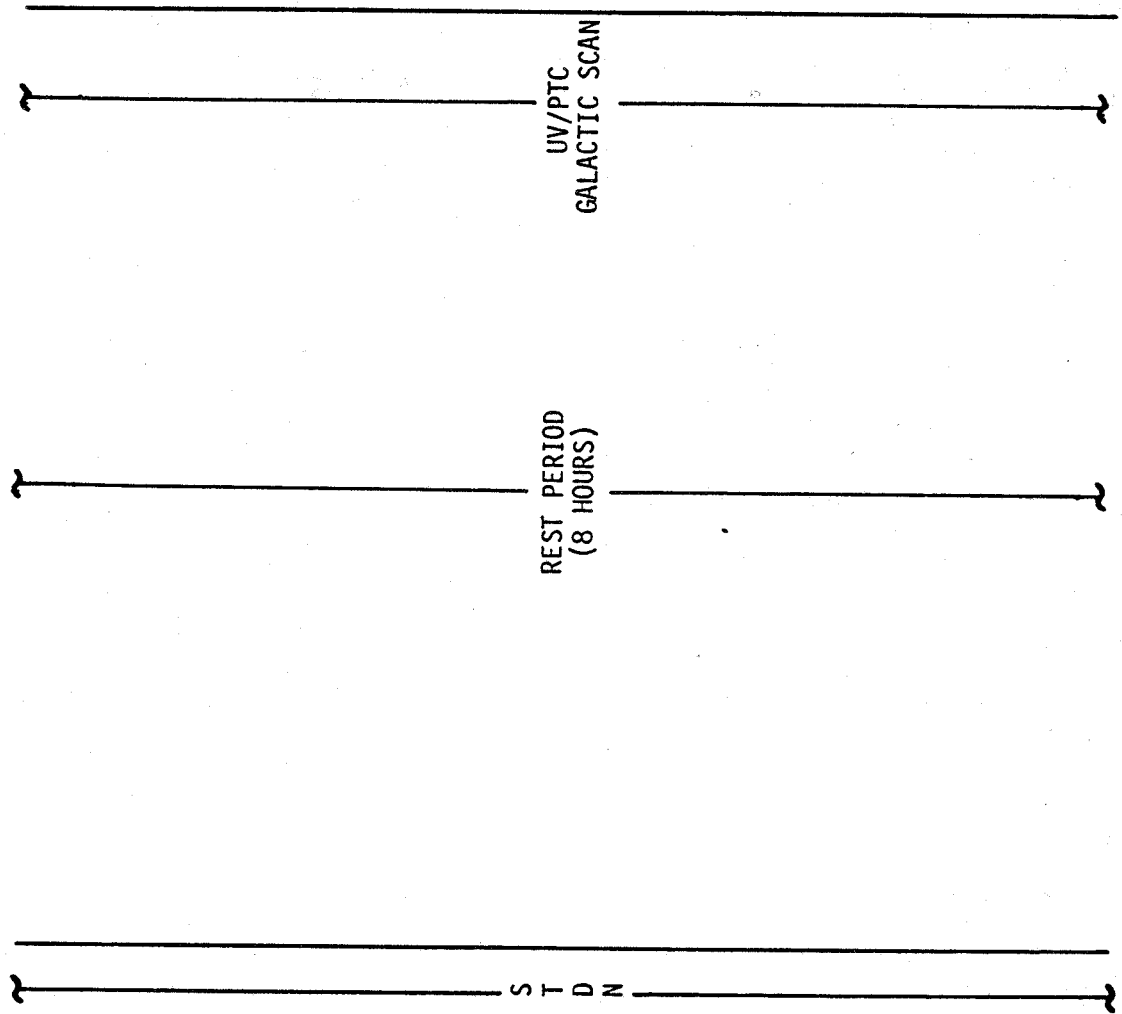
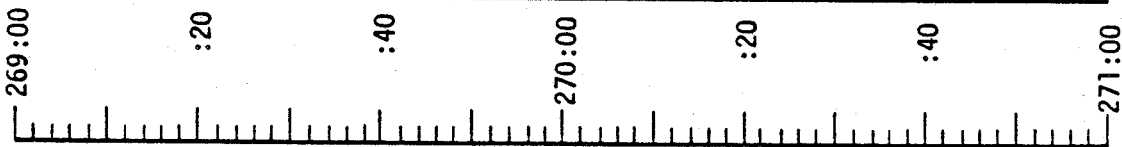


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	267:00 - 269:00	12/TEC	3-379

FLIGHT PLAN

0153 CST

MCC-H



NOTES

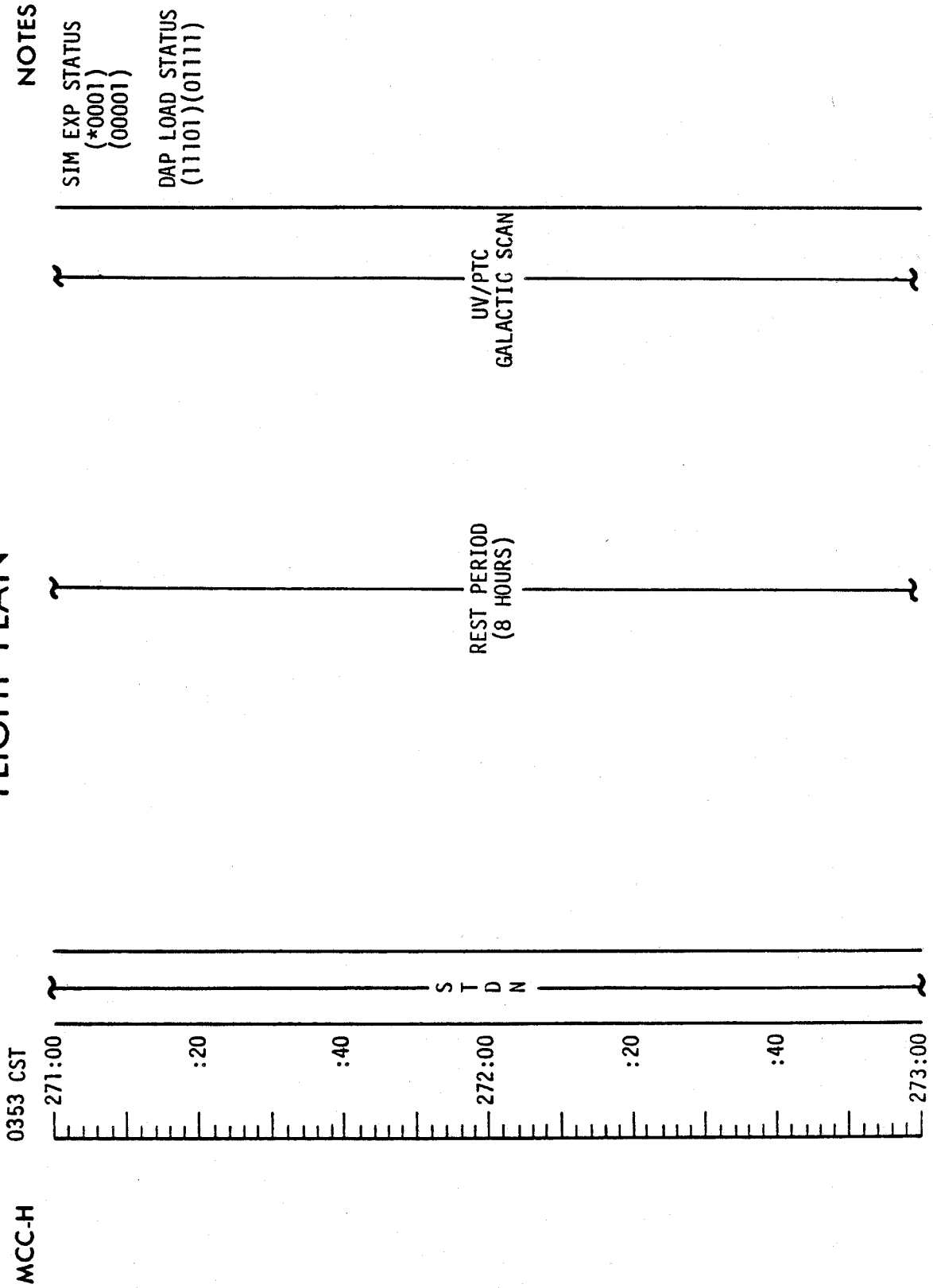
SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	269:00 - 271:00	12/TEC	3-380

FLIGHT PLANNING BRANCH

FLIGHT PLAN



MCC-H

0353 CST

271:00

:20

:40

272:00

:20

:40

273:00

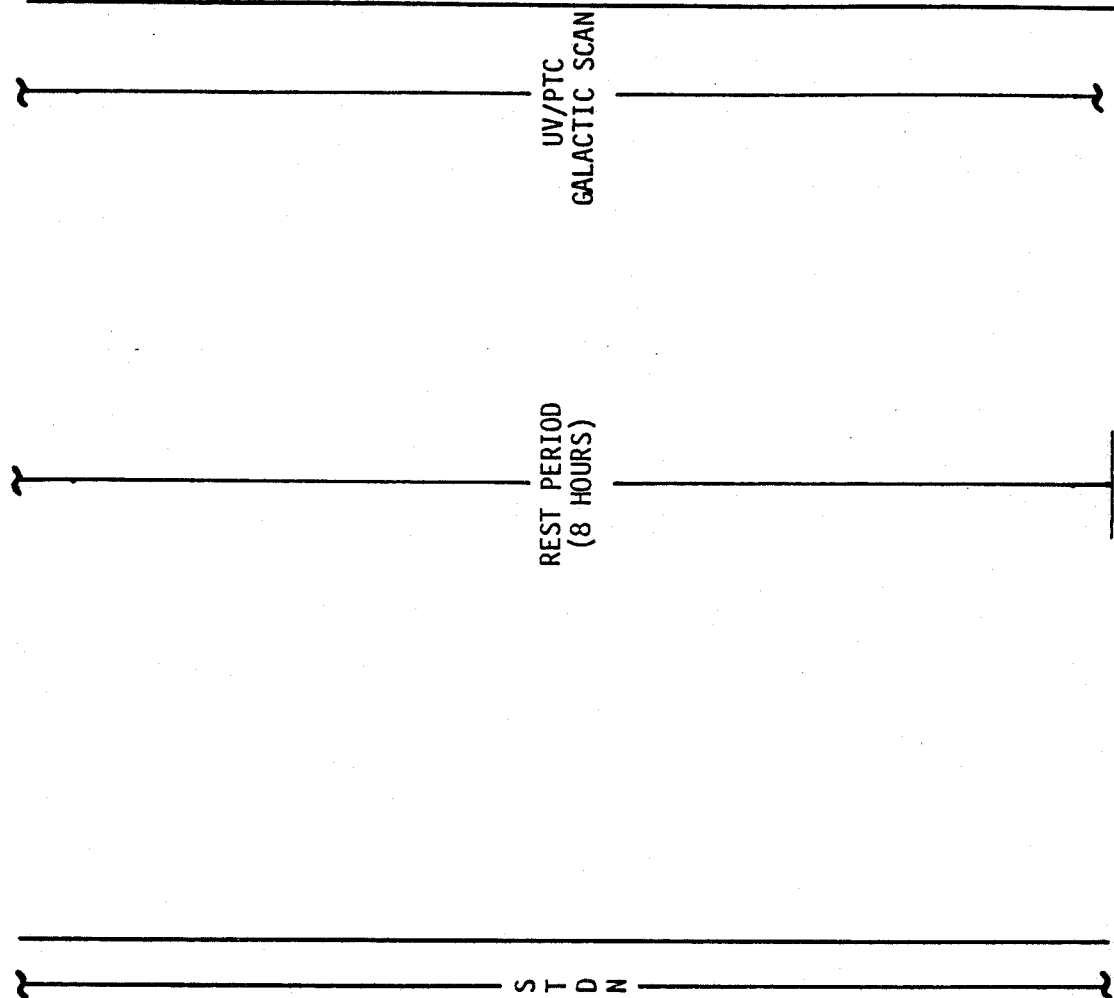
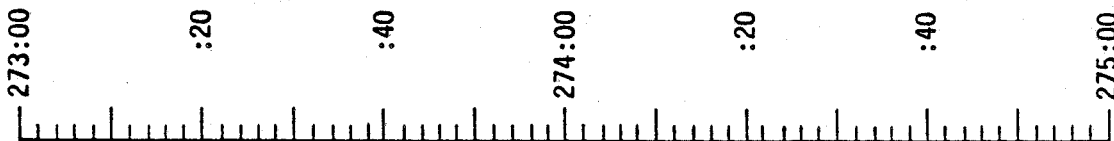
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	271:00 - 273:00	12/TEC	3-381

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0553 CST



NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

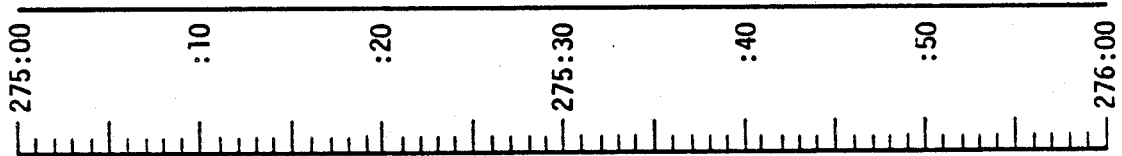
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	273:00 - 275:00	12/TEC	3-382

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0753 CST



CSM SYSTEMS CHECKLIST

POST-SLEEP CHECKLIST

PAGE S/1-29

S T D N

EAT PERIOD

UV/PTC GALACTIC SCAN

NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(111101)(011111)

EARTH DISTANCE
~ 121,855 NM

GET = 275:00 FOV = 4°



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	8/28/72	275:00 - 276:00	13/TEC	3-383

FLIGHT PLANNING BRANCH

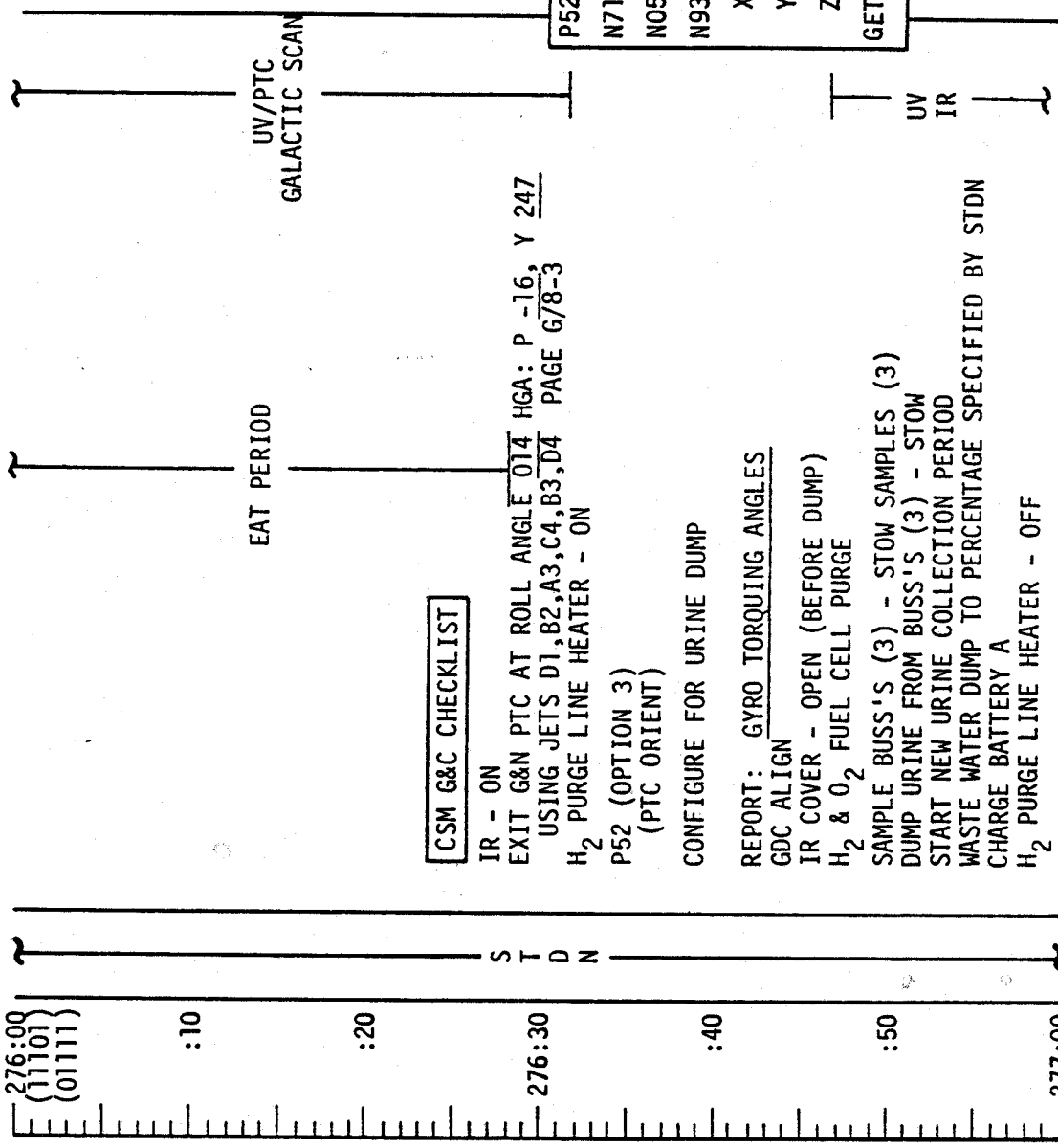
FLIGHT PLAN

0853 CST

MCC-H

NOTES

SIM EXP STATUS
(*0001)
(00001)



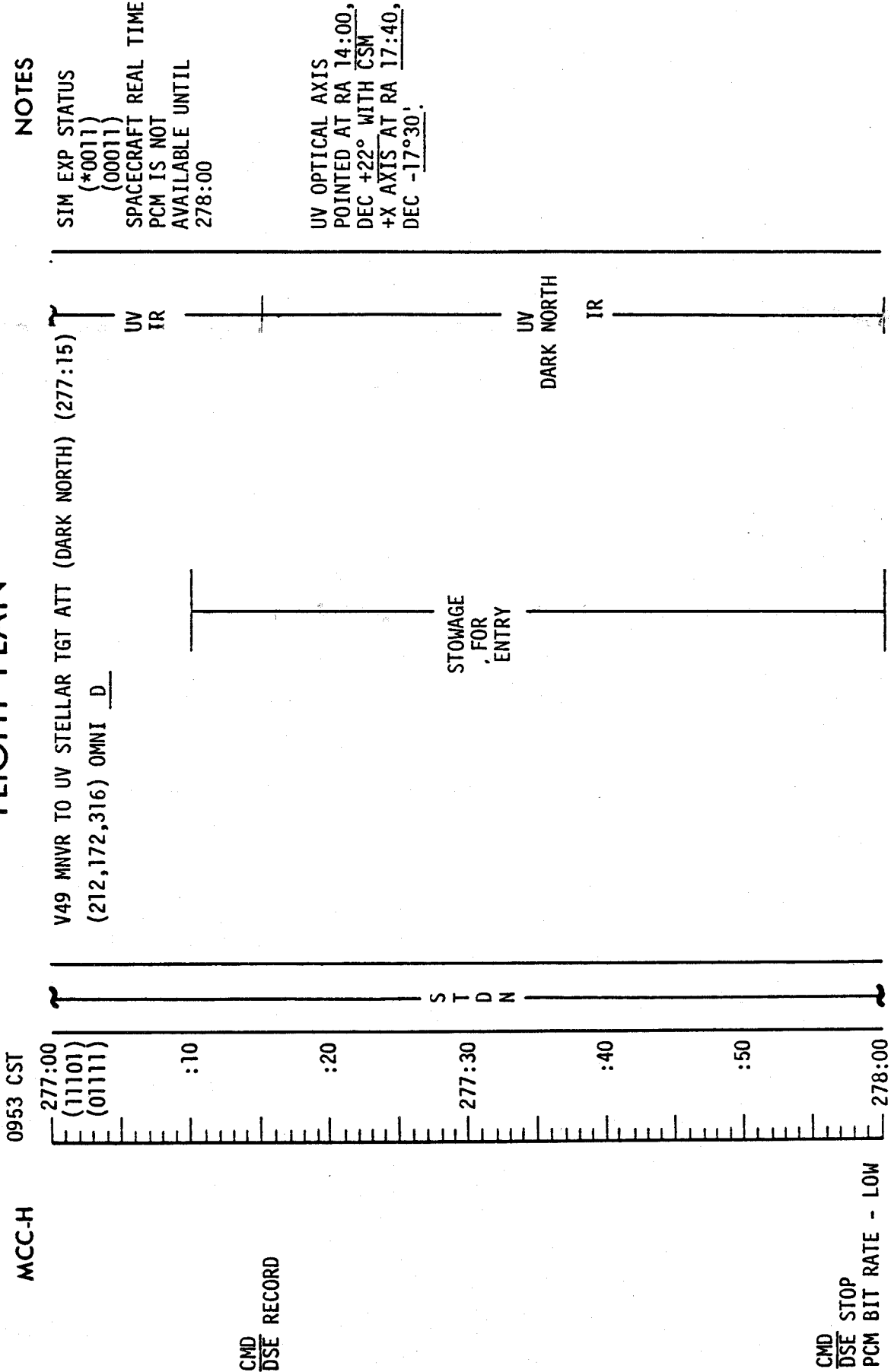
UPDATE
CONSUMABLES STATUS
FLIGHT PLAN
SIM EXP STATUS
WASTE WATER DUMP
PERCENTAGE

P52	IMU REALIGN
N71:	---
N05:	---
N93:	---
X	---
Y	---
Z	---
GET	---

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	276:00 - 277:00	13/TEC	3-384

FLIGHT PLANNING BRANCH

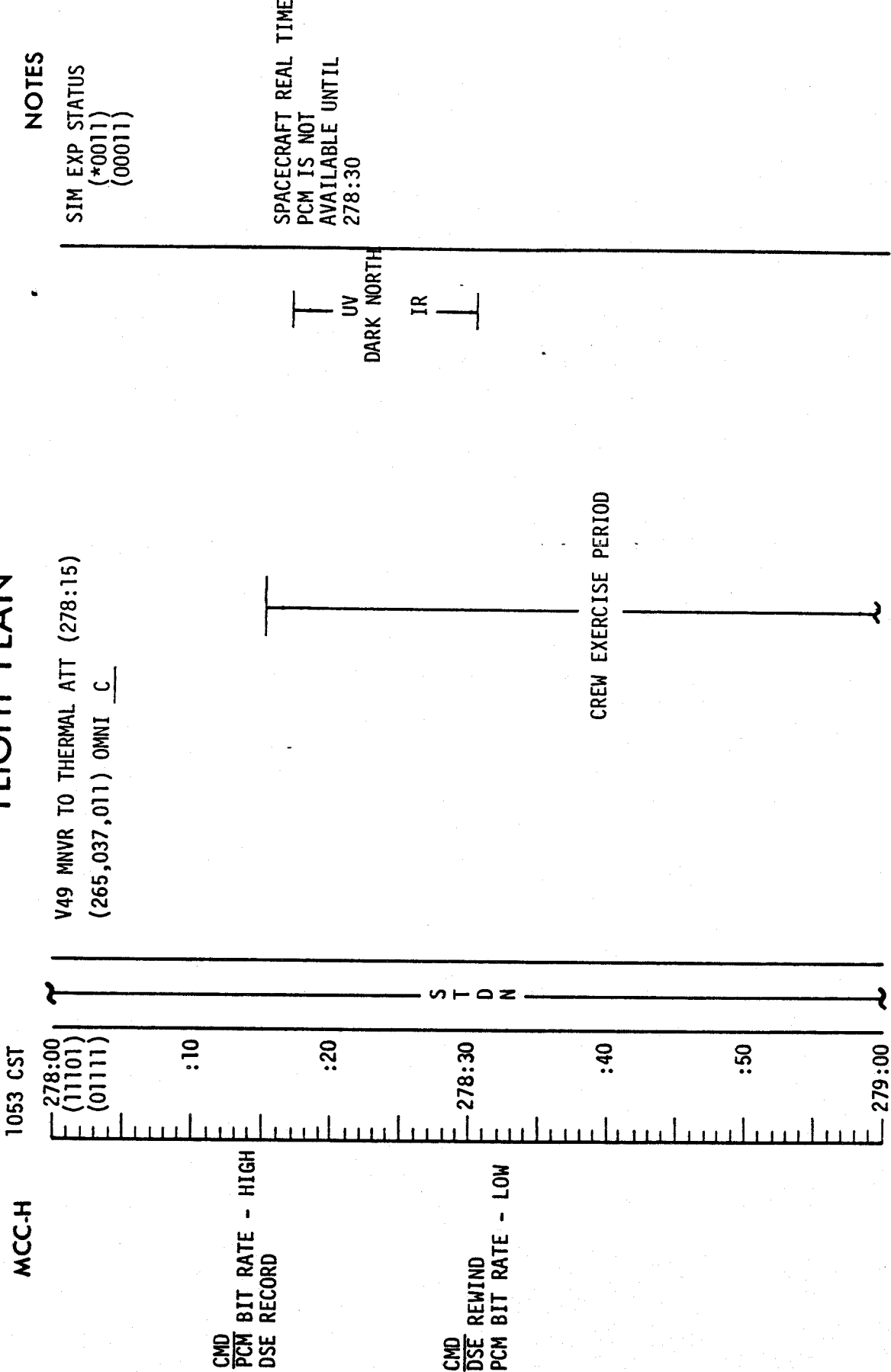
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	277:00 - 278:00	13/TEC	3-385

FLIGHT PLANNING BRANCH

FLIGHT PLAN



MCC-H

1053 CST

278:00
(11101)
(01111)

:10

:20

278:30

:40

:50

279:00

CMD
PCM BIT RATE - HIGH
DSE RECORD

CMD
DSE REWIND
PCM BIT RATE - LOW

NOTES

SIM EXP STATUS
(*0011)
(00011)

SPACECRAFT REAL TIME
PCM IS NOT
AVAILABLE UNTIL
278:30

DARK NORTH

UV

IR

CREW EXERCISE PERIOD

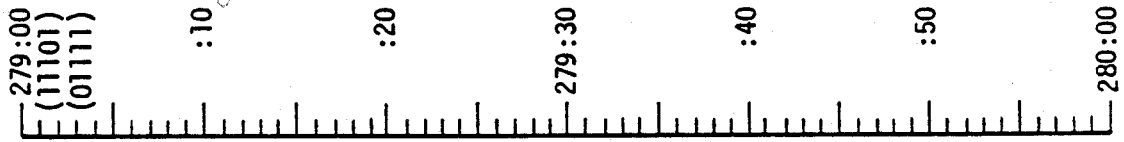
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	278:00 - 279:00	13/TEC	3-386

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1153 CST



NOTES

SIM EXP STATUS
(*0011)
(00011)

LMP DON BIOMED HARNESS
CREW EXERCISE PERIOD

V49 MNVR TO UV STELLAR TGT ATT(NORTH ECLIPTIC POLE)(279:25)
(131,138,327) HGA: P -45, Y 50

CMD
DSE PLAYBACK
PCM BIT RATE - HIGH

CHECK LMP BIOMED HARNESS
CDR DOFF BIOMED HARNESS

CSM EXP/EVA CHECKLIST

LIGHT FLASH PHENOMENON OBSERVATION PAGE X/2-1

REPORT: READINESS TO DON EYE SHIELDS
WHEN EACH EYE SHIELD IS DONNED
THE OCCURRENCE OF EACH LIGHT FLASH
WHEN OBSERVATIONS ARE TERMINATED

UV
NEP
IR

LIGHT
FLASH
OBS

UV OPTICAL AXIS
POINTED AT RA 19:00,
DEC +78° WITH CSM
+X AXIS AT RA 17:55,
DEC +11°

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	279:00 - 280:00	13/TEC	3-387

FLIGHT PLANNING BRANCH

FLIGHT PLAN

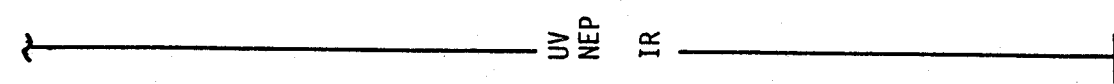
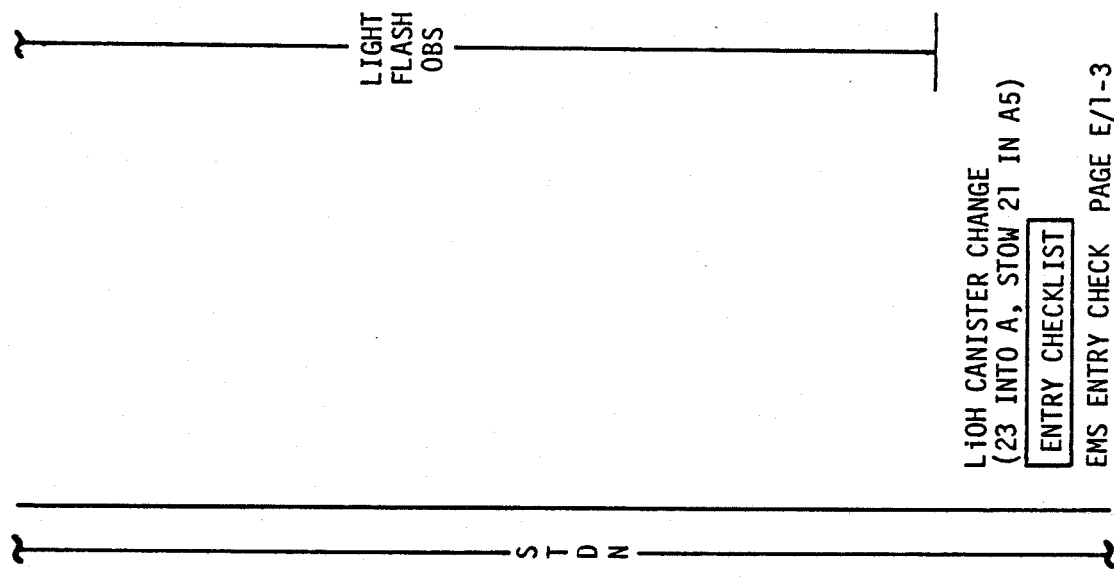
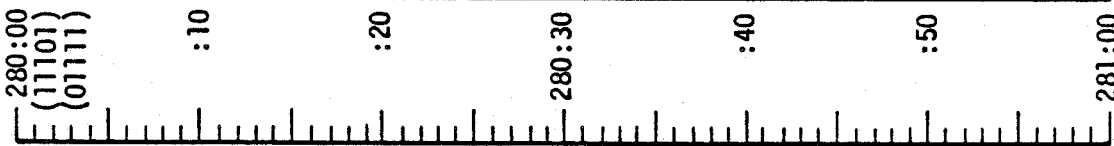
MCC-H

1253 CST

CUE
WHEN 60 MIN
FLASH OBS IS
COMPLETE

CMD
DSE REMIND

UPLINK
CSM S.V. & V66



SIM EXP STATUS
(*0011)
(00011)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	280:00 - 281:00	13/TEC	3-388

FLIGHT PLANNING BRANCH

NOTES

FLIGHT PLAN

MCC-H

1353 CST

UPDATE
ENTRY PAD
FLIGHT PLAN

CMD
DSE RECORD

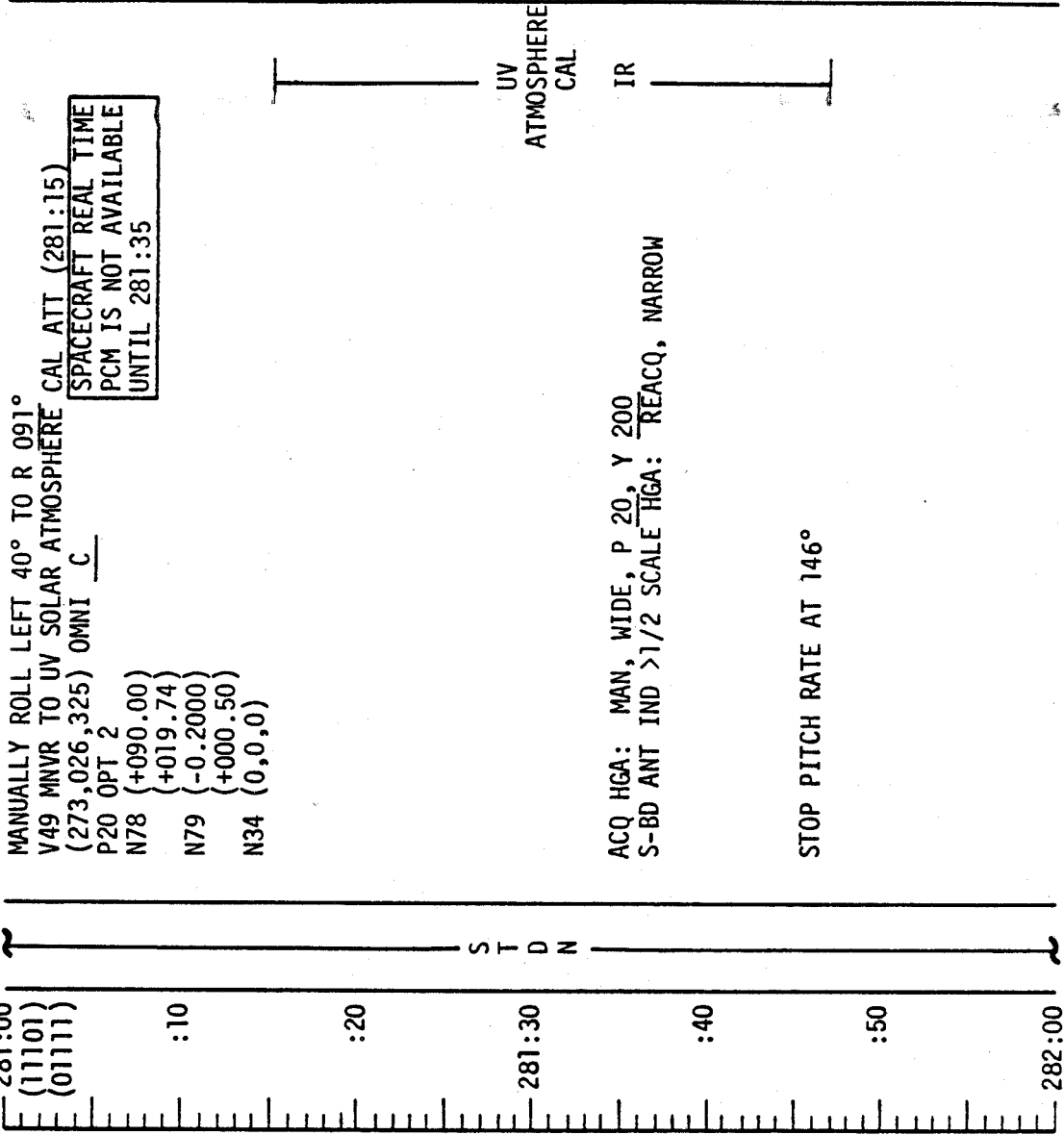
CMD (HGA AOS)
DSE DUMP

NOTES

SIM EXP STATUS
(*0011)
(00011)

IF MCC-6 IS REQUIRED:
UPLINK TGT LOAD
UPDATE MNVR PAD

IF MCC-6 IS REQUIRED:
PERFORM AT 282:18



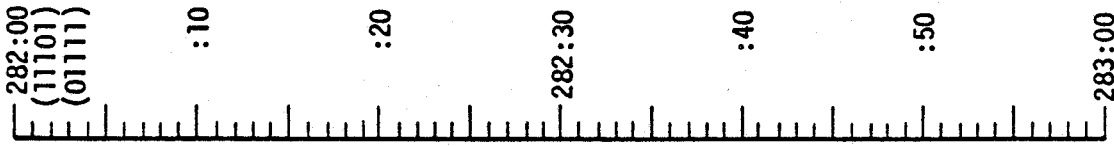
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	281:00 - 282:00	13/TEC	3-389

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1453 CST



CMD
DSE RECORD
EI -22 HRS

ON STDN CUE
V49 MWVR TO UV STELLAR TGT ATT (VIRGO CLUSTER)(282:25)
(253,018,017) OMNI D

S T D N

VIRGO CLUSTER
UV
IR

EAT PERIOD

NOTES
SIM EXP STATUS
(*0011)
(00011)

SPACECRAFT REAL TIME
PCM IS NOT AVAILABLE
UNTIL 283:15

UV OPTICAL AXIS
POINTED AT RA 12:30,
DEC +12°

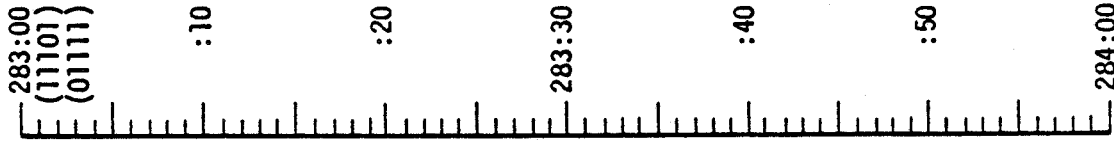
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	282:00 - 283:00	13/TEC	3-390

FLIGHT PLANNING BRANCH

FLIGHT PLAN

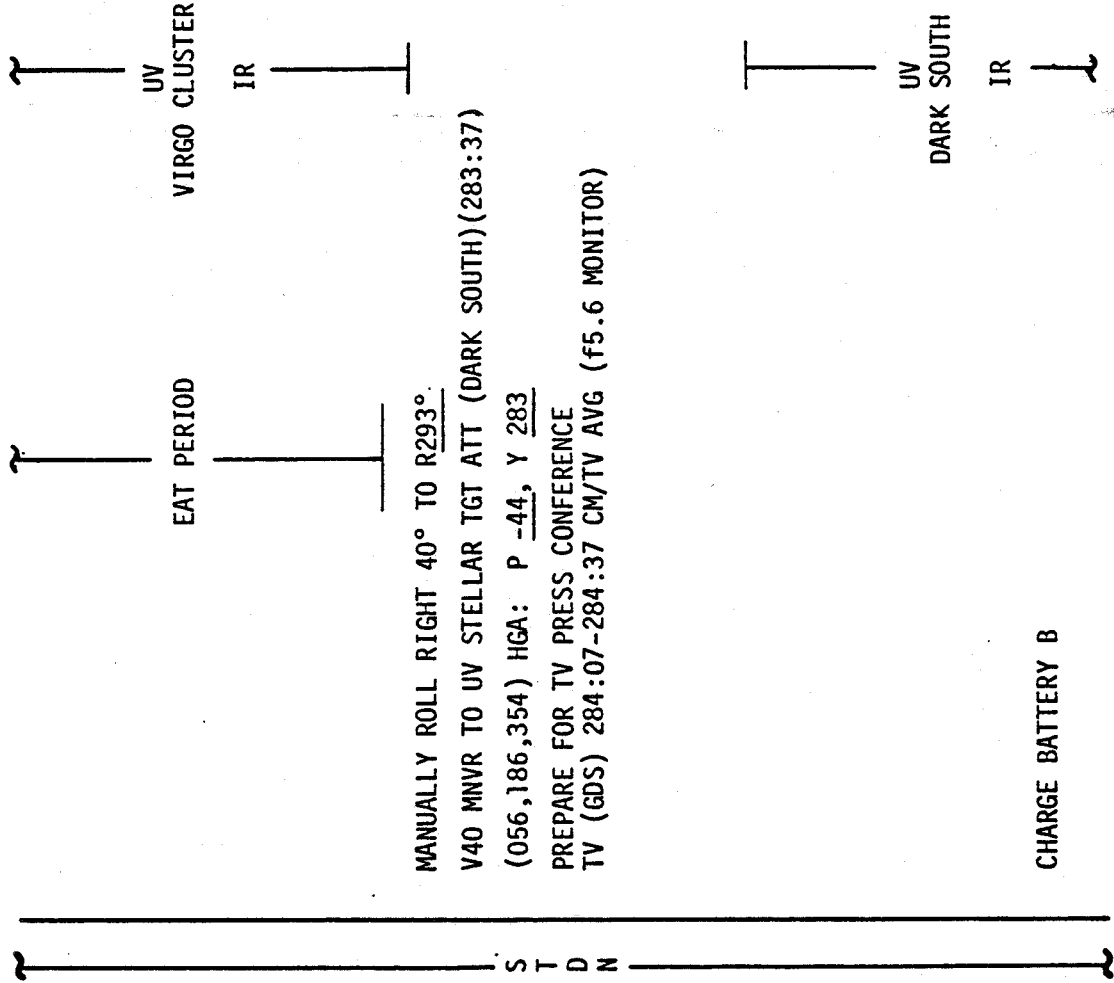
MCC-H

1553 CST



CMD
DSE STOP/REWIND
PCM BIT RATE LOW

CMD
PCM BIT RATE HIGH
DSE PLAYBACK



MANUALLY ROLL RIGHT 40° TO R293°.
V40 MNVR TO UV STELLAR TGT ATT (DARK SOUTH)(283:37)
(056,186,354) HGA: P -44, Y 283
PREPARE FOR TV PRESS CONFERENCE
TV (GDS) 284:07-284:37 CM/TV AVG (f5.6 MONITOR)

CHARGE BATTERY B

NOTES
SIM EXP STATUS
(*0011)
(00011)

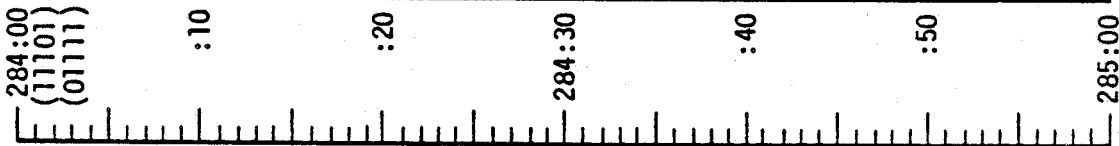
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	283:00 - 284:00	13/TEC	3-391

FLIGHT PLANNING BRANCH

FLIGHT PLAN

1653 CST

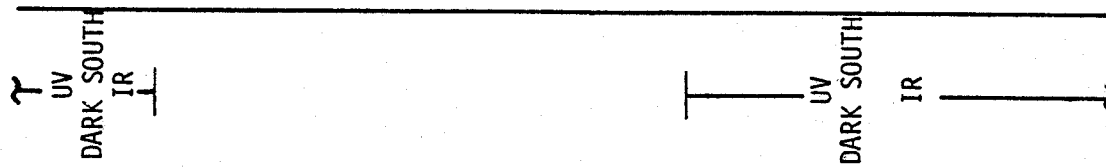
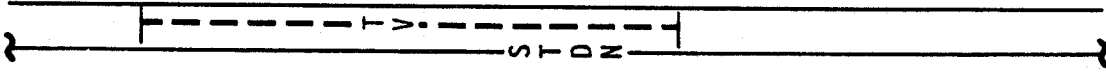
MCC-H



TEC PRESS CONFERENCE

S-BD AUX TV - TV

S-BD AUX TV - SCI



NOTES

SIM EXP STATUS
(*0011)
(00011)

UV OPTICAL AXIS
POINTED AT RA 01:05,
DEC -10° WITH CSM
+X AXIS AT RA 20:30
DEC -25°

CMD
DSE STOP

CMD
DSE PLAYBACK

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	284:00 - 285:00	13/TEC	3-392

FLIGHT PLANNING BRANCH

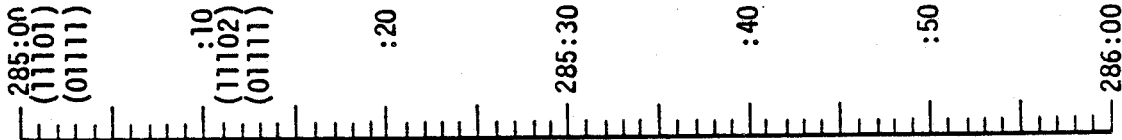
FLIGHT PLAN

MCC-H

UPDATE
FLIGHT PLAN

CMD
DSE REMIND

1753 CST



V48 (11102)(01111)

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N) PAGE G/8-2
EXCEPT: DAMP RATE FOR 5 MIN

V49 MNVR TO UV/PTC ATT

(N20,035,047)
IR COVER - CLOSE
P20 OPT 2, X-AXIS
N78 (0,0,0)
N79 (-0.4200, +000.50)
N34 (0,0,0)
COMM: HGA REACQ NARROW P -40, Y 90

D1, B2, A3, C4, B3 AND
D4 WILL BE USED FOR
PTC RATE DAMPING
B2 & D2 FOR PTC
SPINUP

UV
DARK SOUTH
IR

UV/PTC
NEP, PEG

NOTES

SIM EXP STATUS
(*0011)
(00011)

DURING UV/PTC
GALACTIC SCAN THE
CSM + AXIS WILL
BE POINTED AT
RA 04:55, DEC +46°

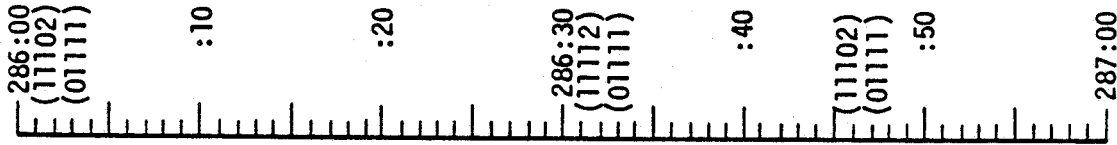
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	285:00 - 286:00	13/TEC	3-393

FLIGHT PLANNING BRANCH

FLIGHT PLAN

1853 CST

MCC-H



CSM G&C CHECKLIST

EXIT G&N PTC AT ROLL ANGLE 131, HGA: P -21, Y 149
 USING JETS D1, B2, A3, C4, B3 AND D4 PAGE G/8-3
 AFTER STDN CUE
 V49 MNVR TO UV STELLAR TGT ATT (SPICA) (286:30)
 (255, 188, 321) OMNI D
 IR COVER - OPEN
 V48 (11112)(01111)

V48 (11102)(01111)
 V49 MNVR TO COMM/UV PTC ATT (286:52)
 (148, 142, 321) HGA: P -37, Y 48

CMP DON BIOMED HARNESS

STDN

UV/PTC
 NEP, Y PEG

UV
 SPICA
 IR

UV
 SPICA, NUMA
 IR

NOTES

SIM EXP STATUS
 (*0001)
 (00011)

SPACECRAFT REAL TIME
 PCM IS NOT
 AVAILABLE UNTIL
 286:52

UV OPTICAL AXIS
 POINTED AT RA
 13:24, DEC -11°
 WITH CSM +X AXIS
 AT RA 18:02, DEC -30°

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	286:00 - 287:00	13/TEC	3-394

FLIGHT PLANNING BRANCH

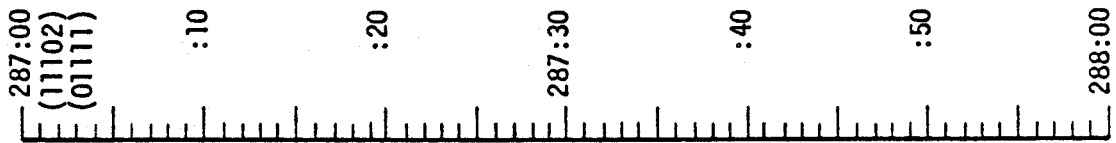
CMD
 DSE RECORD

CMD
 DSE DUMP

FLIGHT PLAN

MCC-H

1953 CST



E-MEMORY DUMP (CUE STDN)

CSM G&C CHECKLIST

PASSIVE THERMAL CONTROL (G&N) PAGE G/8-2

AFTER STDN CUE

IR COVER - CLOSE

IR - OFF

P20 OPT 2, X-AXIS

N78 (0,0,0)

N79 (-0.4200, +000.50)

N34 (0,0,0)

COMM: HGA REACQ NARROW

P -40, Y 90

D1, B2, A3, C4, B3 AND D4 WILL BE USED FOR PTC RATE DAMPING, B2 & D2 FOR PTC SPINUP

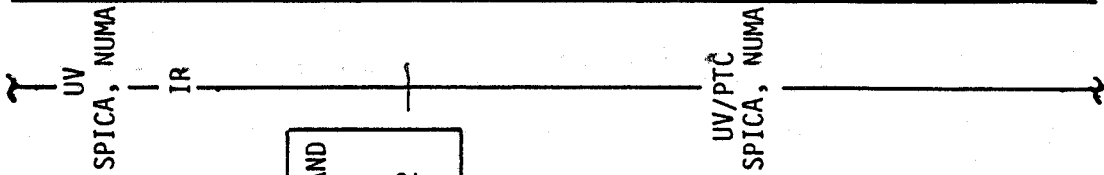
CHECK CMP BIOMED
LMP DOFF BIOMED HARNESS

LiOH CANISTER CHANGE
(24 INTO B, STOW 22 IN A5)

NOTES

SIM EXP STATUS
(*0011)
(00011)

DURING UV/PTC GALACTIC SCAN THE CSM +X AXIS WILL BE POINTED AT RA 17:40, DEC +05°



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	287:00 - 288:00	13/TEC	3-395

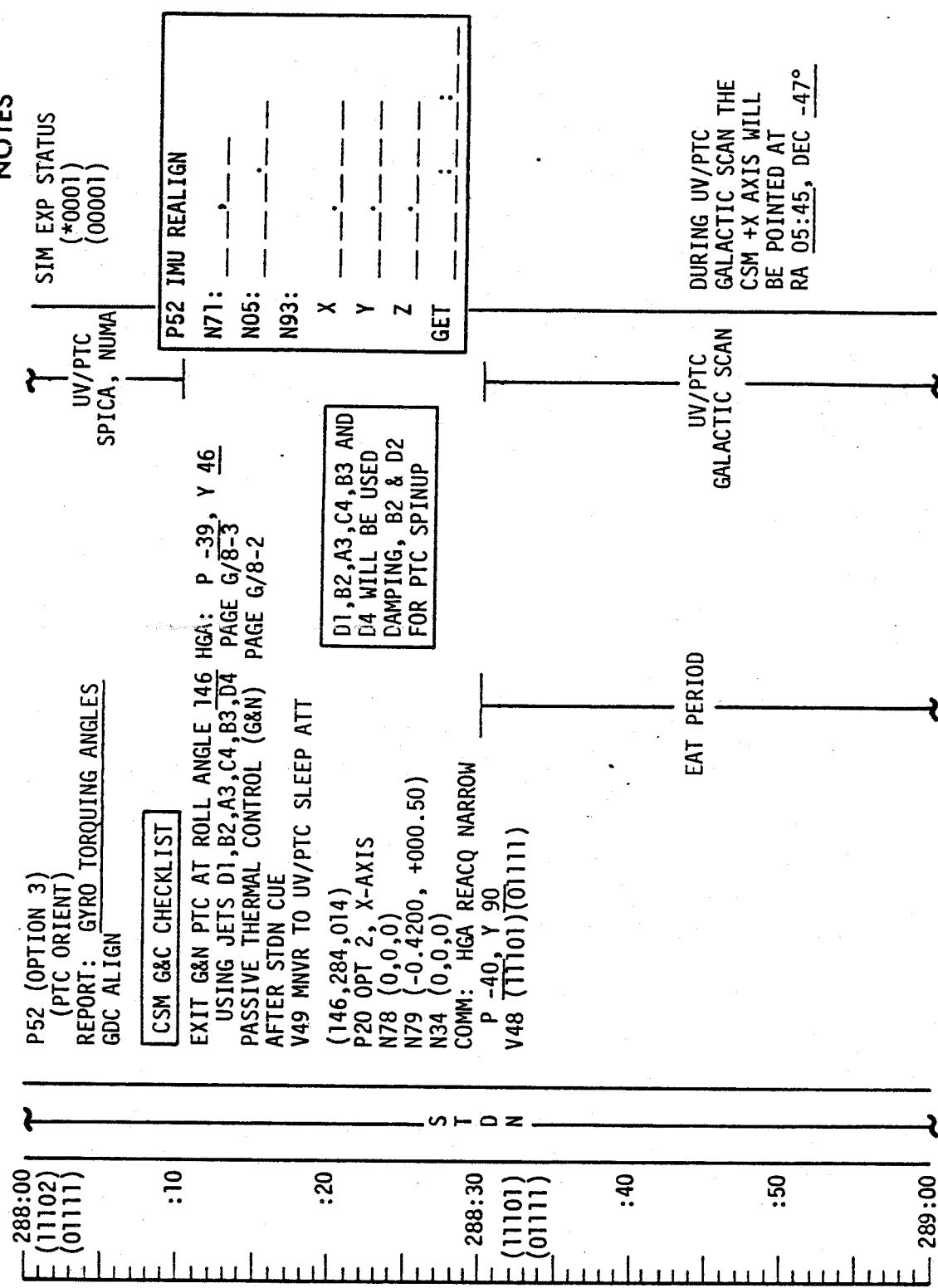
FLIGHT PLANNING BRANCH

FLIGHT PLAN

2053 CST

MCC-H

UPDATE
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	288:00 - 289:00	13/TEC	3-396

FLIGHT PLANNING BRANCH

NOTES

SIM EXP STATUS
(*0001)
(00001)

UV/PTC
SPICA, NUMA

P52 IMU REALIGN

N71: ---
N05: ---
N93: ---
X ---
Y ---
Z ---
GET ---

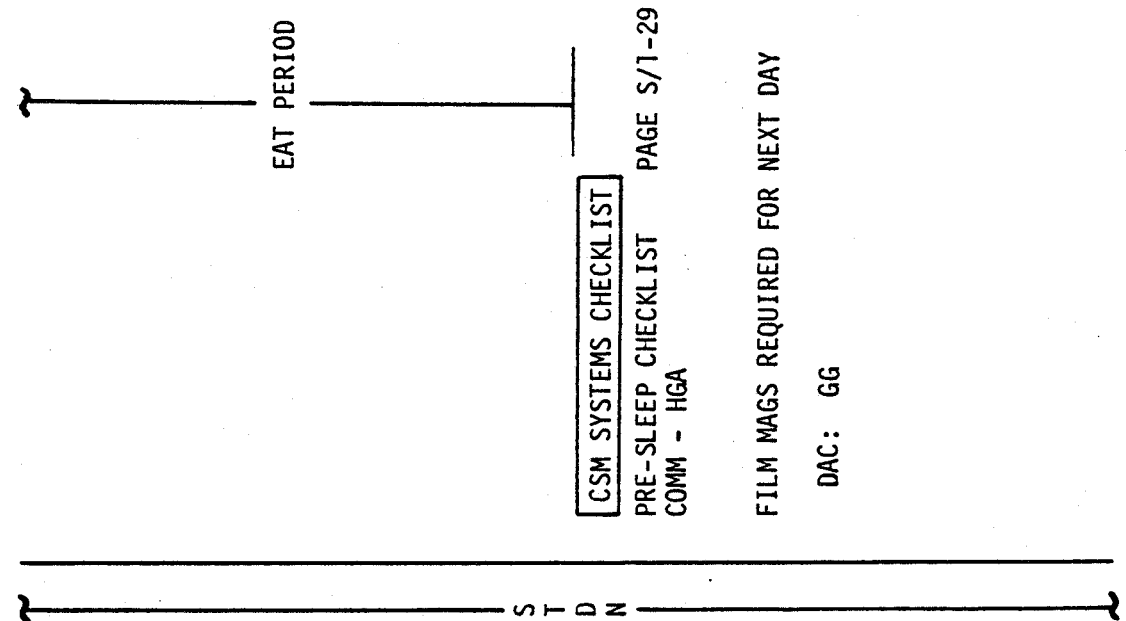
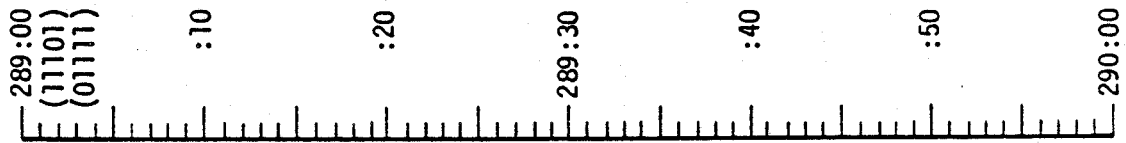
D1, B2, A3, C4, B3 AND
D4 WILL BE USED
DAMPING, B2 & D2
FOR PTC SPINUP

DURING UV/PTC
GALACTIC SCAN THE
CSM +X AXIS WILL
BE POINTED AT
RA 05:45, DEC -47°

FLIGHT PLAN

MCC-H

2153 CST

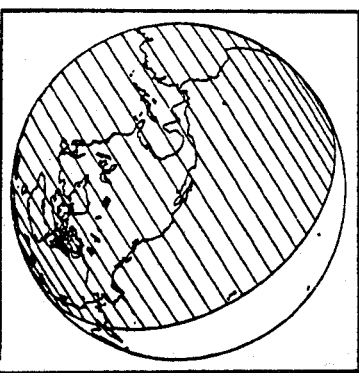


NOTES

SIM EXP STATUS
(*0001)
(00001)

EARTH DISTANCE
~ 80,921 NM

GET = 289:00 FOV = 7°



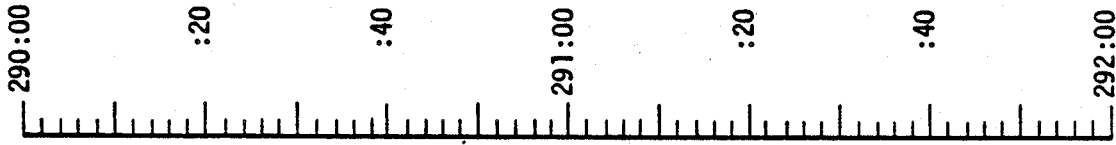
UV/PTC
GALACTIC SCAN

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	289:00 - 290:00	13/TEC	3-397

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H



NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(11101)(01111)

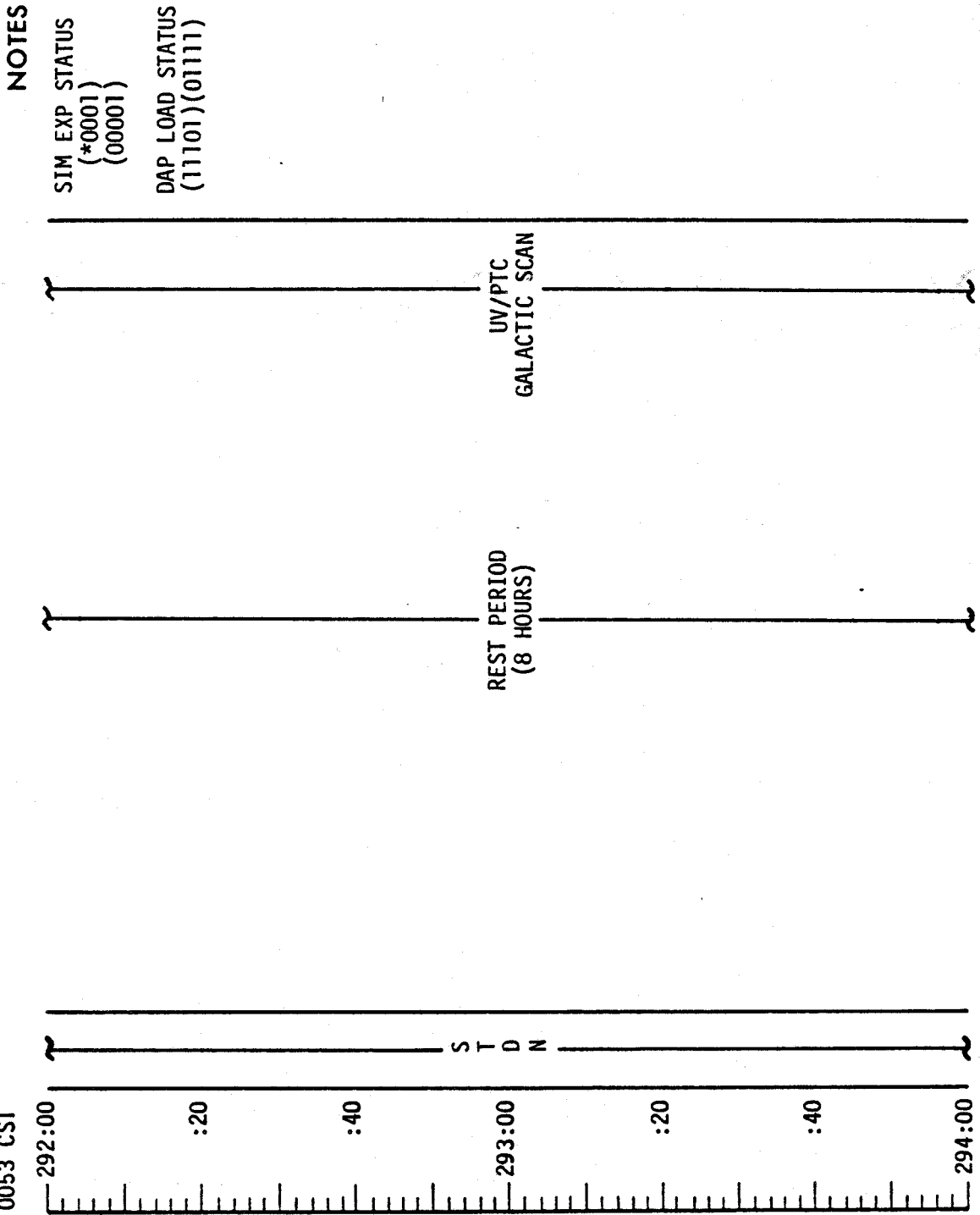
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	290:00 - 292:00	13/TEC	3-398

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0053 CST

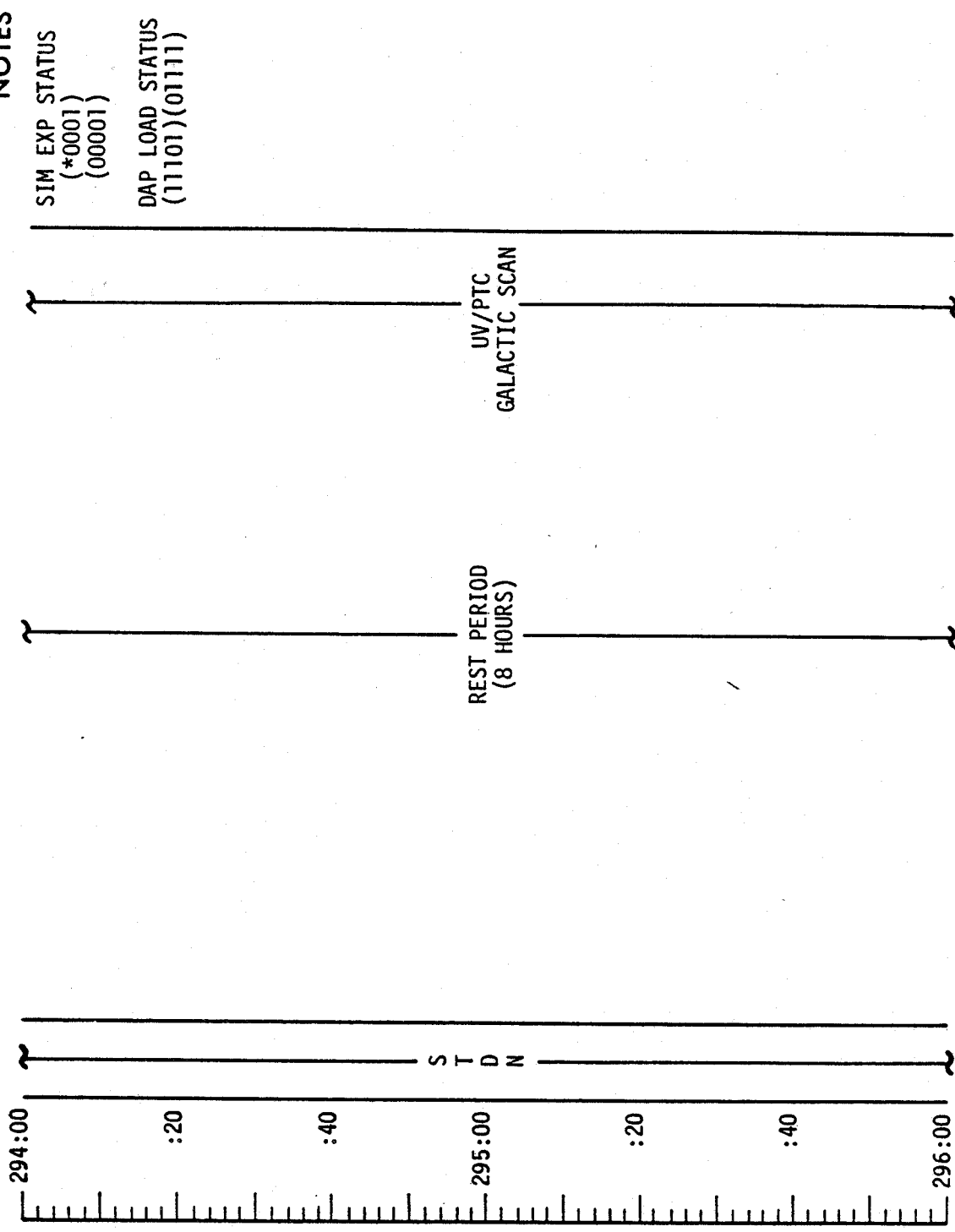


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	292:00 - 294:00	13/TEC	3-399

FLIGHT PLANNING BRANCH

FLIGHT PLAN

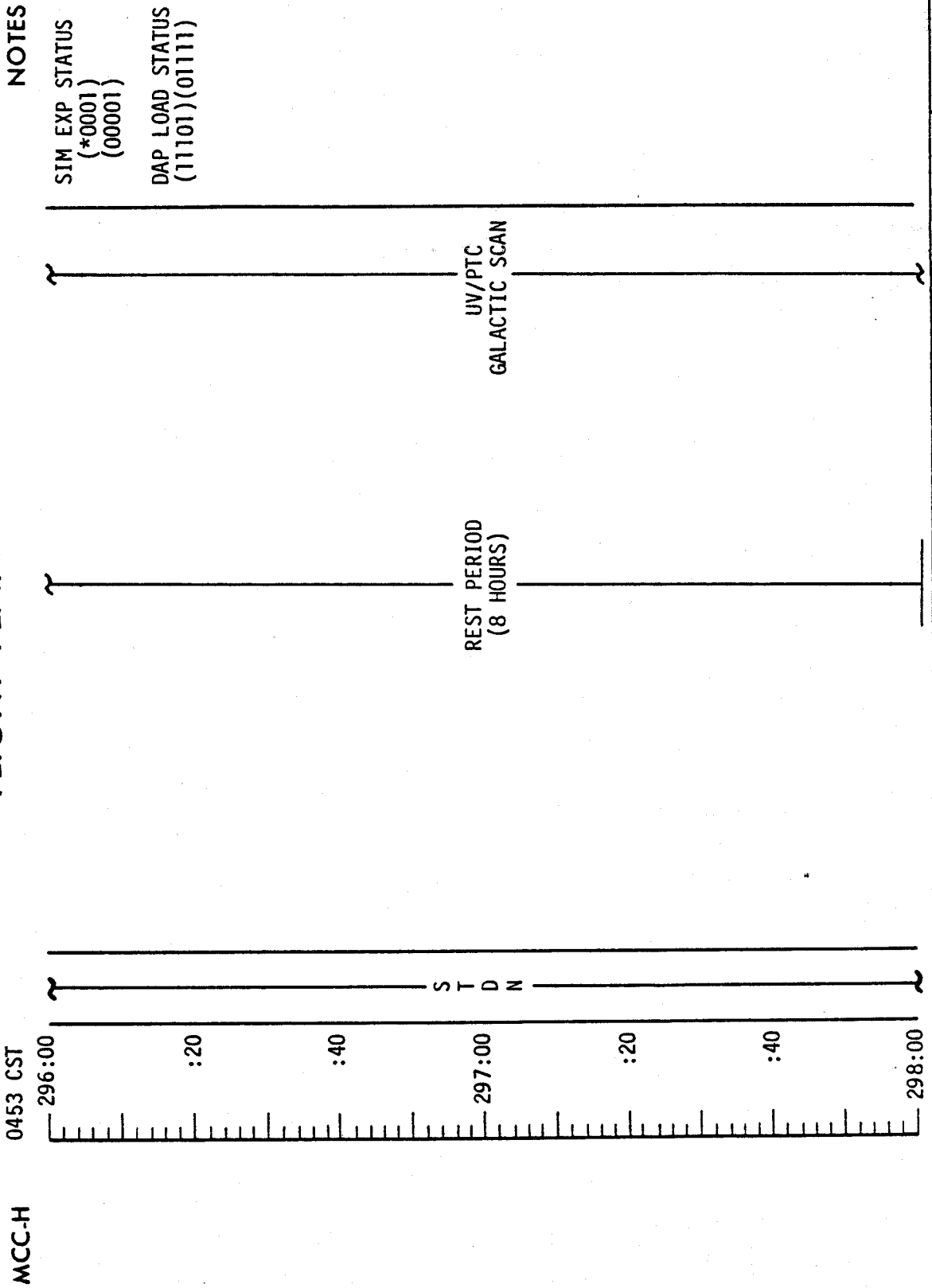
MCC-H



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	294:00 - 296:00	13/TEC	3-400

FLIGHT PLANNING BRANCH

FLIGHT PLAN



NOTES

SIM EXP STATUS
(*0001)
(00001)

DAP LOAD STATUS
(111101)(01111)

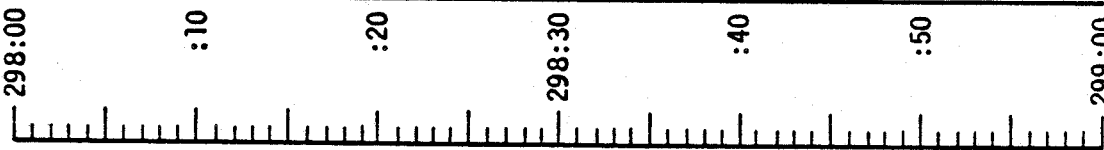
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	296:00 - 298:00	13/TEC	3-401

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

0653 CST



CSM SYSTEMS CHECKLIST

POST-SLEEP CHECKLIST PAGE S/1-29

UV/PTC GALACTIC SCAN

GET = 299:00 FOV = 20°



EARTH DISTANCE
~ 38,615

EAT PERIOD

S T D N

NOTES

SIM EXP STATUS
(*0001)
(00001)
DAP LOAD STATUS
(11101)(01111)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	298:00 - 299:00	14/TEC	3-402

FLIGHT PLANNING BRANCH

EI - 6 HRS

FLIGHT PLAN

MCC-H

0753 CST

NOTES

299:00

(11101)
(01111)

:10

:20

299:30

:40

(11102)
(01111)

:50

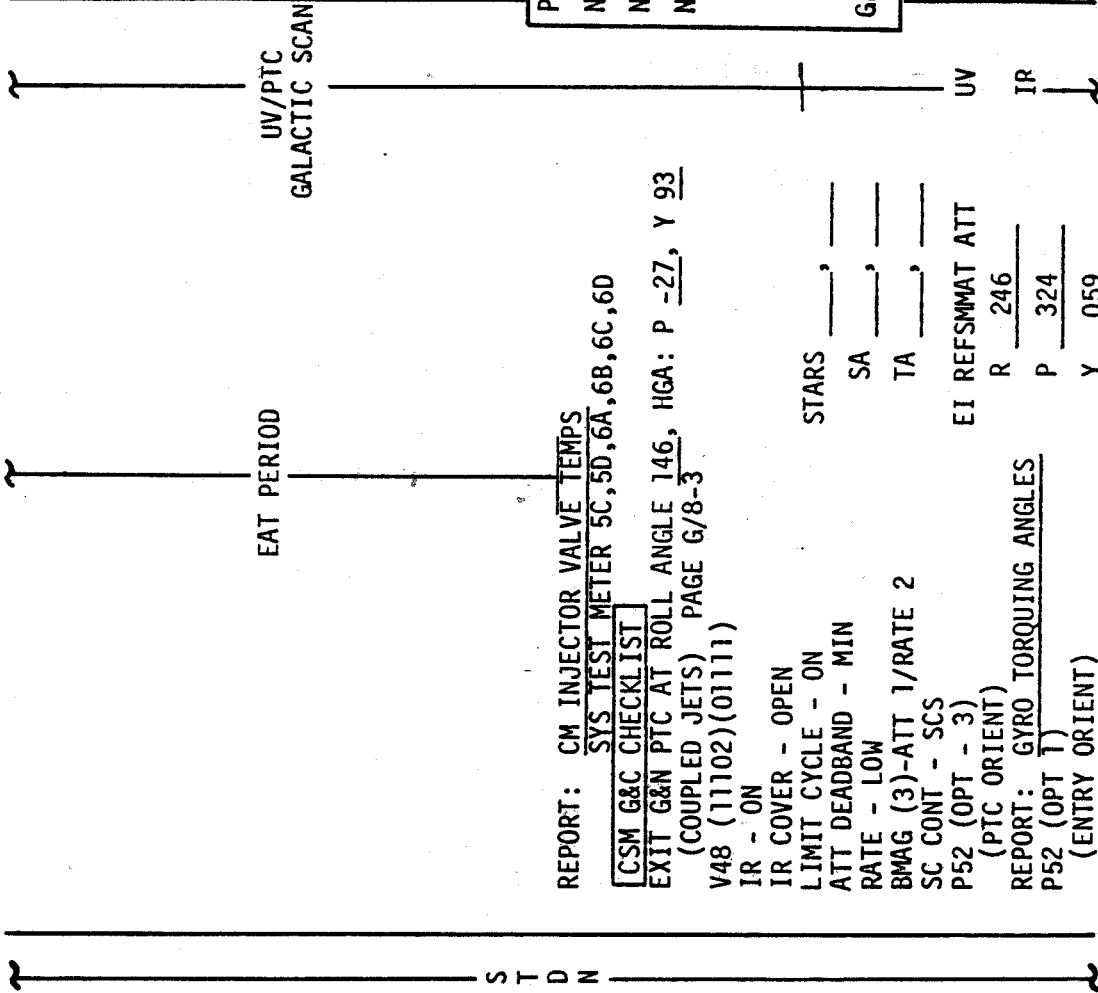
300:00

EI - 5 HRS

UPDATE
CONSUMABLE STATUS
FLIGHT PLAN
GO/NO-GO FOR
MCC-7

UPLINK

DESIRED ORIENT
(ENTRY)



REPORT: CM INJECTOR VALVE TEMPS

SYS TEST METER 5C, 5D, 6A, 6B, 6C, 6D

[CSM G&C CHECKLIST

EXIT G&N PTC AT ROLL ANGLE 146, HGA: P -27, Y 93
(COUPLED JETS) PAGE G/8-3

V48 (11102)(01111)

IR - ON

IR COVER - OPEN

LIMIT CYCLE - ON

ATT DEADBAND - MIN

RATE - LOW

BMAG (3)-ATT 1/RATE 2

SC CONT - SCS

P52 (OPT - 3)

(PTC ORIENT)

REPORT: GYRO TORQUING ANGLES

P52 (OPT 1)

(ENTRY ORIENT)

STARS

SA

TA

EI REFSMMAT ATT

R 246

P 324

Y 059

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	299:00 - 300:00	14/TEC	3-403

FLIGHT PLANNING BRANCH

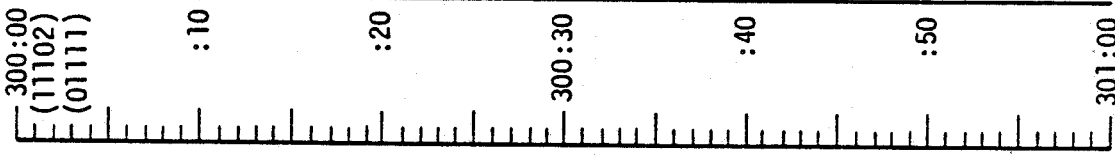
FLIGHT PLAN

0853 CST

MCC-H

UPLINK
 MCC-7 TGT LOAD
 CSM S.V. & V66
 UPDATE
 MCC-7 MNVR PAD
 ENTRY PAD

EI -4 HR



GDC ALIGN

SC CONT - CMC

BMAG (3) - RATE 2

EXTEND AND LOCK YY ATTENUATOR STRUTS

DON MAE WESTS & FOOT RESTRAINTS

cb S-BD FM XMTR/DSE (2) CLOSE-(VERIFY)

[CSM SYSTEMS CHECKLIST]

ECS CKS

02 SUPPLY REFILL PAGE S/1-7

PGA VERIFICATION (IF SUITED) PAGE S/1-14

ECS MONITOR CK PAGE S/1-5

EVAP H2O CONT PRI VLV - AUTO

*P30 EXTERNAL ΔV

*V49 MNVR TO BURN ATT

CONFIGURE FOR URINE DUMP

UPDATE STOWAGE LIST & TAPE TO LEB

CDR & LMP DON BIOMED HARNESS

*SXT STAR CHECK

SAMPLE BUSS'S (3) - STOW SAMPLES (3)

DUMP URINE FROM BUSS'S (3) - STOW

START NEW URINE COLLECTION PERIOD

S T D N

NOTES

SIM EXP STATUS

(*0011)

(00011)

EVAP H2O CONT SEC VLV - AUTO
 SUIT HEAT EXCH SEC GLY - FLOW
 MARK DIRECT 02 "OFF" POSITION WITH TAPE

[CSM SYSTEMS CHECKLIST]

EPS CKS PAGE S/1-2

SPS CK PAGE S/1-1

RCS CKS PAGE S/1-1

C&W SYS CK PAGE S/1-20

*PERFORM IF

MCC-7 IS REQUIRED

UV

IR

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	300:00 - 301:00	14/TEC	3-404

FLIGHT PLANNING BRANCH

THIS PAGE INTENTIONALLY BLANK

APOLLO 17

FINAL (12/6)

10/23/72

3-405

FLIGHT PLAN

MCC-7
BURN TABLE

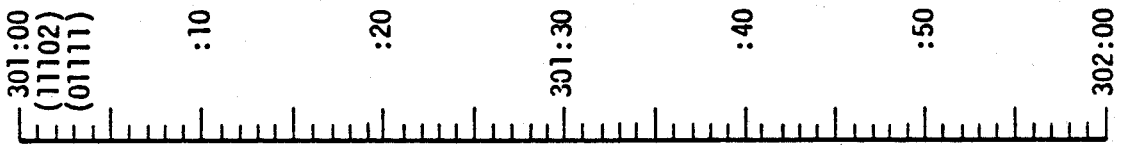
MANEUVER	SPS LIMITS	P OR Y RATES	ATT DEVIATION	MANUAL START ACTION	OVERBURN SHUTDOWN CRITERIA	RCS TRIM GUIDELINES
CORRIDOR CONTROL	LOOSE	10°/SEC COMPLETE	+ 10° COMPLETE	DELAY NO RESTART	BT + 1 SEC AND $\Delta V_c = 0$	TRIM X AXIS ONLY TO 0.2 FPS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)		N/A	14/TEC	3-406

FLIGHT PLAN

MCC-H

0953 CST



*P40 SPS THRUSTING OR
*P41 RCS THRUSTING

MCC-7

TIG: 301:18
BT: NOM ZERO
ΔVT: NOM ZERO
ULLAGE: NOM ZERO

*V66 SET S.V. INTO LM S.V.
*REPORT: BURN STATUS

CMP DON COUNTERPRESSURE GARMENT

VERIFY STOWAGE

REMOVE AND STOW CABIN FAN FILTER (U2)

S T D N

UV
IR

NOTES

SIM EXP STATUS
(*0011)
(00011)

*PERFORM IF MCC-7
IS REQUIRED

BURN STATUS REPORT		ATIG	BT	V gx	R	P	Y	V gx	V gy	V gz	ΔV C	FUEL	OX	UNBAL
X	X													
X	X													
X	X											X	X	X
X	X											X	X	X
X	X											X	X	X

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	301:00 - 302:00	14/TEC	3-407

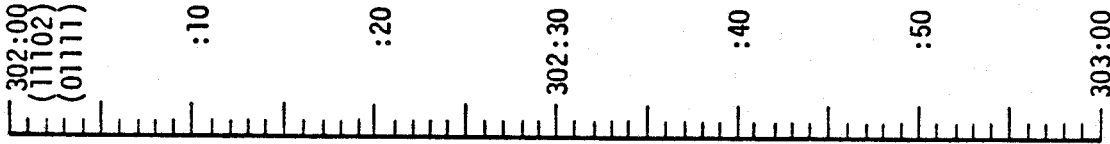
FLIGHT PLANNING BRANCH

FLIGHT PLAN

NOTES

MCC-H

1053 CST



IR - OFF
 UV - OFF
 IR COVER - CLOSE
 UV COVER - CLOSE
 S-BD AUX TV - OFF
 DATA SYS - OFF

STOW FLIGHT PLAN

CSM ENTRY CHECKLIST

LOGIC SEQUENCE CHECK PAGE E/1-2

SIM EXP STATUS
 (*0011)
 (00011)

EI -2 HR

UPDATE
 GO/NO-GO FOR
 PYRO ARM
 SEQUENCE

S T D N

P52	IMU REALIGN
N71:	---
N05:	---
N93:	---
X	---
Y	---
Z	---
GET	---

P52 (OPTION 3) PAGE E/1-2
 (ENTRY ORIENT)

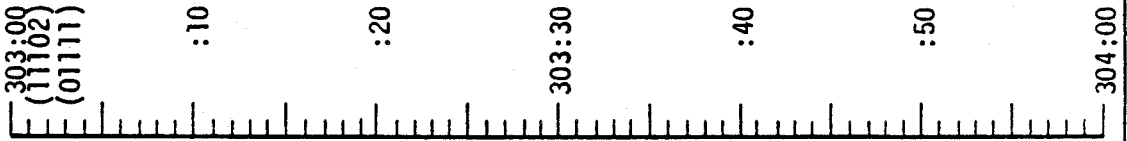
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	302:00 - 303:00	14/TEC	3-408

FLIGHT PLANNING BRANCH

FLIGHT PLAN

MCC-H

1153 CST



REPORT: GYRO TORQUING ANGLES

GDC ALIGN PAGE E/1-3
 V49 MNVR TO HORIZON CHECK ATT
 BORESIGHT & SXT STAR CHECK

EMS ENTRY CHECK PAGE E/1-3
 PRI & SEC WATER EVAP ACTIVATION PAGE E/1-4

CONFIGURE CAMERA EQUIP FOR FIREBALL & CHUTES PHOTOS
 CM RCS PREHEAT (IF REQUIRED)

FINAL STORAGE PAGE E/1-5

CONFIGURE FOR VHF A SIMPLEX VOICE CHECK

TERMINATE RCS PREHEAT
 PYRO BATT CHECK
 SYSTEMS TEST PANEL CONFIGURATION PAGE E/1-6
 CONFIGURE PNL 8

P27 & ENTRY PAD UPDATE

EMS INITIALIZATION PAGE E/2-1

RSI ALIGNMENT

CM RCS CHECK

SEPARATION CHECKLIST PAGE E/2-2

P61 ENTRY PREP PAGE E/2-2

P62 CM/SM SEP & PRE-ENTRY MNVR PAGE E/2-3

P63 ENTRY INIT PAGE E/2-4

EI -1 HR

UPDATE
 GO/NO-GO FOR
 PYRO ARM
 ENTRY PAD
 RECOVERY PAD
 UPLINK
 CSM S.V. & V66

EI -30 MIN

VHF-A SIMPLEX
 COMM CHECK

NOTES

SIM EXP STATUS
 (*0000)
 (00000)

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	303:00 - 304:00	14/TEC	3-409

FLIGHT PLANNING BRANCH

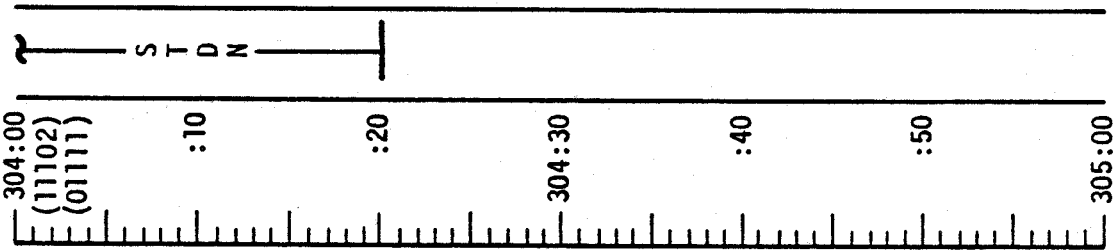
FLIGHT PLAN

NOTES

1253 CST

MCC-H

EI -15 MIN



CM/SM SEP 304:03

ENTRY ATT
(000,152,000)

EI 304:18

SPLASHDOWN 304:31

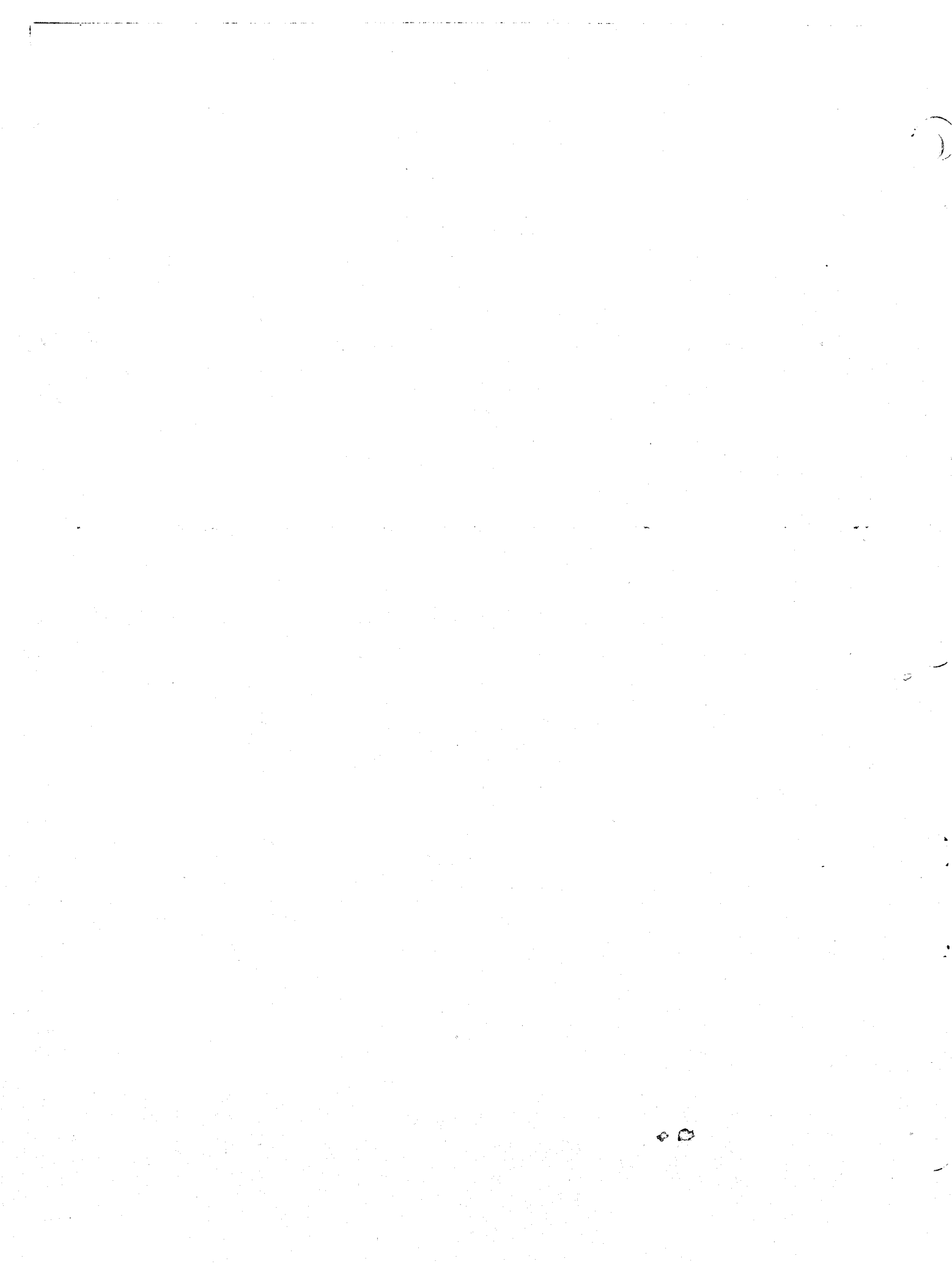
TRAJECTORY EVENTS	TIME FROM 400K FT MIN:SEC
400K FT (GET 304:18:00.5)	00:00
ENTRY S-BAND BLACKOUT	00:17
0.05G	00:29
KA-INITIATE CONSTANT DRAG	00:52
MAX HEATING RATE	01:12
RDOT = -700 FPS	01:20
PEAK G (FIRST)	01:23
SUBCIRCULAR VELOCITY	02:06
P64 TO P67	02:02
EXIT S-BAND BLACKOUT	03:36
PEAK G (SECOND)	05:32
GUIDANCE TERMINATION	06:44
DROGUE DEPLOYMENT	07:41
MAIN DEPLOYMENT	08:23
SPLASHDOWN	13:09

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	304:00 - 305:00	14/TEC	3-410

FLIGHT PLANNING BRANCH

SECTION 4 - CONSUMABLES ANALYSIS

SECTION IV



10/23/72

4-1

Mission profile dependent
8/29/72 Basic

THE SPS ANALYSIS ASSUMPTIONS
FOR THE SPS PROPELLANT ANALYSIS

1. All spacecraft weights and the sequential consumables losses were taken from the Spacecraft Operational Data Book, Amendment 127.
2. The engine I_{sp} assumed for this analysis is 314.5 seconds.
3. The 3σ dispersions are the RSS of the penalties imposed on the SPS margin by 3σ dispersions in propellant loading, mixture ratio, engine I_{sp} , maneuver ΔV , spacecraft weight, and consumable weight losses.
4. The CSM/LM weights for the J-missions have increased to an extent that, for some launch dates, the S-IVB will not have sufficient propellant reserves to compensate for a 3σ engine. Thus, in order to have a combined 3σ confidence level for the S-IVB and SPS, the S-IVB ΔV deficit is covered in the SPS propellant budget. Currently, the nominal mission does not require this allowance.
5. The ground rule for a contingency allowance is to budget for either an LM rescue or for a maneuver to avoid adverse weather conditions at entry, whichever produces the least SPS margin. The ΔV for the LM rescue allowance and the weather avoidance allowance is 600 ft/sec and 300 ft/sec, respectively. For this mission, the weather avoidance allowance produces the least SPS margin.

10/23/72

Mission profile dependent
8/29/72 Basic

APOLLO 17 SPS PROPELLANT SUMMARY

[DECEMBER 7, 1972, G.m.t., LAUNCH DATE; 72° LAUNCH AZIMUTH]

Item	Required, lb	Remaining, lb
Actual loading		40 796
Trapped and unavailable	441	40 355
Outage	60	40 295
Unbalance meter	100	40 195
Available for ΔV		40 195
Required for ΔV		
LOI (2979.9 fps)	26 143	14 052
DOI	1 497	12 555
CIRC (70.1 fps)	276	12 279
LOPC-1 (336.7 fps)	1 238	11 041
TEI (3045.7 fps)	9 446	1 595
Nominal remaining		1 595
Dispersions		
TLMC (23 fps)	263	1 332
-3 σ performance	367	965
S-IVB ΔV deficit	0	965
Margin above 3 σ		965
Available for contingencies*		965

*965 lb is equivalent to 378 fps end-if-mission reserve. Weather avoidance contingency allowance of 300 fps requires 795 lbs, which results in a margin after contingencies of 172 lbs.

SM RCS budget

Mission profile dependent

8/29/72 Basic

Ground Rules and Assumptions

1. Following transposition and docking, the S-IVB performs the evasive maneuver.
2. Two midcourse corrections (translunar) are executed as SPS burns with one MCC followed by an RCS trim.
3. One midcourse correction (transearth) is executed as an RCS burn of 5 fps.
4. Quad management is to be determined during the mission.
5. Single jet RCS control during SIM exps.
6. Couple jet RCS control during SIM off periods (major burns).
7. All maneuvering at low rate ($0.2^\circ/\text{sec}$) both docked and undocked.
8. Attitude hold deadband during SIM photography and major burns - 0.5° .
9. Attitude hold deadband at other times - 2.5° .
10. Lunar orbit usage

Sim photography	1.0 lb/hr
Rest periods	0.1 lb/hr
Other	0.5 lb/hr
11. Nominal ullages.
12. Redlines will be defined by the Flight Control Division as an aid in assuring that mission rules are not violated during the mission. They are subject to review during the mission as mission phases are completed and systems capabilities are evaluated. In the event the rescue redline is violated prior to rendezvous, lunar orbit photography activities can be curtailed to conserve propellant. The lunar orbit redline includes a nominal transearth coast phase (with all navigational sightings) plus a 3 sigma G&N TEI cutoff error MCC. If a rescue is required and the lunar orbit redline is violated prior to the nominal TEI, TEI can be performed early and navigational sighting activity curtailed during the transearth phase. The rescue redline is based on the minimized activity during the transearth phase.

Mission profile dependent
8/29/72 Basic

APOLLO 17 SM RCS ANALYSIS

Item	Required, lb	Remaining, lb
Nominal loading	- -	1338.4
Initial M/R outage	15.6	- -
Total trapped	26.4	- -
Gaging inaccuracy	56.0	- -
Deliverable		1240.4
Nominal usage		
Translunar coast	177.5	- -
Lunar orbit	395.9	- -
Transearth coast	99.4	- -
Total	672.8	- -
Nominal remaining usable		567.6

10/23/72

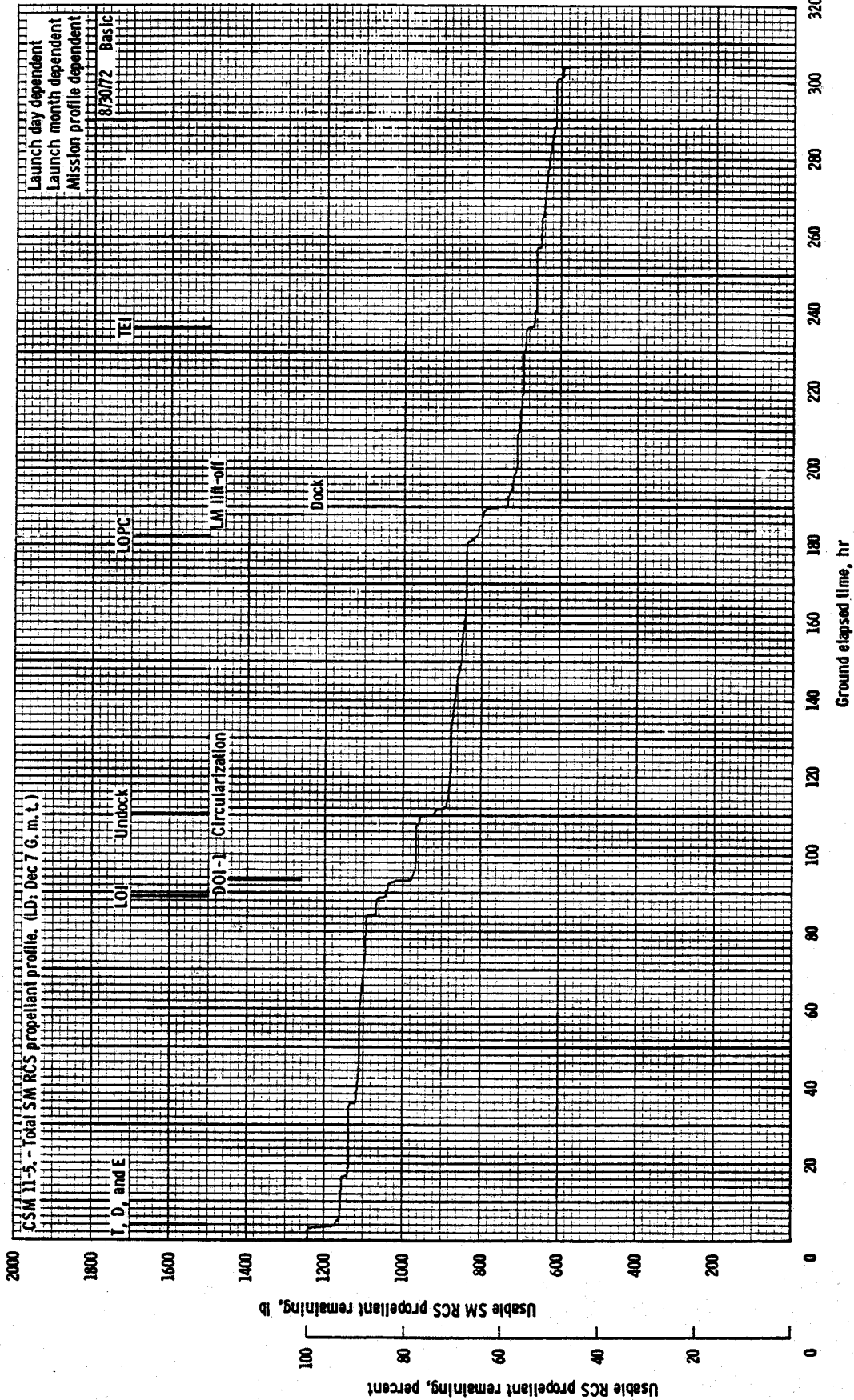
Mission profile dependent
8/29/72 Basic

SM RCS PROPELLANT TRANSLATION COST

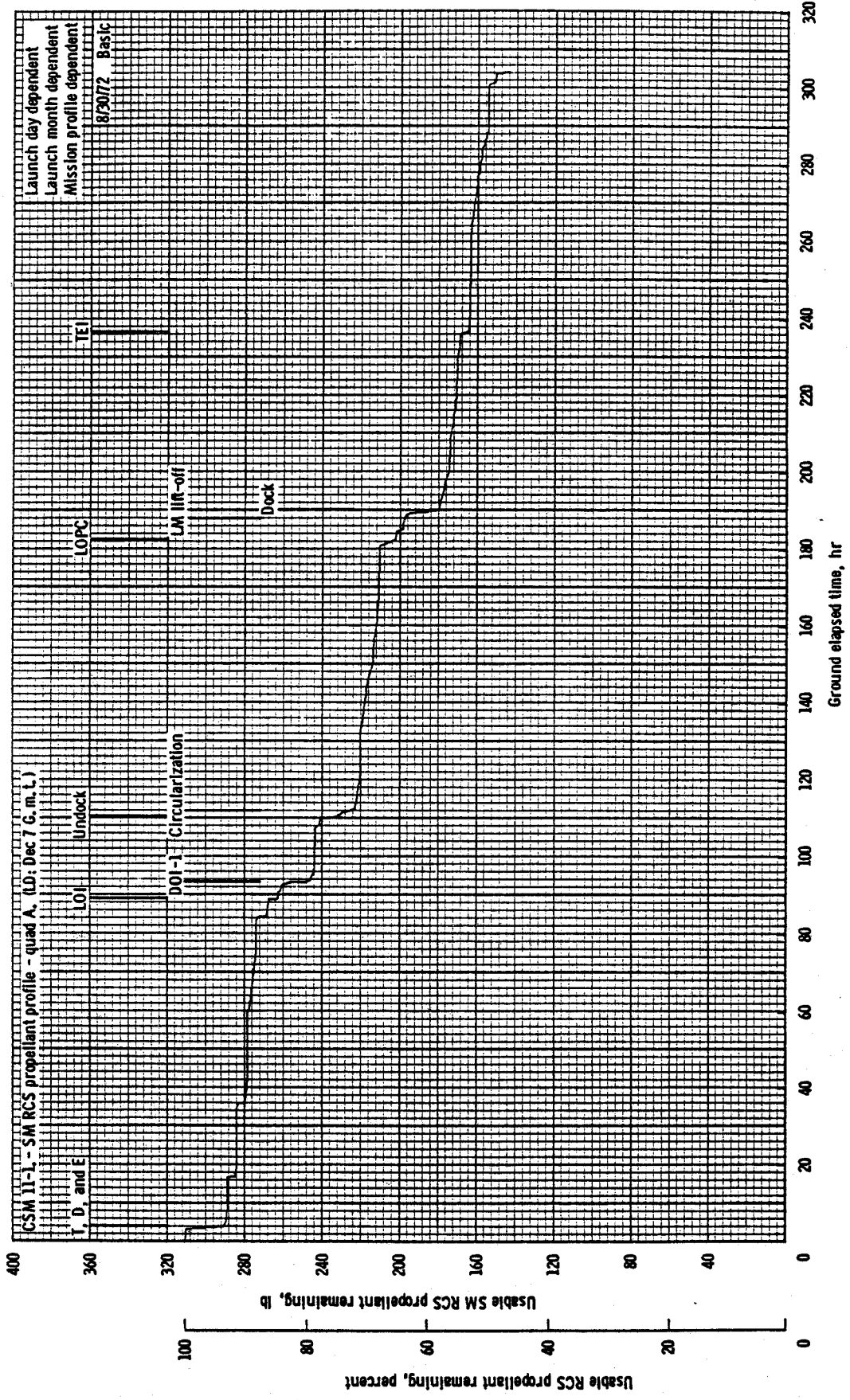
APOLLO 17

(CSM 114/LM-12)

Mission phase	Typical S/C weight (lb)	+X 4 jet G&C (1b/fps)	+X 2 jet A/C G&C (1b/fps)	+X 2 jet A/C SCS (1b/fps)	+X 2 jet B/D G&C (1b/fps)	+X 2 jet B/D SCS (1b/fps)	+Y or +Z G&C (1b/fps)
Translunar	103 000	11.7	12.0	13.3	12.4	13.3	--
Lunar orbit docked	75 000	8.6	8.7	9.3	8.8	9.3	--
Lunar orbit undocked	36 500	4.0	4.1	4.7	4.3	4.7	5.0
Transearth	26 900	3.1	3.2	3.8	3.4	3.8	3.5



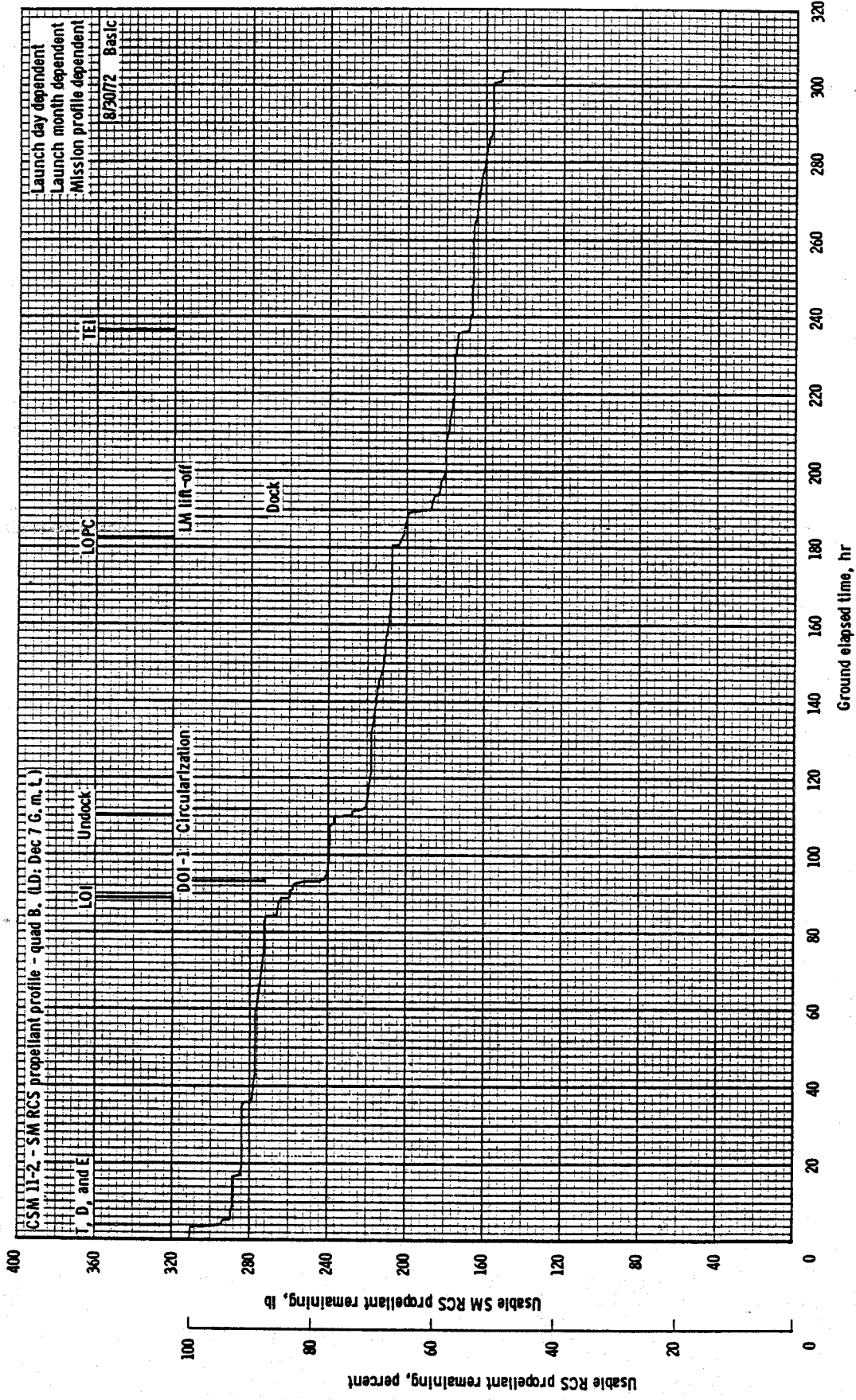
Total SM RCS propellant usage profile.



Launch day dependent
Launch month dependent
Mission profile dependent
8/30/72 Basic

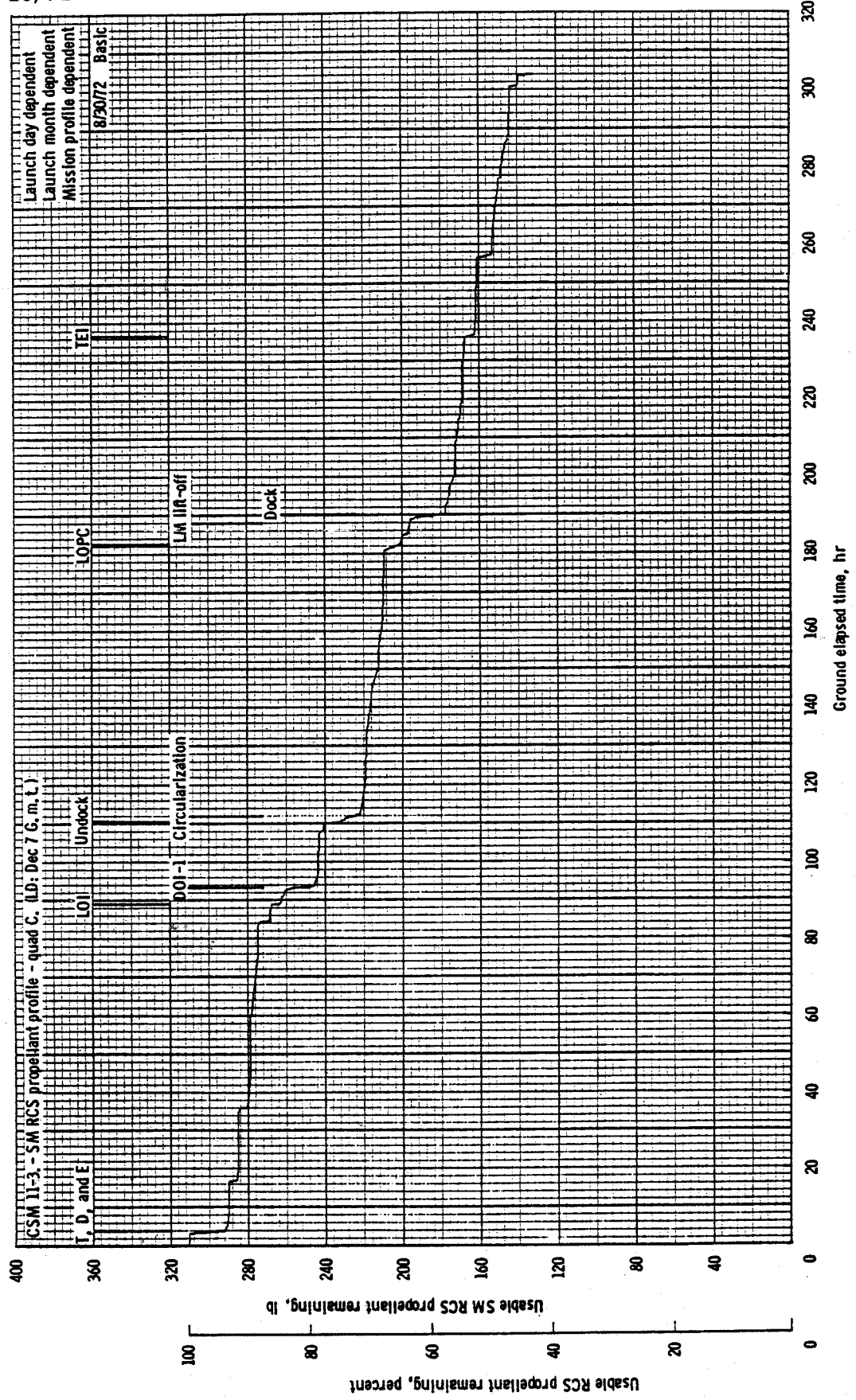
CSM II-1 - SM RCS propellant profile - quad A. (LD: Dec 7 G. m. L.)
T, D, and E

SM RCS propellant profile - quad A.

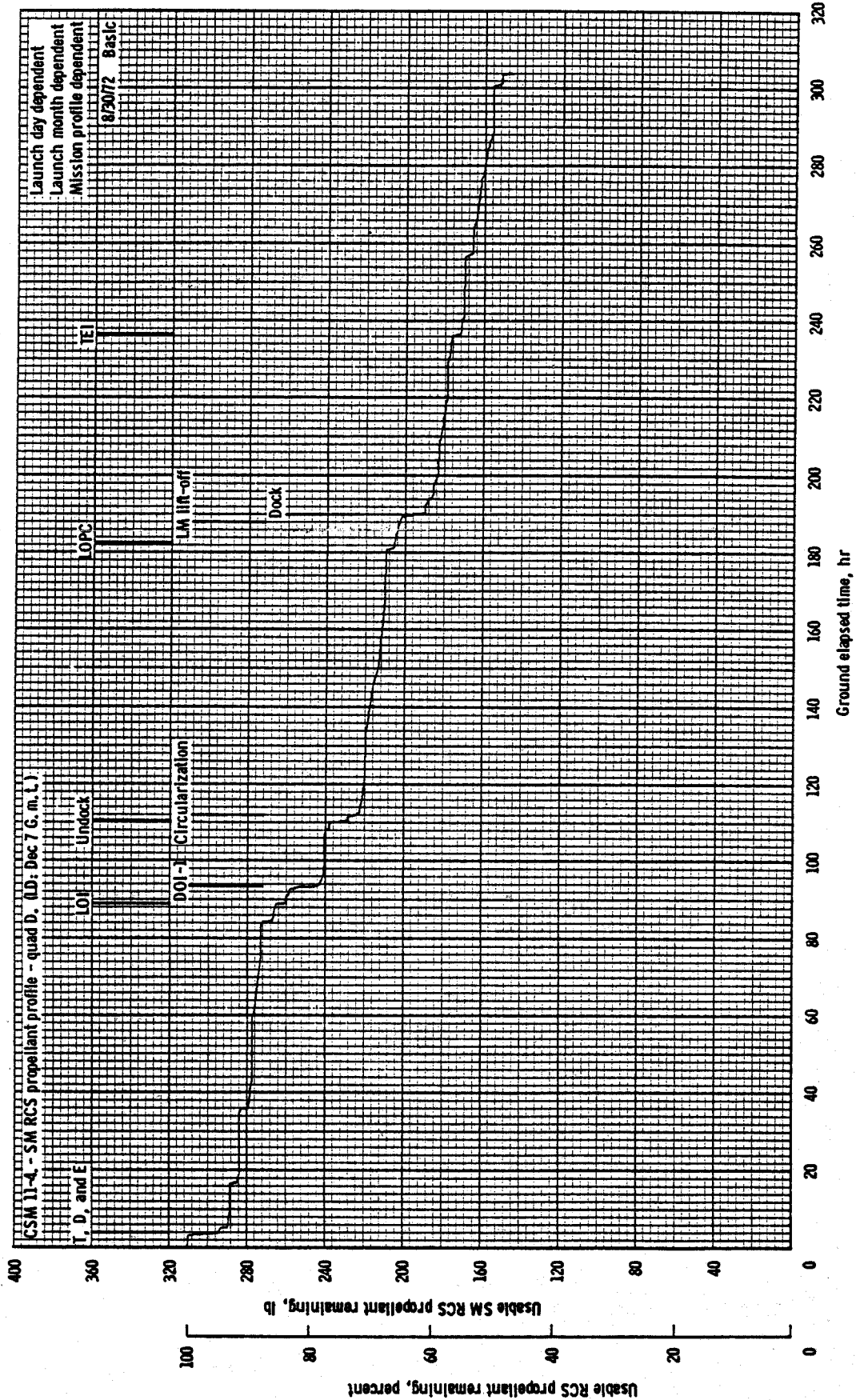


SM RCS propellant profile - quad B.

10/23/72



SM RCS propellant profile - quad C.



SM RCS propellant profile - quad D.

10/23/72

4-11

Mission profile dependent
8/29/72 Basic

CM RCS PROPELLANT SUMMARY

Item	Propellant required, lb	Propellant remaining, lb
Loaded	--	233.2
Trapped	36.4	196.8
Available for mission planning . . .	--	196.8
Nominal usage*	54.7	142.1
Nominal remaining	--	142.1

*CM RCS propellant usage is for dual ring operation
with DAP control

Mission profile dependent
8/30/72 Basic

GROUND RULES AND ASSUMPTIONS FOR THE CSM CRYOGENICS

1. Three O_2 and H_2 tanks are available.
2. Fuel cell purging is included in the EPS requirements.
3. No cryogenic venting was assumed in flight.
4. The EPS hydrogen consumption rate (\dot{H}_2) (lb/hr) = $0.00257 \times I_{fc}$
when I_{fc} is the total fuel cell current.
5. The EPS oxygen consumption rate (\dot{O}_2) (lb/hr) = $7.936 \times \dot{H}_2$.
6. No allowance for the SM enhancement battery is assumed.

Mission profile dependent
8/30/72 Basic

7. The following tank depletion schedules are being used:

CRYO MANAGEMENT SCHEDULE

GET (hrs:min)	Tank numbers				
	Oxygen htrs ^a		H ₂ tank 1, 2 htrs, tank 3 fan		
	Auto	Off	Auto	Manual	Off
0:00	1, 2	3	1, 2	3	
4:17	1, 2, 3				
5:05	1, 2	3			
8:40	3	1, 2	3		
15:10					1, 2
39:05	1, 2, 3				
39:55	3	1, 2			3
70:00			1, 2	3	
^b 84:40	1, 2	3			
^c 256:50	1, 2, 3				
259:23	1, 2	3			

^aO₂ tank 1 and 2 heaters may be required if the LM pressure equalization at approximately 39:00 hrs GET causes a pressure decay in the O₂ tanks.

^bSwitch to 50-watt heaters in O₂ tanks 1, 2 at this time.

^cSwitch to 100-watt heaters in O₂ tanks 1, 2 and 3 at this time.

The CSM consumables summary (table 5-I) shows that a significant H₂ and O₂ margin exists at the end of the mission. This is reflected in the H₂ and O₂ usage profiles shown in figures 5-1 and 5-2. However, these curves do not include dispersions.

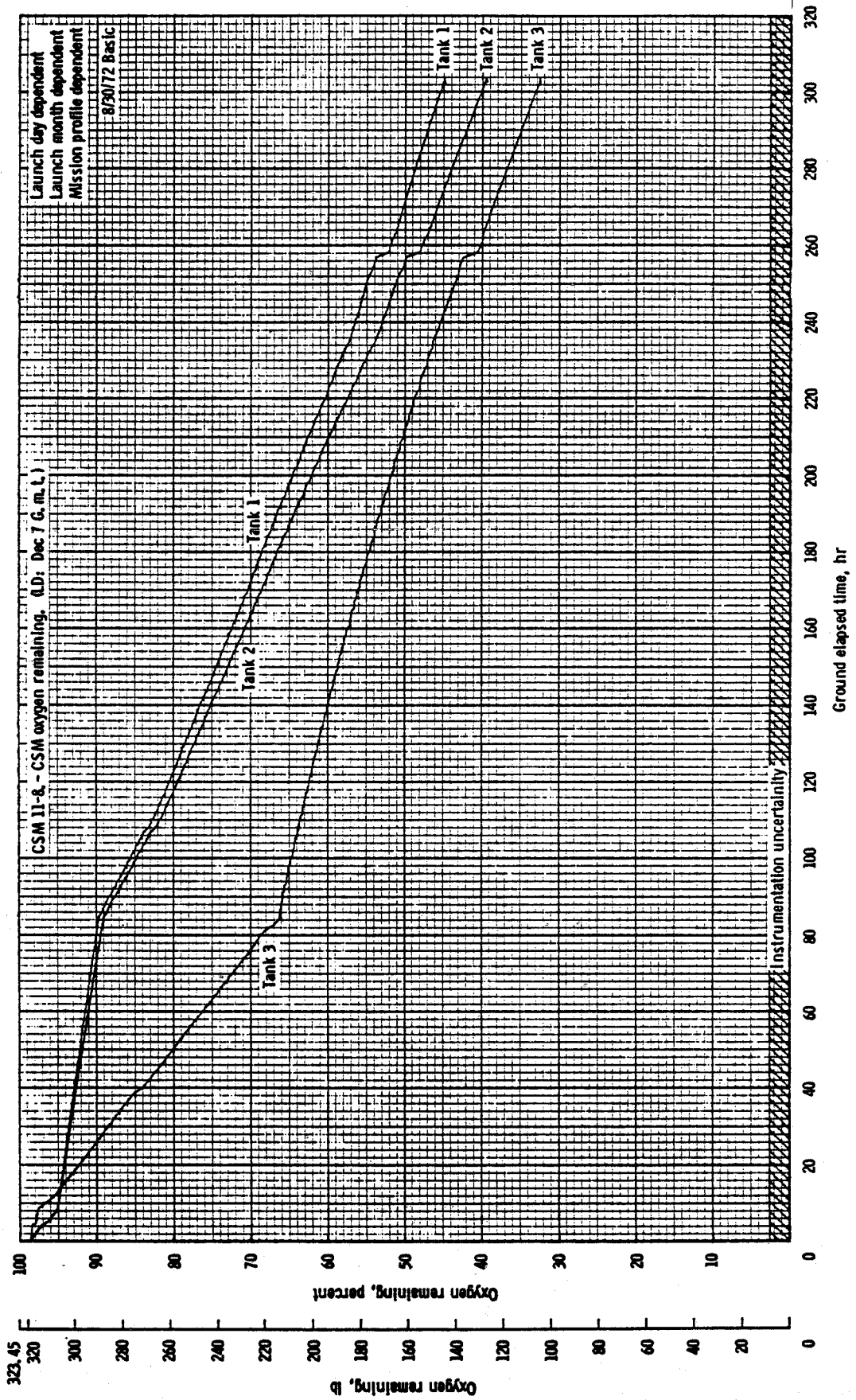
In summary, the nominal mission requirements can be satisfied with the existent consumables.

Mission profile dependent
8/30/72 Basic

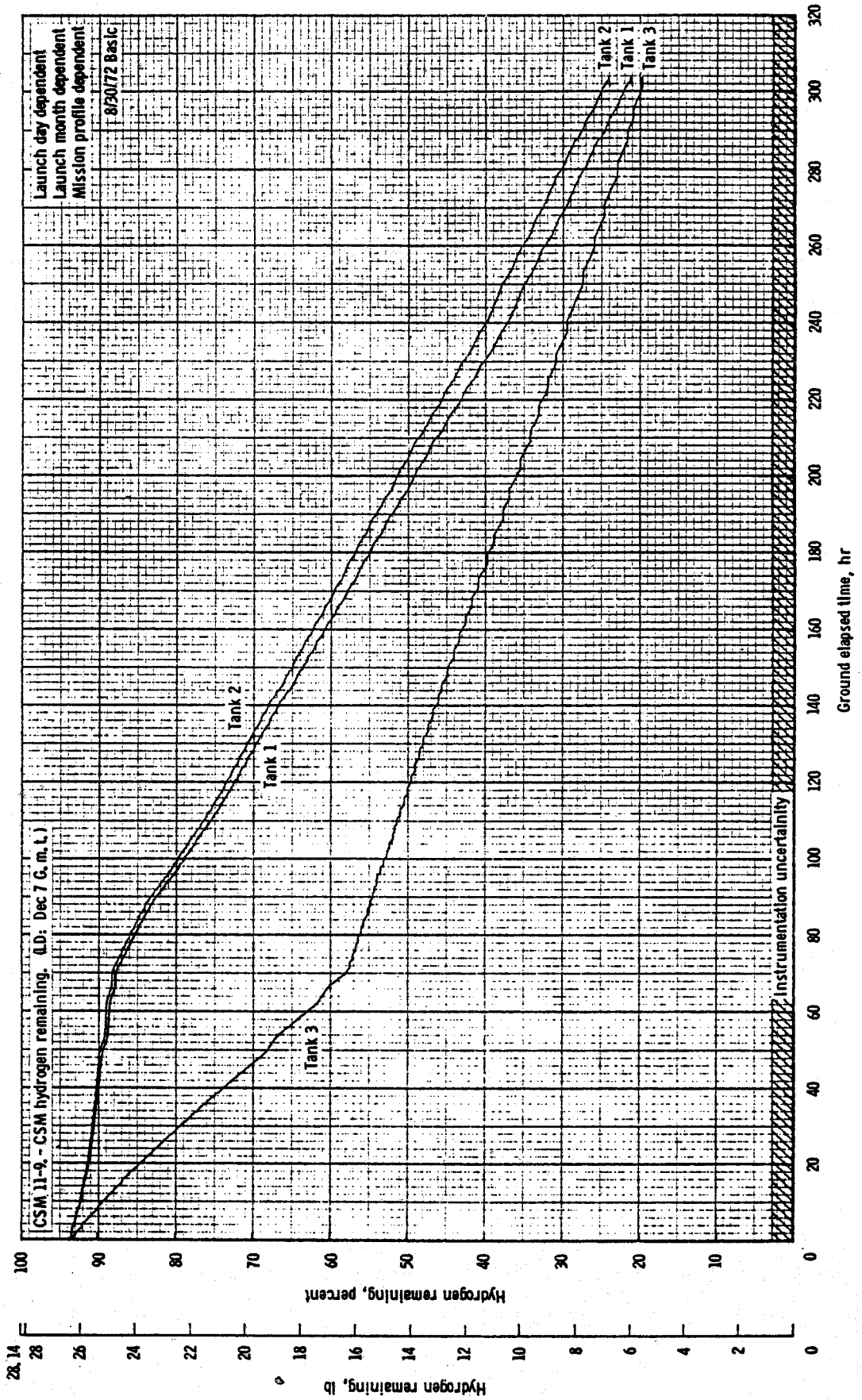
APOLLO 17 CRYOGENIC SUMMARY

	H ₂ lbs	O ₂ lbs
Planning allowance		
Total loaded	87.9	990.3
Less residual	3.5	19.8
Less instrumentation error	<u>2.3</u>	<u>26.0</u>
Available for mission planning	82.1	944.5
Prelaunch requirement*	5.7	44.8
Flight requirement		
EPS (including fuel cell purge)	60.5	479.3
ECS (including cabin purge + EVA)	--	85.7
LM pressurization	<u>--</u>	<u>11.9</u>
	60.5	576.9
Nominal reserves		
EPS uncertainty (2.5%)	1.5	12.0
ECS uncertainty (.08 #/hr)	<u>--</u>	<u>24.3</u>
	1.5	36.3
Total requirement	67.7	658.0
Margin T = 0 (fill/launch)	14.4	286.5

*Supplied by KSC.



CSM oxygen remaining.



CSM hydrogen remaining.

10/23/72

4-17

Mission profile dependent
8/29/72 Basic

ASSUMPTIONS FOR THE DPS ANALYSIS

The propellant loading is based on the optimization of the fuel and oxidizer balance that was computed from the LM-12 engine data. The ΔV requirements were coordinated with the Landing Analysis Branch. The ΔV requirement for lunar descent differs from that in the operational trajectory because of differences in the inert vehicle weight, plus an allowance for 155 seconds from low gate to touchdown.

The 3σ dispersions represent total propellant cost based on 3σ uncertainties in propellant loading, trapped propellant, specific impulse, ΔV , separation weight, non- ΔV consumables weight, mixture ratio, and physical location of the low level sensor.

A flying time of 2 minutes and 35 seconds below low gate will be called a nominal requirement.

The following data were used:

- a. The separation weight is $36\,733.5 \pm 39.3$ pounds.
- b. Integrated average I_{sp} is 305.1 ± 1.8 seconds.
- c. Mixture ratio is $1.5999 \pm .012$.
- d. Non- ΔV consumables from separation to PDI are 110.7 pounds.

Mission profile dependent
8/29/72 Basic

DPS PROPELLANT SUMMARY

Item	Total propellant, lb	Hover time, sec
Loaded	19 562.9	--
Trapped and unavailable	-100.9	--
Outage	-16.6	--
Available for ΔV	19 445.4	--
Required for ΔV (155-sec flying time from low gate, $\Delta V = 7099.3$ fps)	-18 820.0	--
Remaining	625.4	67
Dispersion (-3σ)	-280.9	--
Pad	344.5	37
Operational allowances		
Low-level (5 sec, 26.5 fps)	-47.2	--
Abort reserve (20 sec, 106 fps)	-187.5	--
Margin (hover time before abort decision point)	109.8	12

Mission profile dependent
8/29/72 Basic

ASSUMPTIONS FOR THE APS ANALYSIS

The propellant loading is based on the optimization of the fuel and oxidizer balance that was computed from the LM-12 engine data. The ΔV requirements were coordinated with the Landing Analysis Branch. The ΔV requirement for the lunar ascent differs from that in the Operational Trajectory because of differences in the inert vehicle weight.

The APS analysis accounts for an APS TPI, engine valve-pair malfunction, and balanced couples. The following data were used in determining the APS propellant requirements for Apollo 17.

- a. $I_{sp} = 309.9 \pm 3.5$ seconds.
- b. Mixture ratio = $1.598 \pm .027$.
- c. Lift-off weight = $10\ 917.1 \pm 38.7$ pounds.

Mission profile dependent
8/29/72 Basic

APS PROPELLANT SUMMARY

Item	Total propellant, lb
Loaded	5257.5
Trapped and unavailable	-51.9
Outage	-12.2
Available for ΔV	5193.4
Required for Ascent (6062.2 fps)	-4974.2
Remaining	219.1
Required for APS TPI ^a (54.8 fps)	-32.6
Remaining	186.5
Dispersions (-3σ)	-67.6
Pad	118.9
Operational allowances	
Engine valve-pair malfunction ($\Delta MR = +.0097$ or $-.0183$)	-22.8
Balanced couples on	-39.2
Half-degree out of plane (18 fps)	-10.7
Margin	46.3

^aThe total TPI ΔV is 76.6 fps. It is assumed that 22 fps is obtained by a 10-sec, 4-jet ullage.

10/23/72

4-21

Mission profile dependent
8/29/72 Basic

ASSUMPTIONS AND GROUND RULES FOR THE LM RCS ANALYSIS

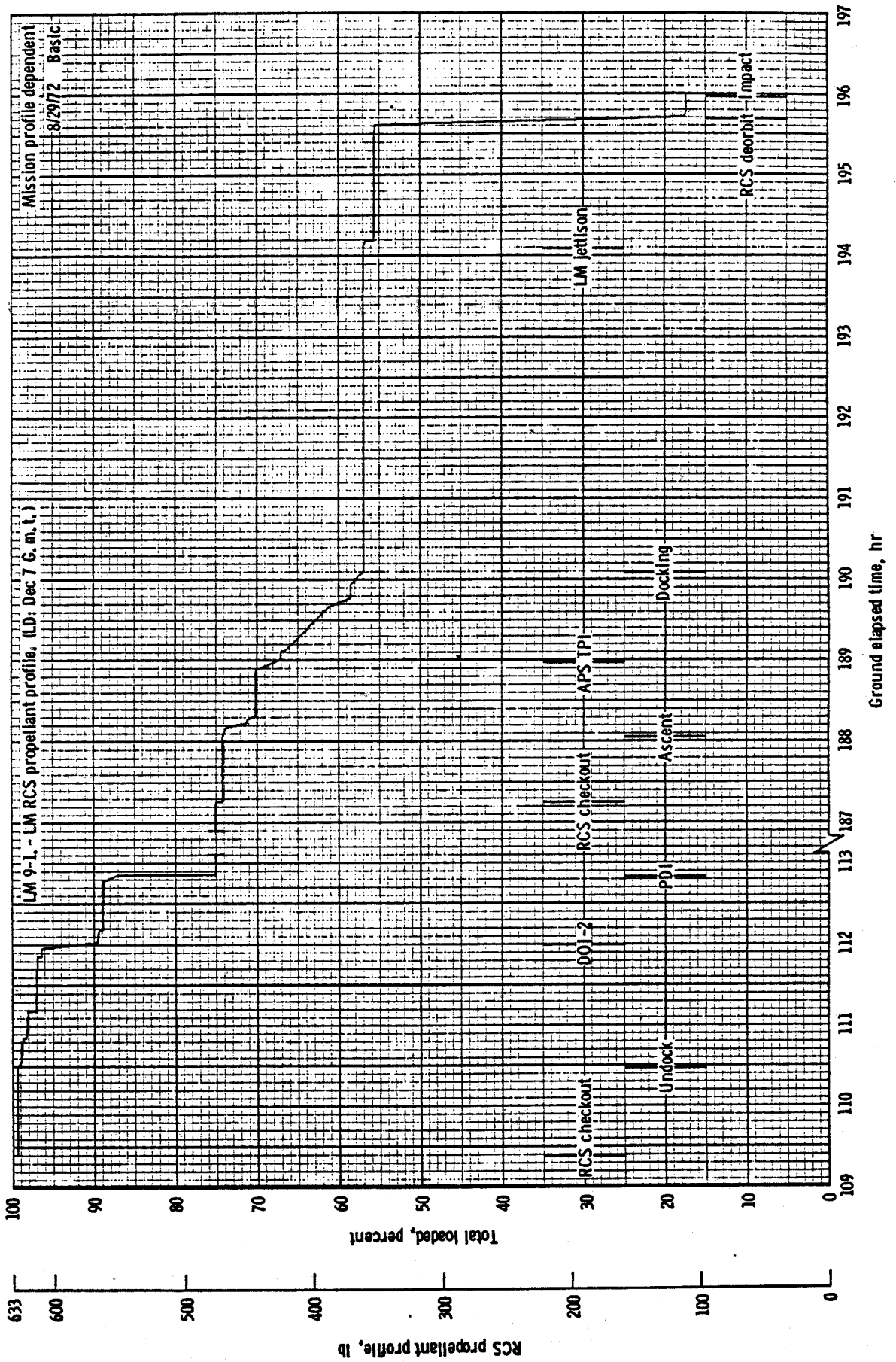
1. Data for the LM RCS engine performance and propellant requirements were obtained from the SODB, Volume II, and from postflight analyses of Apollo 9-16 missions.
2. The analysis assumes an insertion trim or RCS tweak burn (nominally zero) of 20 fps.
3. It is assumed there will be a 5-fps RCS trim following the APS TPI maneuver.

Mission profile dependent
(LD: Dec 7 G.m.t.)

LM RCS PROPELLANT LOADING AND USAGE SUMMARY

Item	Required, lb	Remaining, lb
Loaded		631.2
Trapped	38.0	593.2
Gaging inaccuracy and loading tolerance	43.5	549.7
Mixture ratio uncertainty	17.0	532.7
Usable		532.7
Nominal usage through lunar landing	158.2	374.5
Nominal usage from landing through docking	114.2	260.3
Nominal usage from docking through impact	249.4	10.9
Usable propellant remaining		10.9

10/23/72



10/23/72

Mission profile dependent
8/28/72 Basic

ASSUMPTIONS FOR THE LM EPS ANALYSIS

- a. Energy available from the descent batteries is 2075 A-h and from the ascent batteries is 592 A-h.
- b. Energy unusables caused by lack of continuous STDN coverage for the descent and ascent stages are zero.
- c. Energy unusables caused by TM inaccuracies for the descent and ascent stages were 74 and 18 A-h, respectively. The new descent battery current measurement uncertainty of 0.5 amperes per battery was used.
- d. Energy unusables caused by checklist deviations (dispersion) for the descent and ascent stages were 34 and 6 A-h, respectively. This dispersion is obtained by calculating 2 percent of the energy used.
- e. In accordance with the Flight Plan, the PGNCs was in standby mode from surface powerdown until 3.7 hours before powerup.
- f. The RCS heaters were assumed to have a 100 percent duty cycle for 15 minutes after initial activation and then to decrease to an 18.3 percent duty cycle until undocking. For the remainder of the mission, except for lunar surface stay, the duty cycle was 2.6 percent. The duty cycle during lunar surface stay was 3.9 percent.
- g. The inverter was operated throughout the mission.
- h. The CDR and LMP forward window heaters were assumed not to be needed.
- i. The six MESA heaters have a total power rating of 150 watts. The power required by the heaters during the period LM activation to touchdown was assumed to be 5.6 watts. From touchdown until 1 hour into EVA-2, the heating were assumed to draw 27.5 watts. The power required until the beginning of EVA-3 was 20 watts. The MESA heaters were turned off at that point.
- j. TV power is supplied by the LM during the first hour of EVA-1. For the remainder of EVA-1 and the other EVA's, the TV will be powered by the lunar communications relay unit (LCRU).
- k. The liquid cooled garment pump was operated before each EVA for 10 minutes.

10/23/72

4-25

Mission profile dependent
8/28/72 Basic

ASSUMPTIONS FOR THE LM EPS ANALYSIS - Concluded

1. The S-band power amplifier was cycled as dictated by the time line.
- m. The portable utility lights were assumed to be off throughout the mission.
- n. In accordance with the Flight Plan, the floodlights were turned off at surface powerdown, and on again at powerup. The overhead and forward floodlights were not used.
- o. The short (M=1) rendezvous was considered nominal.
- p. At the beginning of the analysis, it was assumed that a total of 10 A-h had been used from the descent batteries between the period starting 30 minutes before launch and ending at the conclusion of transposition and docking.

Mission profile dependent
8/28/72 Basic

DESCENT STAGE EPS SUMMARY

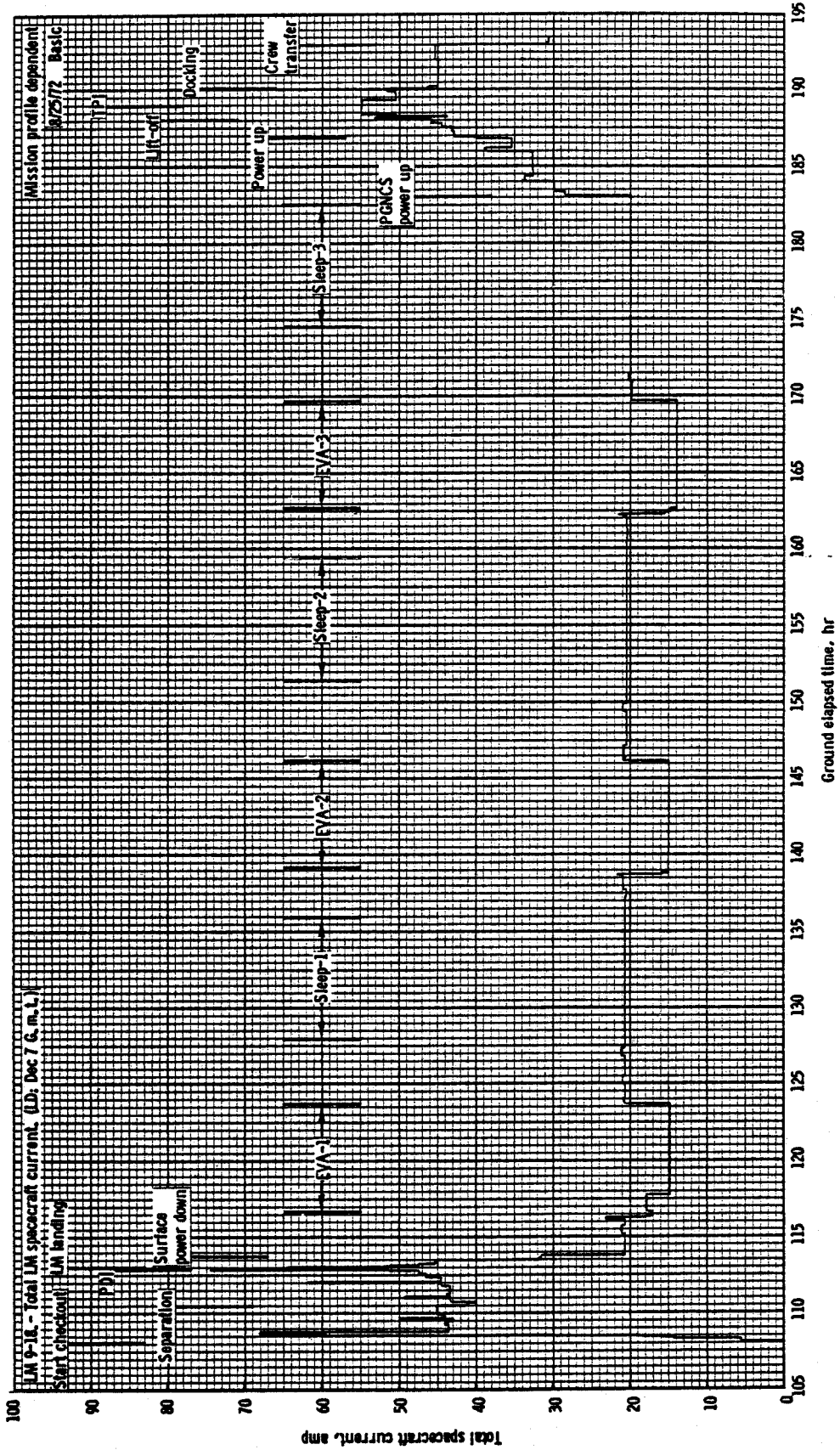
Item	A-h required	A-h remaining
Initial capacity	--	2075
Total unusables	108	1967
Required through touchdown	219	1748
Required for surface stay	1470	278
Total usable margin	--	278

ASCENT STAGE EPS SUMMARY

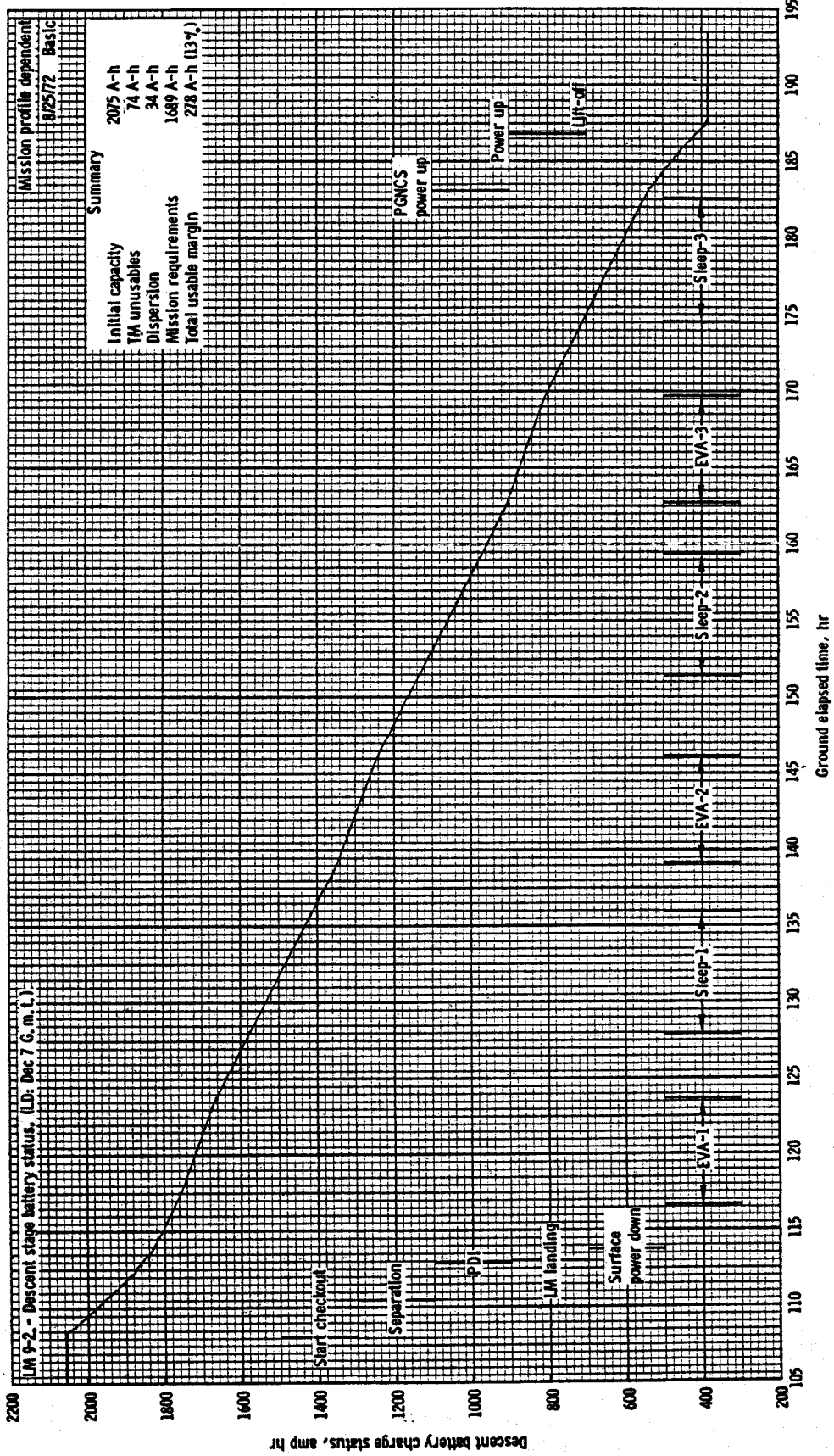
Item	A-h required	A-h remaining
Initial capacity	--	592
Total unusables	24	568
Required through docking	150	418
Required through crew transfer	284	284

10/23/72

4-27



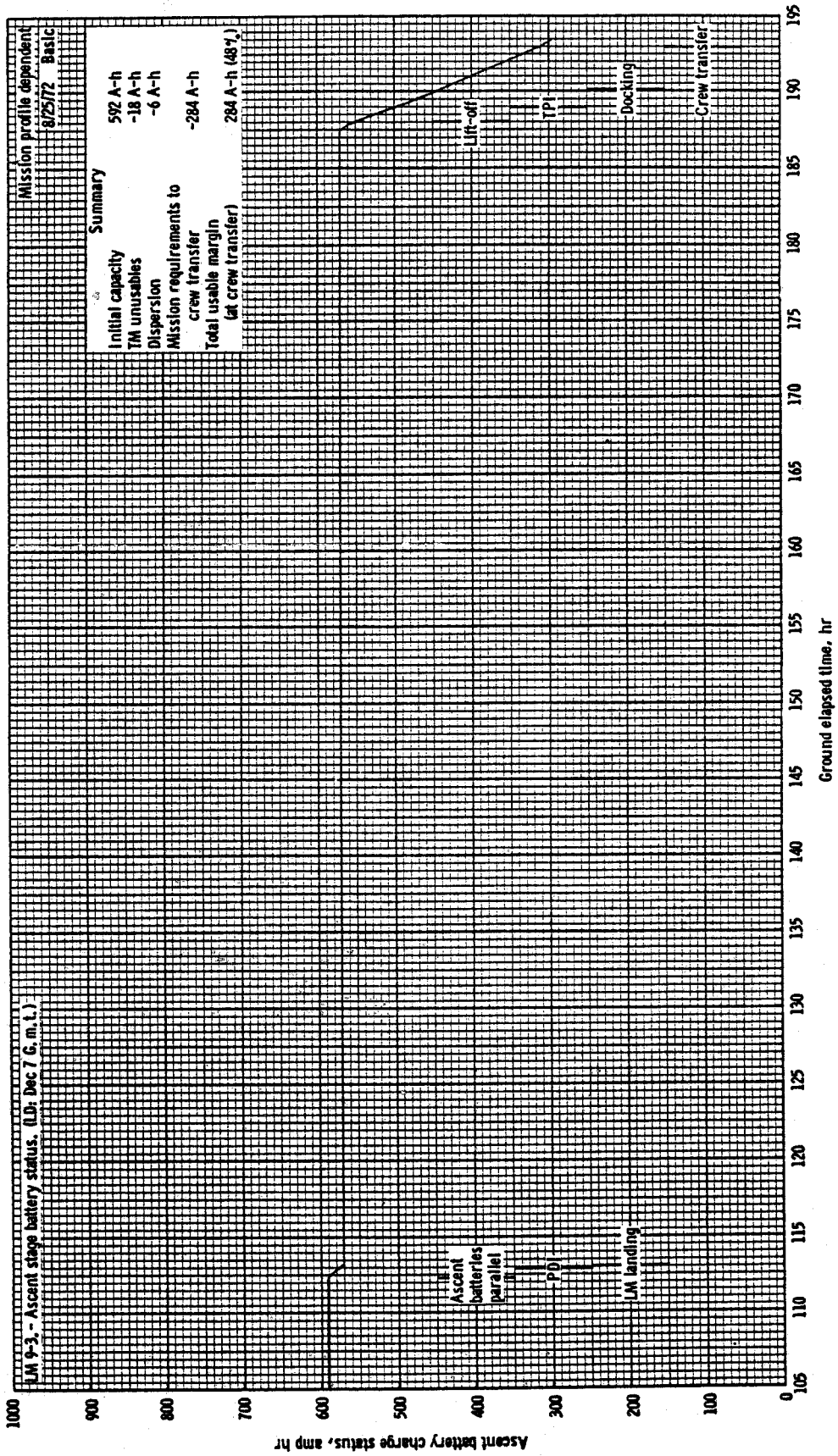
Apollo 17 total LM spacecraft current.



Apollo 17 descent electrical energy remaining.

10/23/72

4-29



Apollo 17 ascent electrical energy remaining.

Mission profile dependent
8/28/72 Basic

LM ECS ASSUMPTIONS

a. The oxygen analyses were calculated using a cabin leak rate of 0.06 lb/hr based on previous Apollo postflight analyses.

b. Metabolic rates were varied using the final flight plan and table 4.3-II of SODB Vol. II.

c. Metabolic oxygen consumed was calculated by $(1.643 \times 10^{-4} \times \text{lb/Btu})$ (metabolic rate, Btu/hr).

d. The cabin regulator check and the suit integrity check were assumed to require 0.5 pound of oxygen.

e. The cabin was pressurized five times with 5.5 pounds required for each pressurization except the last two which required 5.8 pounds.

f. The dispersion in the oxygen profile was calculated as 5 percent of the nominal oxygen requirement.

g. The PLSS refills required 47.0 pounds of water and 5.4 pounds of oxygen.

h. The sublimator fill required 2.23 pounds.

i. The drink bags required 8.0 pounds of water.

j. Water lost through crew micturition was 0.11 lb/hr per man.

k. Water required for thermal control was calculated by dividing the total spacecraft heat load by 1040 Btu/lb.

l. The dispersion in the water profile was calculated as 5 percent of the nominal usage.

m. The descent oxygen tanks were loaded to 2610.0 psi at 70.0°F.

Mission profile dependent
9/1/72 Basic

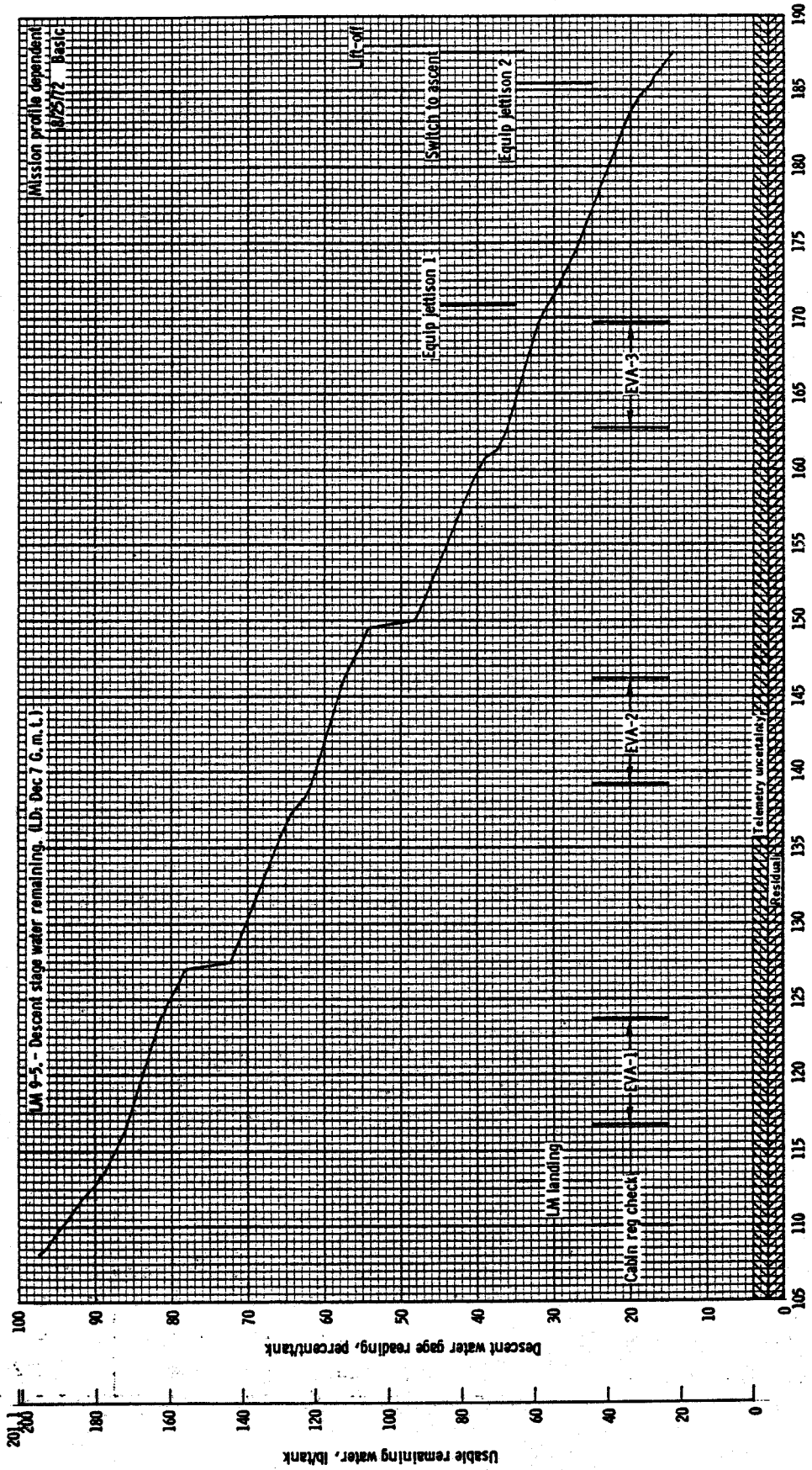
LM ECS SUMMARY

(a) Water

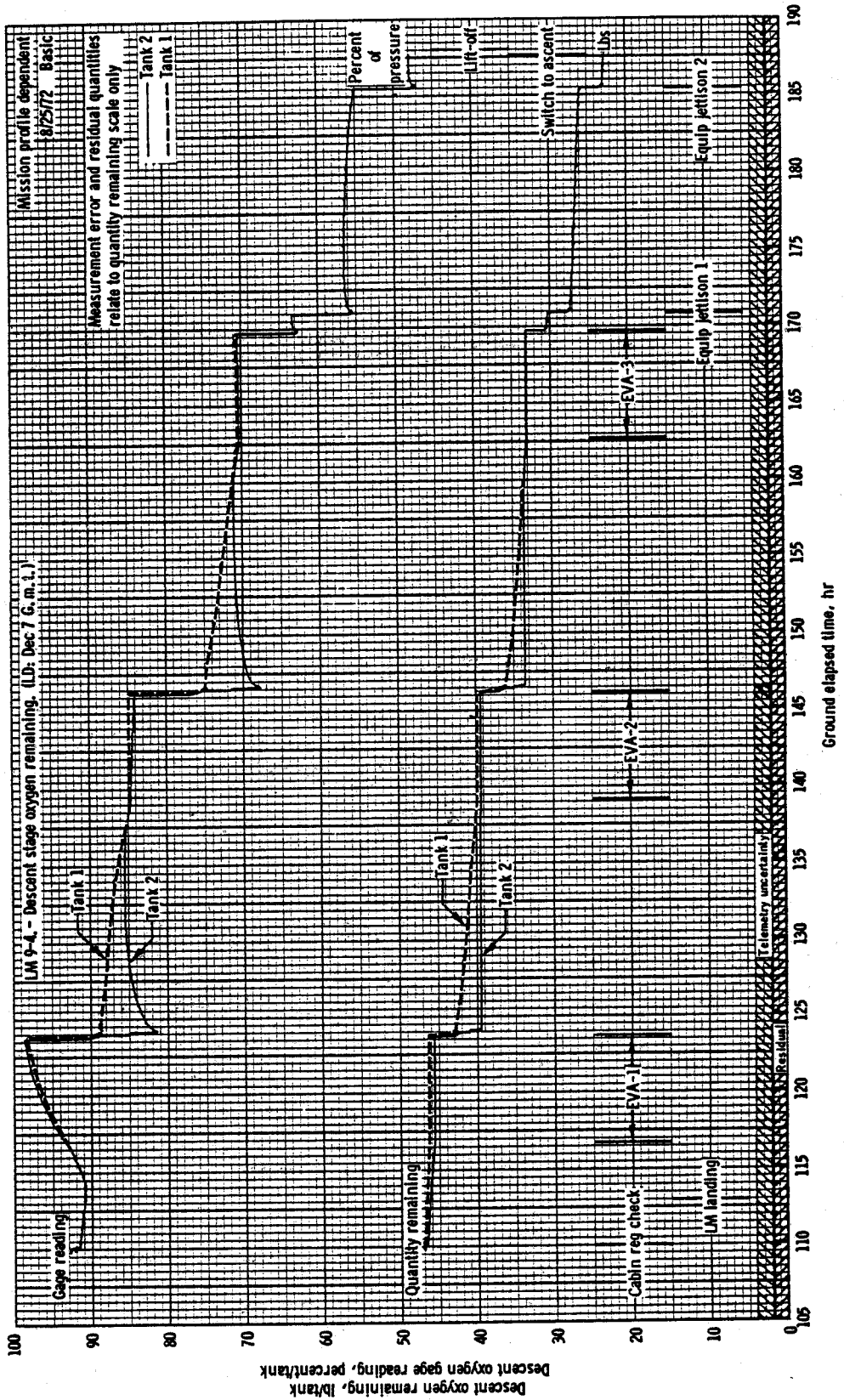
Description	Descent, 1b	Ascent, 1b
Loaded	419.0	85.0
Sampling	11.0	0
Residual	8.4	1.7
Telemetry uncertainty	8.4	7.5
Loading uncertainty	3.0	1.8
Available for mission	388.2	74.0
Required to lunar landing	28.1	0
Required to lunar lift-off	319.2	0
Required to LM/CSM docking	0	17.2
Required to LM close-out	0	15.1
Remaining in tanks	40.9	41.7
Dispersion	17.4	1.6
Margin	23.5	40.1

(b) Oxygen

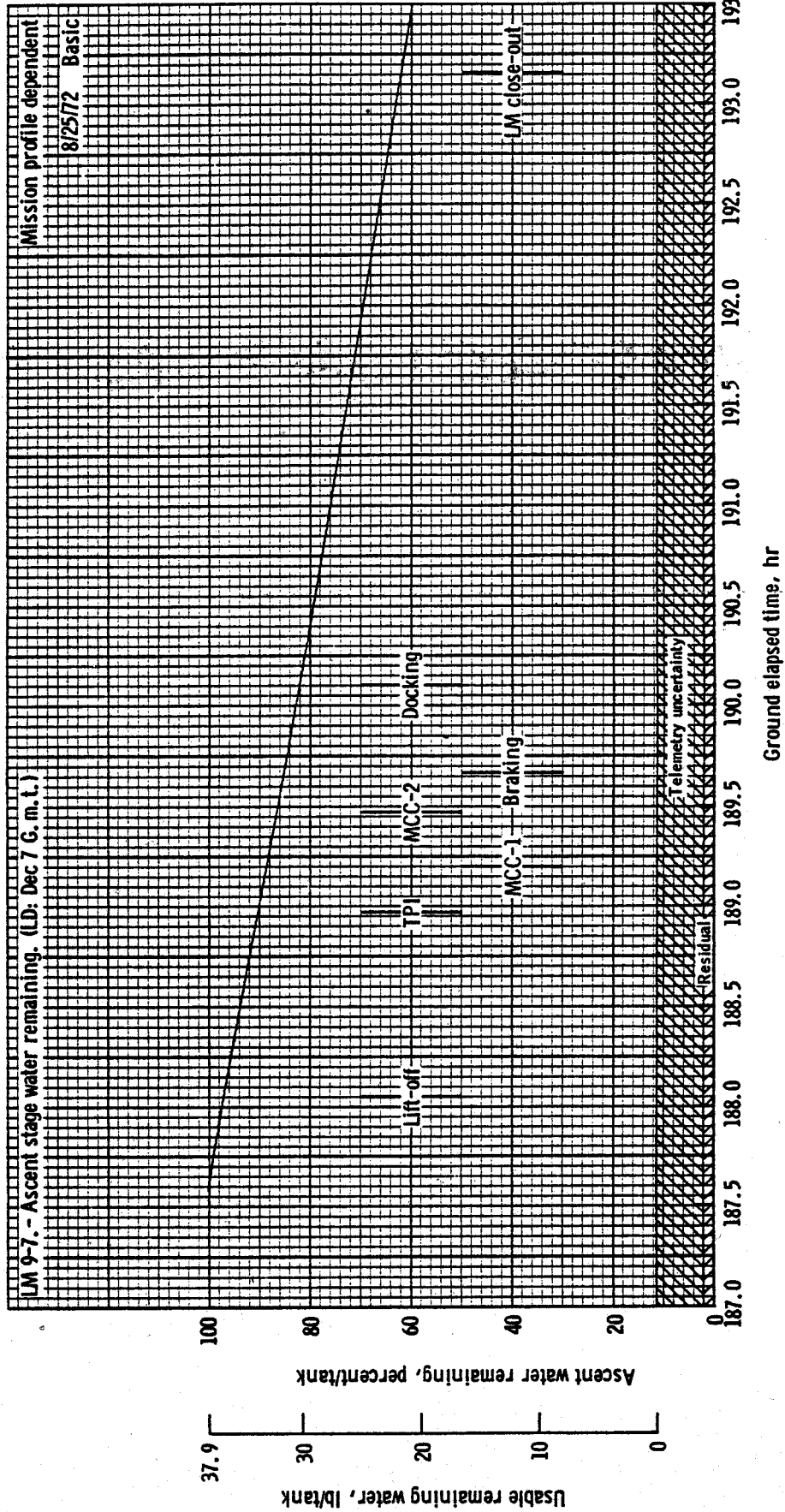
Description	Descent, 1b	Ascent 1, 1b	Ascent 2, 1b
Loaded	93.8	2.4	2.4
Residual	1.6	0.1	0.1
Measurement uncertainty	2.2	0.1	0.1
Available for mission	90.0	2.2	2.2
Required to lunar landing	1.3	0	0
Required to lunar lift-off	47.5	0	0
Required to LM/CSM docking	0	0.6	0
Required to LM close-out	0	0.1	0
Remaining in tank	41.2	1.5	2.2
Dispersion	2.4	0.1	0
Margin	38.8	1.4	2.2



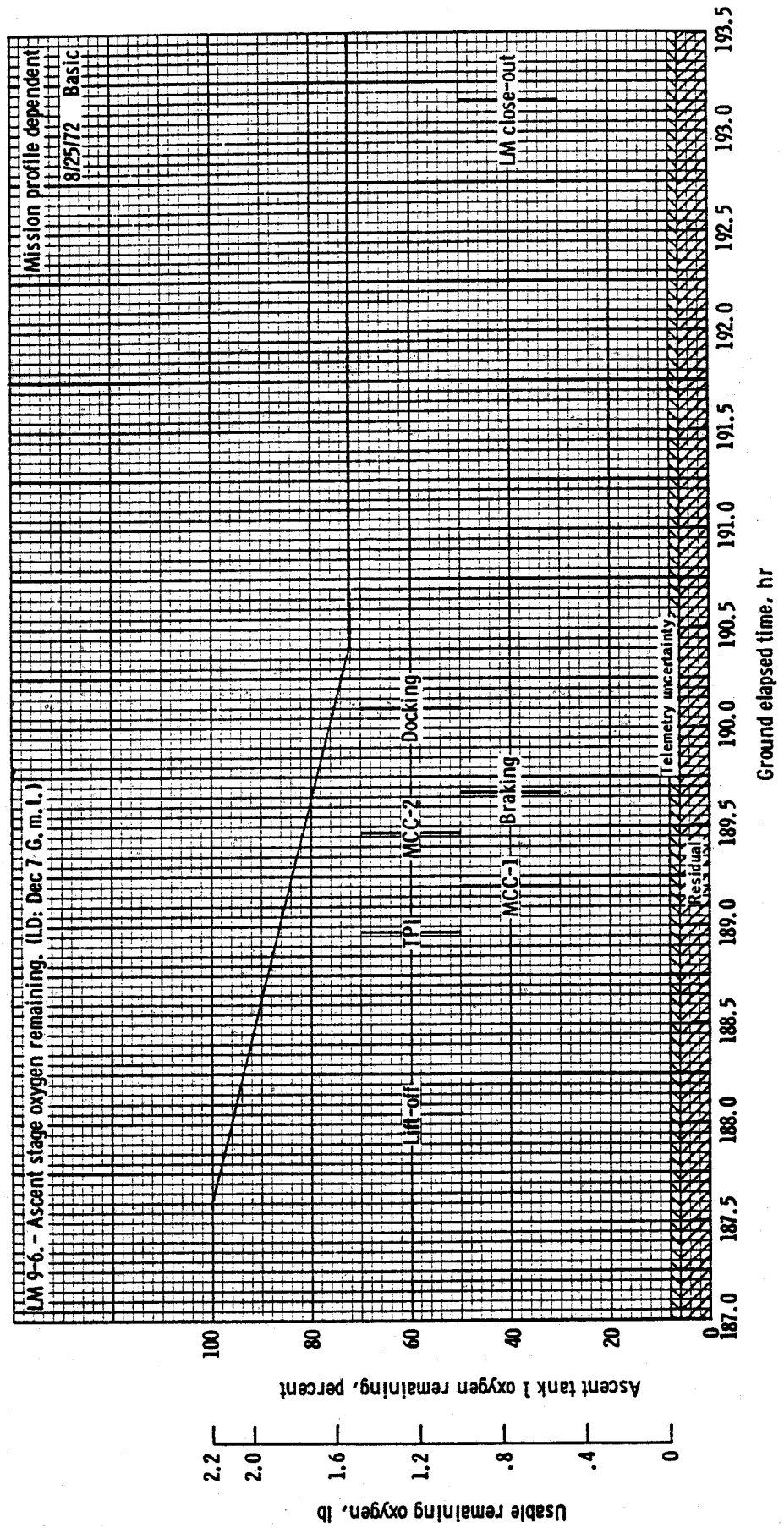
10/23/72



Descent stage oxygen remaining.



10/23/72

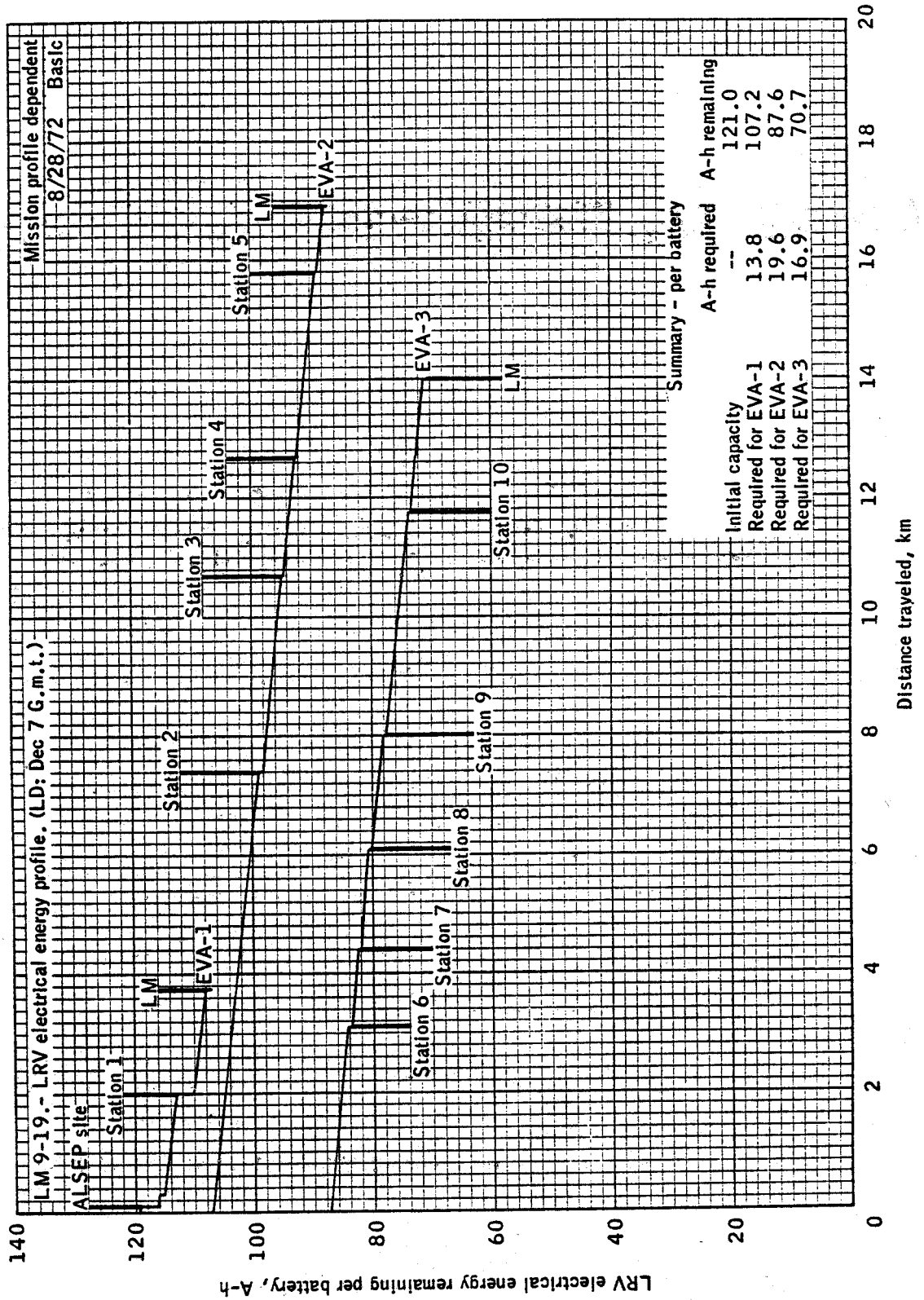


Ascent tank 1 oxygen remaining.

Mission profile dependent
8/28/72 Basic

ASSUMPTIONS FOR THE LRV EPS ANALYSIS

- a. The energy available from each of the two batteries is 121 A-h.
- b. No unusables or uncertainties are considered in the budget.
- c. Slopes were derived from the Apollo 17 landing site form line map.
- d. Terrain types and stop times were derived from the traverse data package.
- e. The MSFC soil model L-3 was used.
- f. The vehicle speed was 8 km/hr except where mobility conditions dictated lower speeds.
- g. The traction drive system was off during stops longer than 5 minutes.
- h. The navigation and caution systems were operated throughout each traverse.
- i. Electrical power required by the LCRU during EVA-1 was supplied by LRV batteries. While driving, the LCRU was in the PMI/WB mode. During all station stops the LCRU mode of operation was FM/TV.
- j. The vehicle weight was 1470 pounds.
- k. A wander factor of 1.1 is included in the analysis.
- l. The distance traveled is the map or straight line distance between points.
- m. An effective alpha of 0.40 was assumed for all cool-down periods.



LRV electrical energy profile.



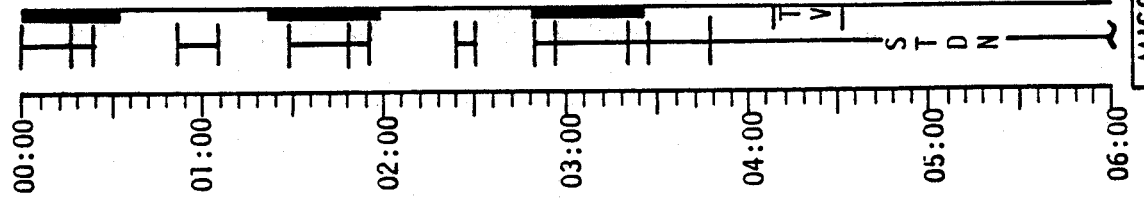
SECTION 5 - SUMMARY TIMELINE

CONFIDENTIAL

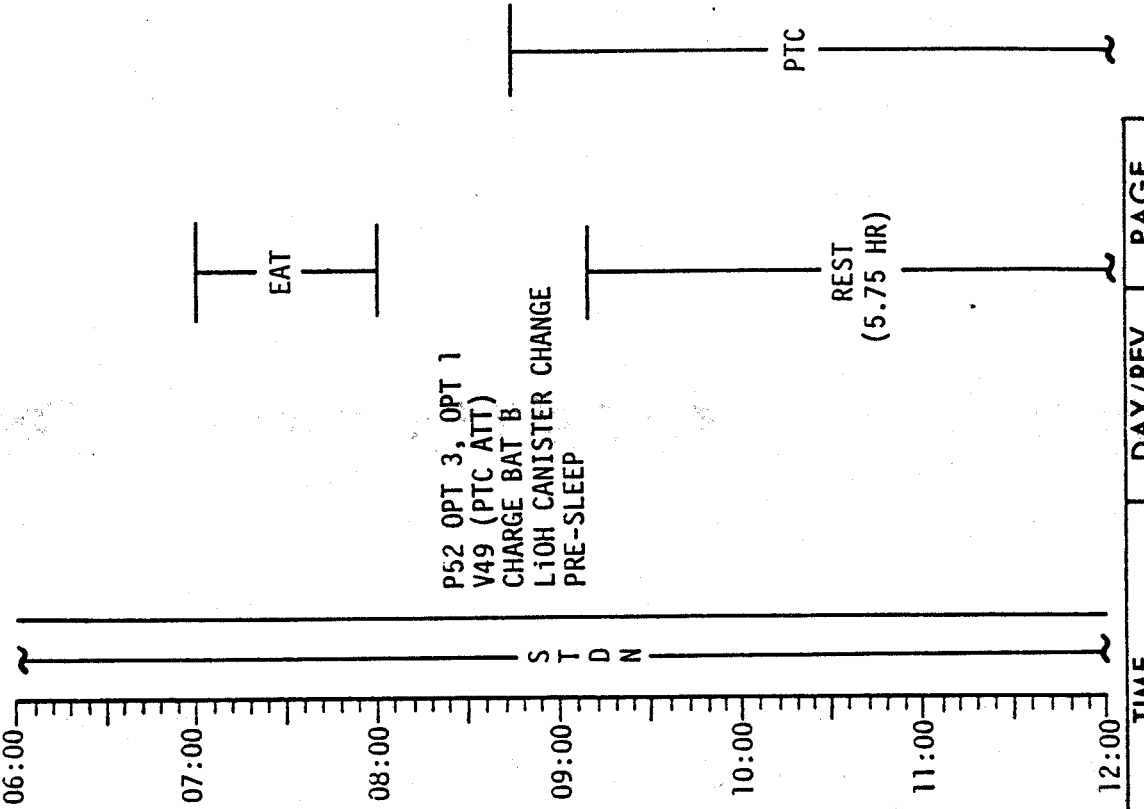
FLIGHT PLAN

CSM

LIFT-OFF 2053 CST, DEC. 6, 1972



CSM

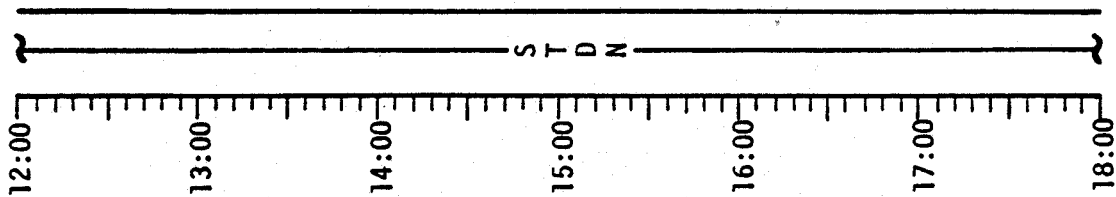


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	00:00 - 12:00	1/E0-TLC	5-1

FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM



REST
(5.75 HR)

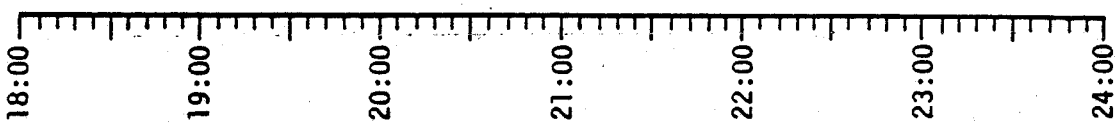
PTC

EAT

P52 OPT 3
V49 (OPTICS CAL ATT)

P23 Cislunar
NAV (4 STARS)

STDN



EAT

CREW EXERCISE

L10H CANISTER CHG
P52 OPT 3

EAT

PTC

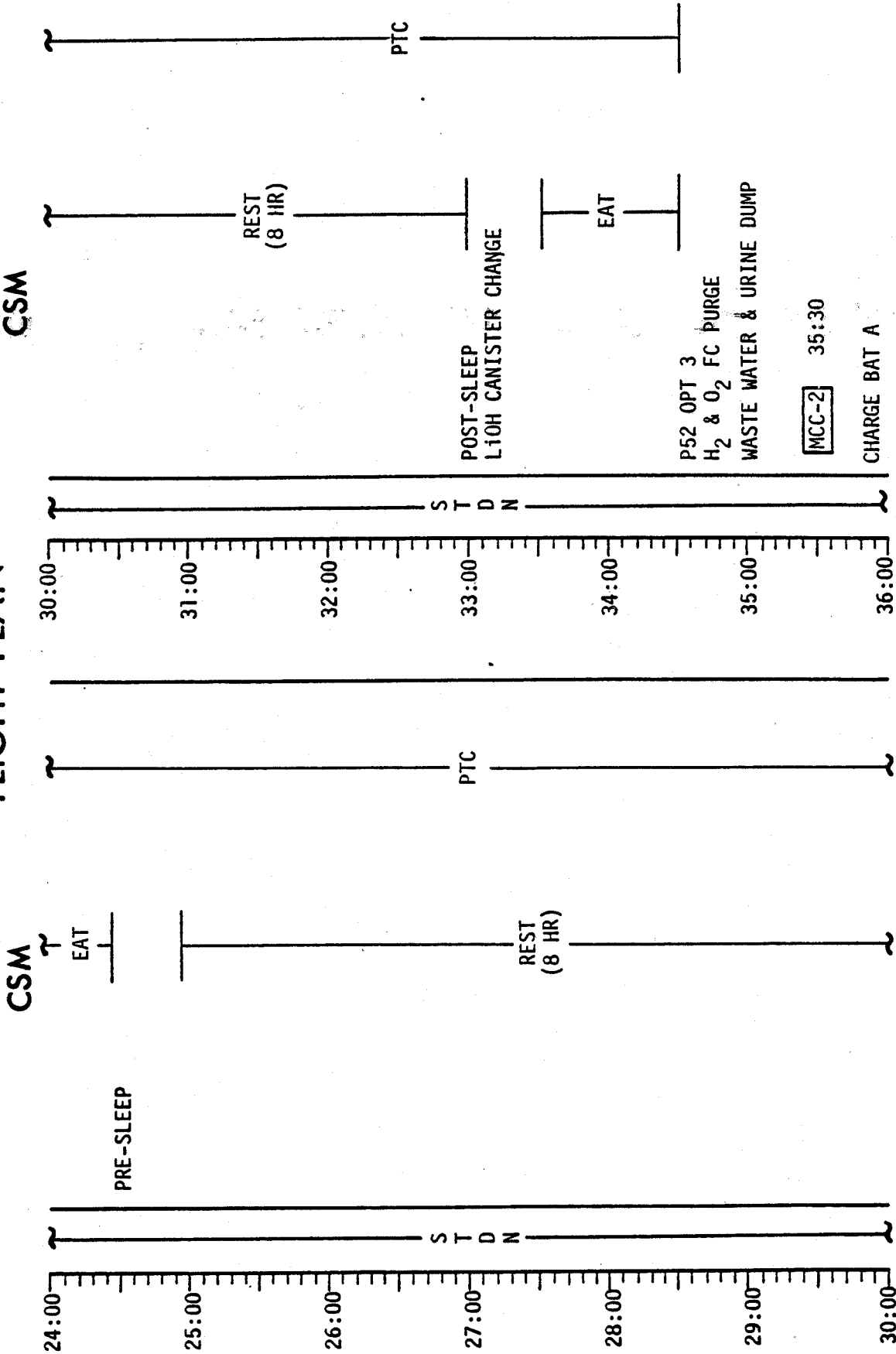
CSM

P23
CHARGE BAT A
WASTE WATER & URINE DUMP
PC & MC FILM CYCLING
O₂ FC PURGE
V49 (PTC ATT)
EARTH PHOTOS

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	12:00 - 24:00	1-2 /TLC	5-2

FLIGHT PLANNING BRANCH

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	24:00 - 36:00	2-3/TLC	5-3

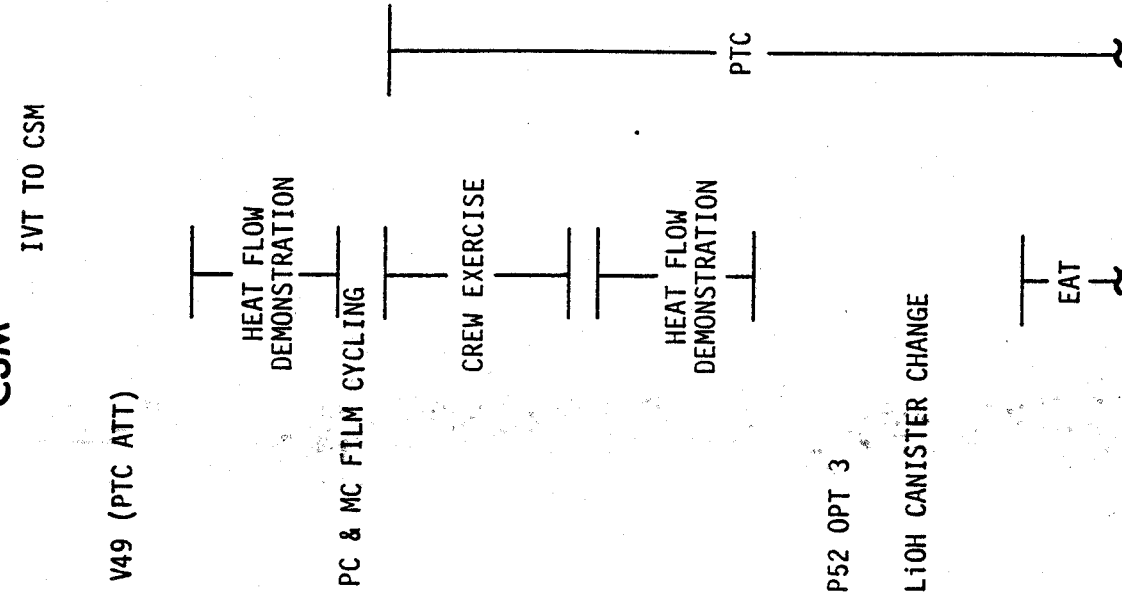
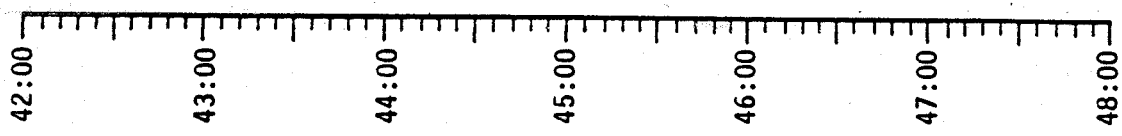
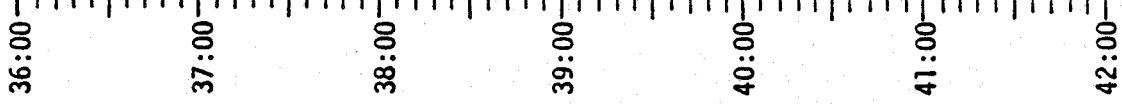
FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM

LM

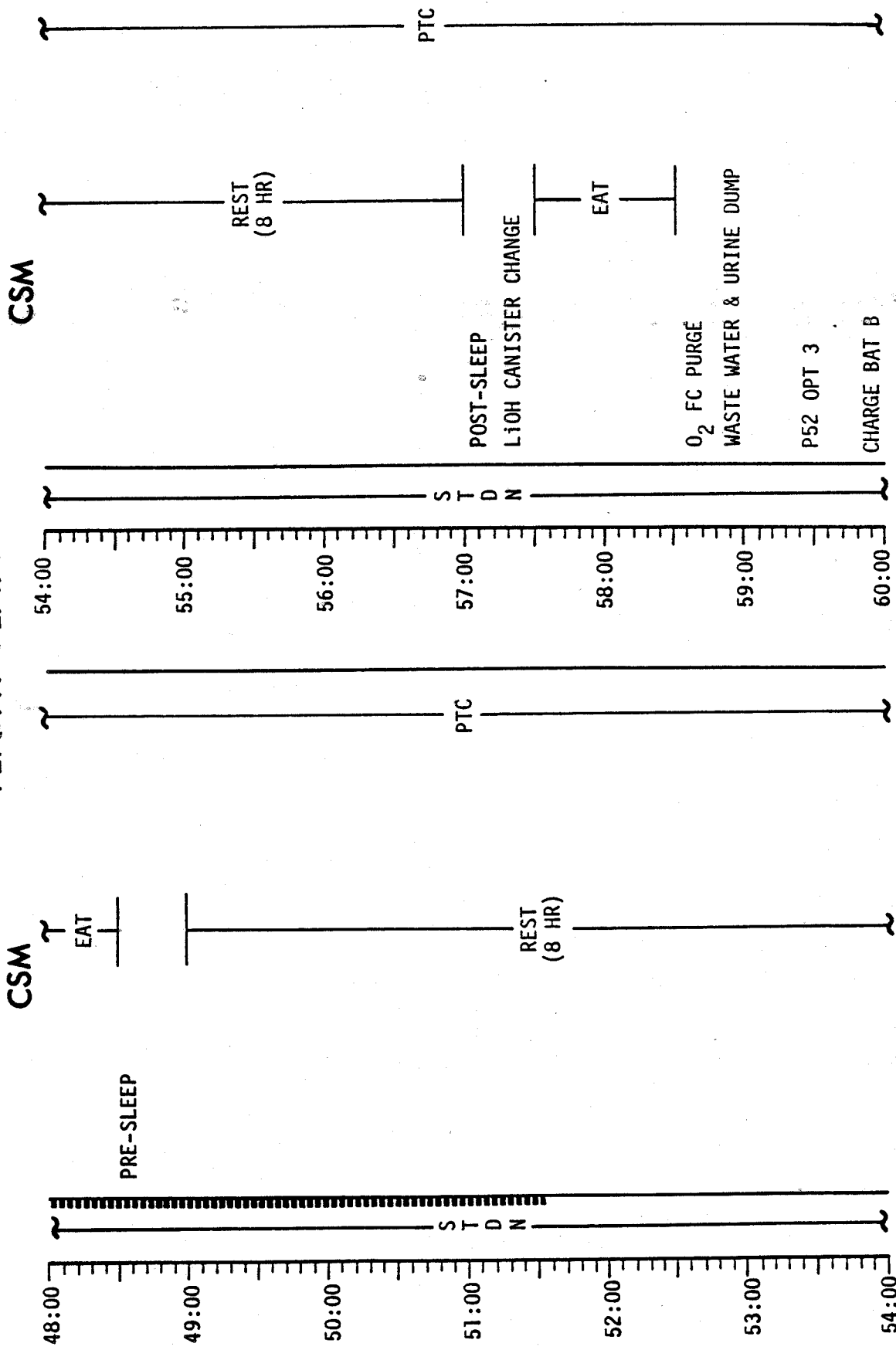
CSM



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	36:00 - 48:00	3 /TLC	5-4

FLIGHT PLANNING BRANCH

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	48:00 - 60:00	3-4 /TLC	5-5

FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM

IVT PREP
V49 (LM CHECKOUT ATT)
PRESSURIZE LM
IVT TO LM

E-MEMORY DUMP

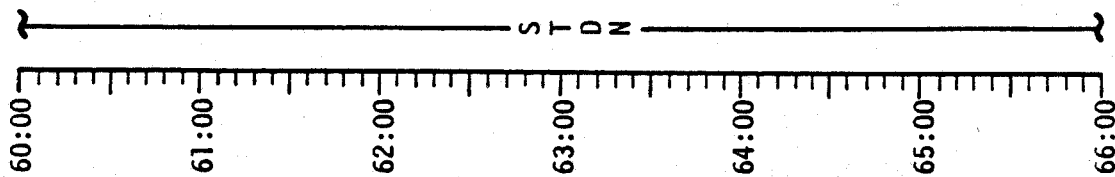
IVT TO CSM

PGA TEST

V49 (PTC ATT)

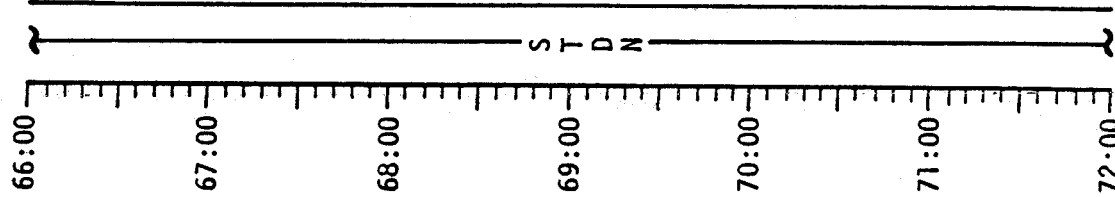
PTC

EAT



LM

PTC
LM TLM
CHECKOUT



CSM

UPDATE SATURN L/O TIME
(IF REQ'D)

ALFMED

PC & MC FILM CYCLING

P52 OPT 3

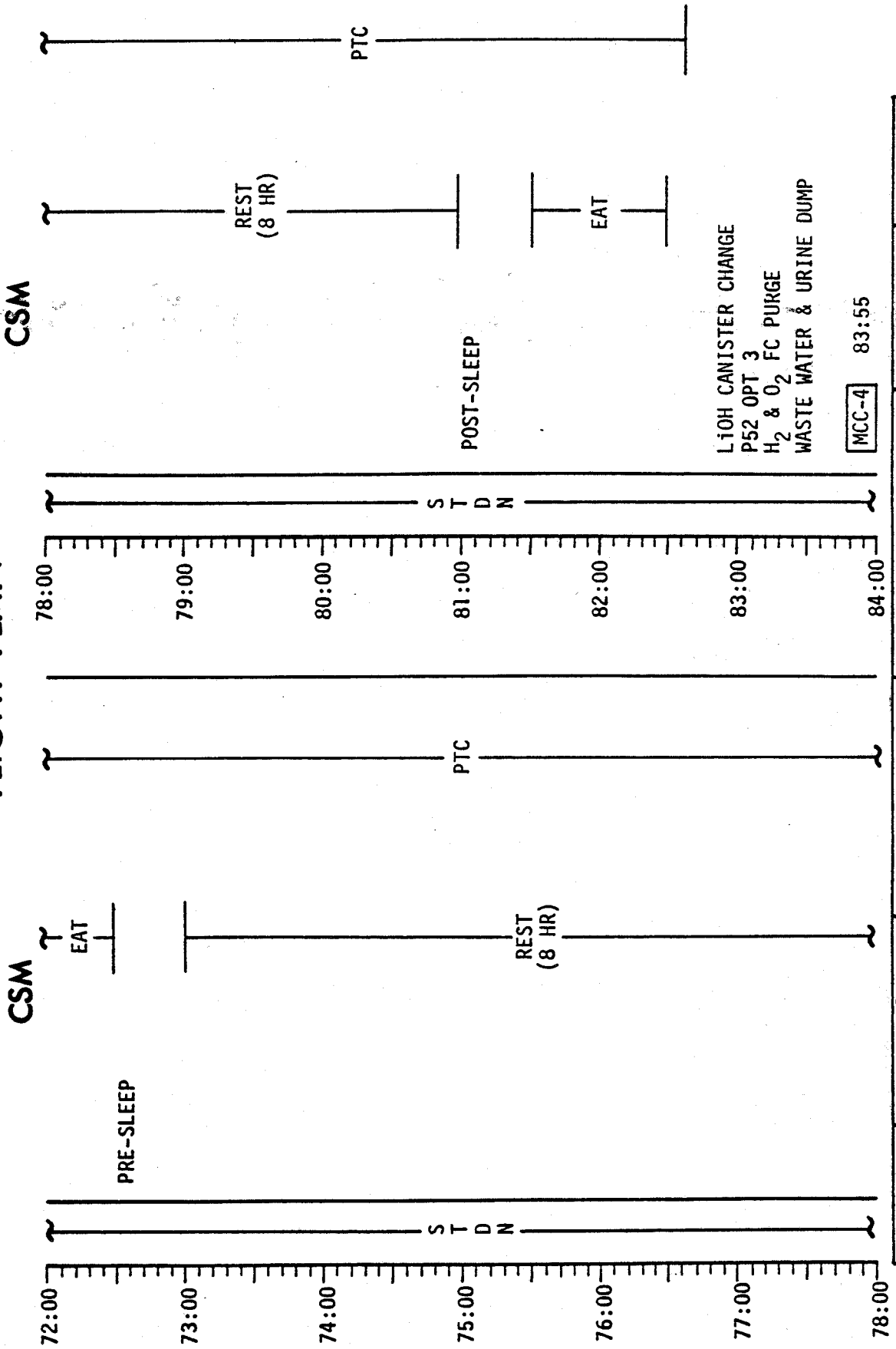
LiOH CANISTER CHANGE

EAT

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	60:00 - 72:00	4/TLC	5-6

FLIGHT PLANNING BRANCH

FLIGHT PLAN

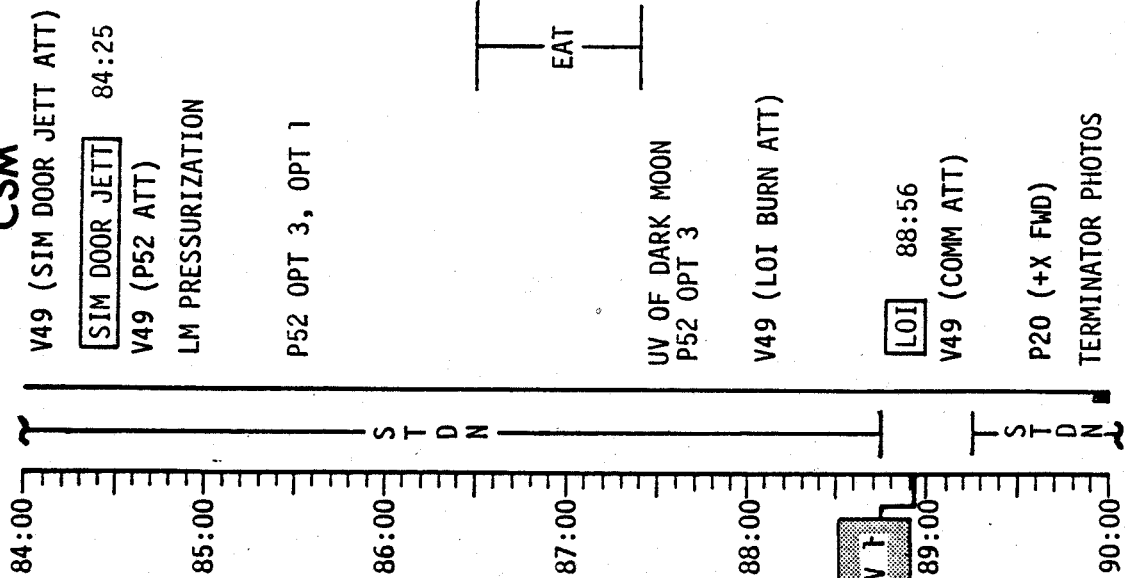


L10H CANISTER CHANGE
 P52 OPT 3
 H₂ & O₂ FC PURGE
 WASTE WATER & URINE DUMP

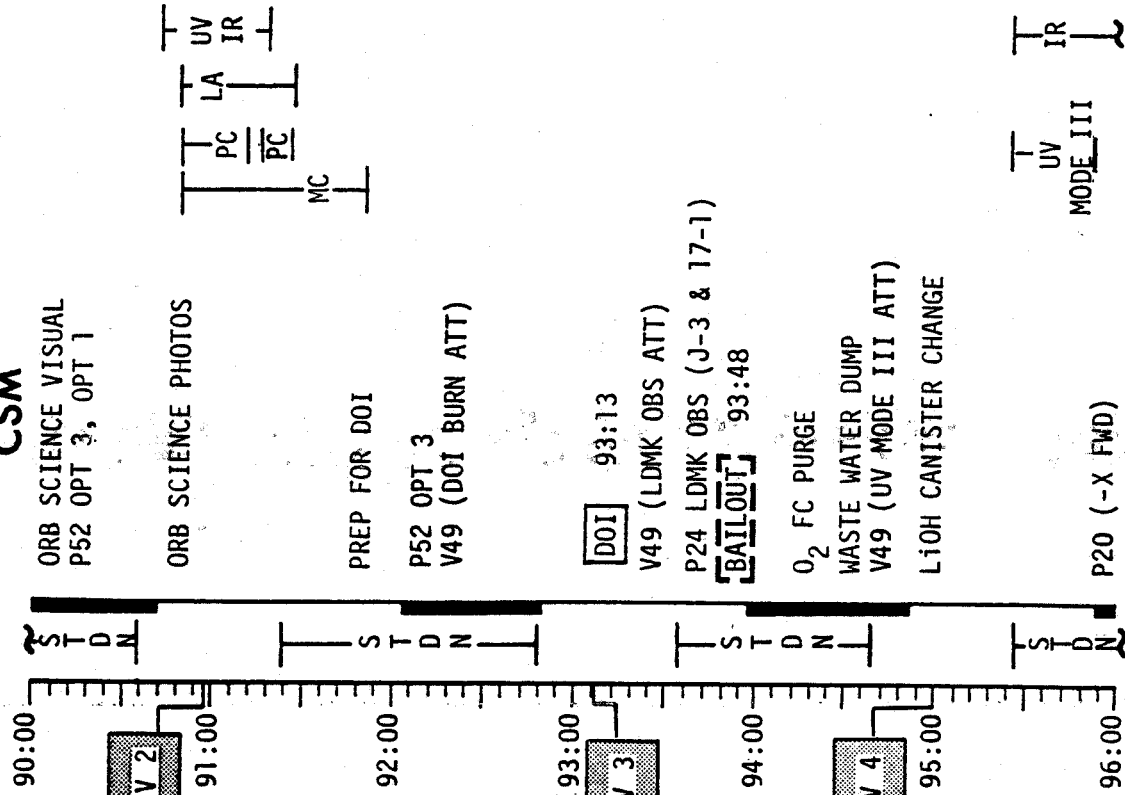
MCC-4 83:55

FLIGHT PLAN

CSM

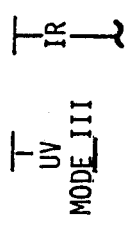


CSM



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	84:00 - 96:00	5/TLC-4	5-8

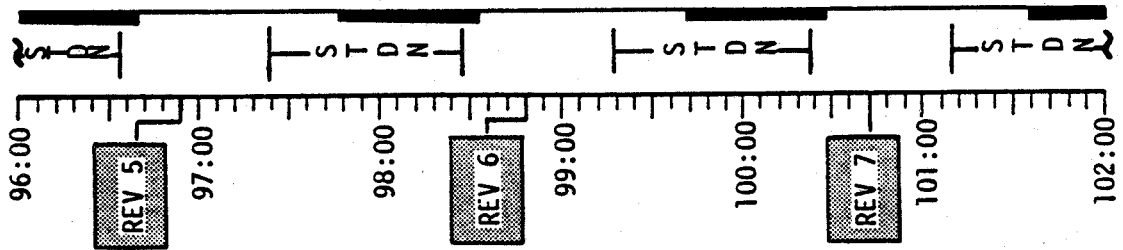
FLIGHT PLANNING BRANCH



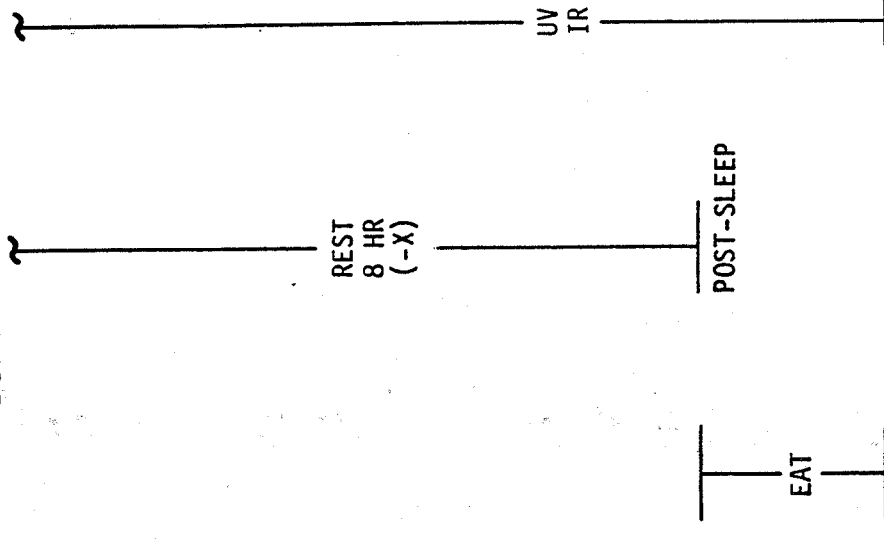
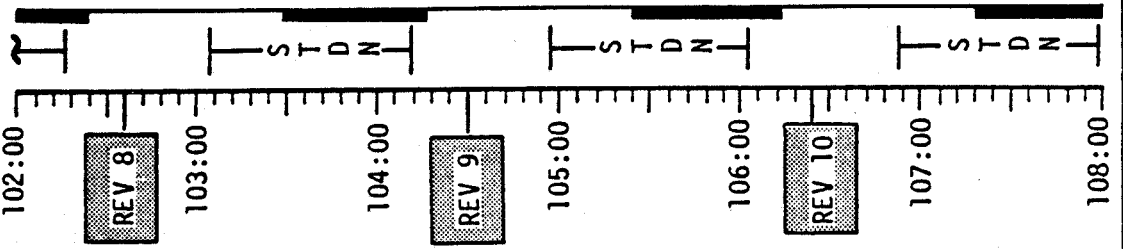
FLIGHT PLAN

CSM

P52 OPT 3, OPT 1 (IF REQ)



CSM

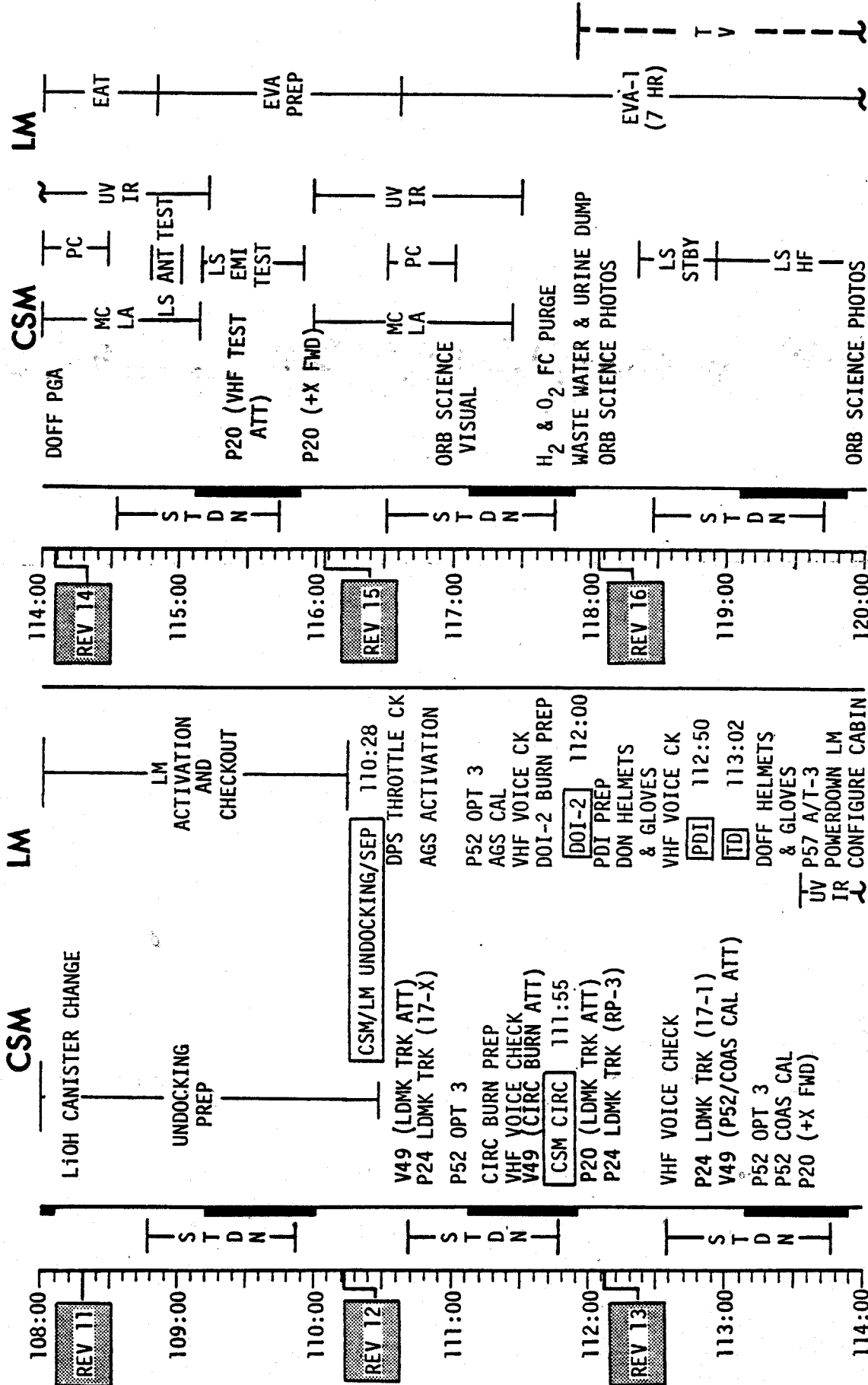


CDR & LMP DON SUITS
P52 OPT 3
CMP DON SUIT
CDR & LMP IVT TO LM

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	96:00 - 108:00	5-6/5-10	5-9

FLIGHT PLANNING BRANCH

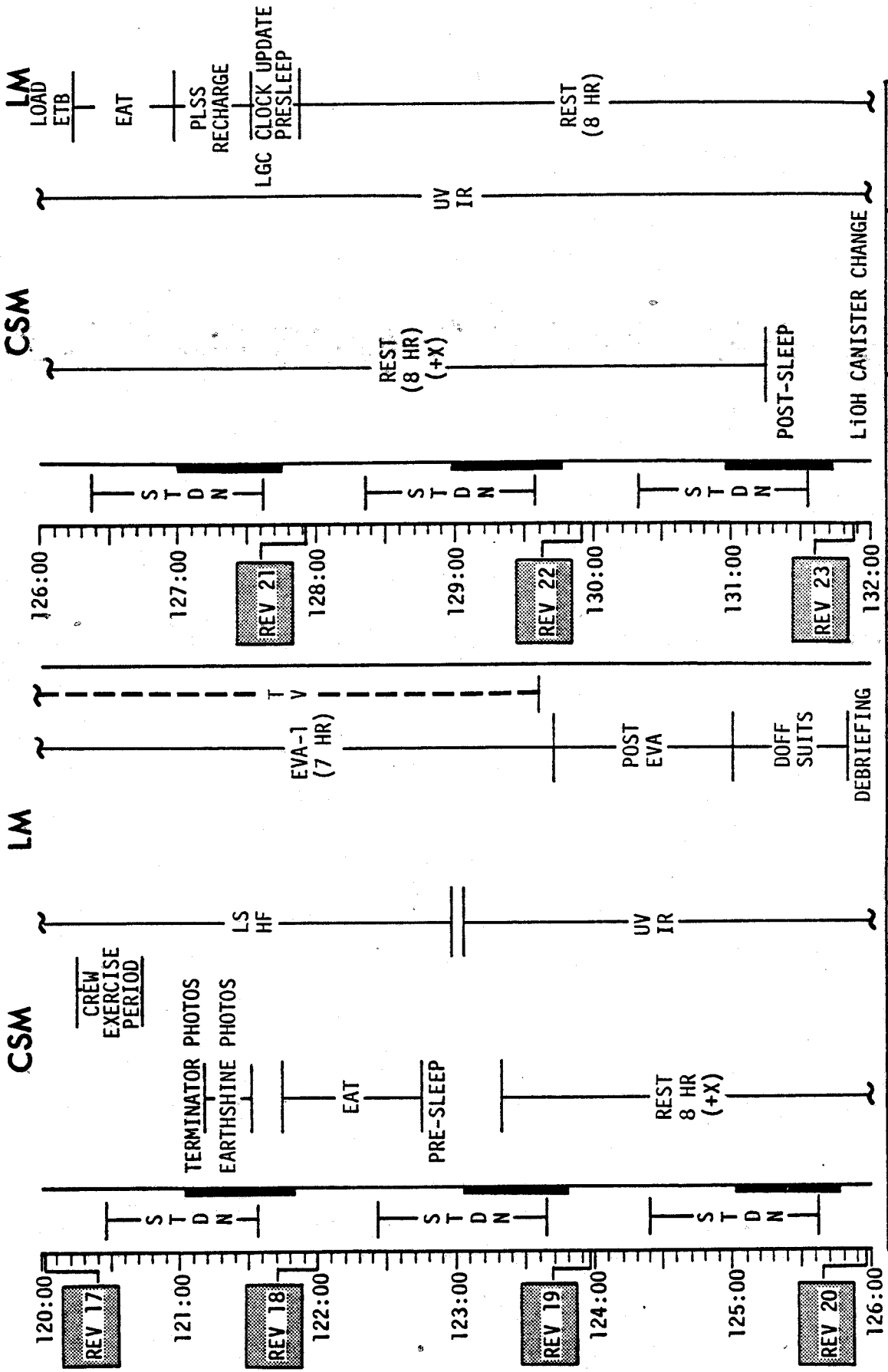
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	108:00 - 120:00	6 / 11-16	5-10

FLIGHT PLANNING BRANCH

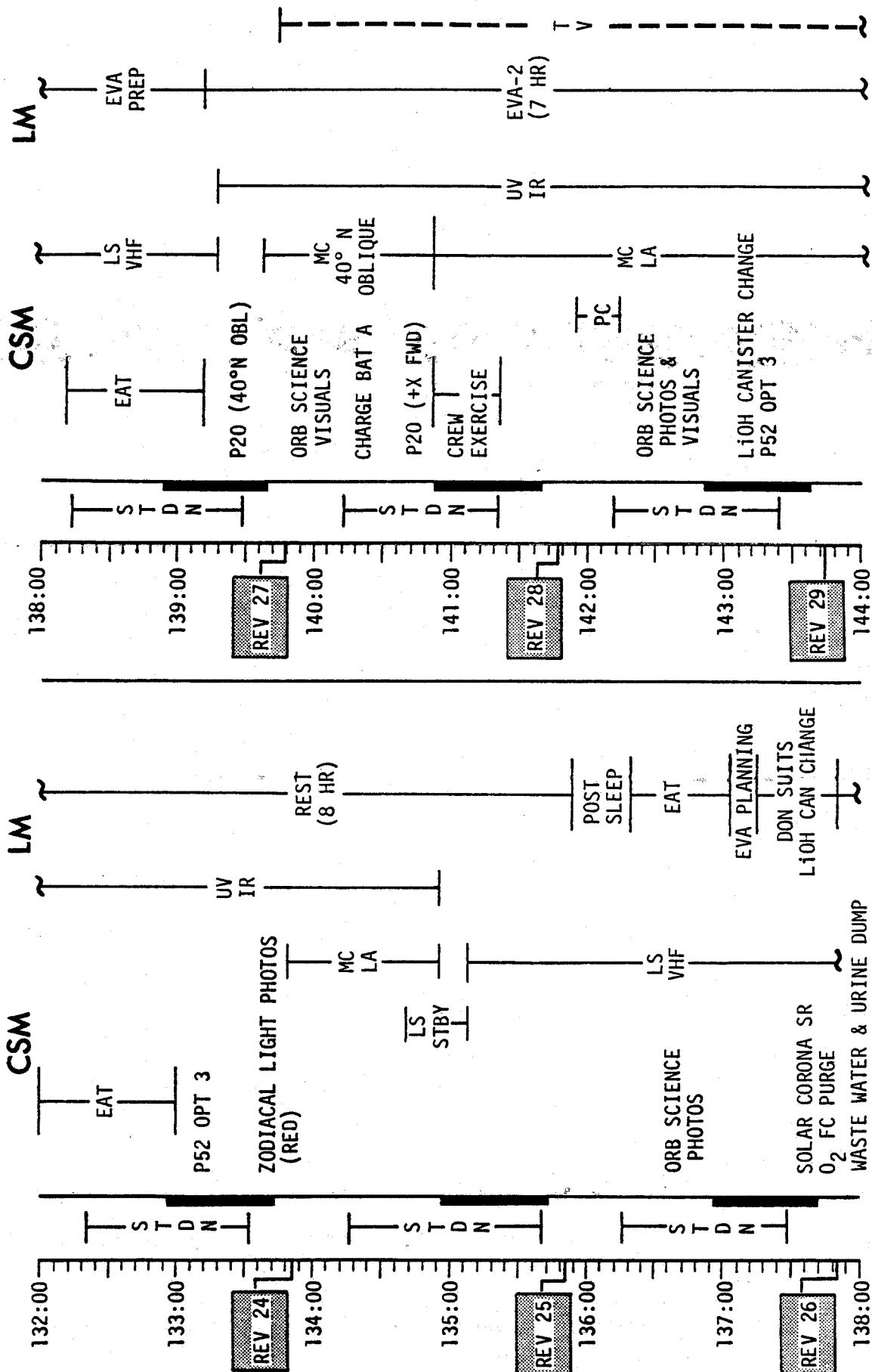
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	120:00 - 132:00	6-7/17-23	5-11

FLIGHT PLANNING BRANCH

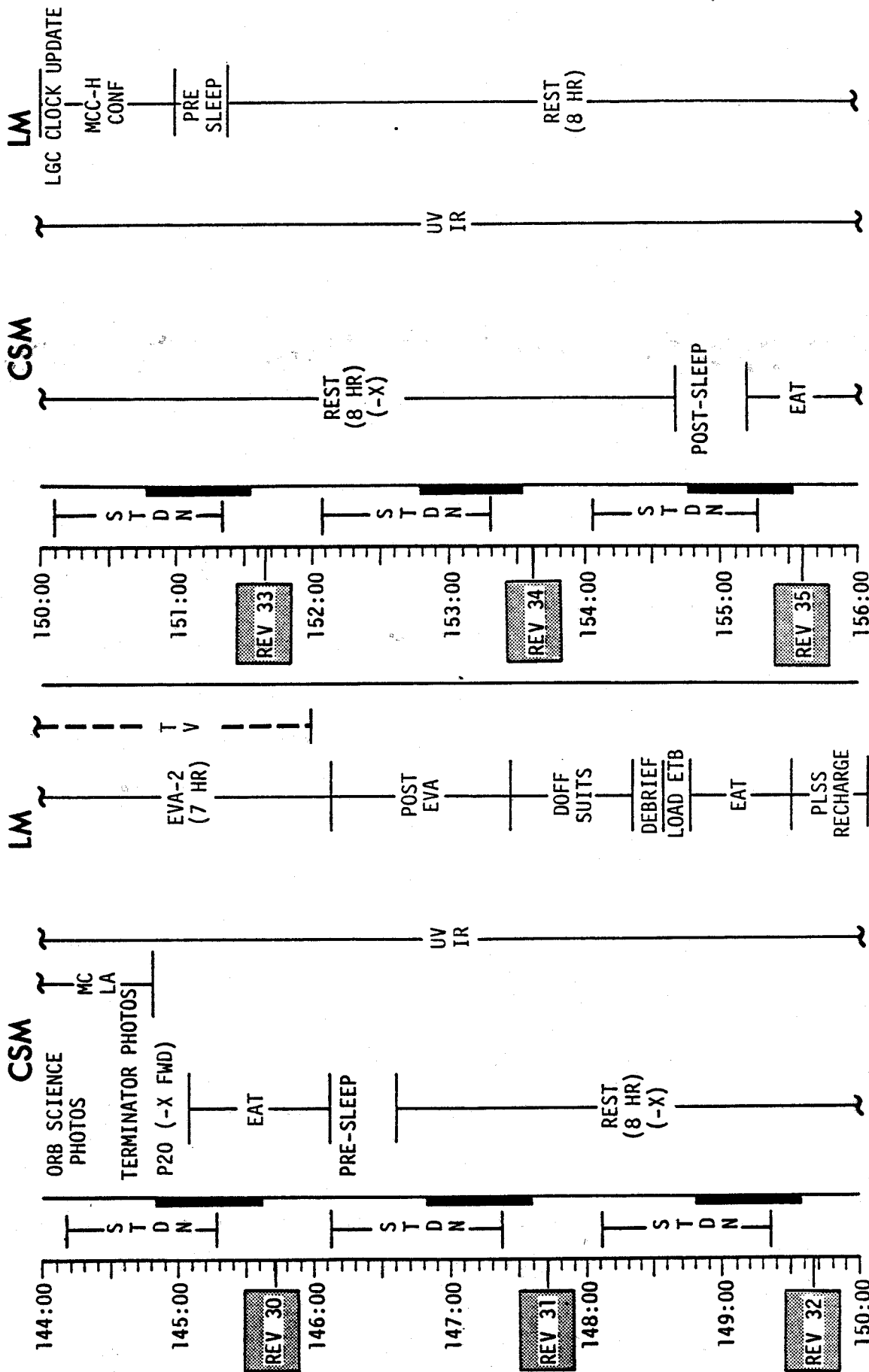
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	132:00 - 144:00	7/24-29	5-12

FLIGHT PLANNING BRANCH

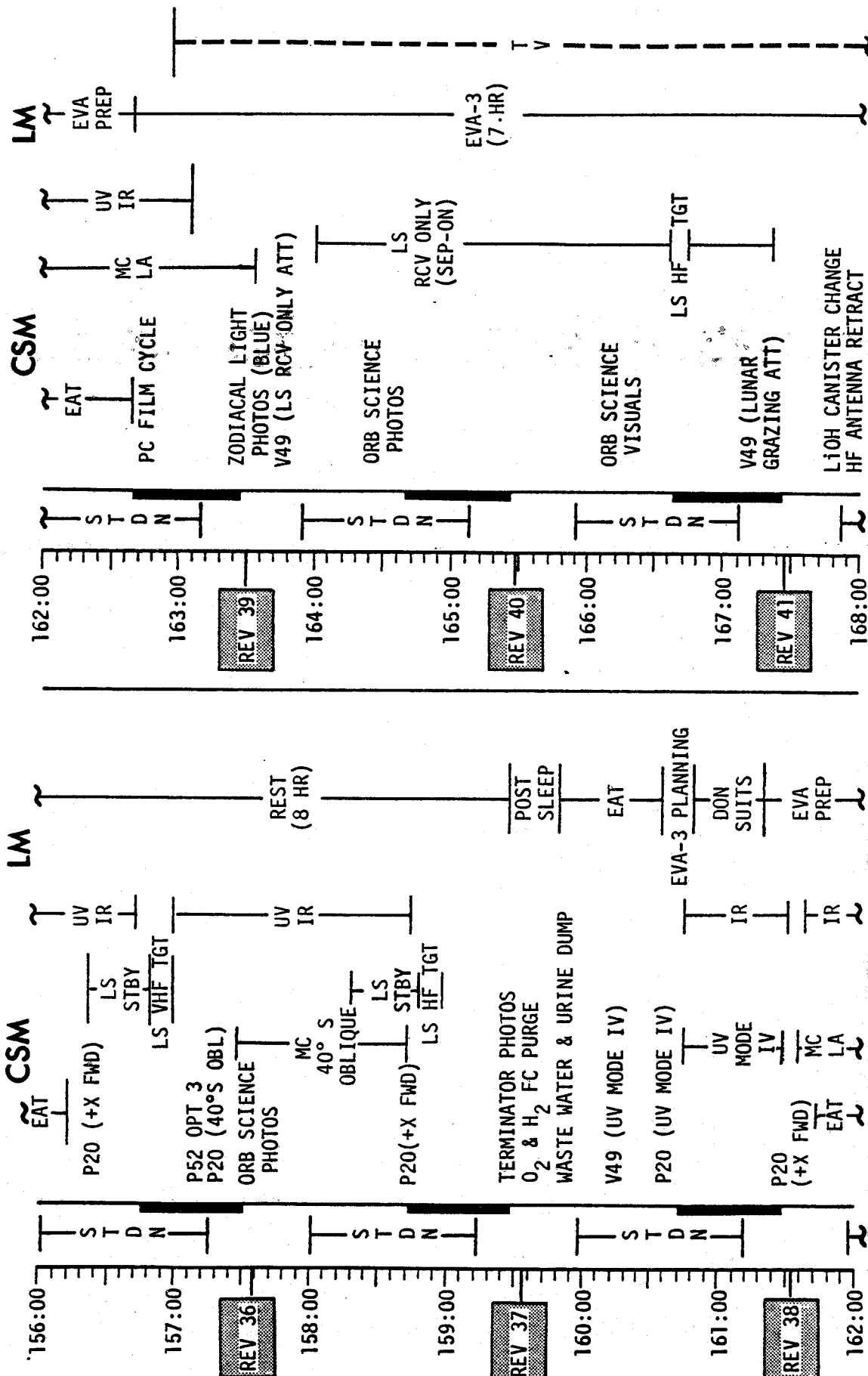
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	144:00 - 156:00	7-8/30-35	5-13

FLIGHT PLANNING BRANCH

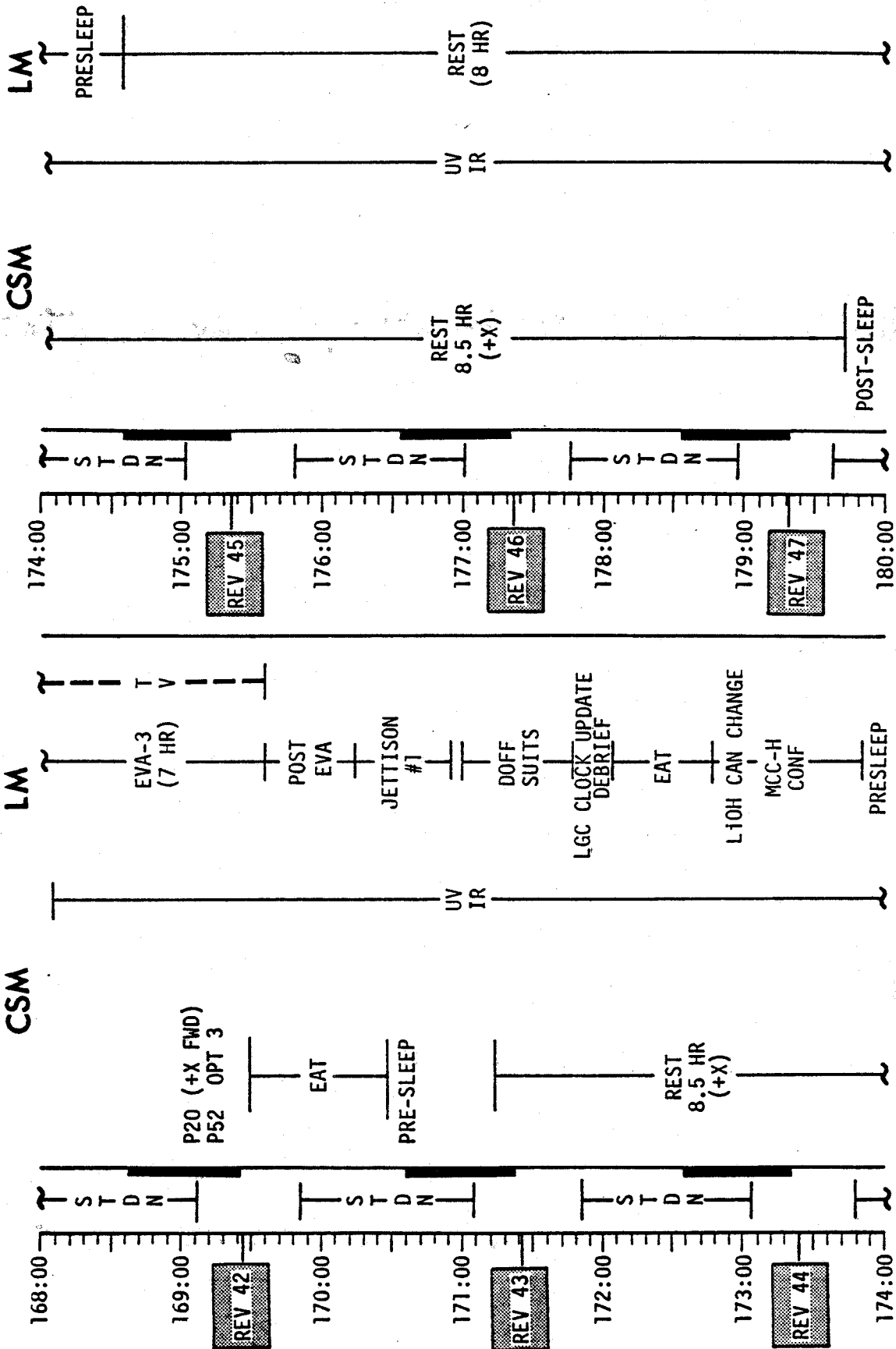
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	156:00 - 168:00	8/36-41	5-14

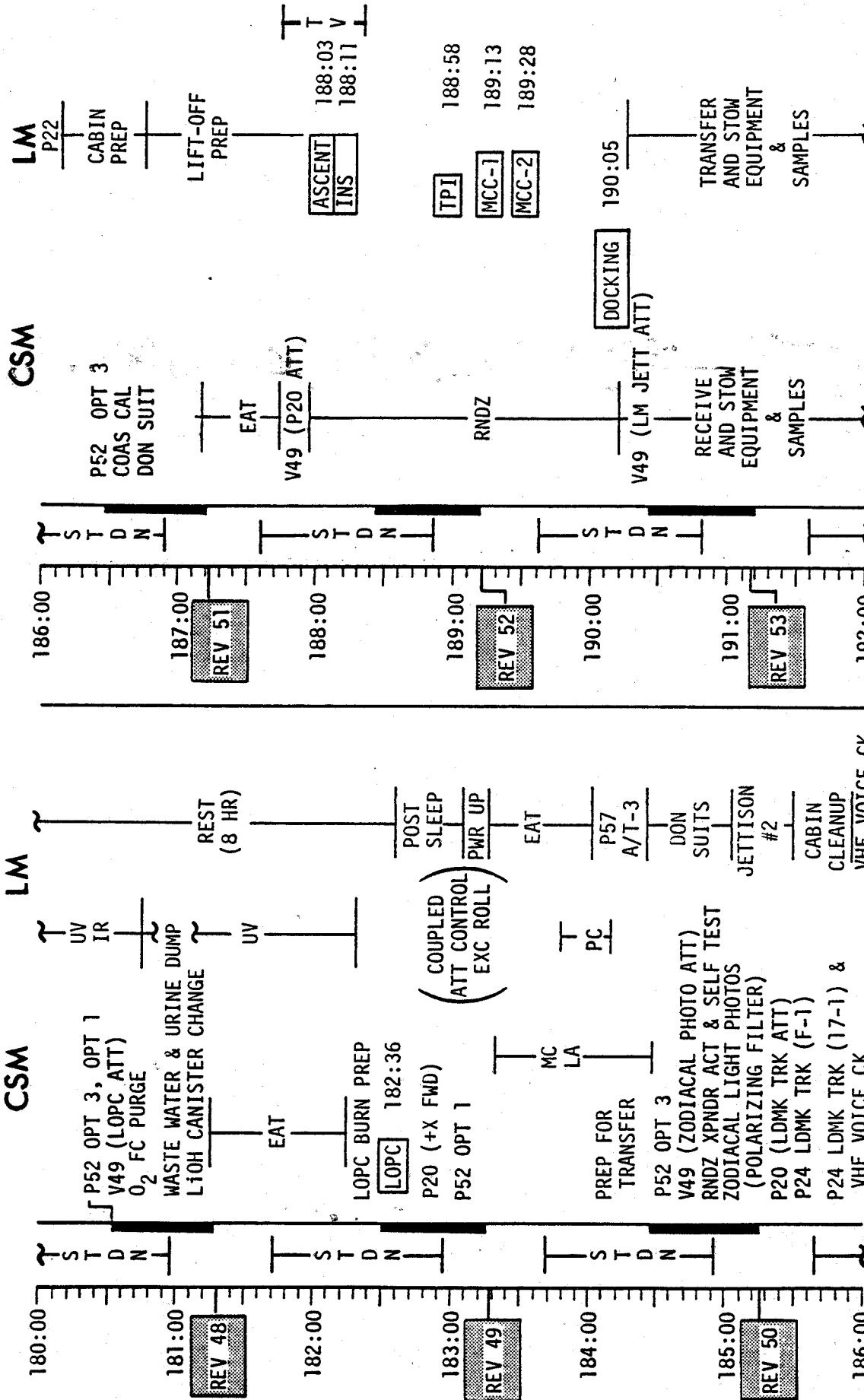
FLIGHT PLANNING BRANCH

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	168:00 - 180:00	8-9/42-47	5-15

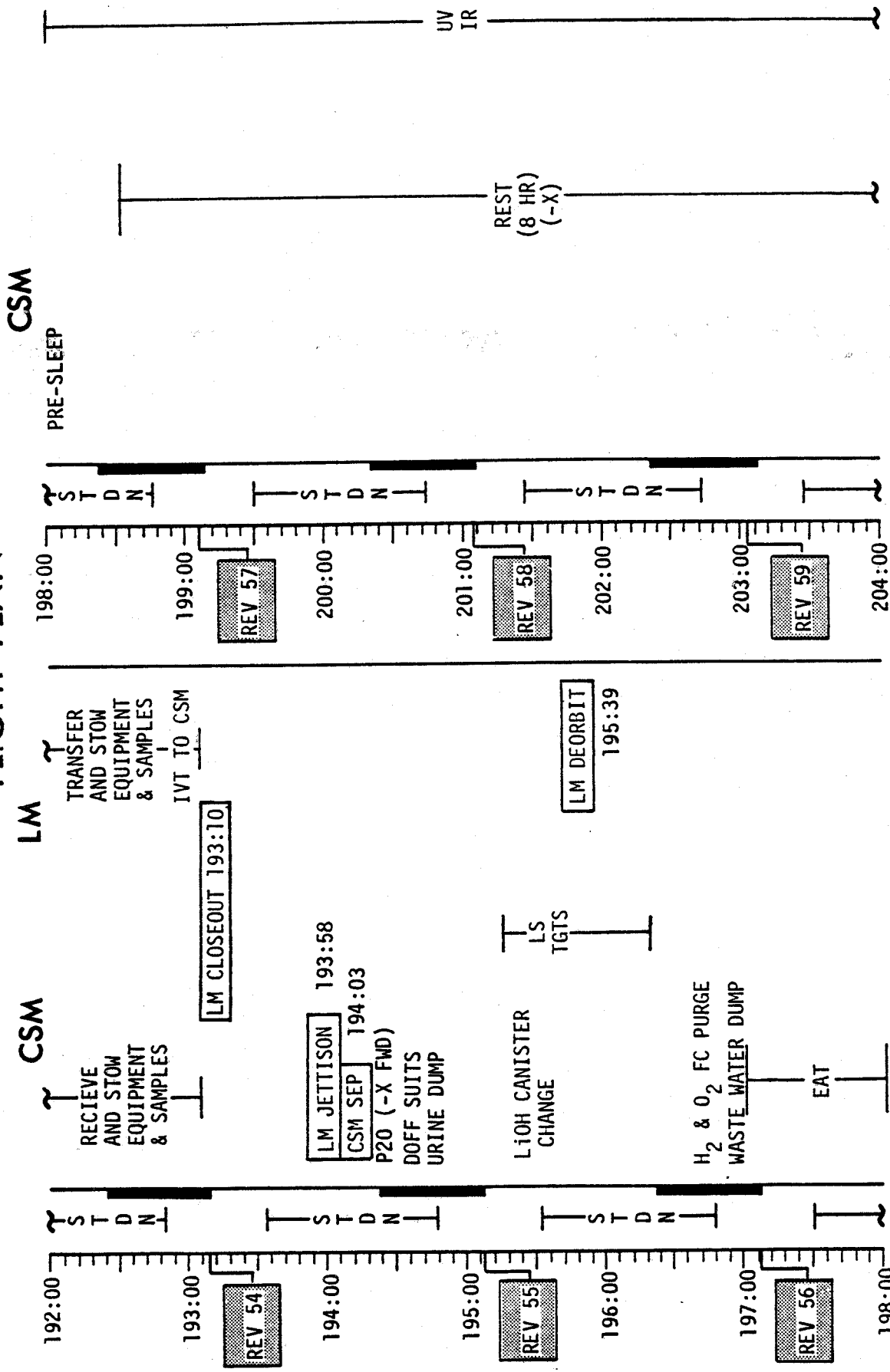
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	180:00 - 192:00	9 / 48-53	5-16

FLIGHT PLANNING BRANCH

FLIGHT PLAN



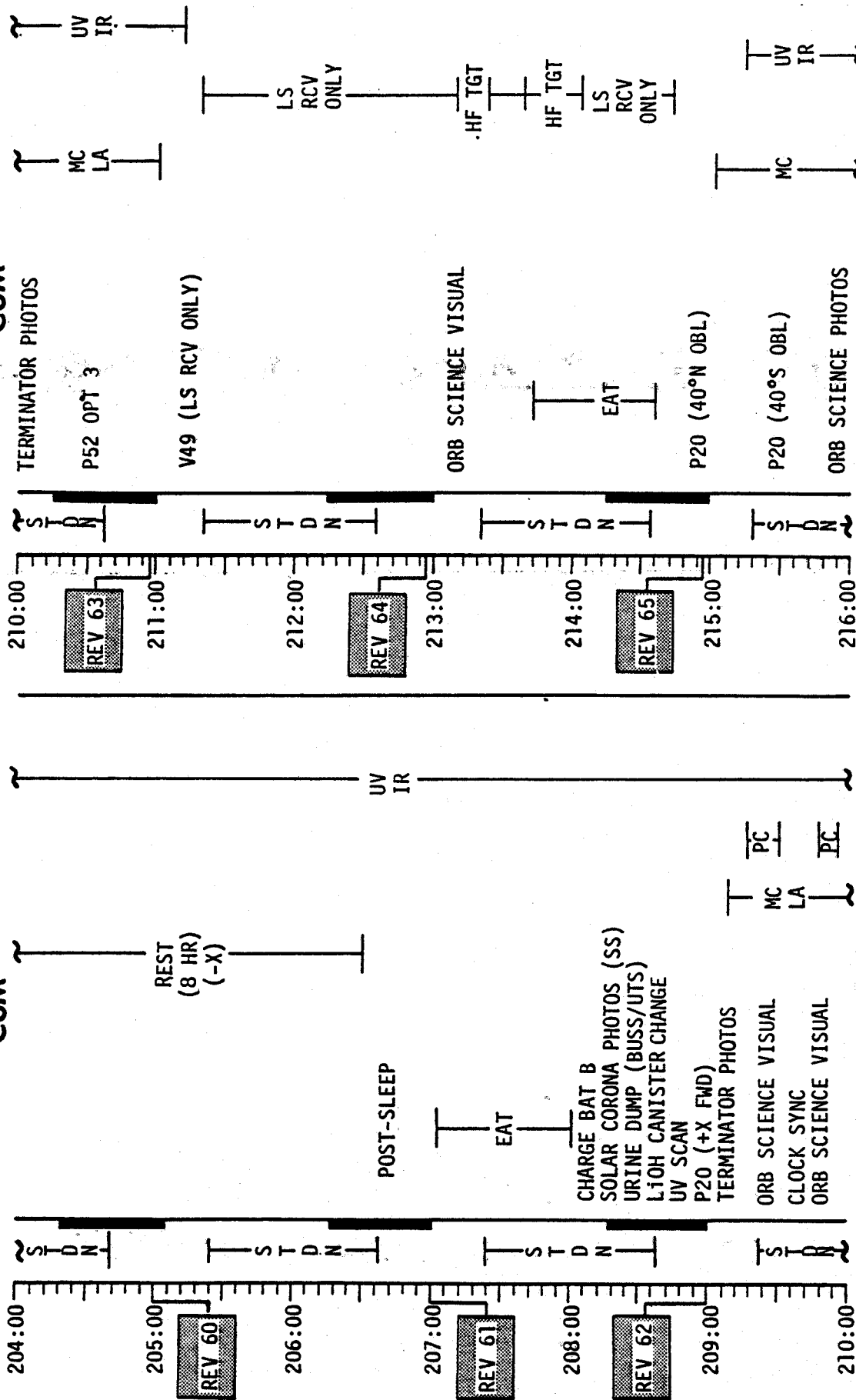
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	192:00 - 204:00	9/54-59	5-17

FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM

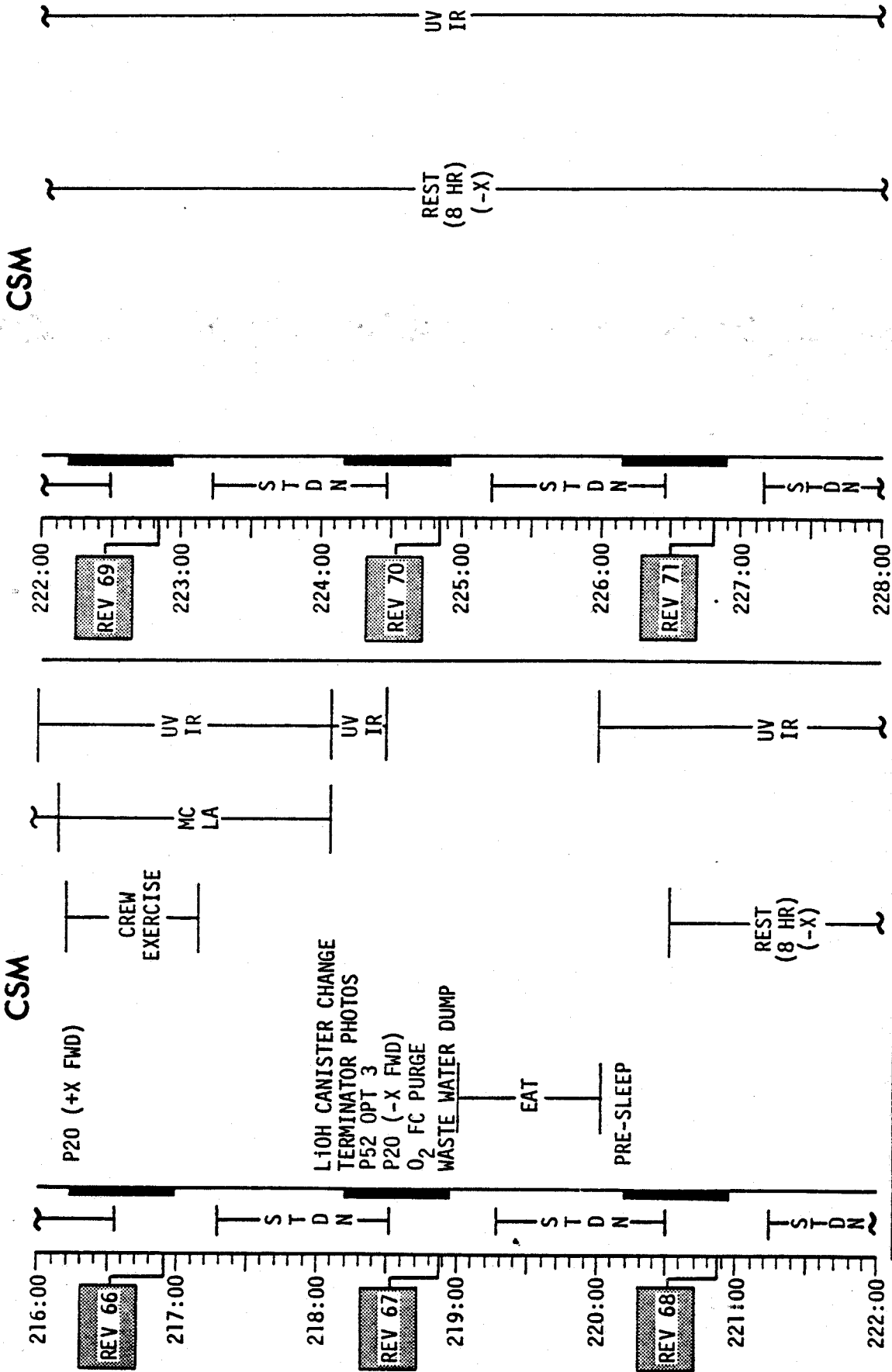
CSM



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	204:00 - 216:00	9-10/60-65	5-18

FLIGHT PLANNING BRANCH

FLIGHT PLAN

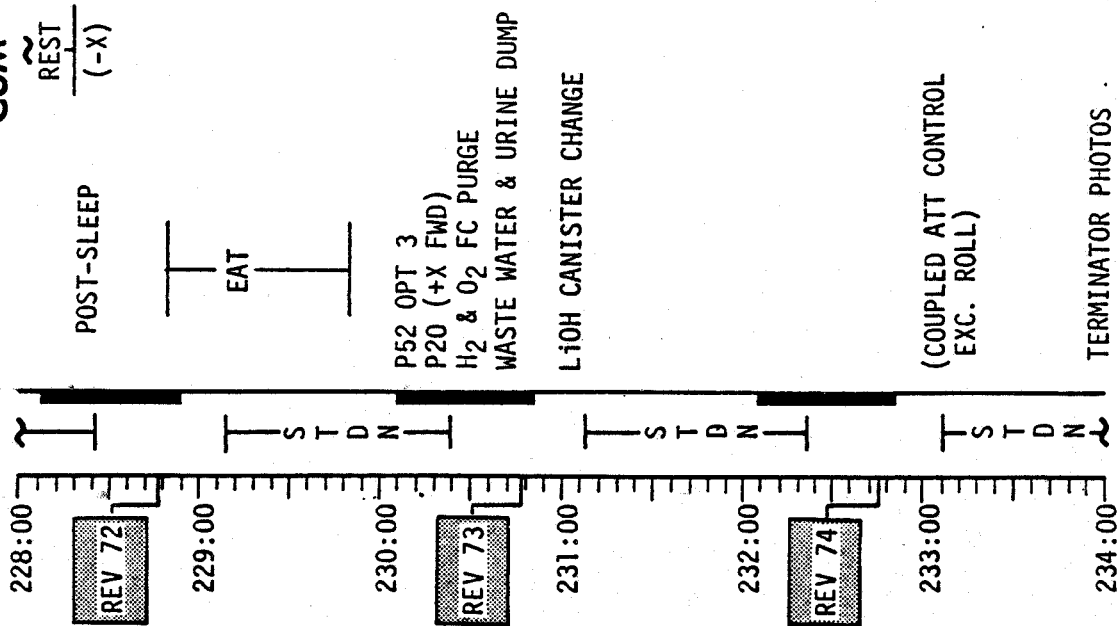


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	216:00 - 228:00	10/66-71	5-19

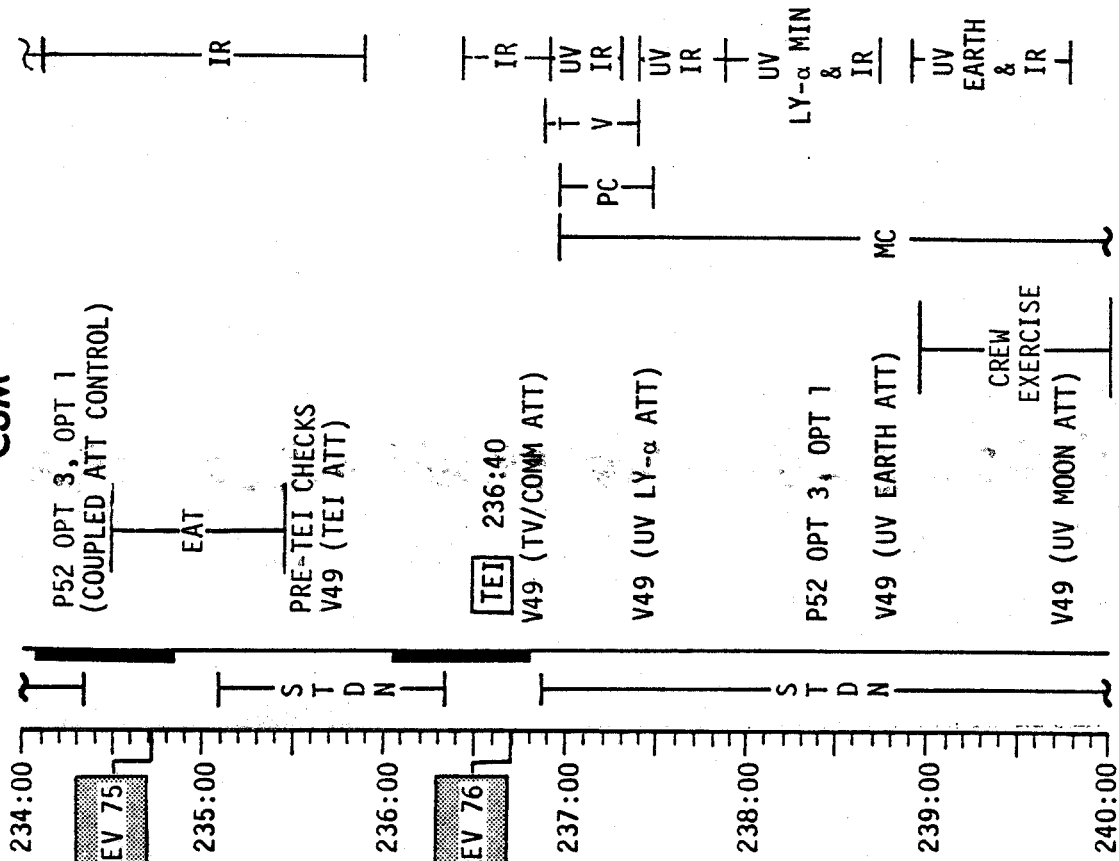
FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM



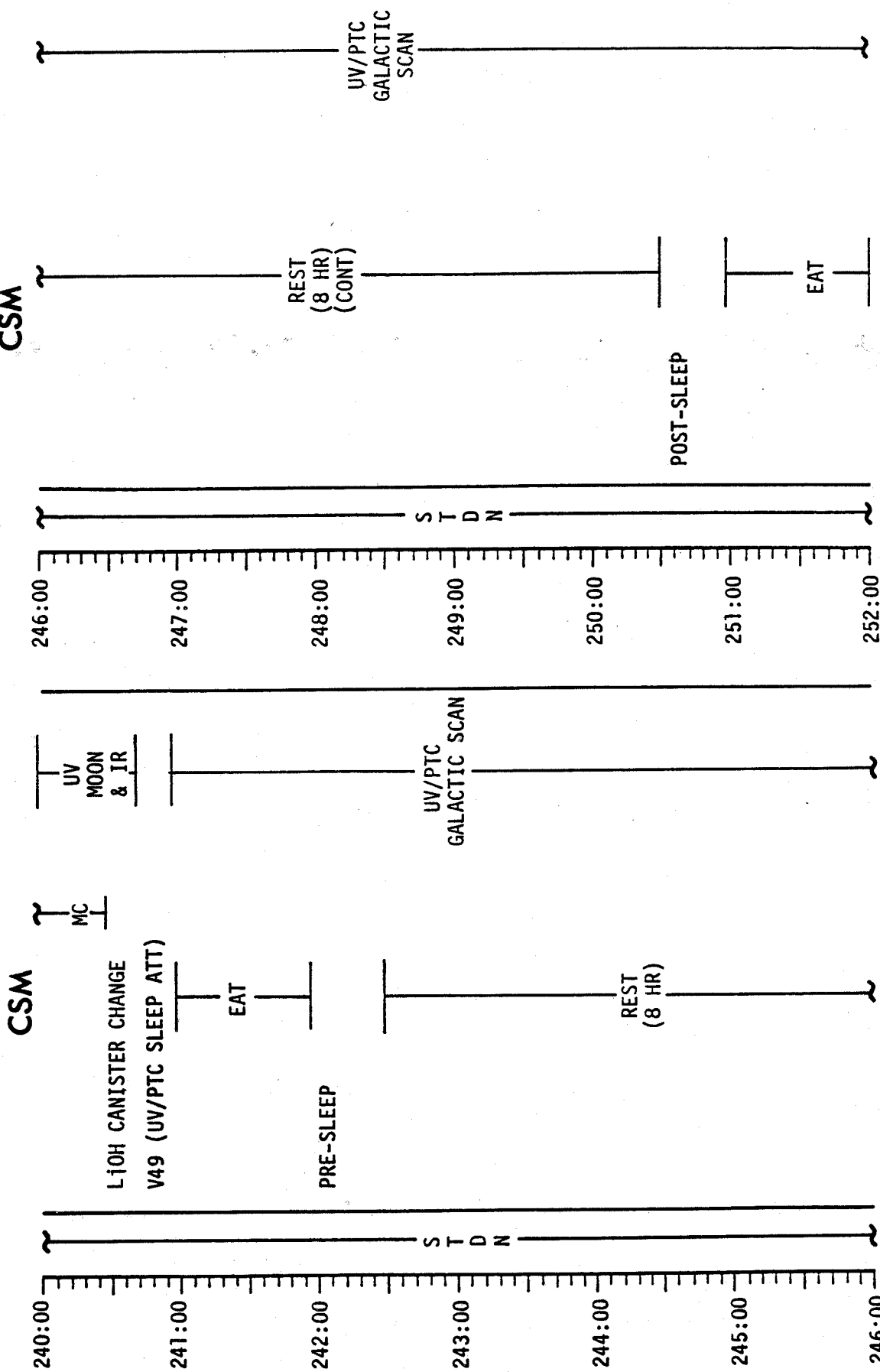
CSM



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	228:00 - 240:00	10-11 / 72-TEC	5-20

FLIGHT PLANNING BRANCH

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	240:00 - 252:00	11-12/TEC	5-21

FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM

P52 OPT 3
 L10H CANISTER CHANGE
 V49 (MCC-5 BURN ATT)
 O₂ FC PURGE
 WASTE WATER & URINE DUMP

MCC-5 253:40

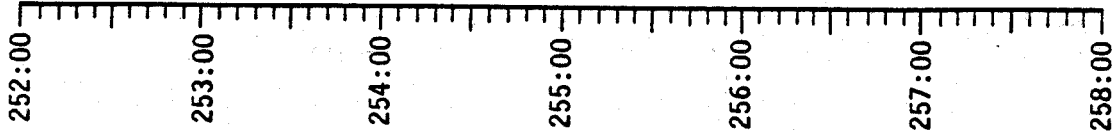
CABIN PREP FOR CM EVA

TV & DAC PREP

EVA EQUIP PREP

DON SUITS

V49 (EVA ATT)
 PRESS GAGE STATIC CHECK
 COMM CHECK
 SYS PREP FOR DEPRESS
 CMP EVA EQUIP PREP
 OPS DONNING
 CDR/LMP INTEGRITY CHECK
 CABIN DEPRESS & HATCH OPENING
 INSTALL TV/DAC
 RETRIEVE LUNAR SOUNDER CASSETTE
 RETRIEVE PAN CAMERA CASSETTE



CSM

RETRIEVE MAPPING CAMERA CASSETTE
 INGRESS & HATCH CLOSING
 CM POST EVA
 POST EVA PROCEDURES
 CLEANUP PROCEDURES
 DOFF SUITS
 STOW EQUIP

V49 (UV COMA CLUSTER ATT)

V49 (UV STELLAR CAL ATT)
 (60 x 14)

V49 (UV STELLAR CAL ATT)
 (60 x 60)

V49 (UV αERI ATT)
 CREW EXERCISE

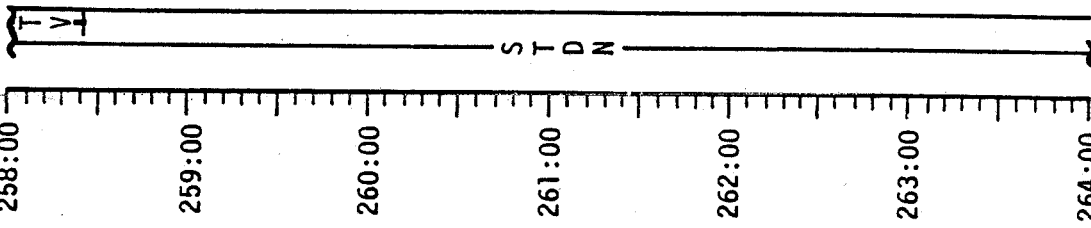
V49 (UV/PTC αERI, αGRU)

UV
 COMA
 CLUSTER
 &
 IR

IR & UV
 STELLAR
 CAL
 (60x14)

UV
 STELLAR
 CAL
 (60x60)
 & IR

UVαERI
 & IR

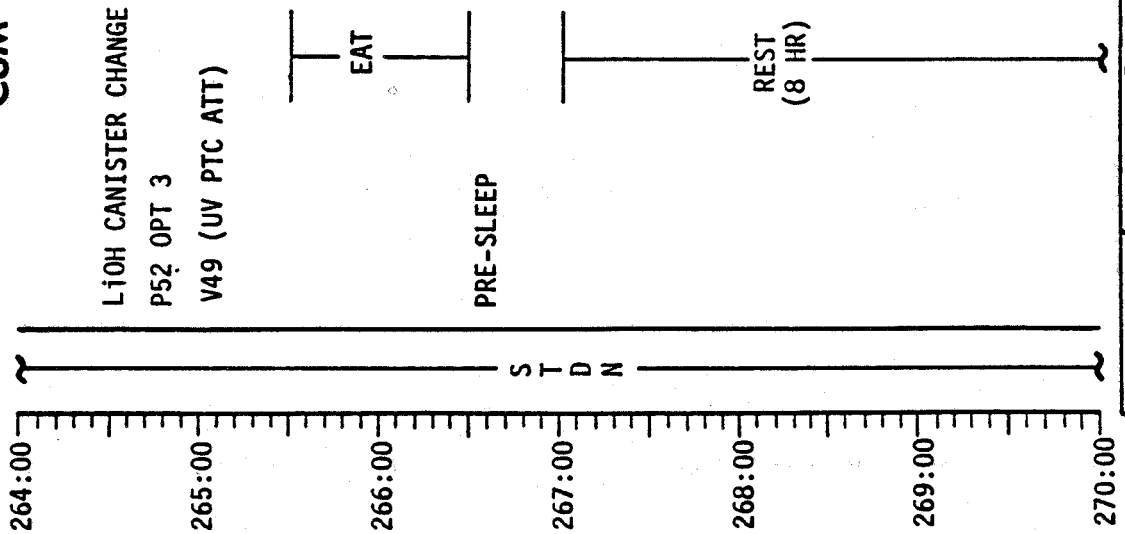


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	252:00 - 264:00	12 / TEC	5-22

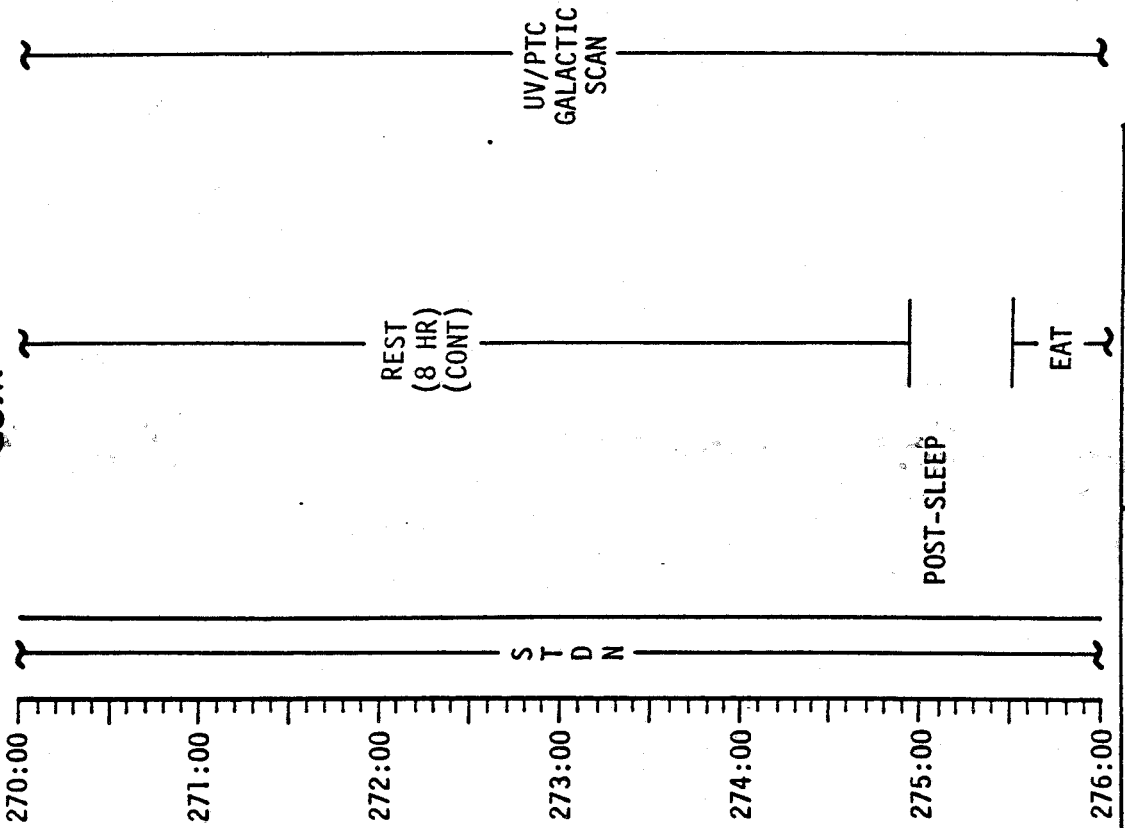
FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM



CSM

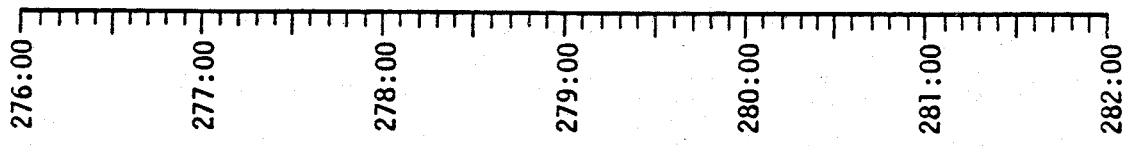


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	264:00 - 276:00	12-13/TEC	5-23

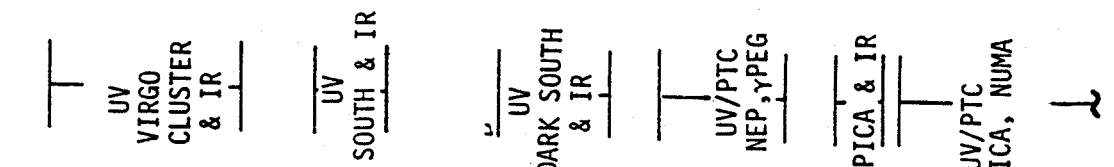
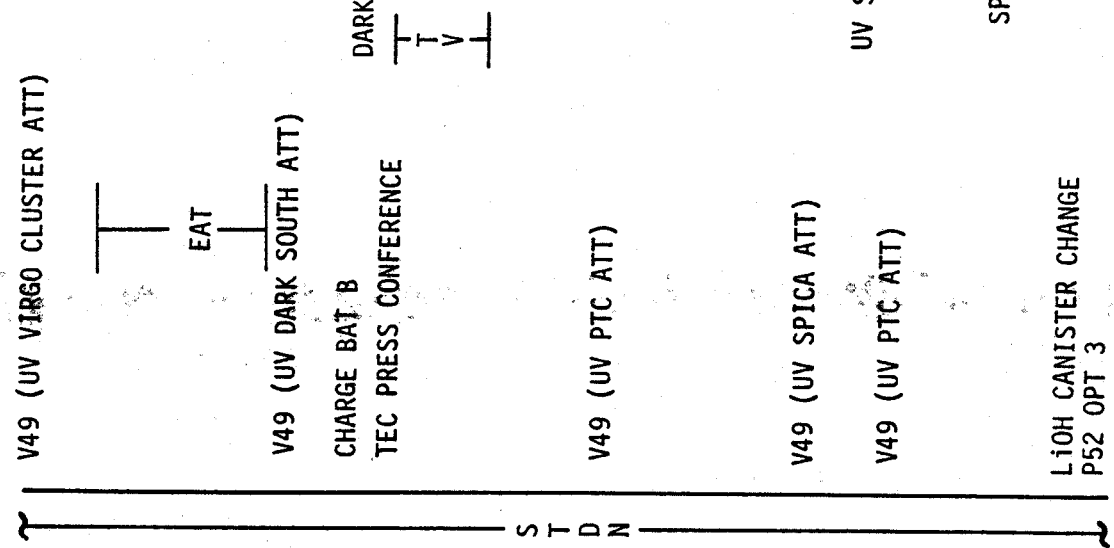
FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM



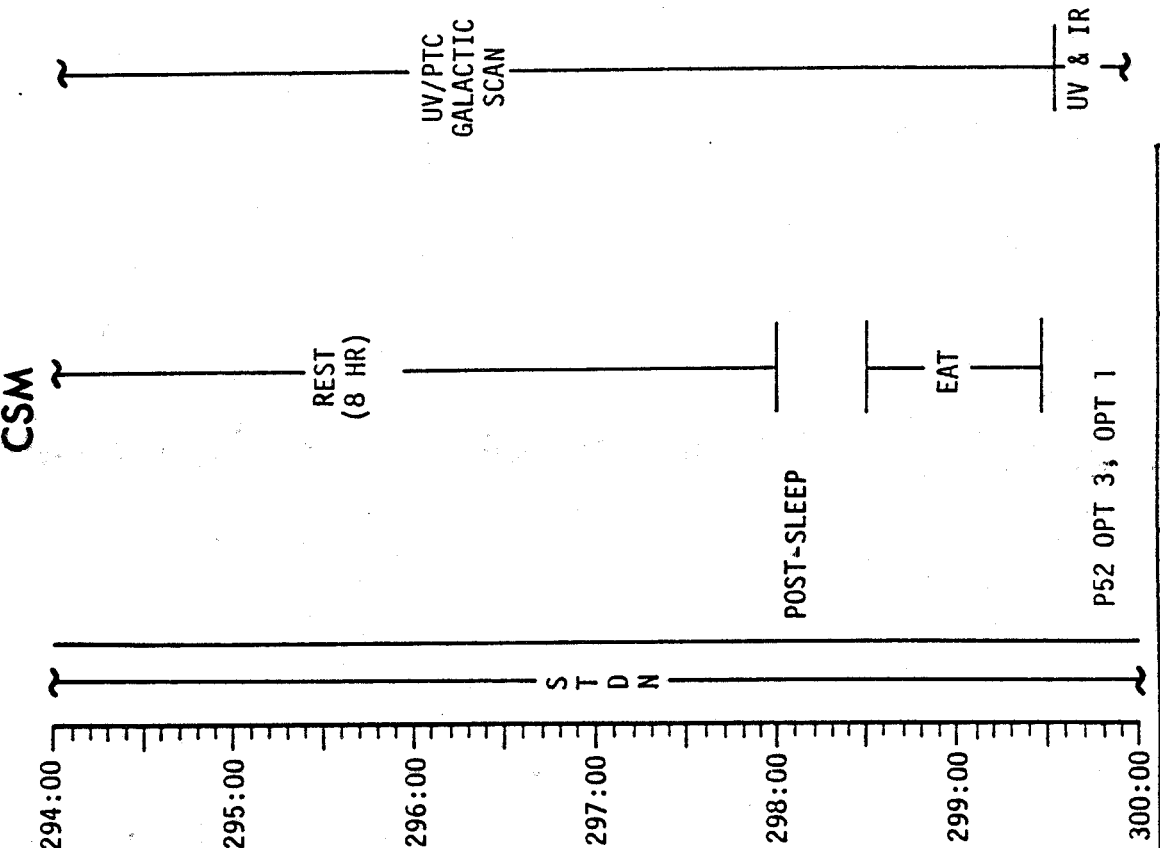
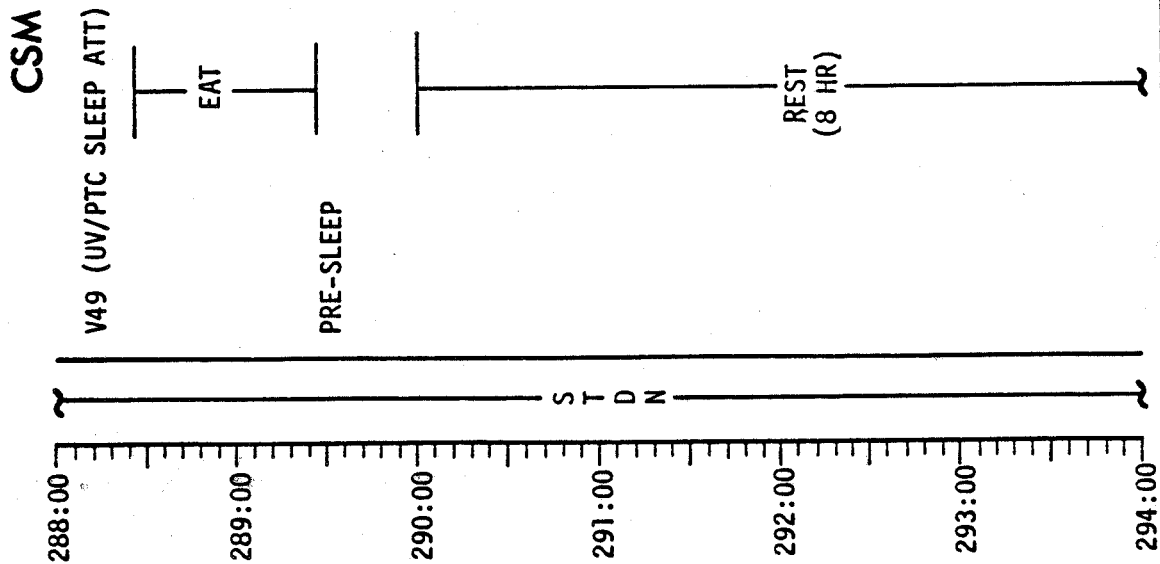
CSM



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	276:00 - 288:00	13/TEC	5-24

FLIGHT PLANNING BRANCH

FLIGHT PLAN

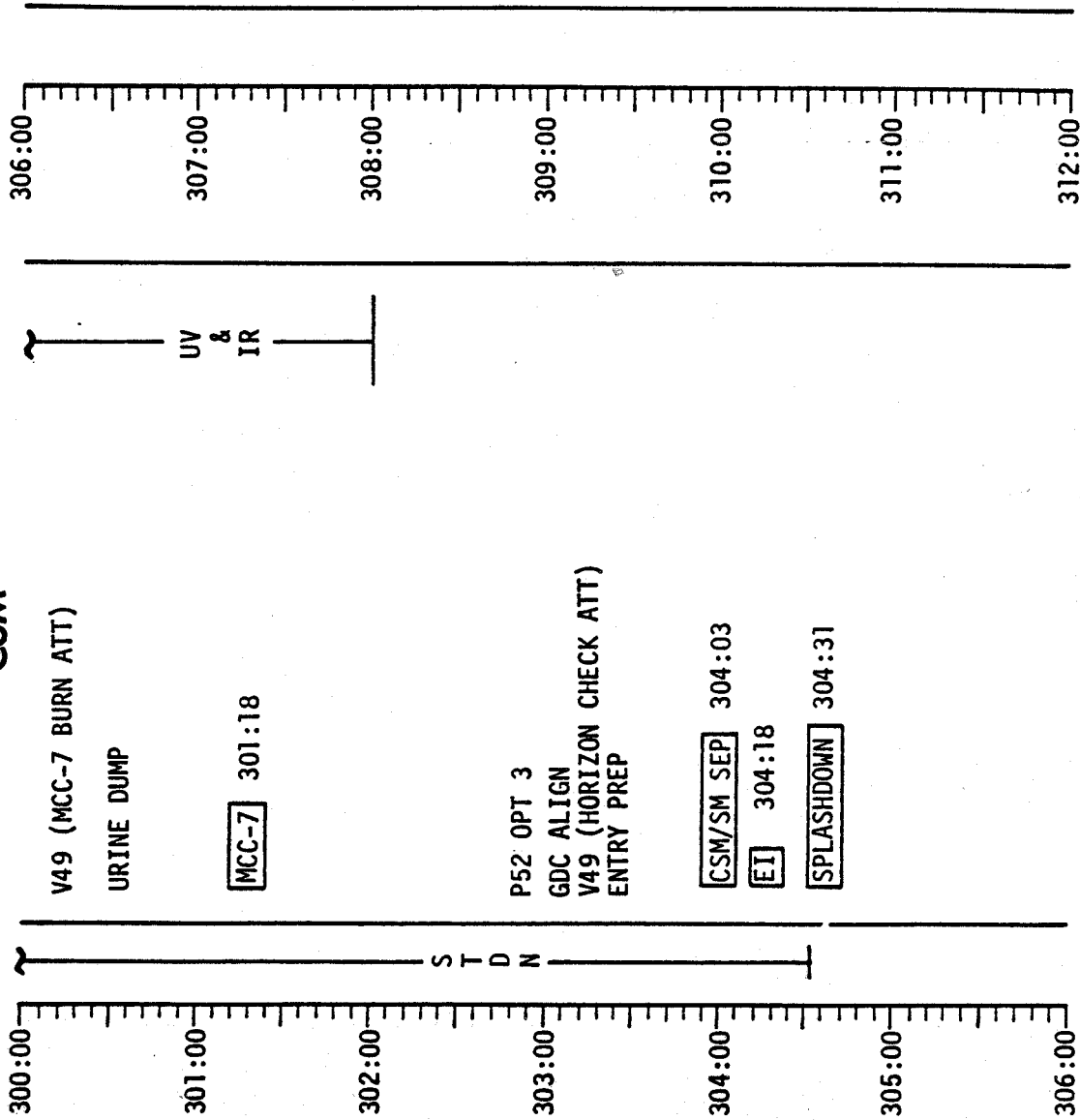


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	288:00 - 300:00	13-14/TEC	5-25

FLIGHT PLANNING BRANCH

FLIGHT PLAN

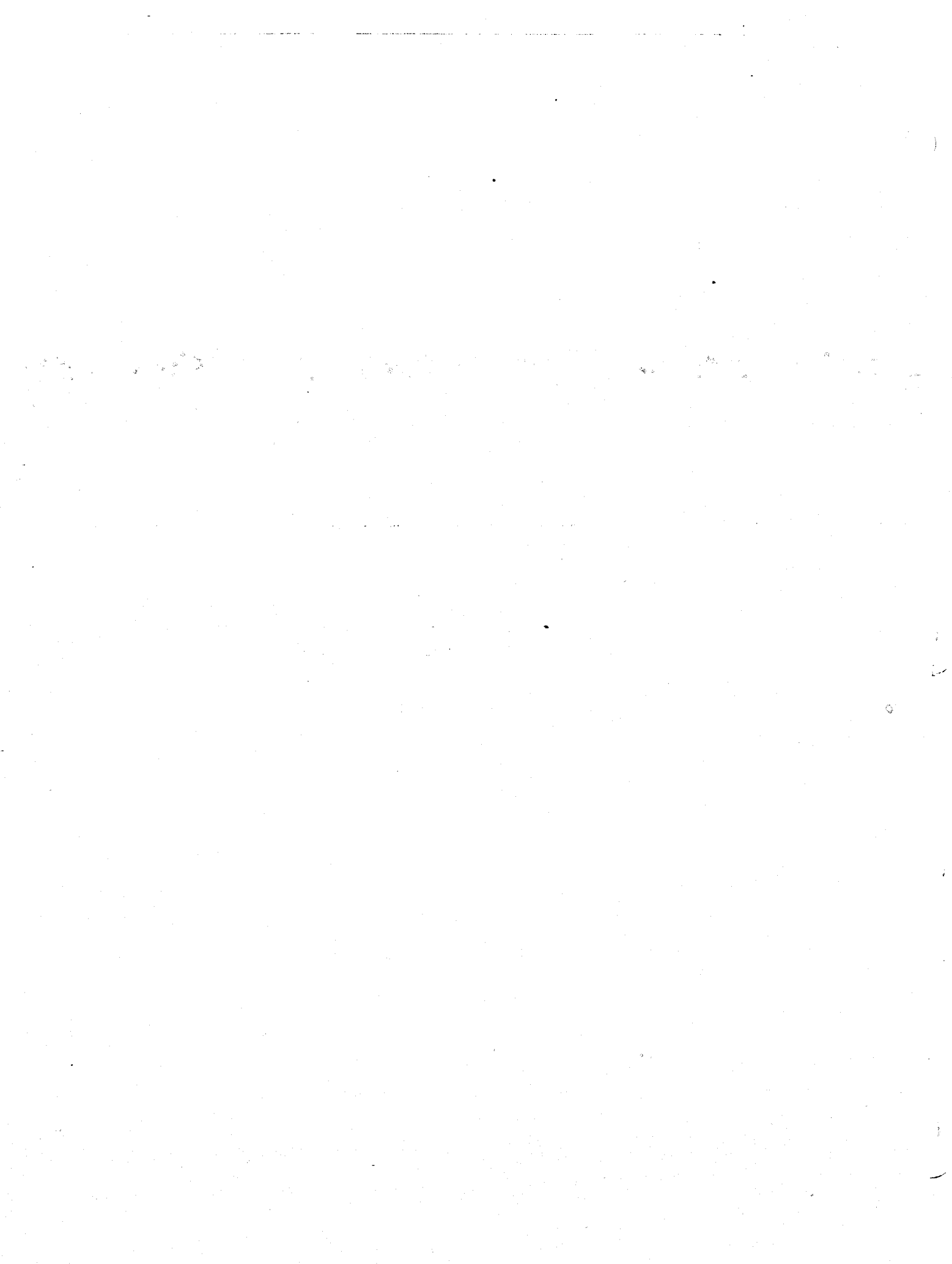
CSM



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	300:00 - 312:00	14/TEC-ENTRY	5-26

FLIGHT PLANNING BRANCH

SECTION 6 - ALTERNATE MISSION SUMMARIES



EARTH ORBIT ALTERNATE MISSION

Assumptions

- 1) A SAFE insertion orbit has been achieved by the S-IVB.
- 2) A systems failure has resulted in a NO/GO for TLI.

CONSTRAINTS

- 1) Maintain SM-RCS deorbit capability
- 2) Photography in the southern hemisphere
- 3) LM to be jettisoned for water impact.

Sequence of Events

This alternate mission is initiated by a systems failure which will not allow TLI. The alternate mission timeline is entered at the nominal time of TLI and allows for a failure checkout period followed by a possible second TLI opportunity. If the second TLI is not performed, the CSM executes TD&E and prepares the LM for an ocean impact. The CSM executes five SPS burns to position itself for photographic coverage of the Southern Hemisphere with an inclination of forty-five degrees.

All the Sim Bay experiments are activated, except for the IR Radiometer, and an EVA is planned to retrieve the film canisters. The timeline indicates that lunar sounder operations is continuous but these will be broken into passes of approximately five minutes each when specific targets are chosen. At that time additional UV passes will be scheduled for Mode IV, lunar surface albedo, and galactic targets. The DSE will be managed such that data will be recorded during the daytime and dumped to STDN during the crew sleep periods when possible.

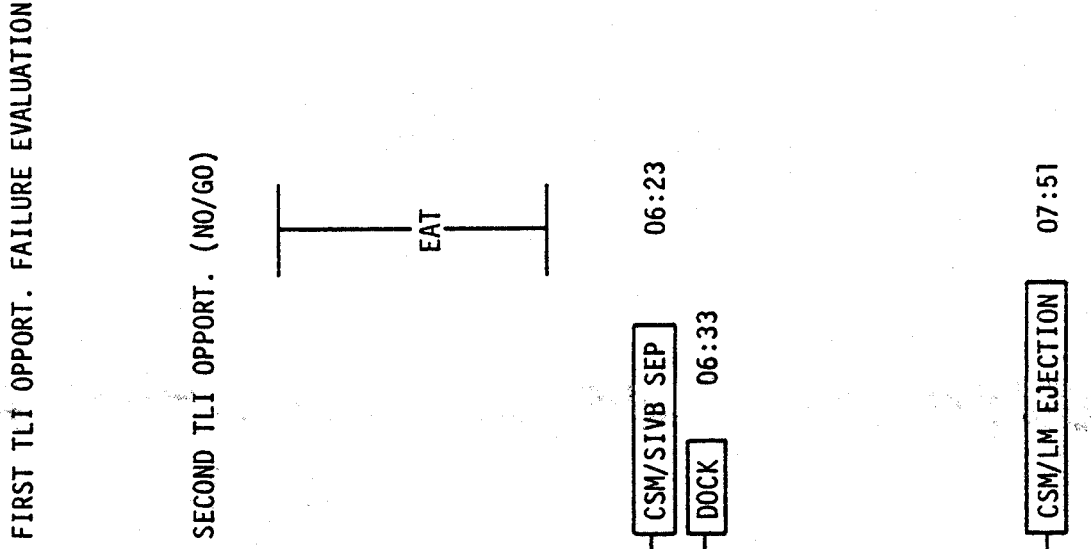
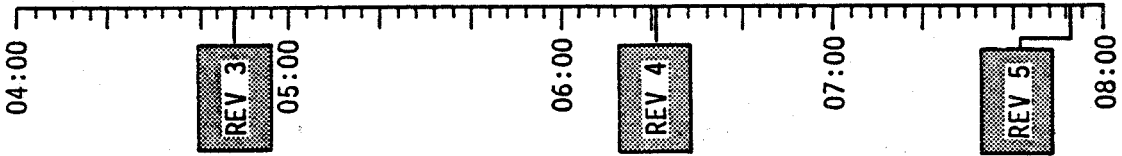
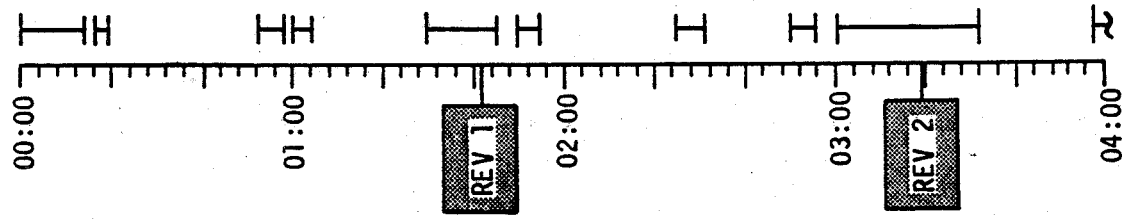
The mission is open ended but for flight planning purposes, a seven-day mission is planned.

THIS PAGE INTENTIONALLY BLANK

FLIGHT PLAN

EARTH ALTERNATE

2053 CST



NOMINAL MISSION

FIRST TL I OPPORT. (NO/GO)

GO/NO-GO FOR TL I-2

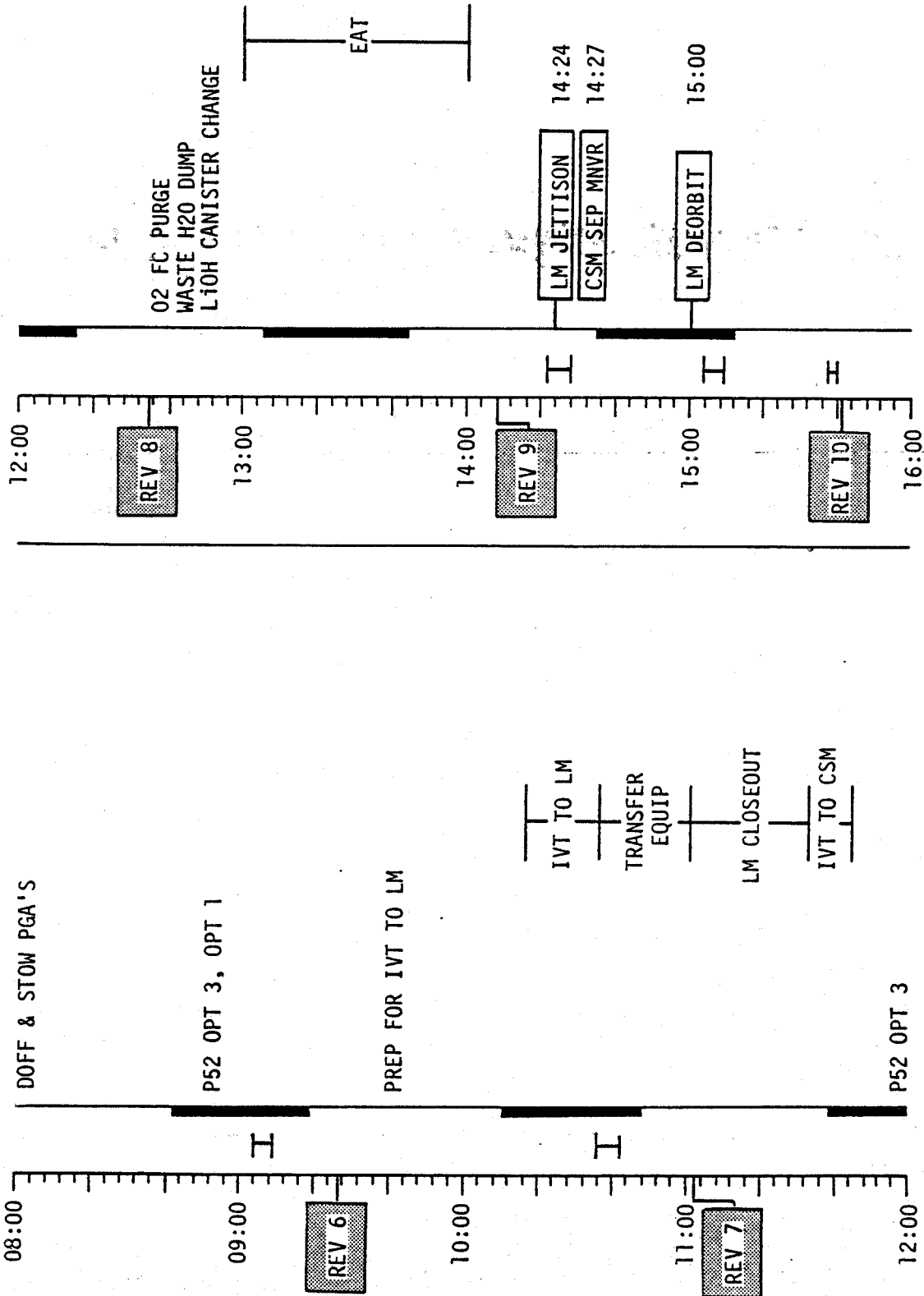
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	00:00 - 08:00	1/1-5	6-3

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

0453 CST



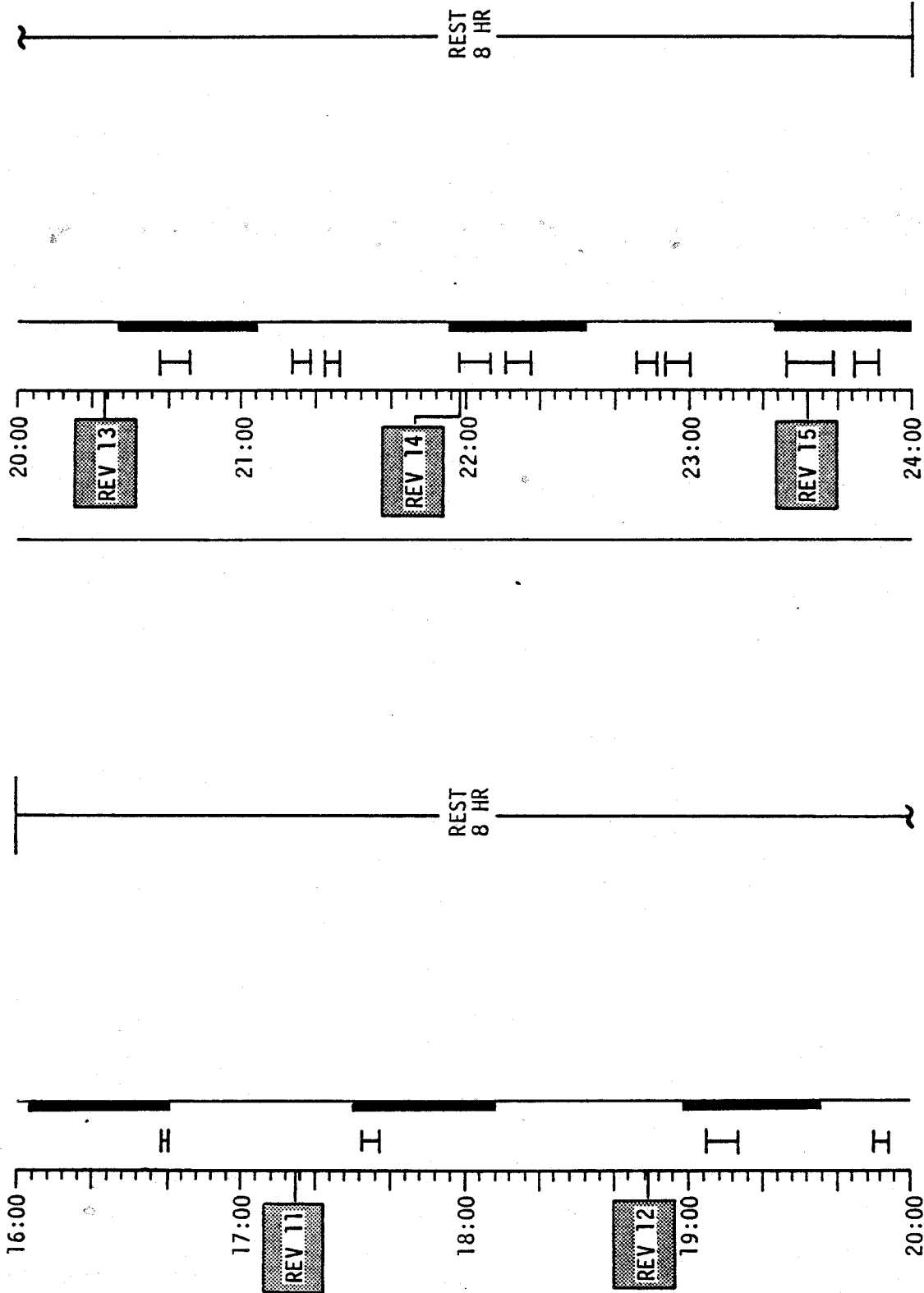
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	08:00 - 16:00	1/5-10	6-4

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

1253 CST



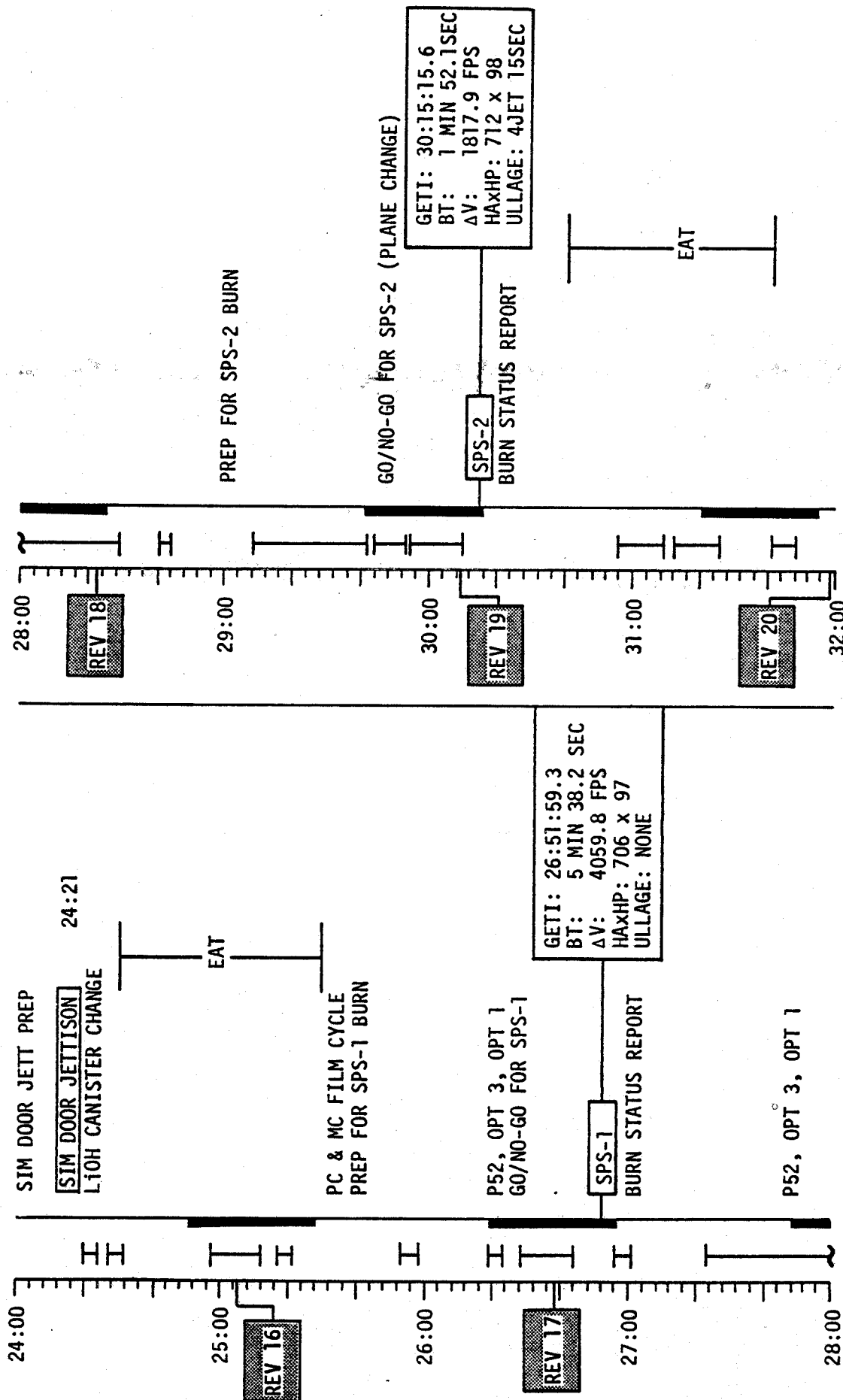
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	16:00 - 24:00	1/10-15	6-5

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

2053 CST

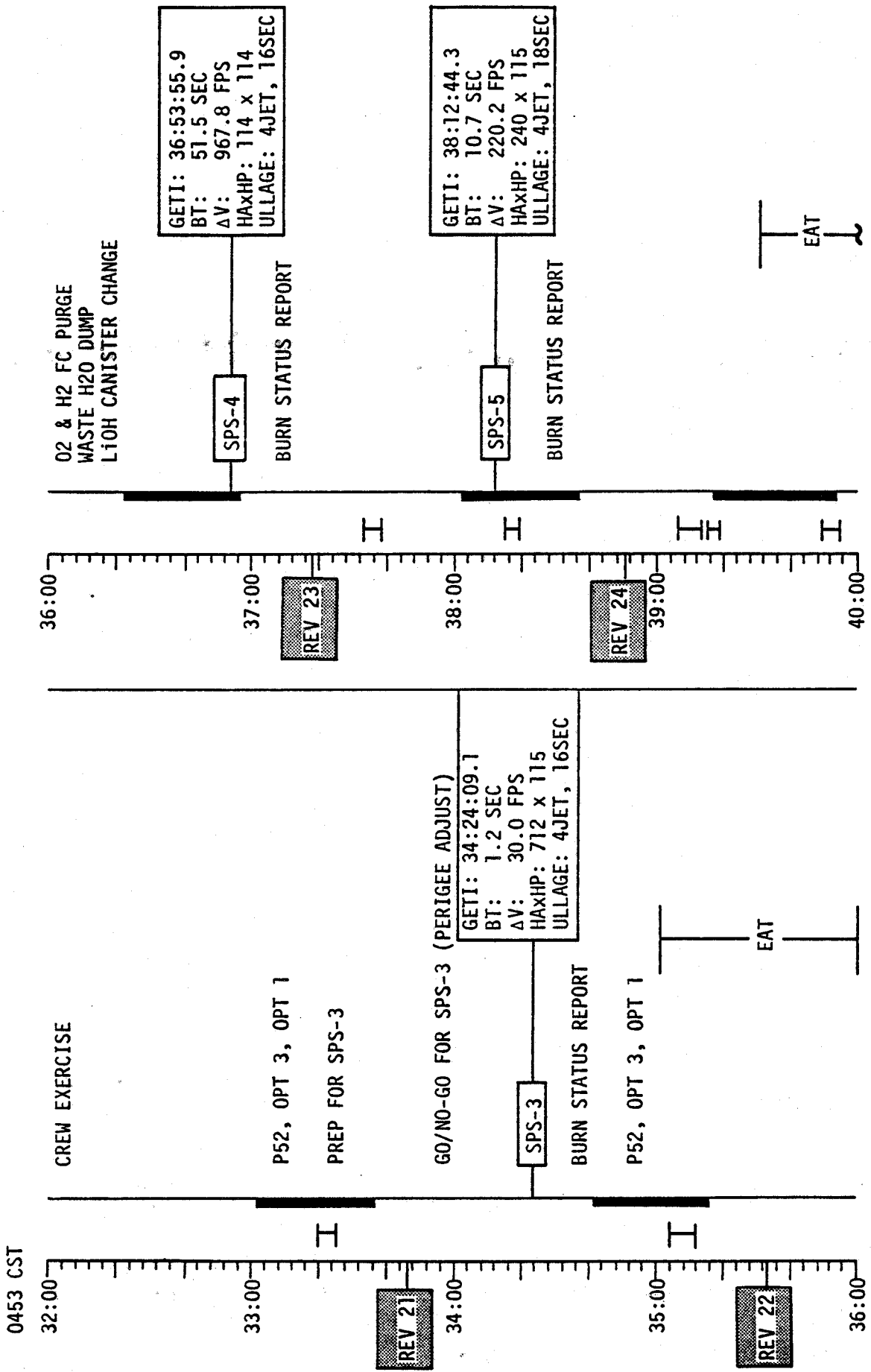


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	24:00 - 32:00	2/15-20	6-6

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE



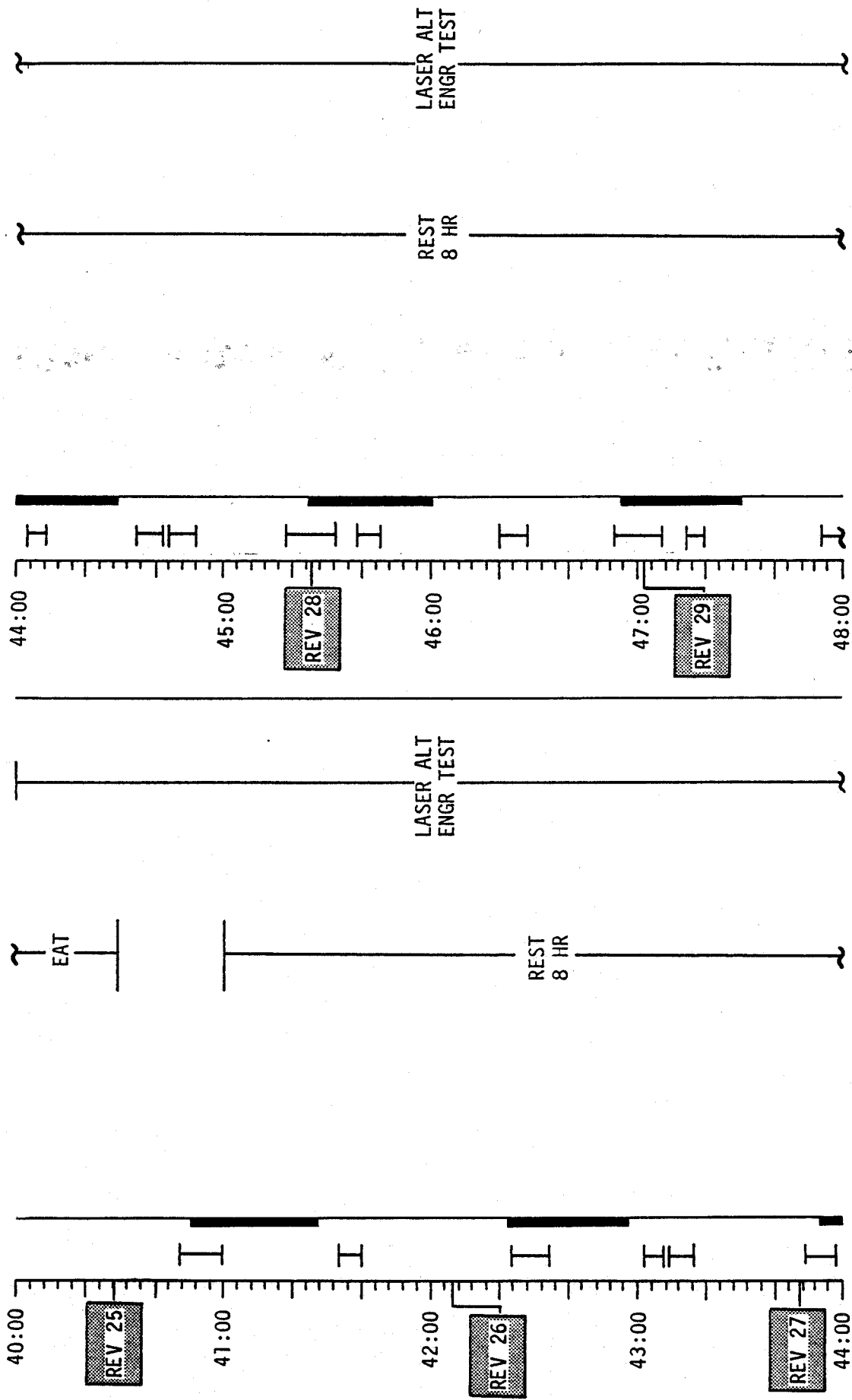
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	32:00 - 40:00	2/20-24	6-7

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

1253 CST

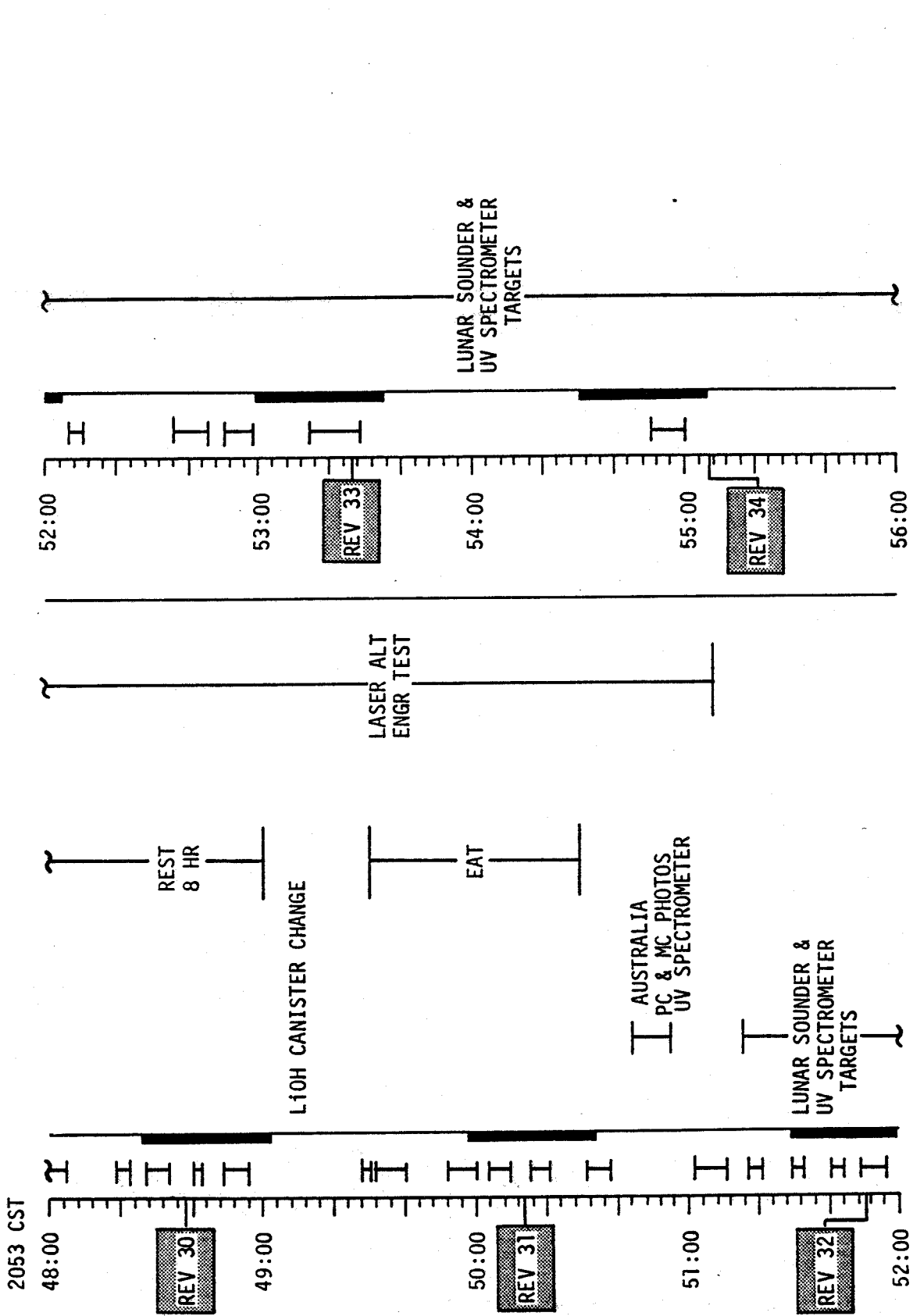


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	40:00 - 48:00	2/25-29	6-8

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE



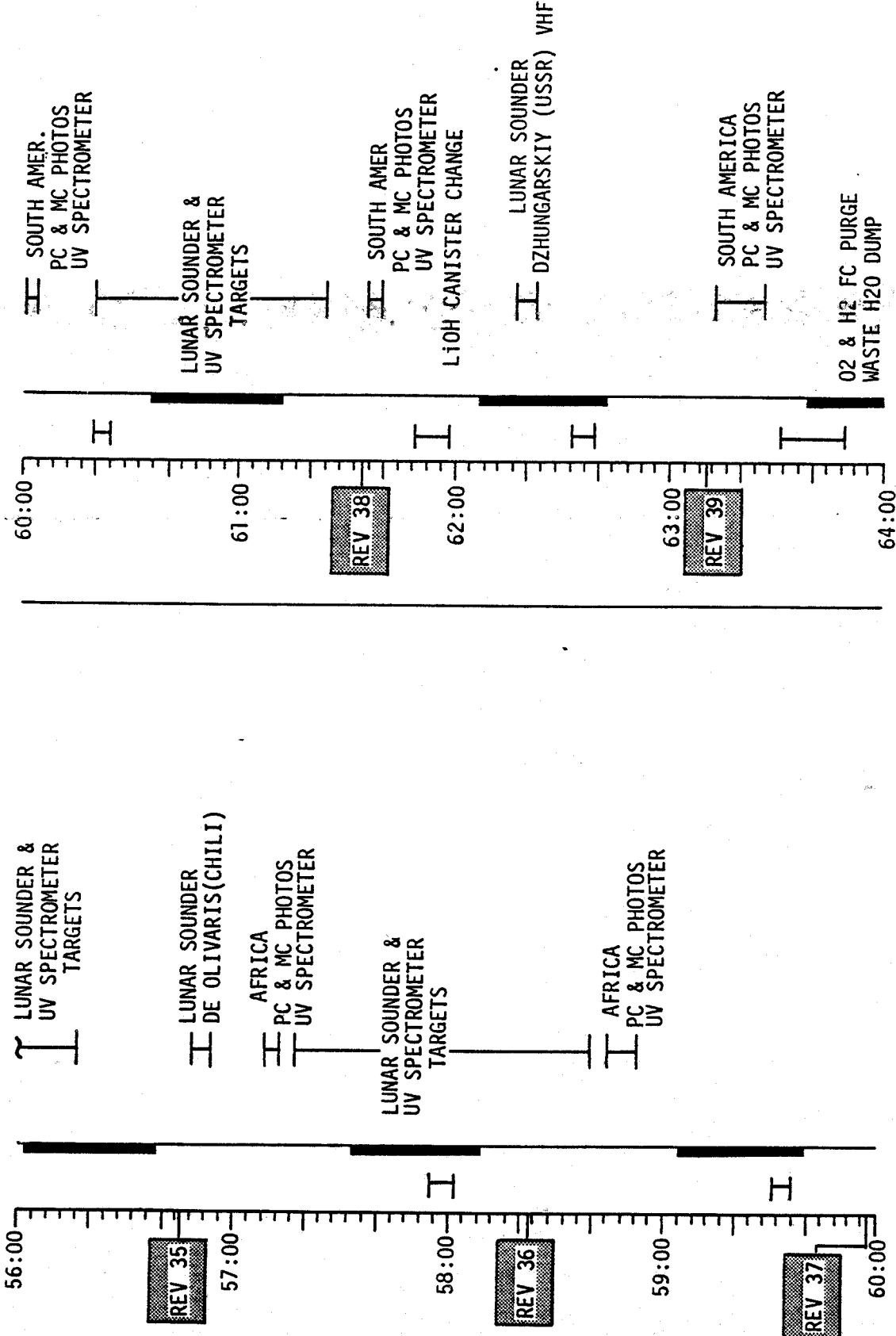
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	48:00 - 56:00	3/30-34	6-9

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

0453 CST

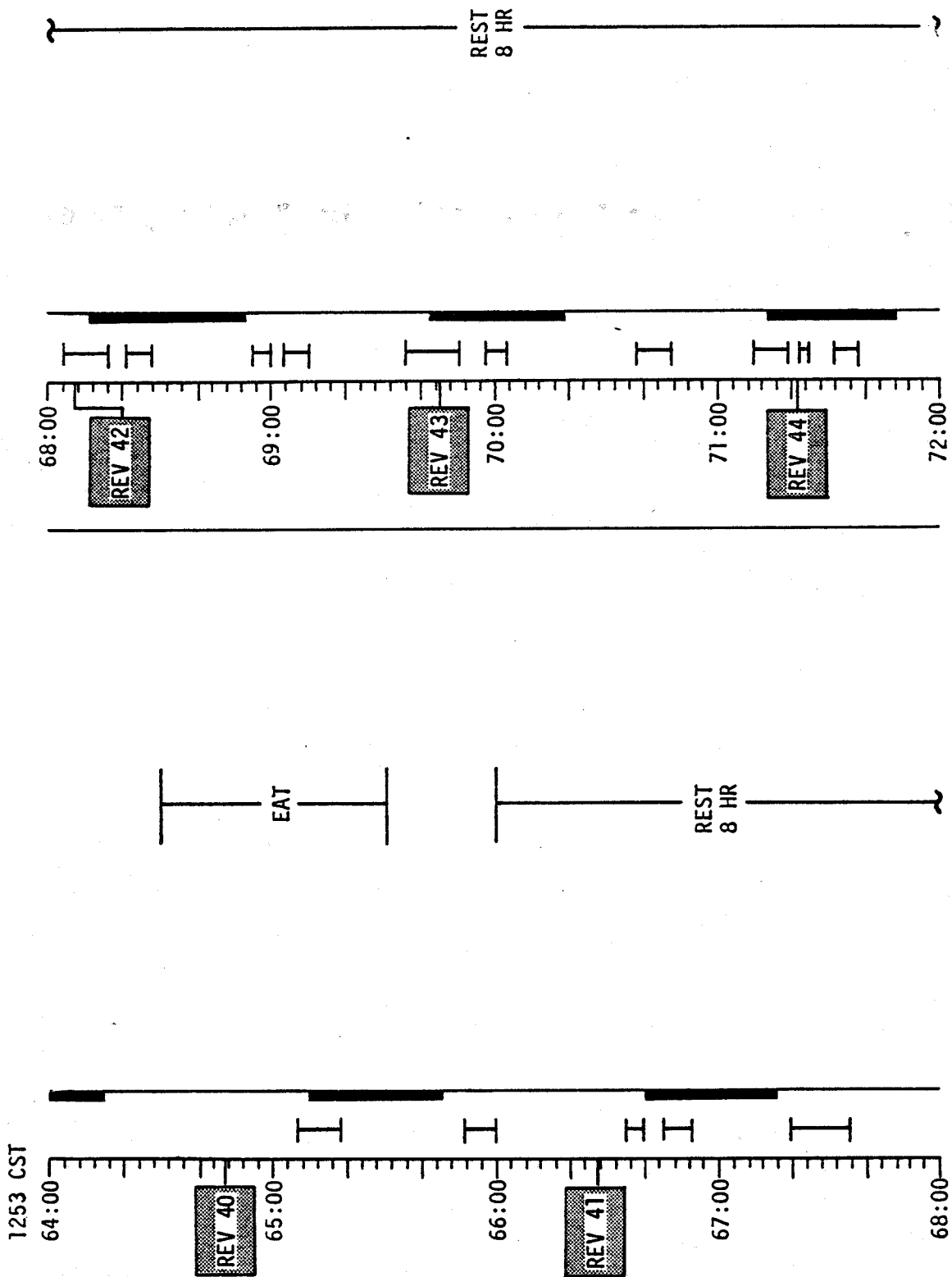


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	56:00 - 64:00	3/35-39	6-10

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE



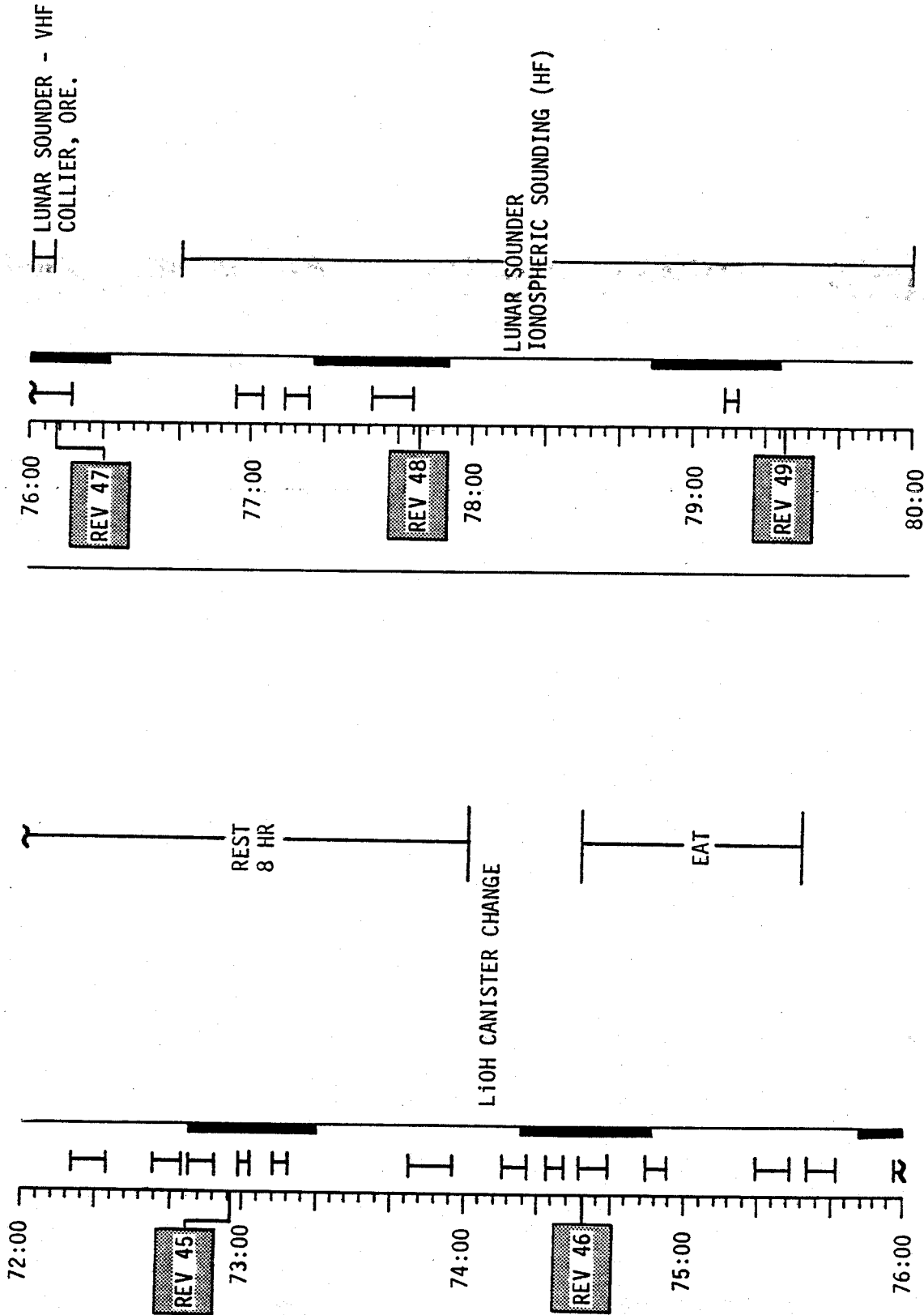
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	64:00 - 72:00	3/40-44	6-11

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

2053 CST



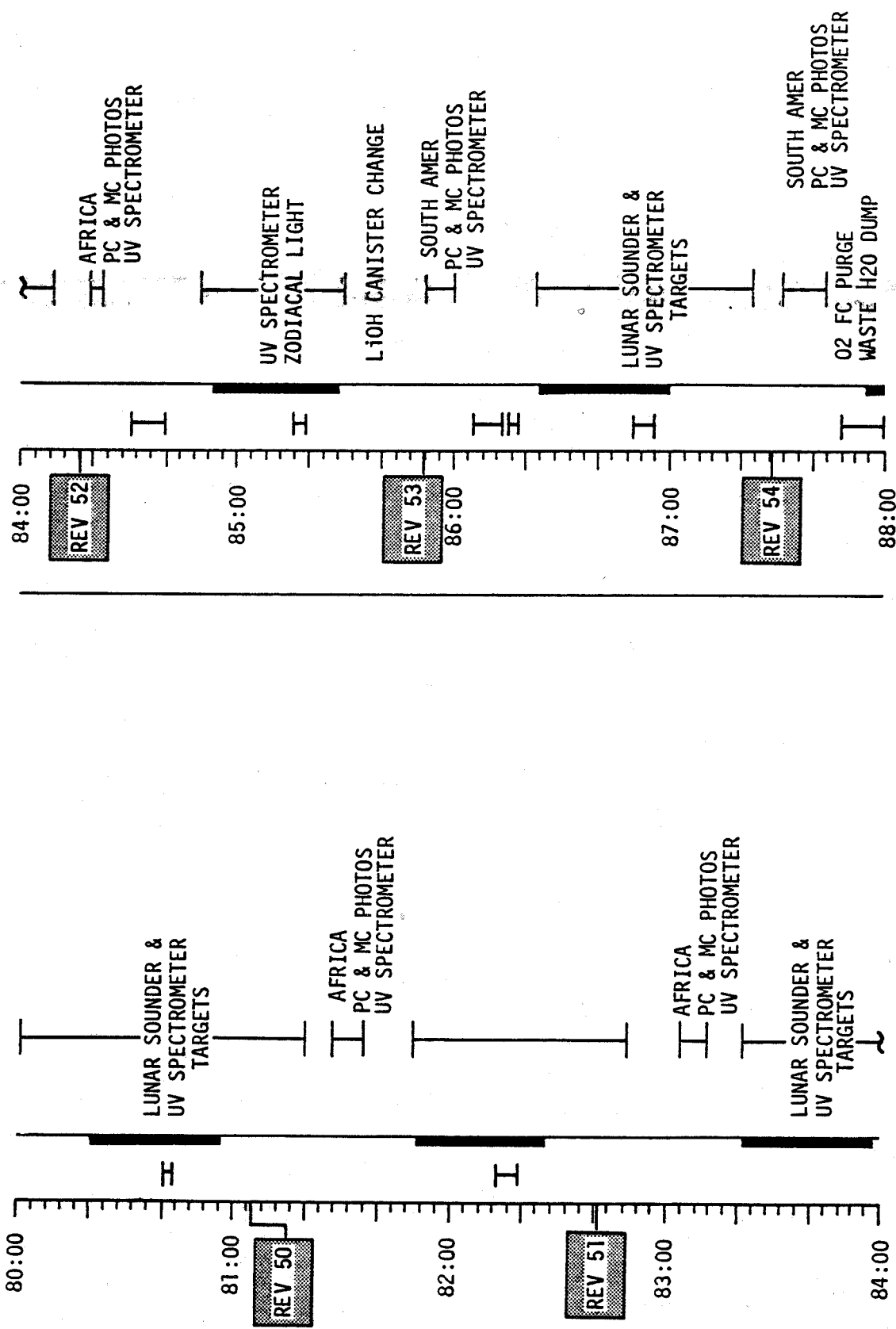
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	72:00 - 80:00	4/45-49	6-12

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

0453 CST



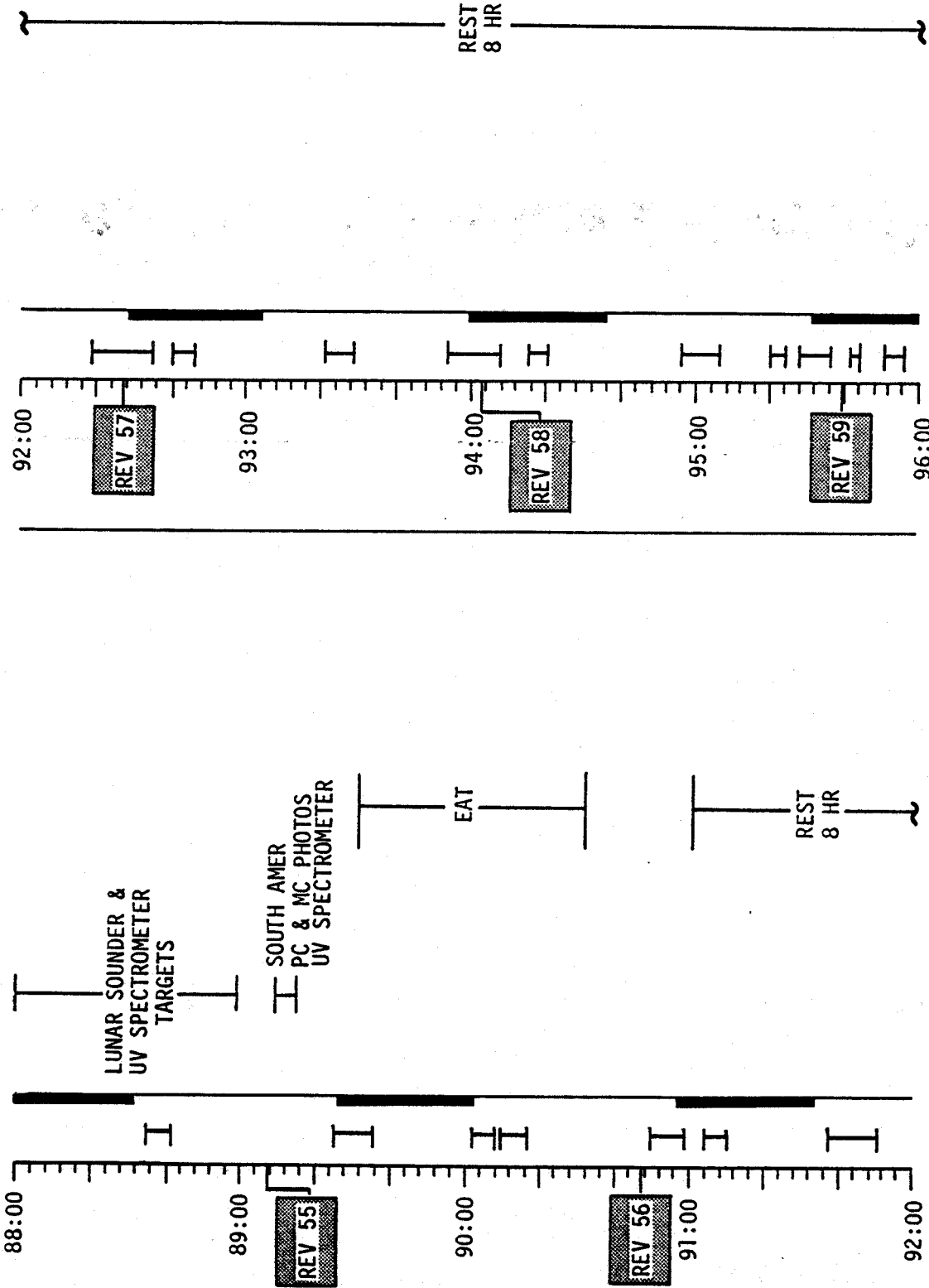
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	80:00 - 88:00	4/50-54	6-13

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

1253 CST



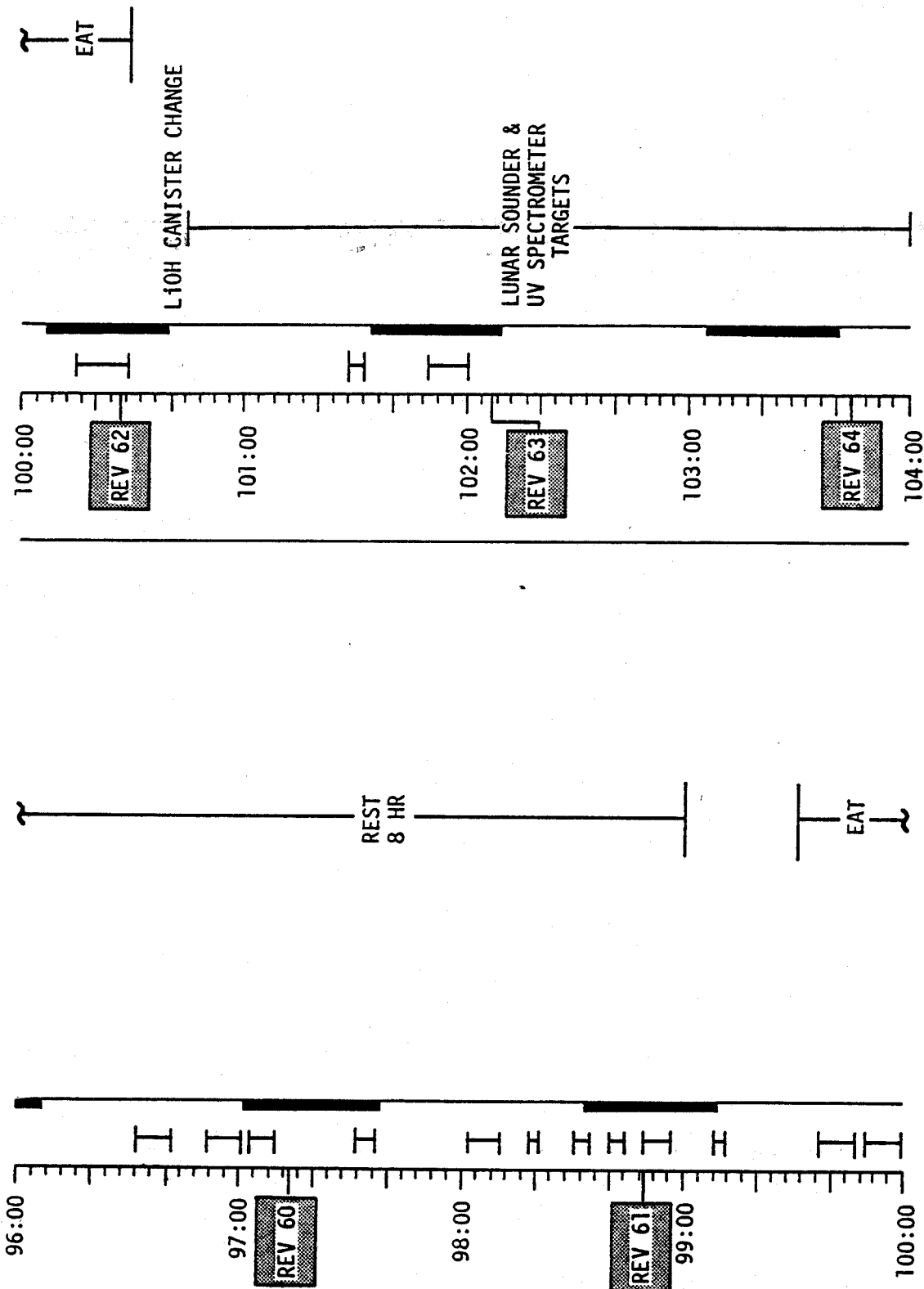
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	88:00 - 96:00	4/55-59	6-14

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

2053 CST



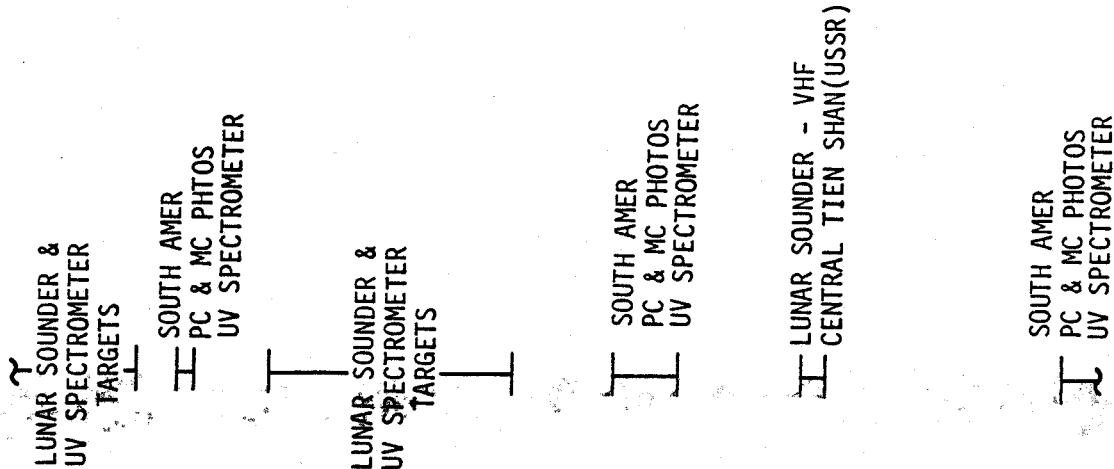
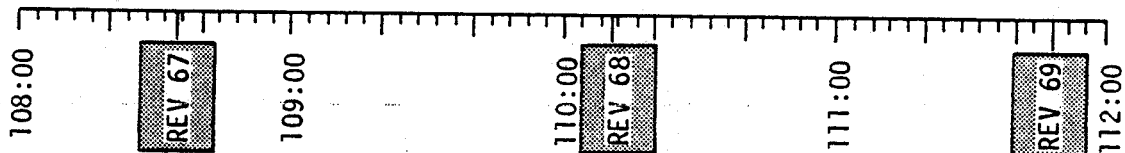
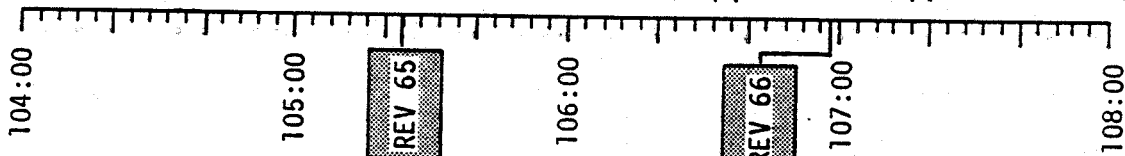
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	96:00 - 104:00	5/60-64	6-15

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

0453 CST

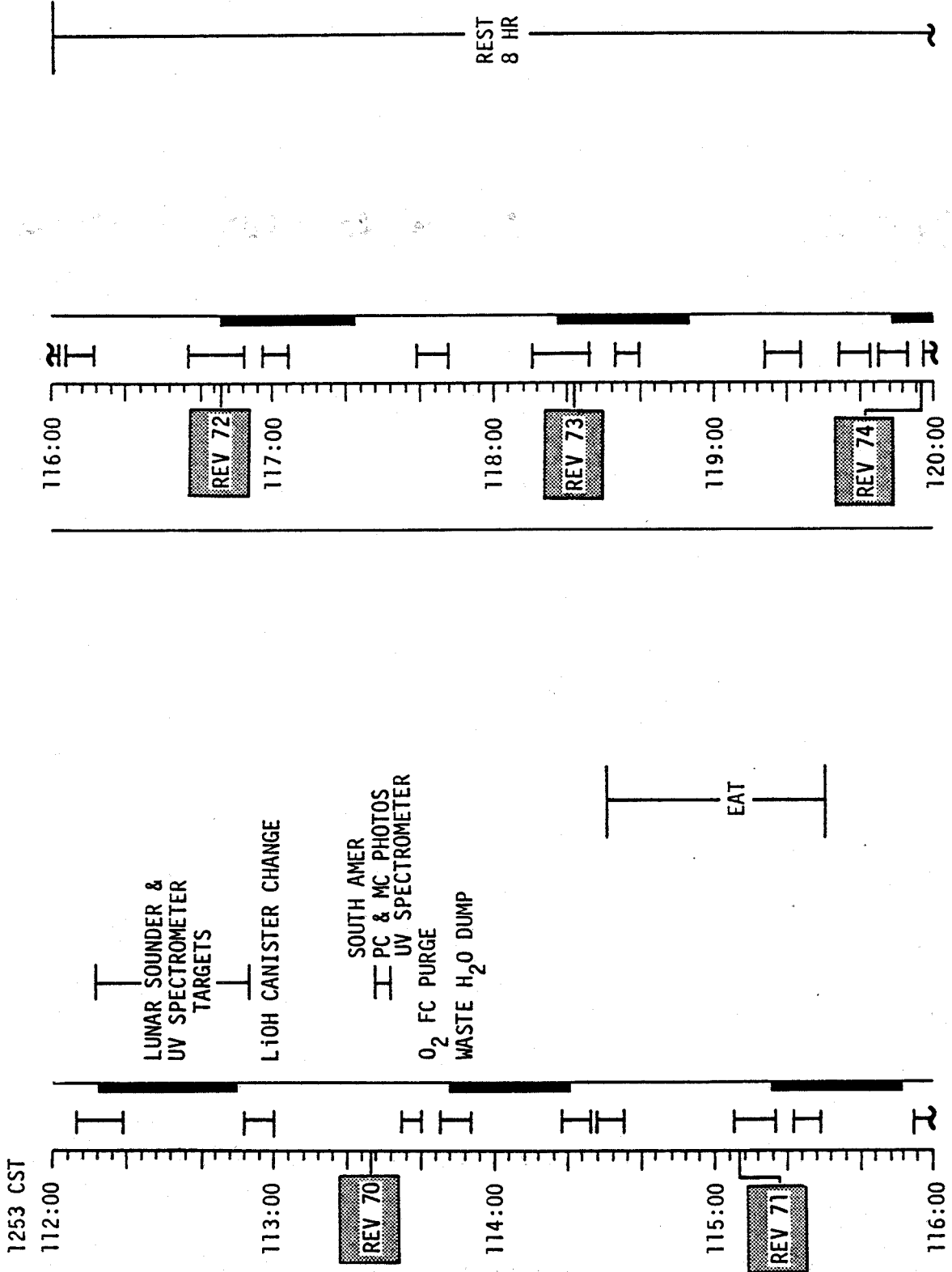


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	104:00 - 112:00	5/65-69	6-16

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

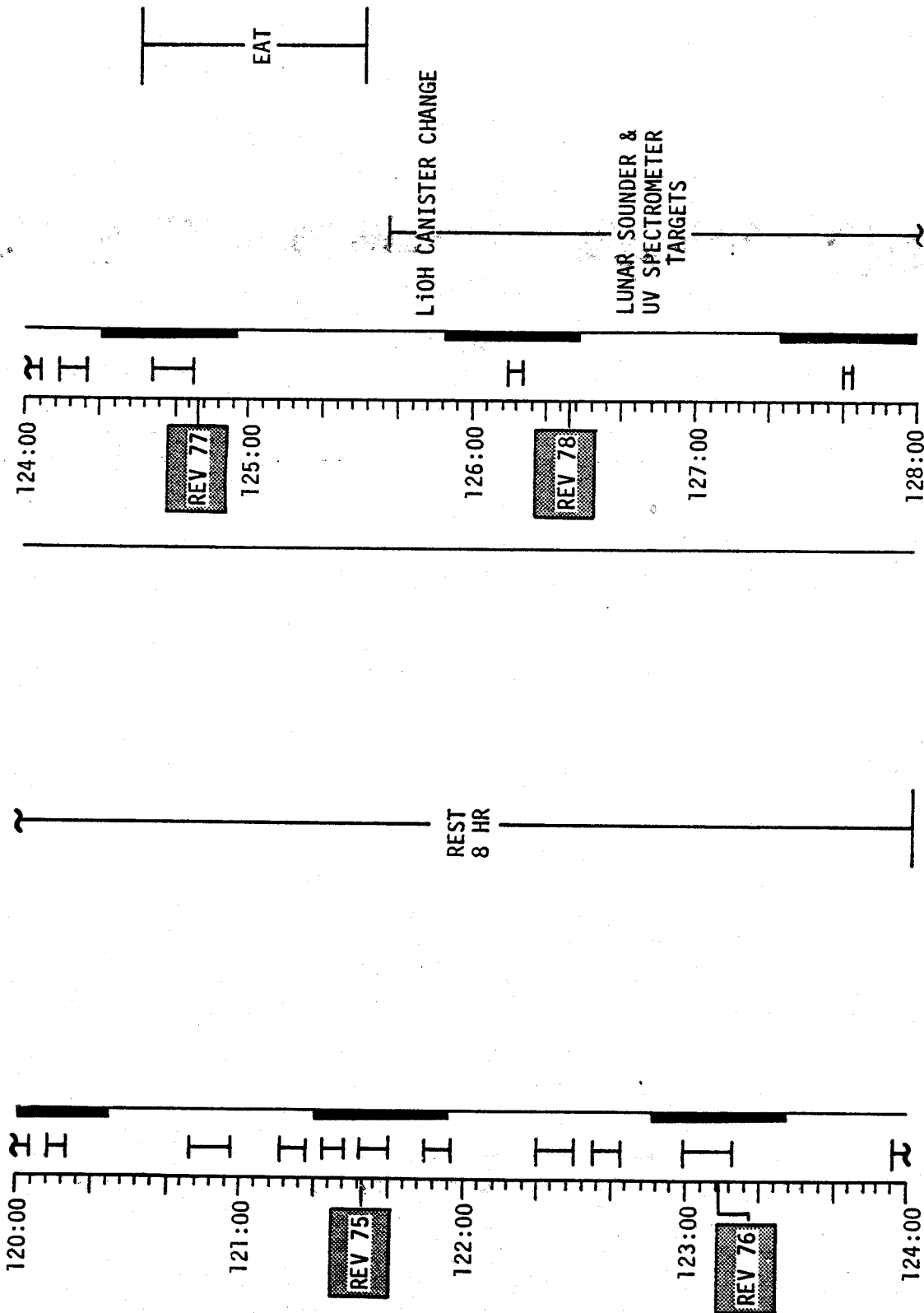


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	112:00 - 120:00	5/70-74	6-17

FLIGHT PLAN

EARTH ALTERNATE

2053 CST

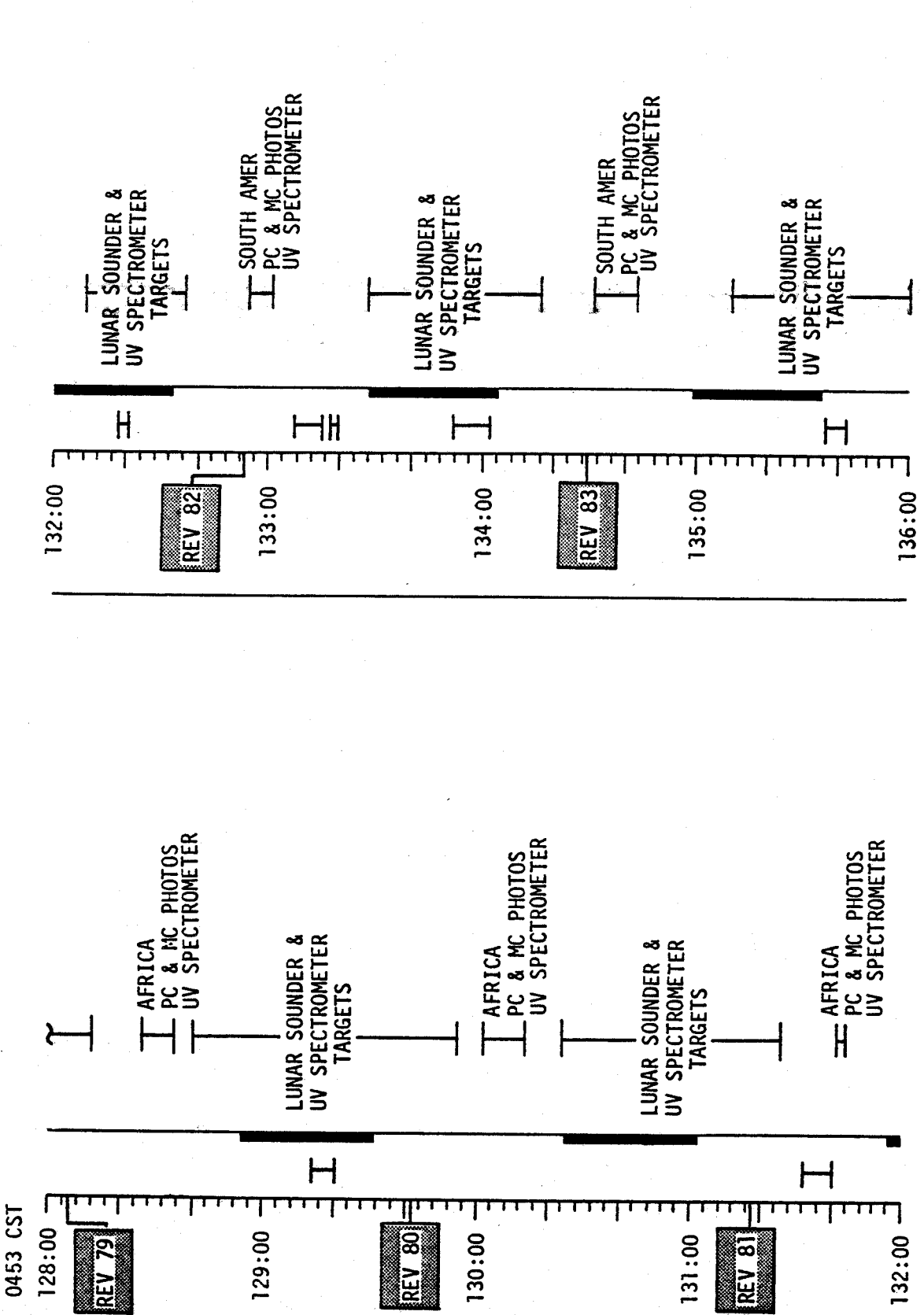


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	120:00 - 128:00	6/75-78	6-18

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

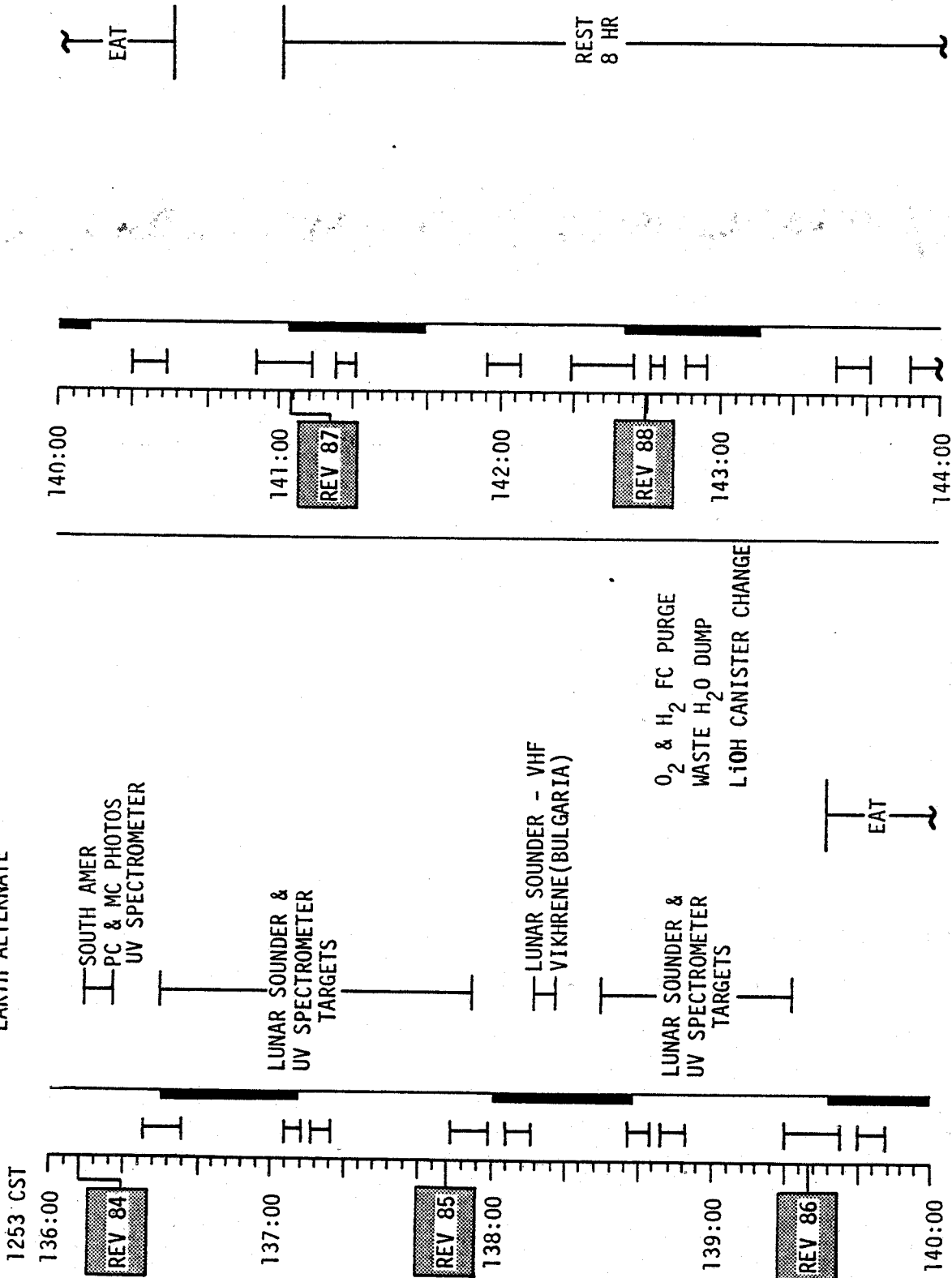


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	128:00 - 136:00	6/79-83	6-19

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE



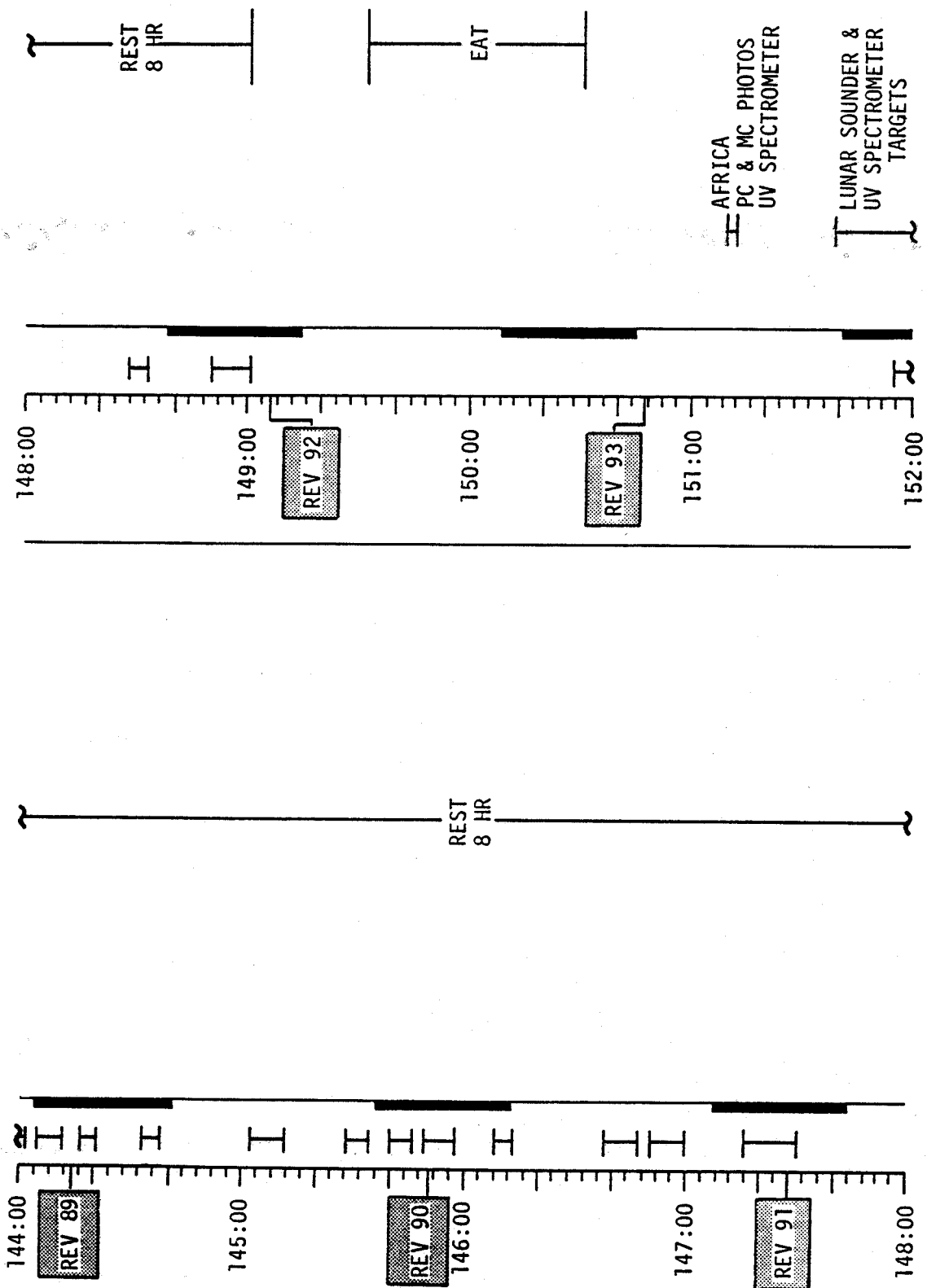
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	136:00 - 144:00	6/84-88	6-20

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

2053 CST



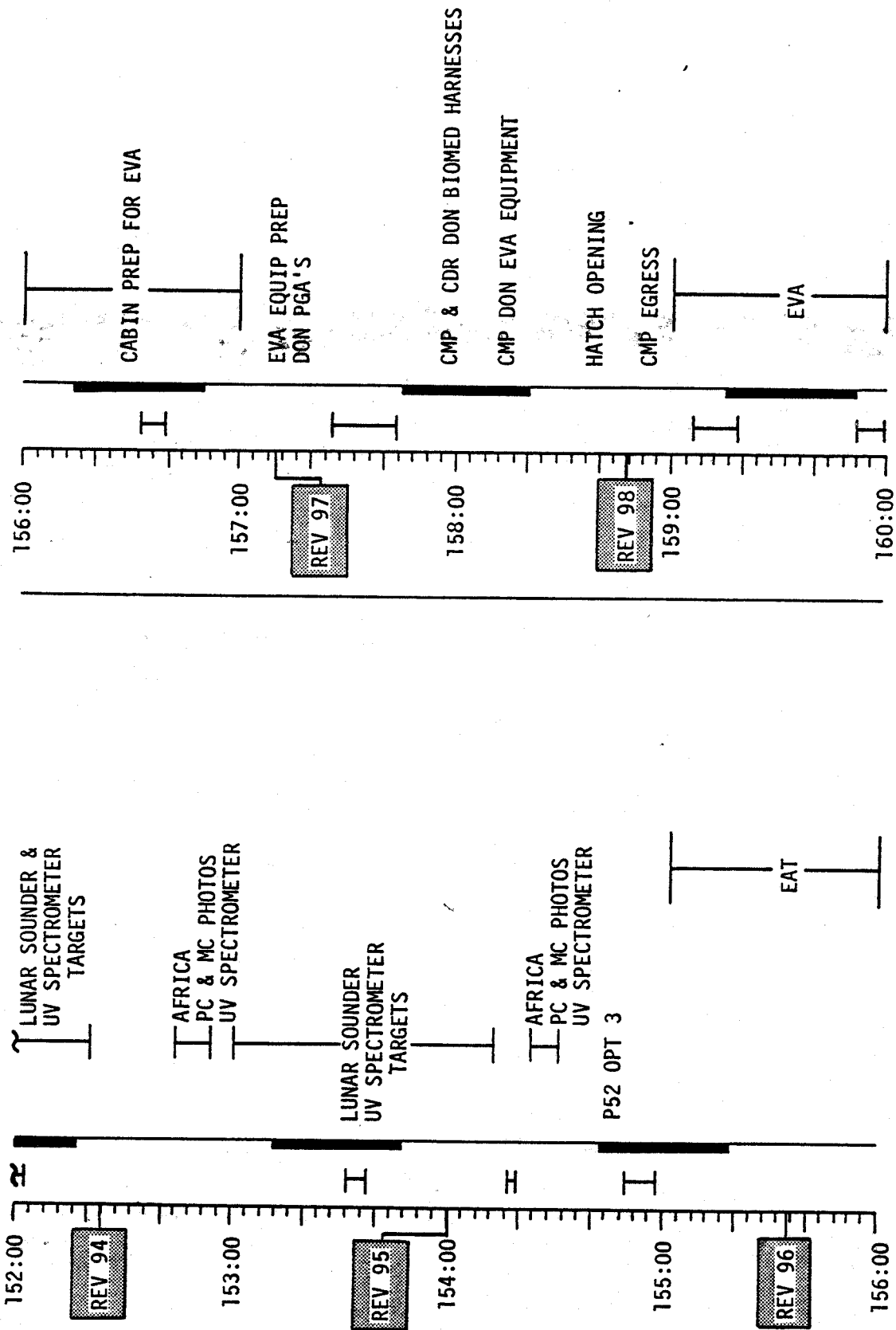
MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	144:00 - 152:00	7/89-93	6-21

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE

0453 CST

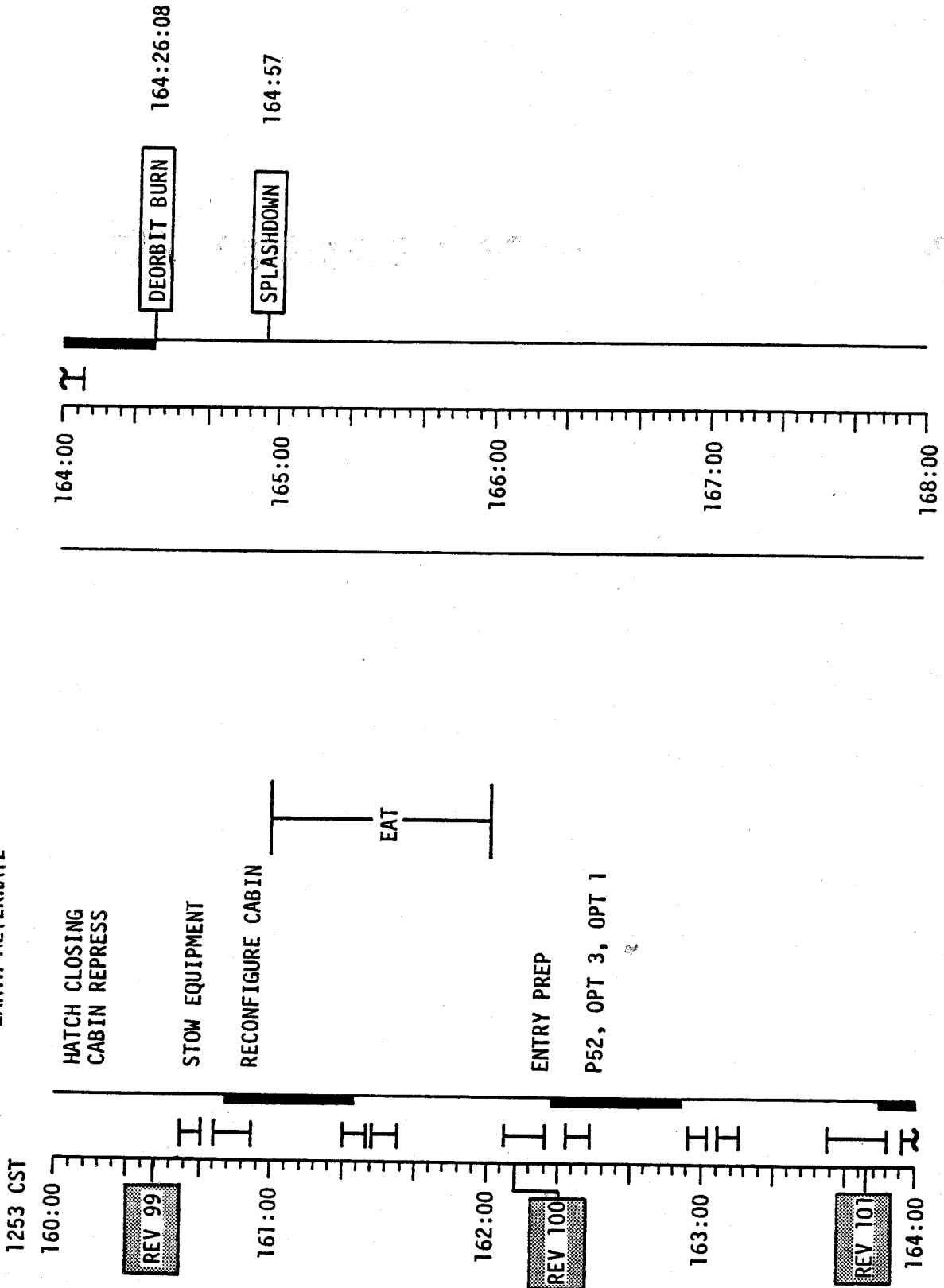


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	152:00 - 160:00	7/94-98	6-22

FLIGHT PLANNING BRANCH

FLIGHT PLAN

EARTH ALTERNATE



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	10/23/72	160:00 - 168:00	7/99-101	6-23

FLIGHT PLANNING BRANCH

THIS PAGE INTENTIONALLY BLANK

APOLLO 17

FINAL (12/6)

10/23/72

6-24

CSM/LM ALTERNATE MISSION

Assumptions

- 1) Nominal LOI and DOI Burns have been achieved by the SPS.
- 2) A systems failure while in lunar orbit has resulted in a NO/GO for landing.

Constraints

- 1) Jettison LM to a lunar impact.
- 2) Circularize to a 60 nm orbit.
- 3) Adhere to the nominal flight plan as much as possible
- 4) Obtain sim bay experiments data.

Sequence of Events

This alternate mission is initiated by a systems failure with the DPS which will not allow a landing mission. LM jettison, Circularization and TEI occurs at approximately the nominal time.

6-26

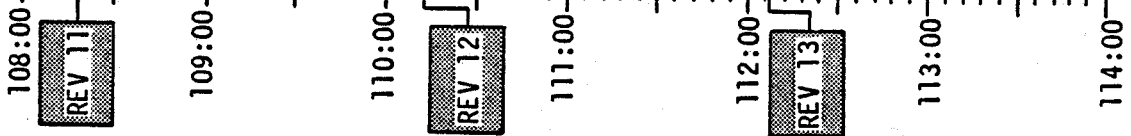
10/23/72

THIS PAGE INTENTIONALLY BLANK

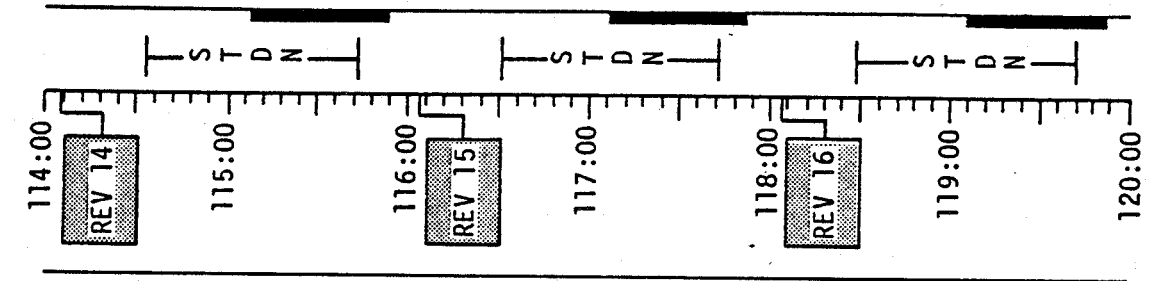
FLIGHT PLAN

CSM/LM ALTERNATE MISSION
CSM

LM



FAILURE
EVALUATION



CSM

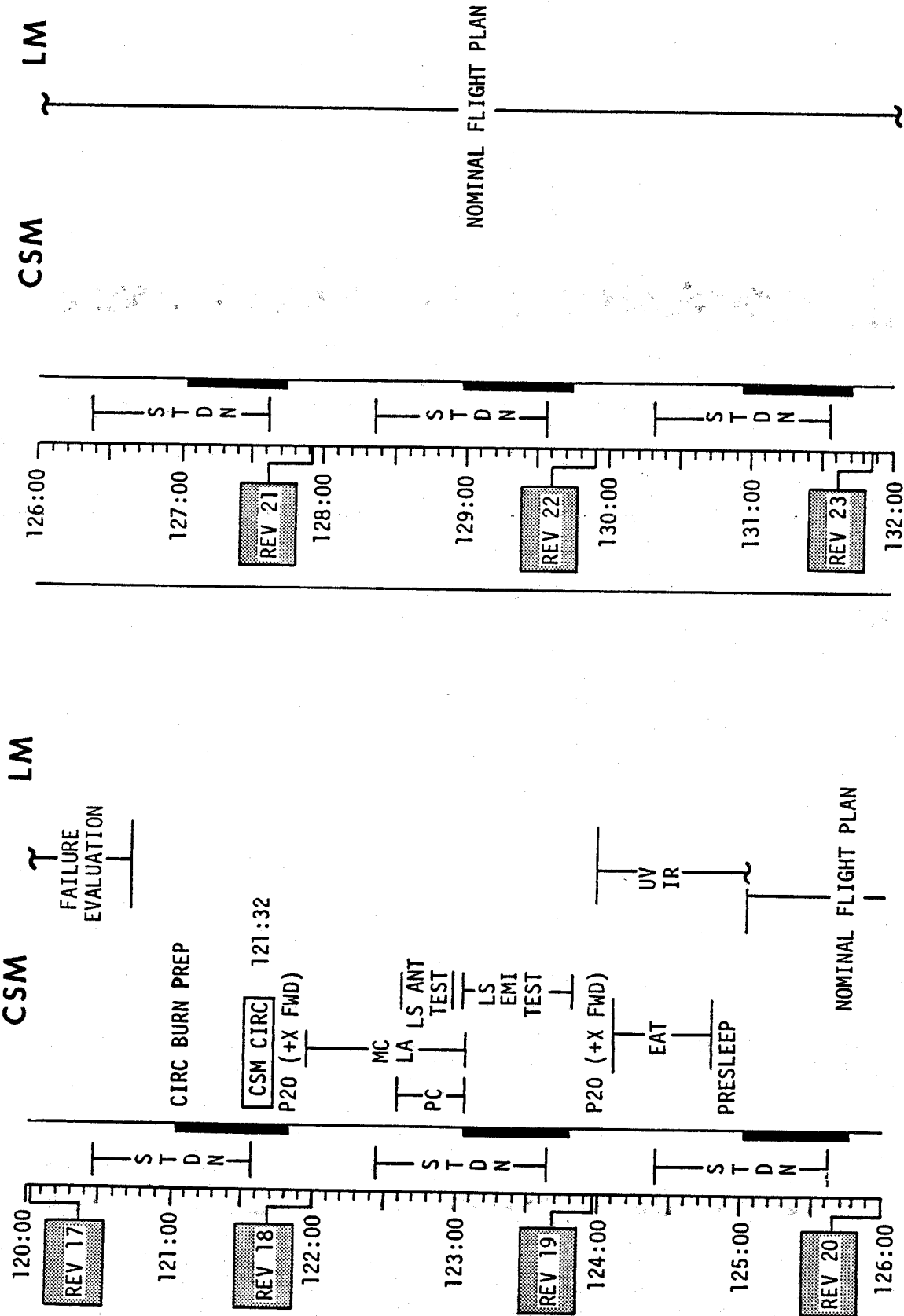
LM

FAILURE
EVALUATION

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	108:00 - 120:00	6/11-16	6-27

FLIGHT PLAN

CSM/LM ALTERNATE MISSION

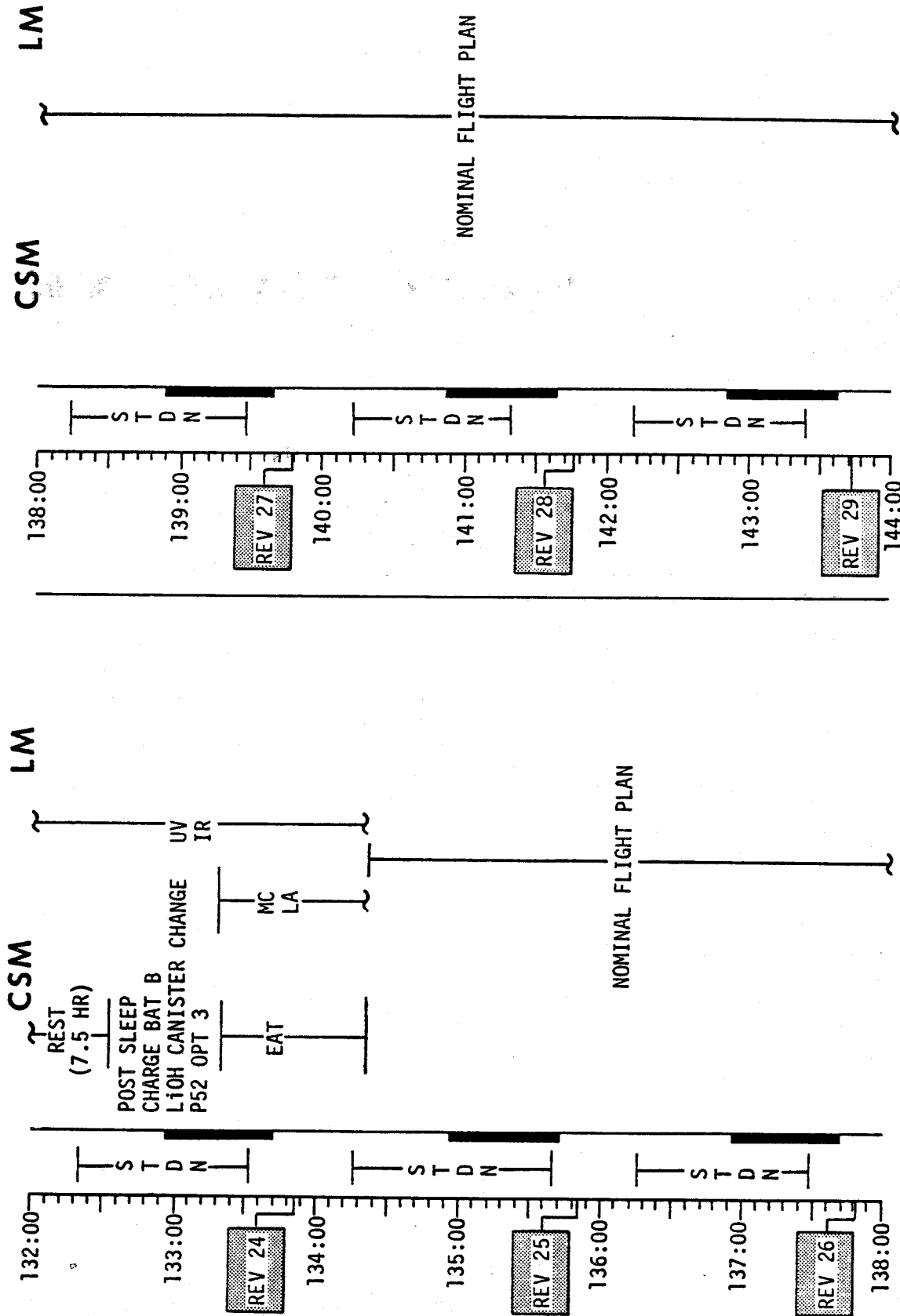


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	120:00 - 132:00	6-7/17-23	6-28

FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM/LM ALTERNATE MISSION



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	132:00 - 144:00	7/24-29	6-29

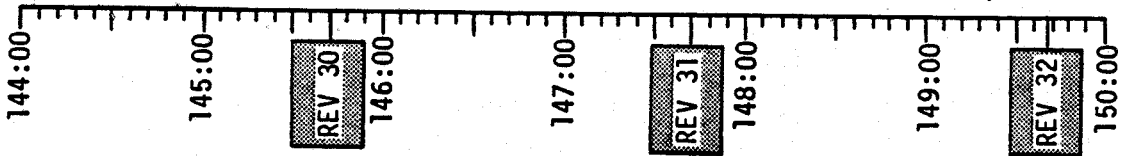
FLIGHT PLANNING BRANCH

FLIGHT PLAN

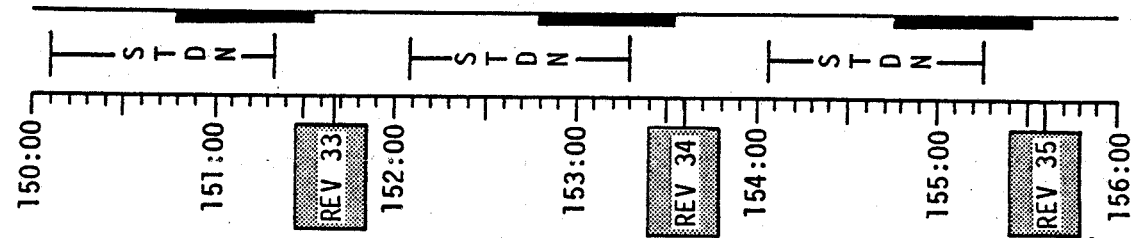
CSM/LM ALTERNATE MISSION

CSM

LM



NOMINAL FLIGHT PLAN



NOMINAL FLIGHT PLAN

LM

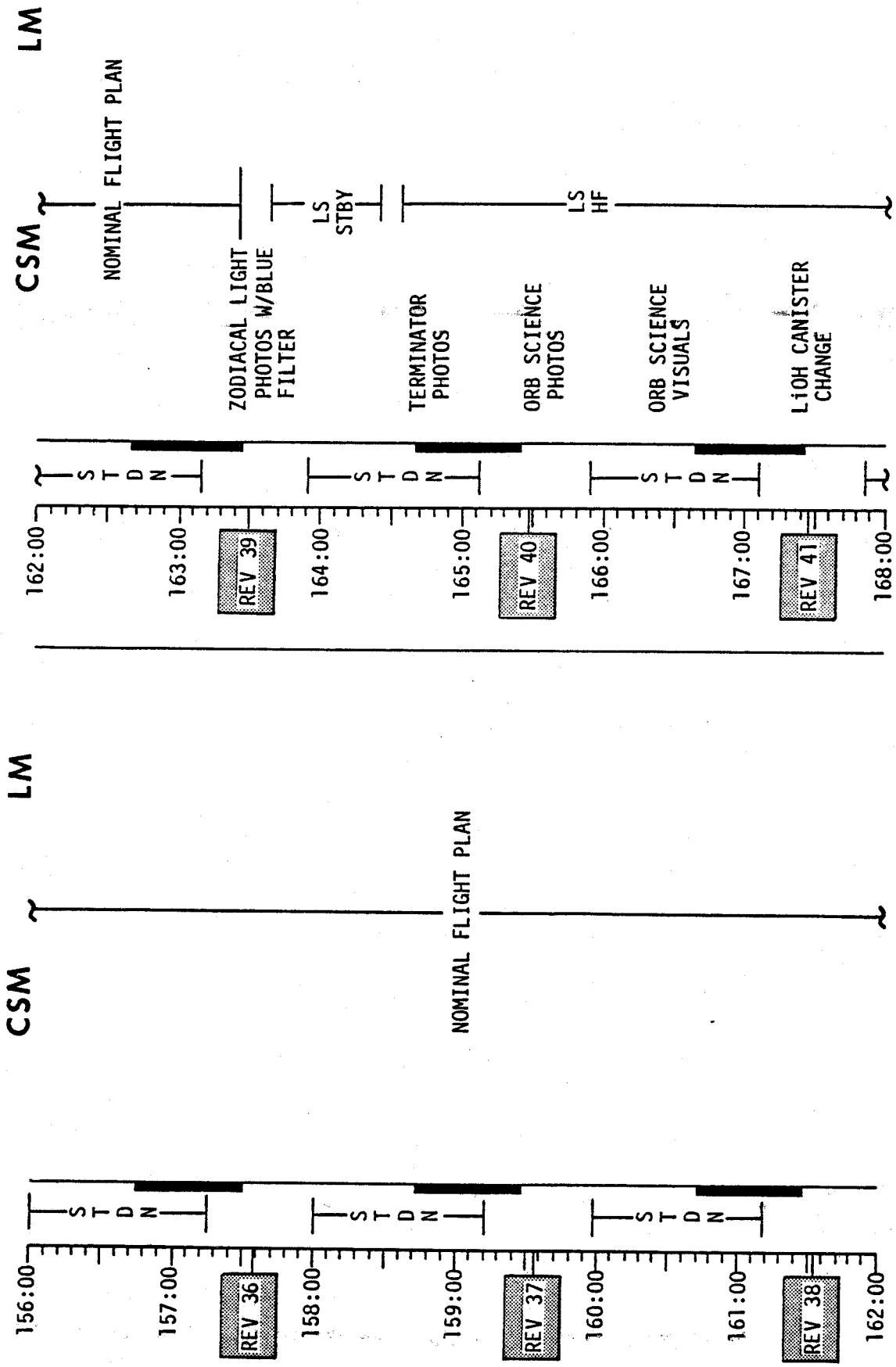
CSM

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	144:00 - 156:00	7-8/30-35	6-30

FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM/LM ALTERNATE MISSION

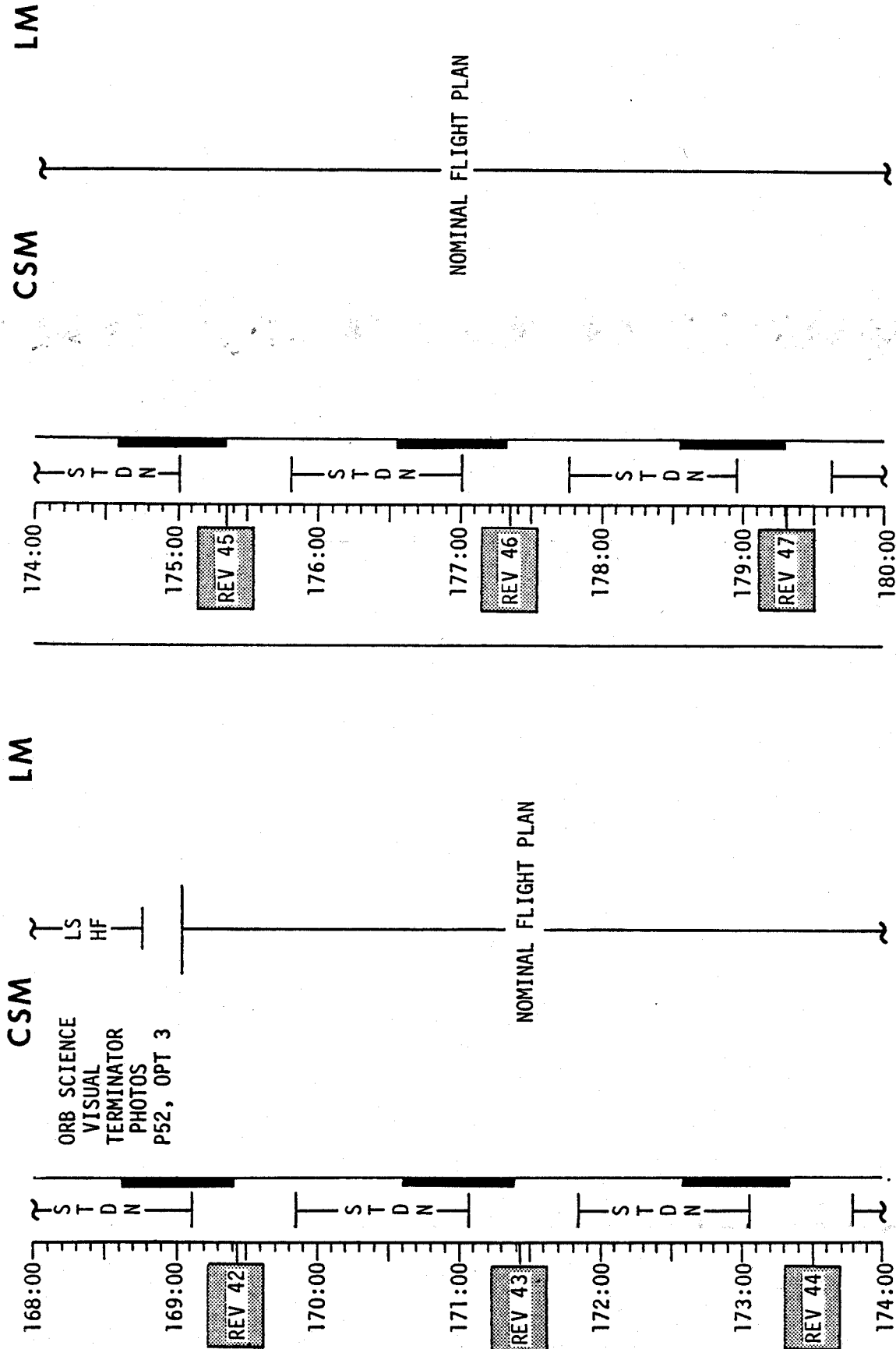


MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	156:00 - 168:00	8/36-41	6-31

FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM/LM ALTERNATE MISSION



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	168:00 - 180:00	8-9/42-47	6-32

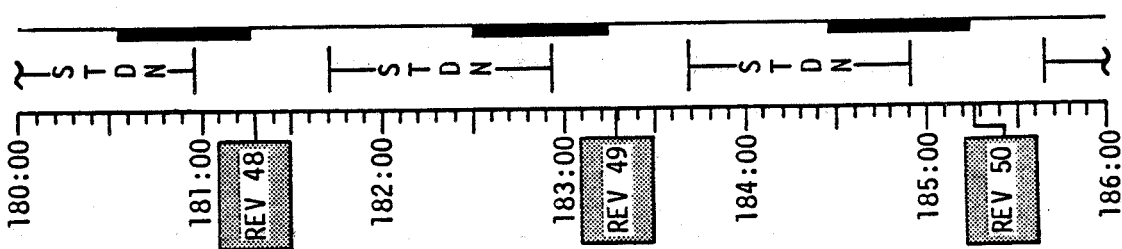
FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM/LM ALTERNATE MISSION

CSM

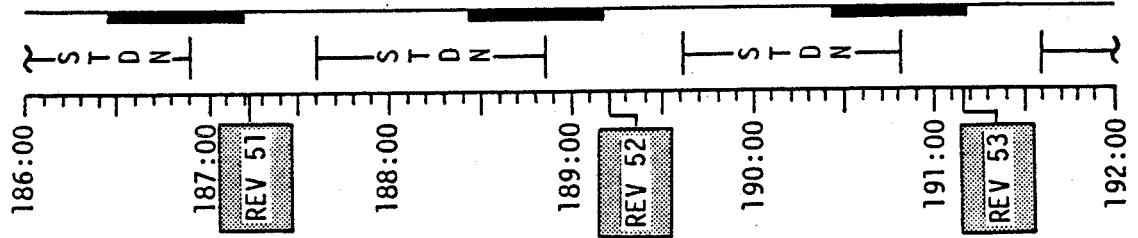
LM



NOMINAL FLIGHT PLAN

CSM

LM



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	180:00 - 192:00	9/48-53	6-33

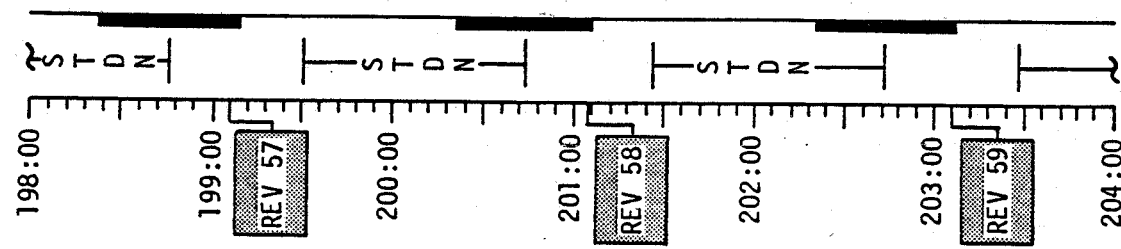
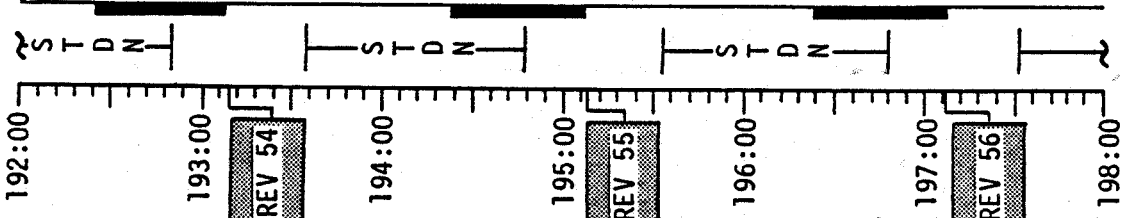
FLIGHT PLANNING BRANCH

FLIGHT PLAN

CSM/LM ALTERNATE MISSION

CSM

LM



LM

CSM

NOMINAL FLIGHT PLAN

NOMINAL FLIGHT PLAN

MISSION	EDITION	DATE	TIME	DA./REV	PAGE
APOLLO 17	FINAL (12/6)	23 OCTOBER 1972	192:00 - 204:00	9/54-59	6-34

FLIGHT PLANNING BRANCH

CSM ONLY ALTERNATE MISSION

Assumptions

- 1) A nominal TLI Burn has been achieved by the S-IVB.
- 2) A systems failure during T.D.&E or a LM Jettison during TLC has resulted in a CSM-Only Alternate Mission.

Constraints

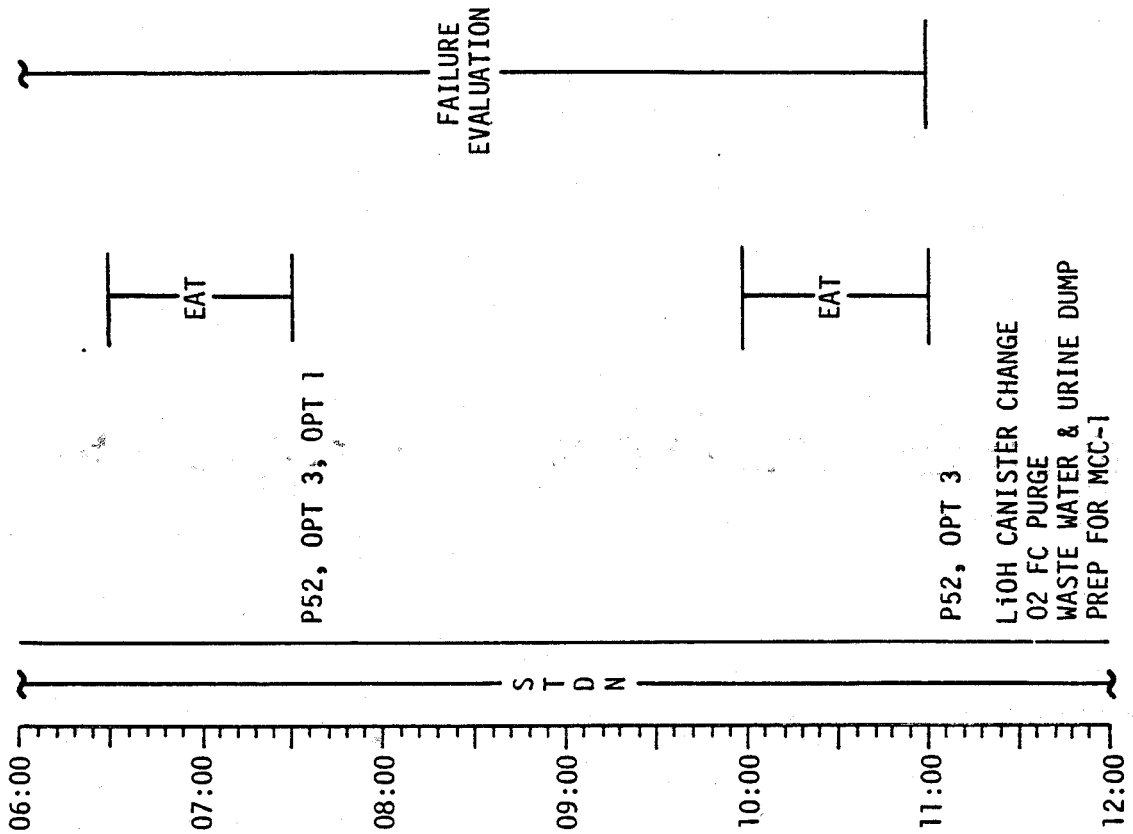
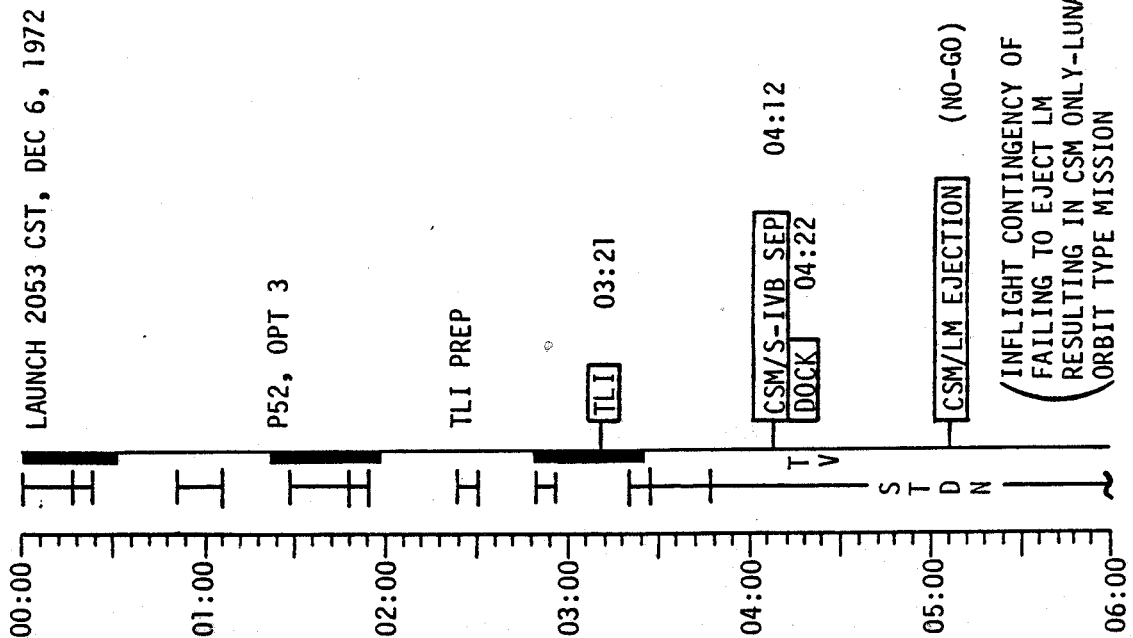
- 1) SPS midcourse burn to return to a free return trajectory.
- 2) Maintain any rev TEI Capability.
- 3) Obtain sim bay experiments data.

Sequence of Events

This alternate mission is initiated by a failure to eject the LM at T.D.&E or a LM Jettison during TLC. An SPS midcourse will be performed to a free return trajectory. The CSM will perform an LOI and Circularization Burn sequence with an inclination of approximately twenty degrees. Six days are planned in lunar orbit operating all the sim bay equipment and expending all the pan and mapping camera film. The TEI burn will follow a sequence similar to the nominal mission.

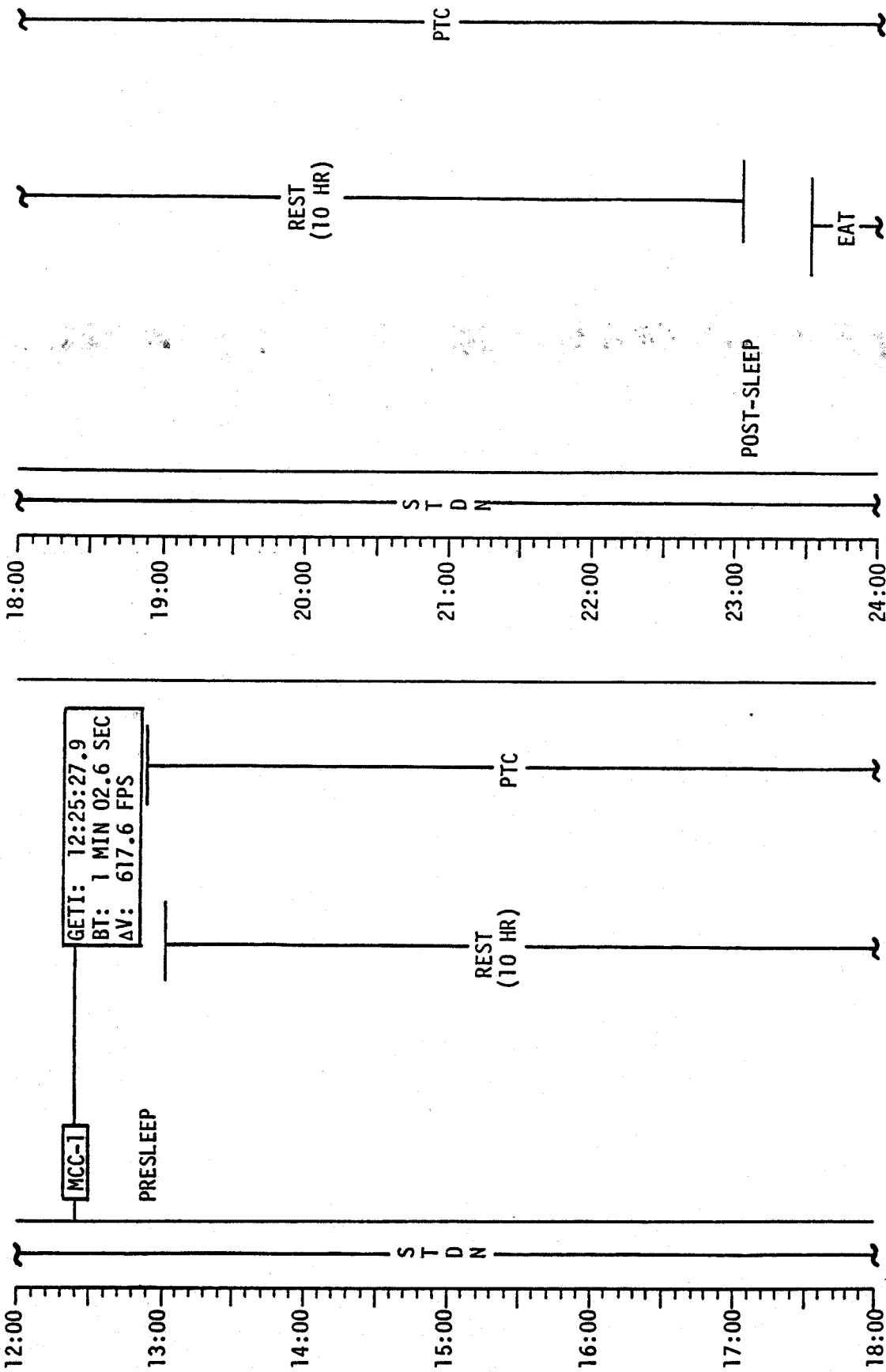
THIS PAGE INTENTIONALLY BLANK

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	00:00 - 12:00	1/TLC	6-37

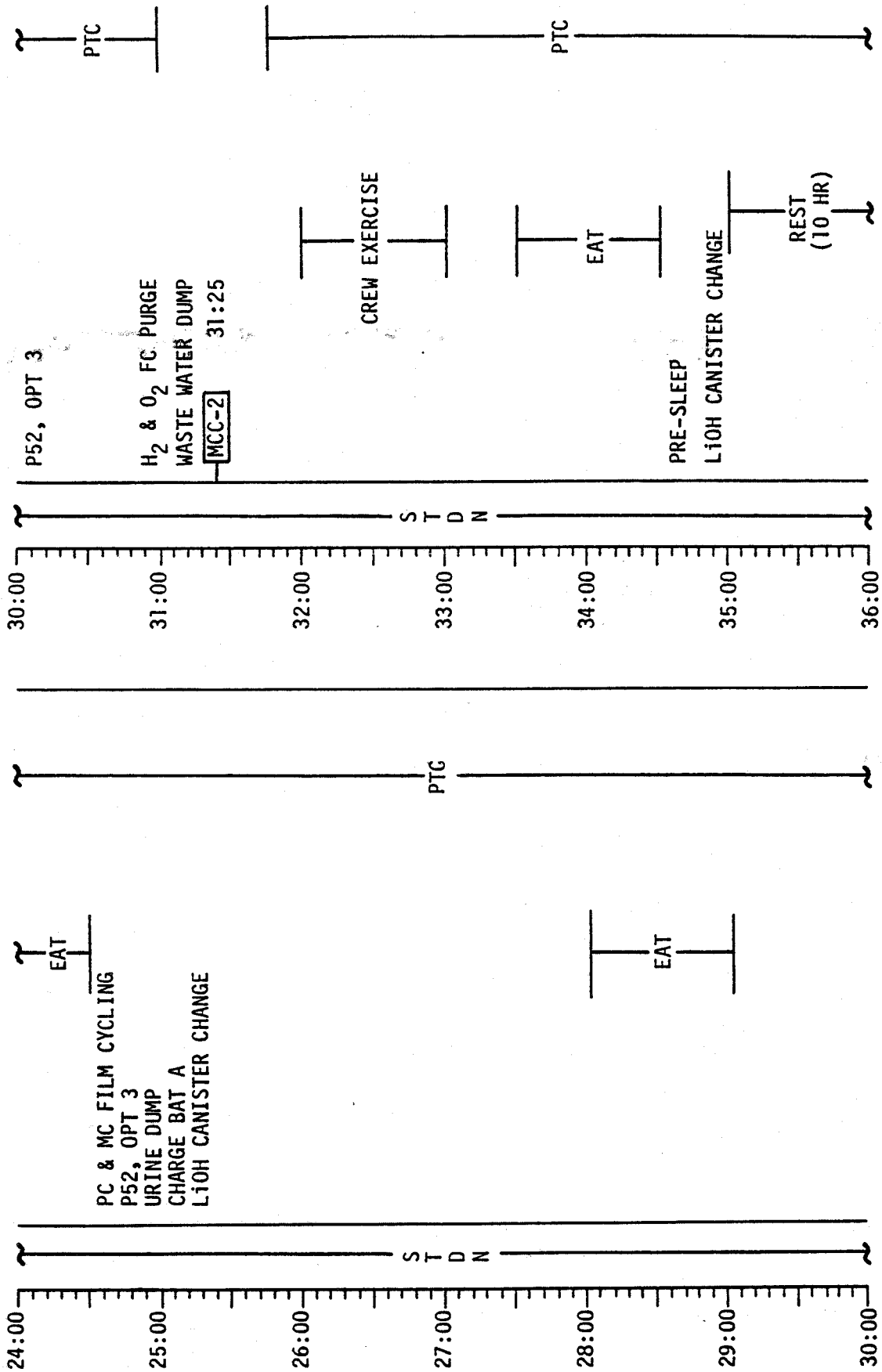
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	12:00 - 24:00	1/TLC	6-38

FLIGHT PLANNING BRANCH

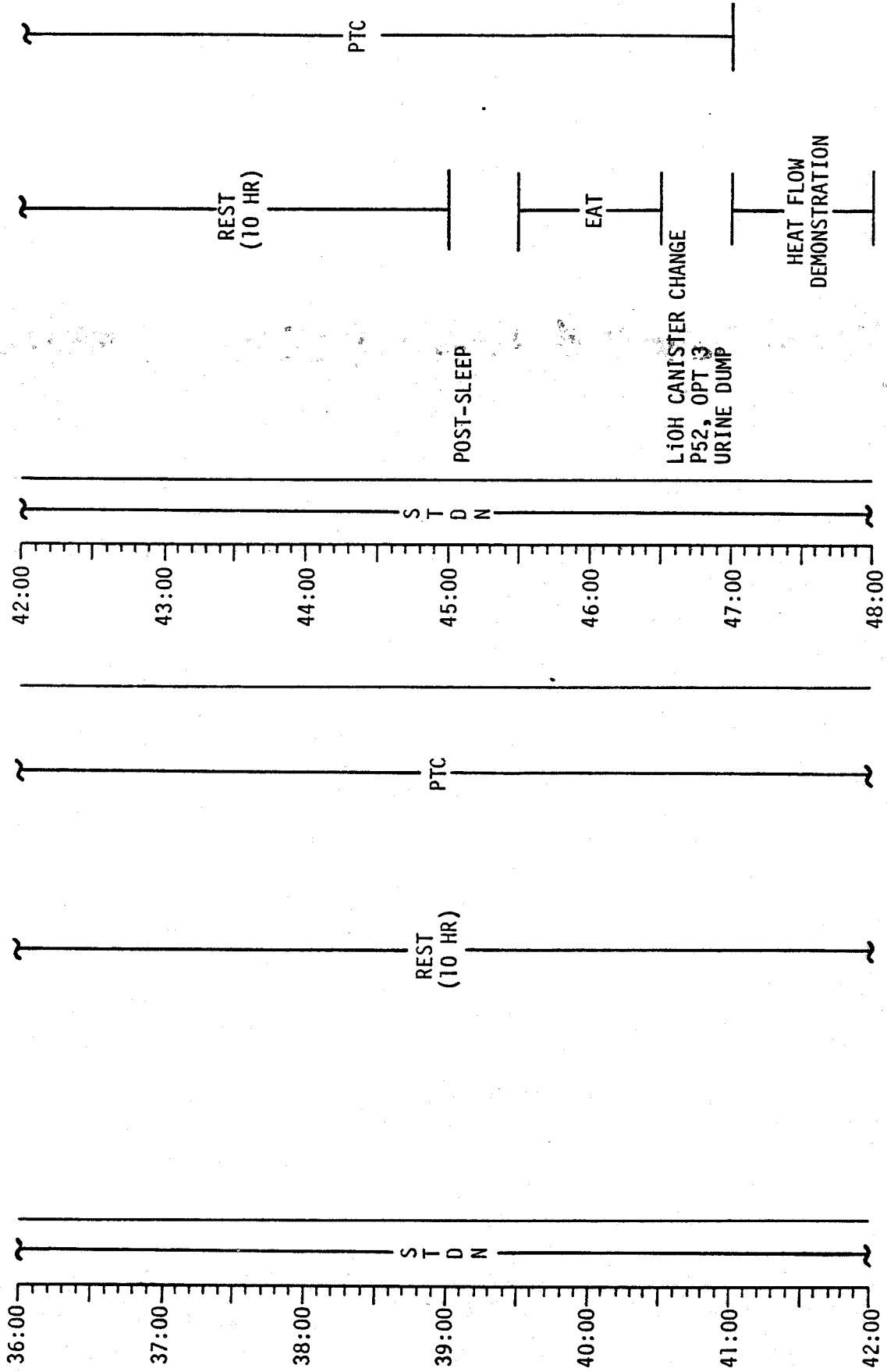
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	24:00 - 36:00	2/TLC	6-39

FLIGHT PLANNING BRANCH

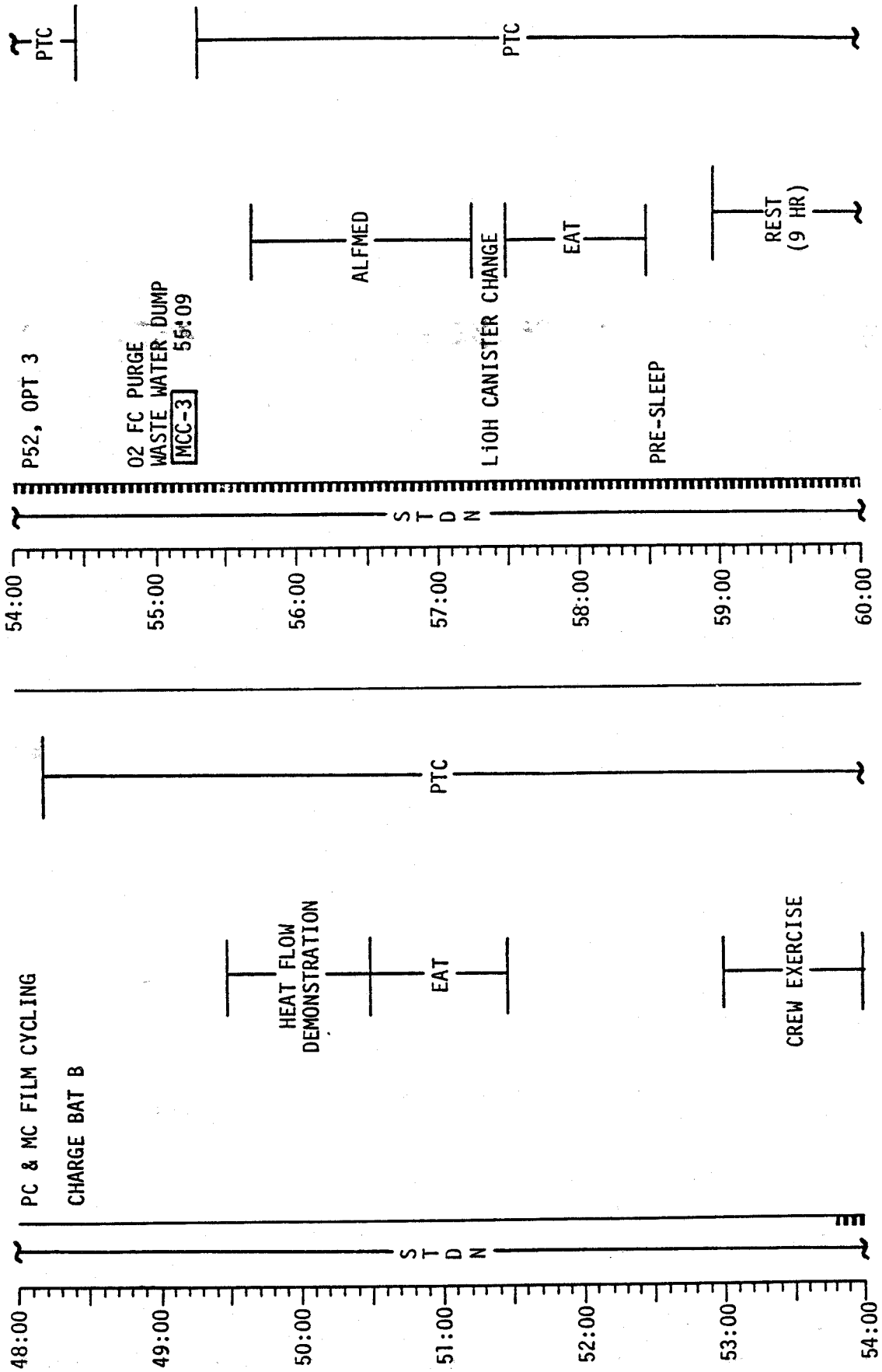
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	36:00 - 48:00	2/TLC	6-40

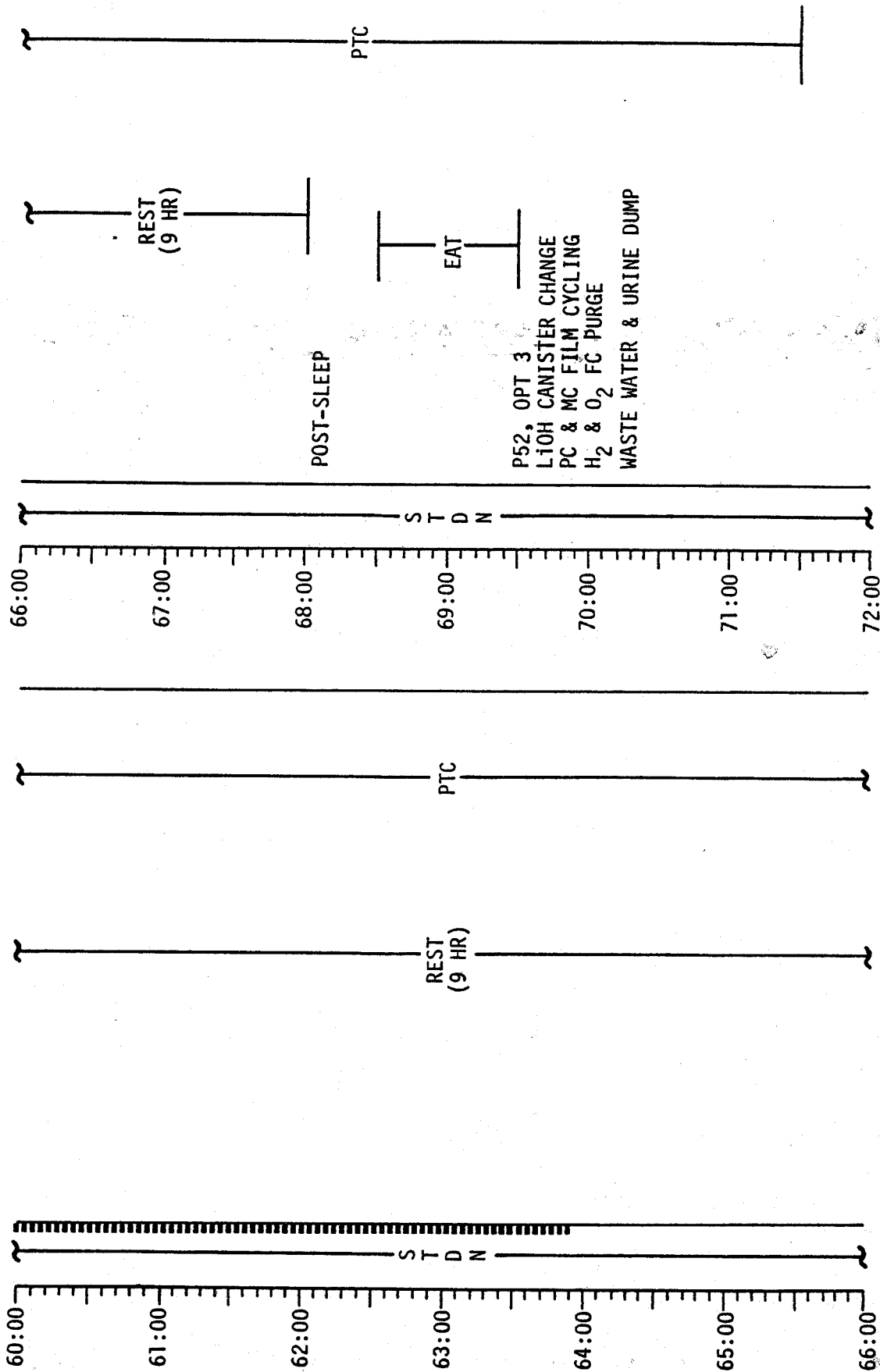
FLIGHT PLANNING BRANCH

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	48:00 - 60:00	3/TLC	6-41

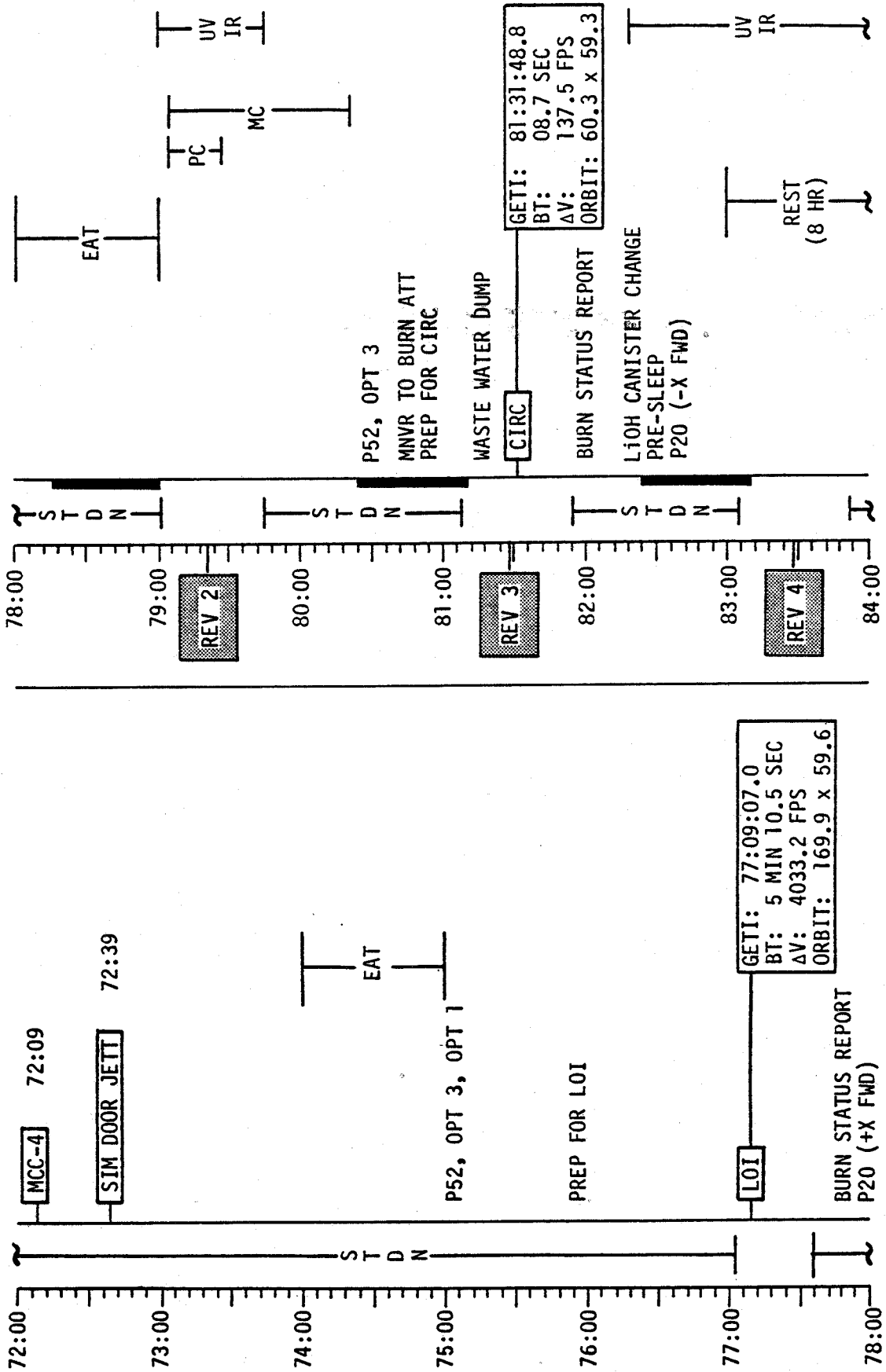
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY / REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	60:00 - 72:00	3/TLC	6-42

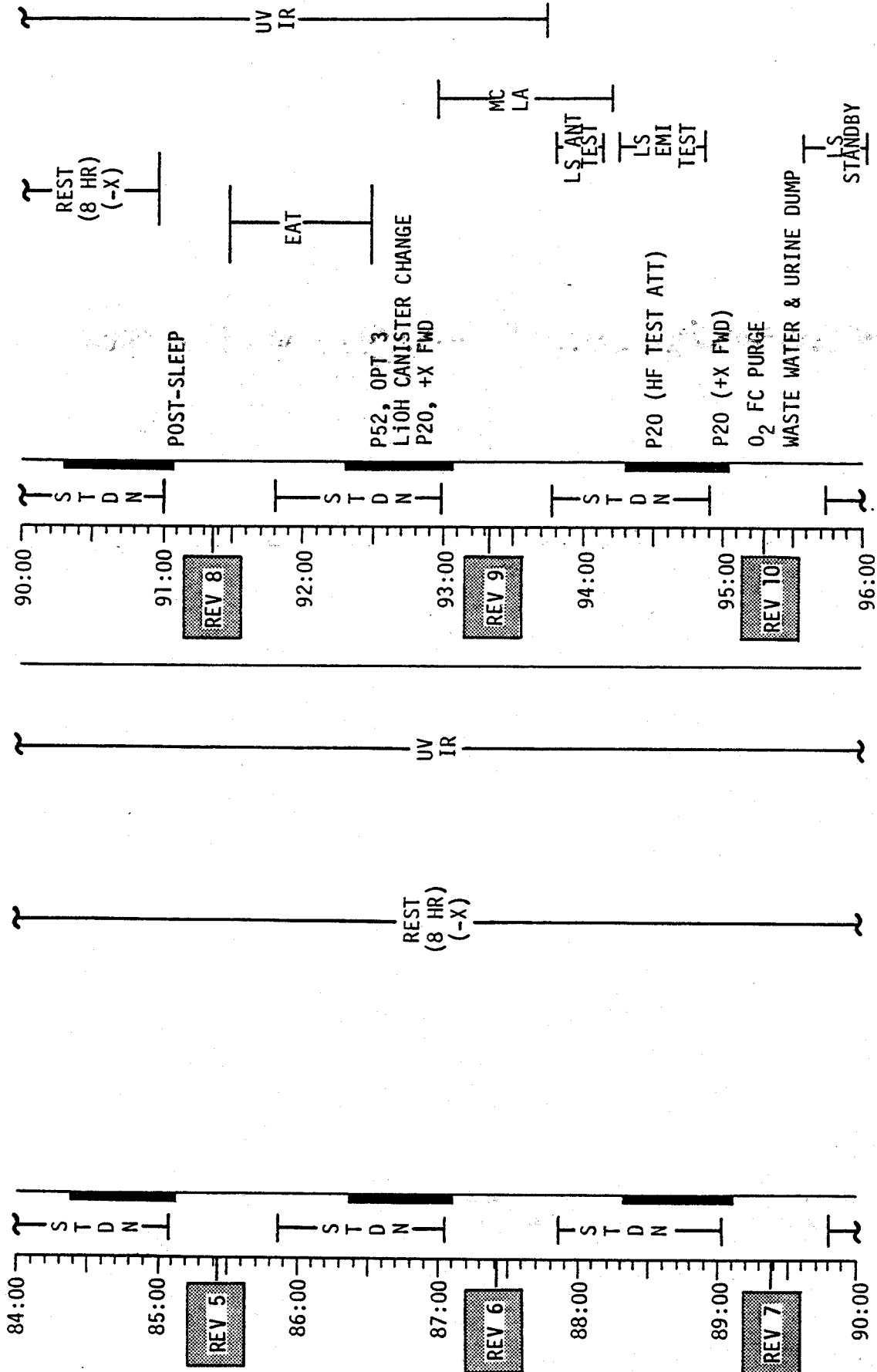
FLIGHT PLANNING BRANCH

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	72:00 - 84:00	4/1-4	6-43

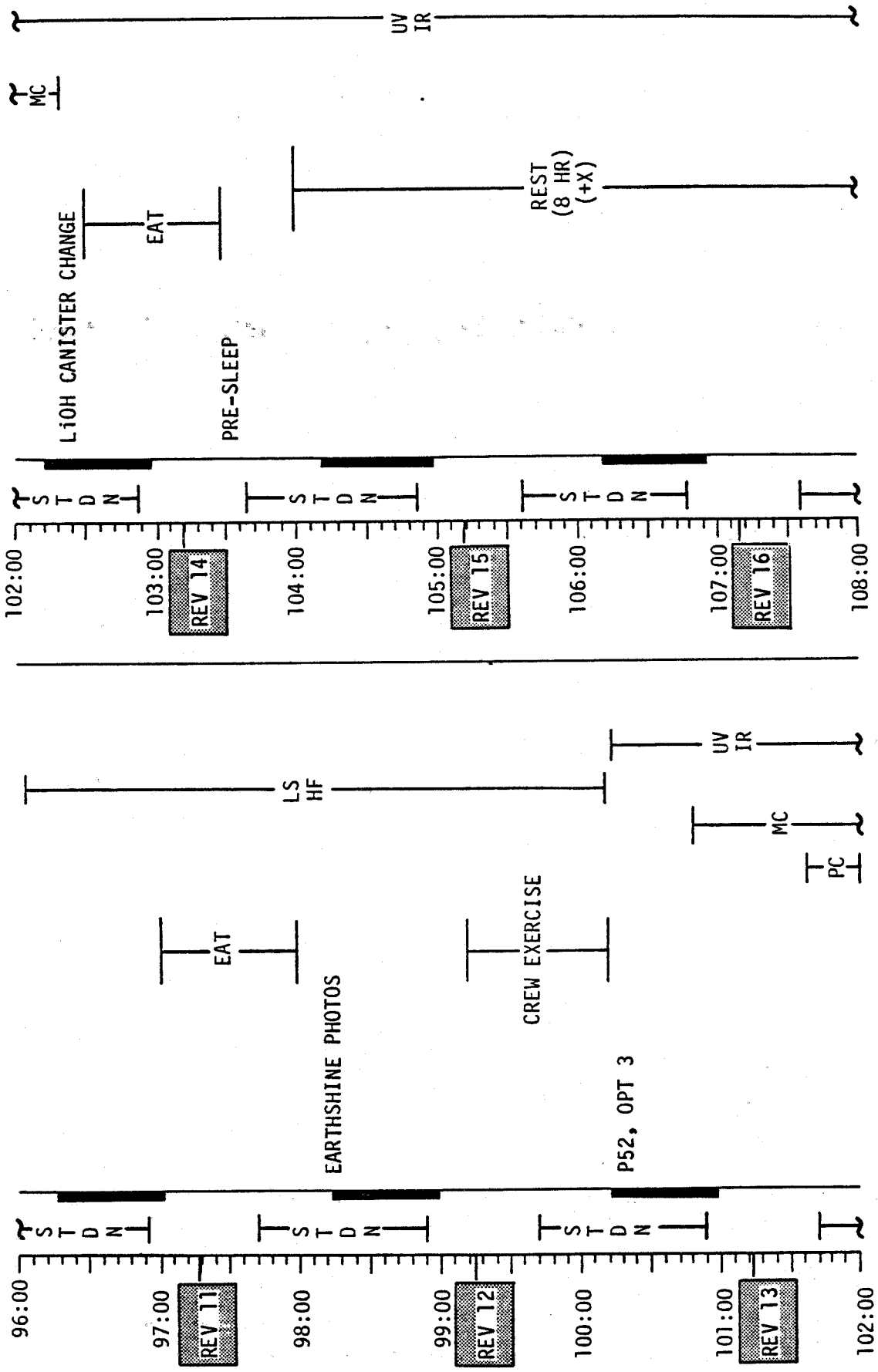
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	84:00 - 96:00	4/4-10	6-44

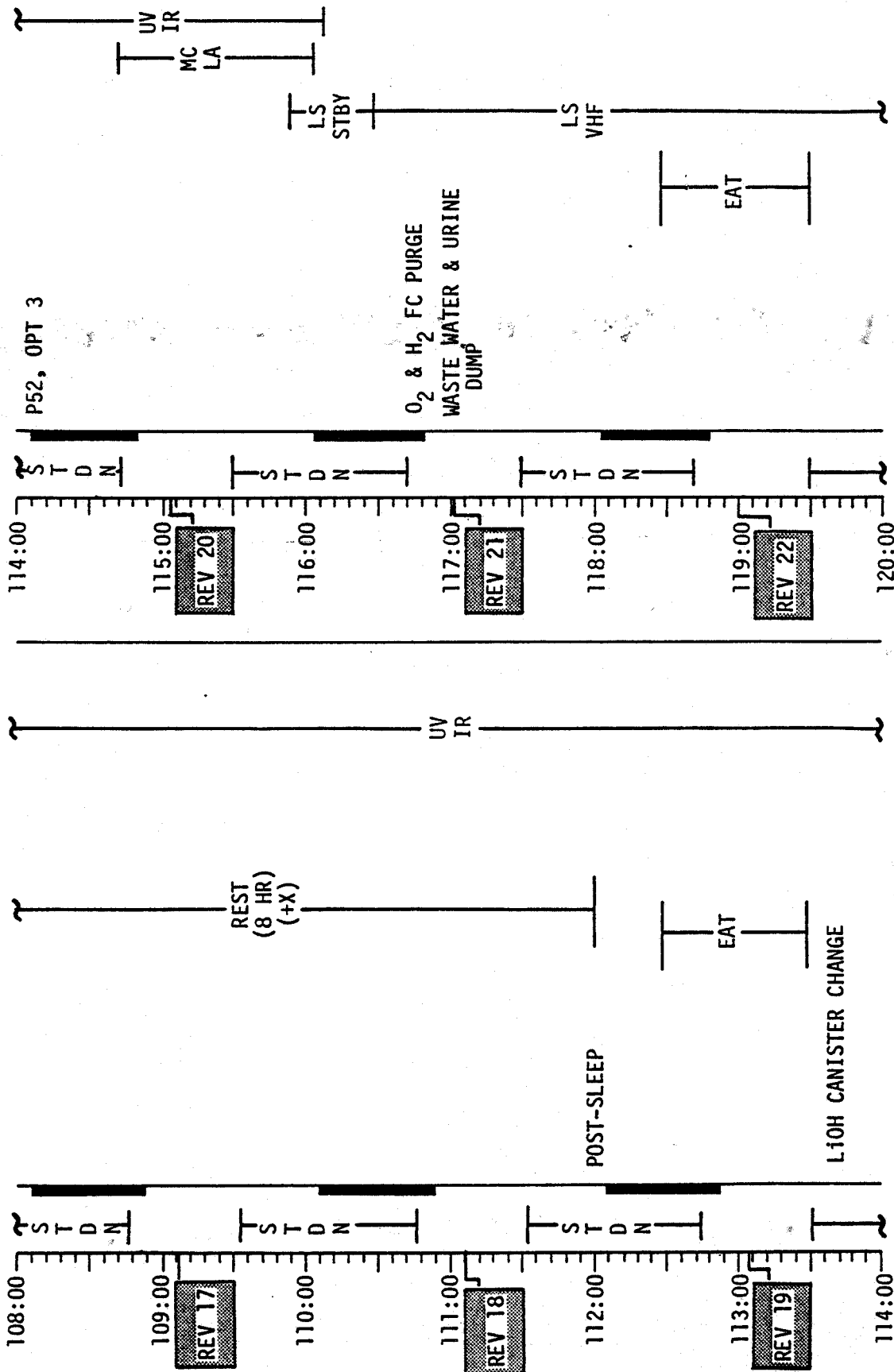
FLIGHT PLANNING BRANCH

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	96:00 - 108:00	5/11-16	6-45

FLIGHT PLAN

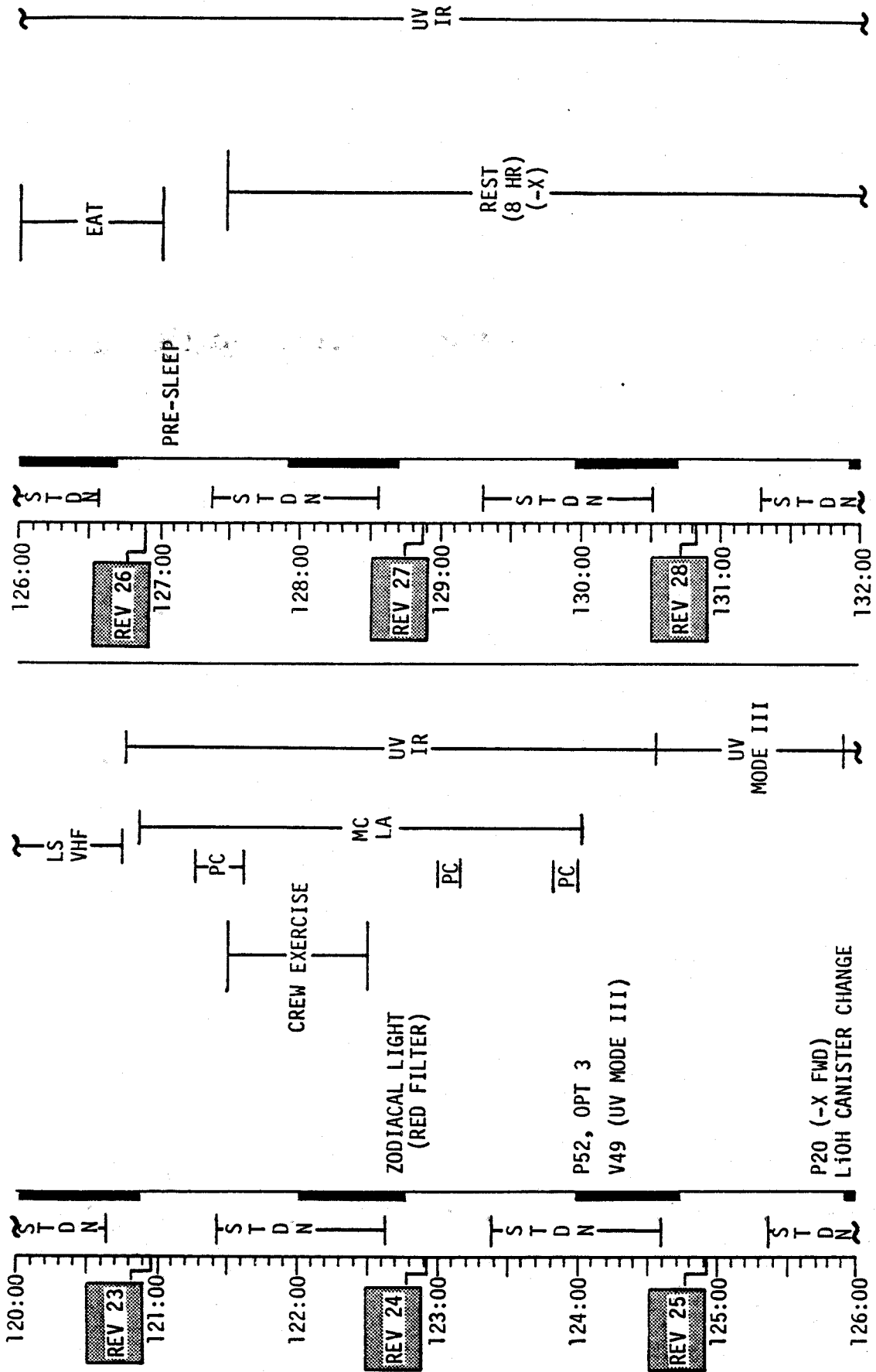


P52, OPT 3

MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	108:00 - 120:00	5-6/17-22	6-46

FLIGHT PLANNING BRANCH

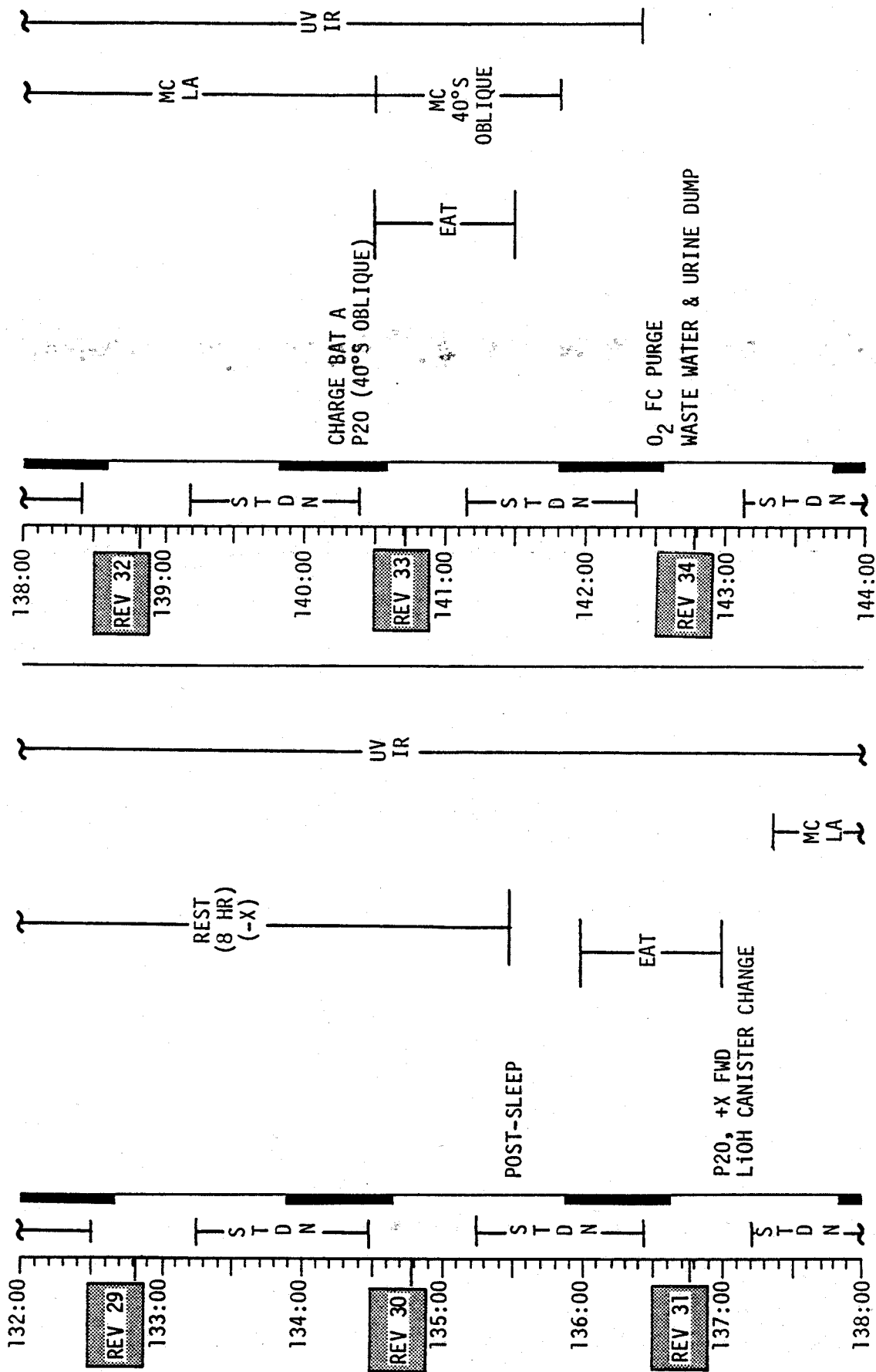
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	120:00 - 132:00	6/23-28	6-47

FLIGHT PLANNING BRANCH

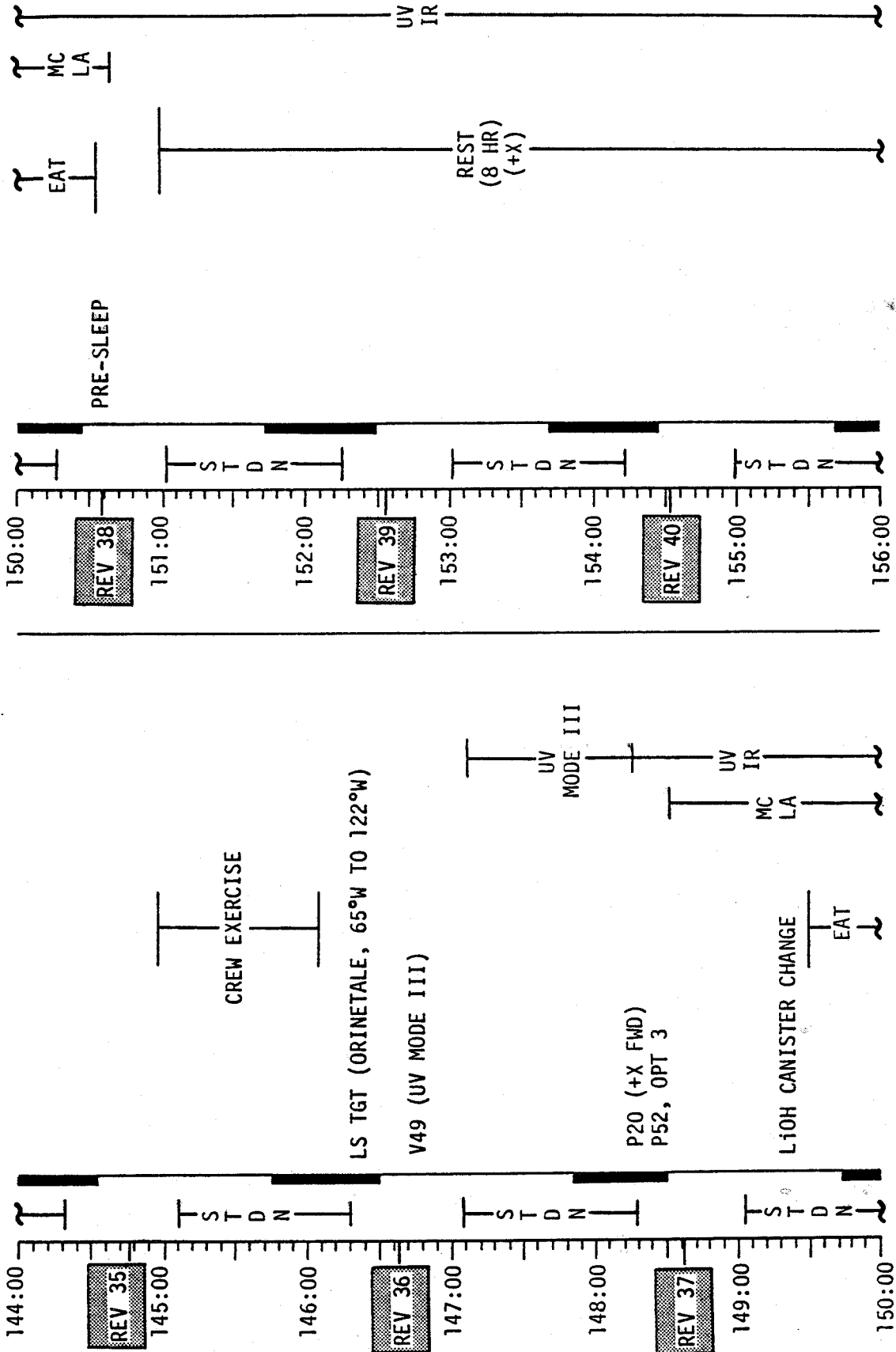
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	132:00 - 144:00	6-7/29-34	6-48

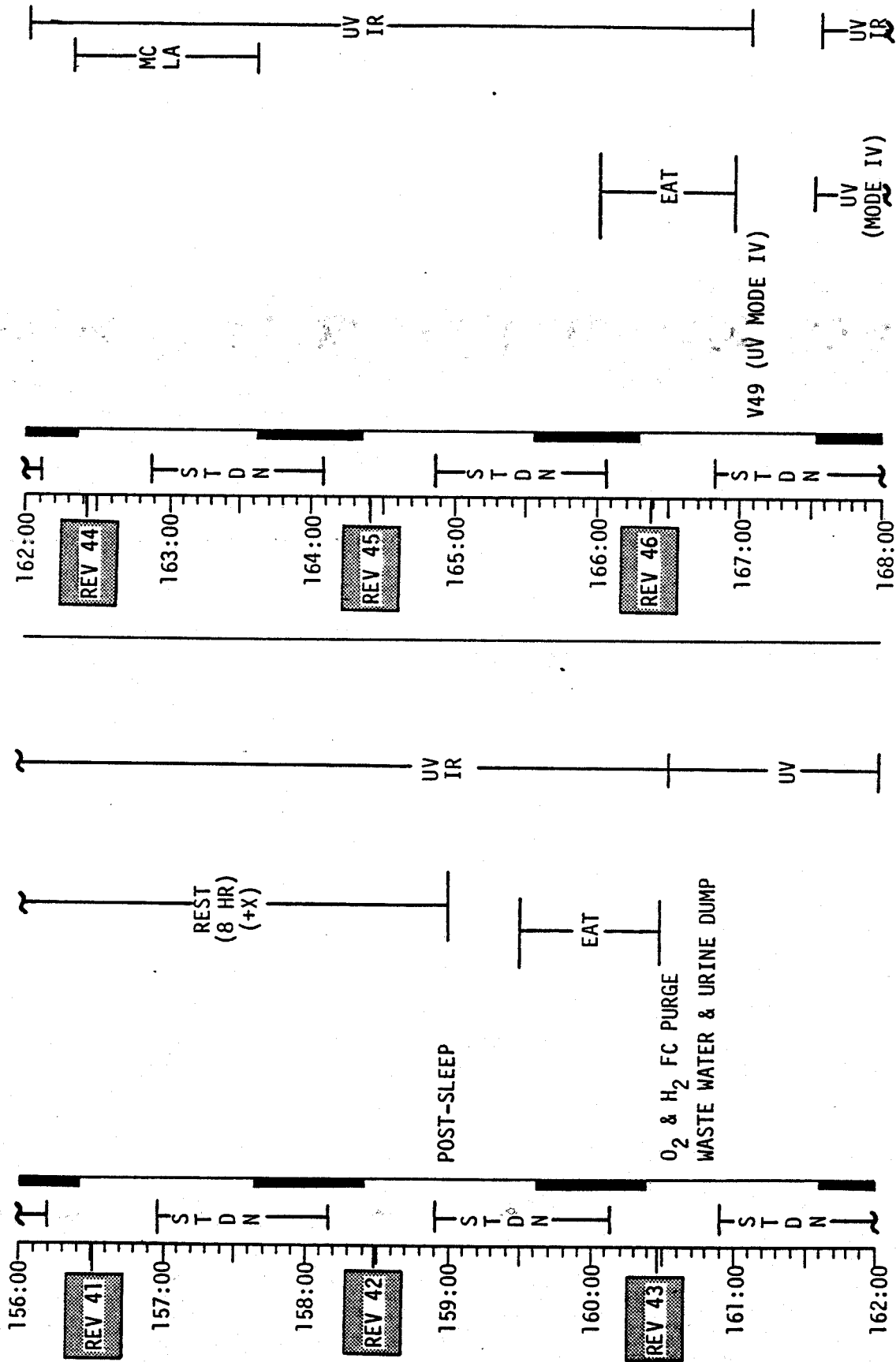
FLIGHT PLANNING BRANCH

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	144:00 - 156:00	7/35-40	6-49

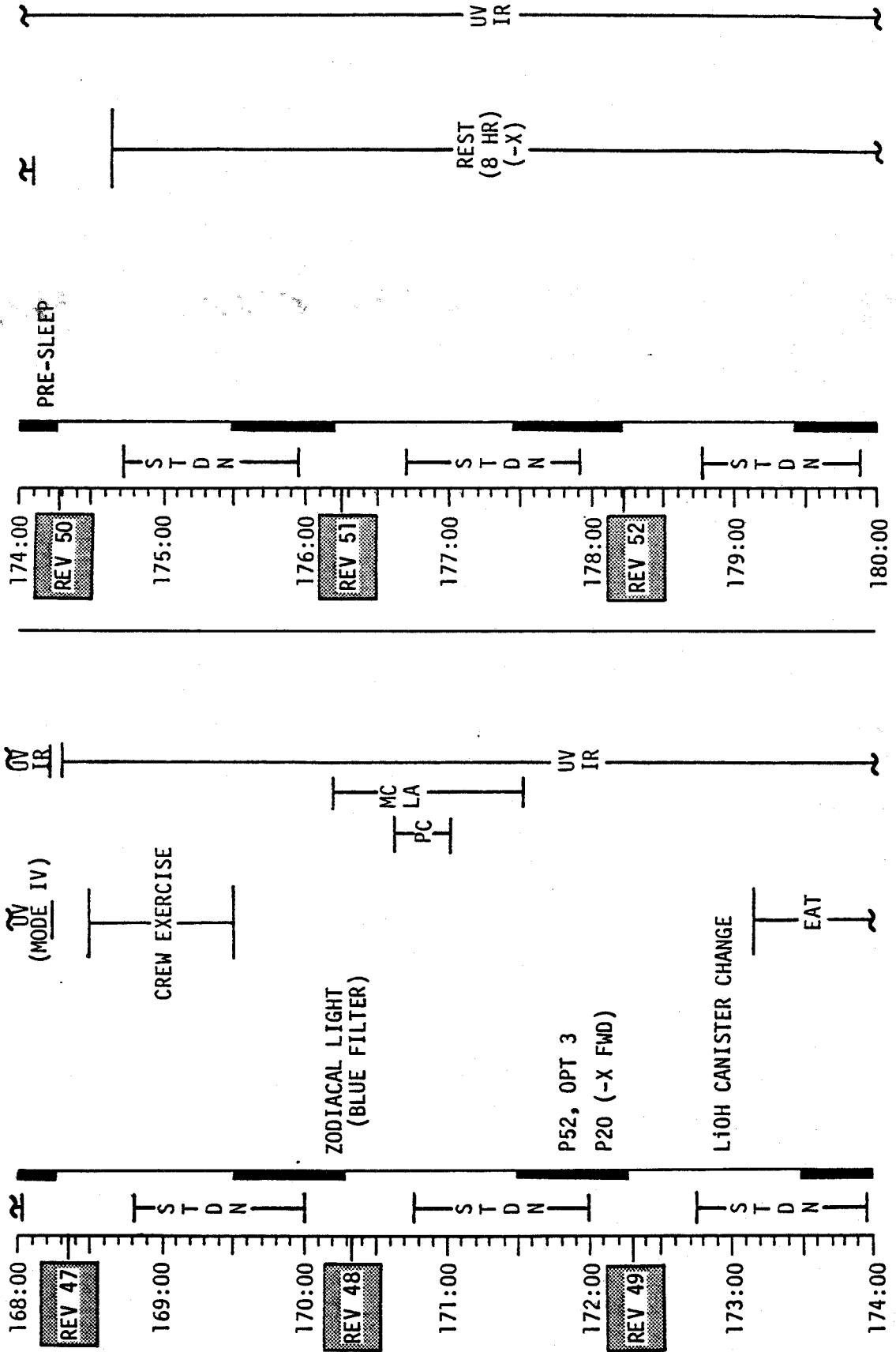
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	156:00 - 168:00	7-8/41-46	6-50

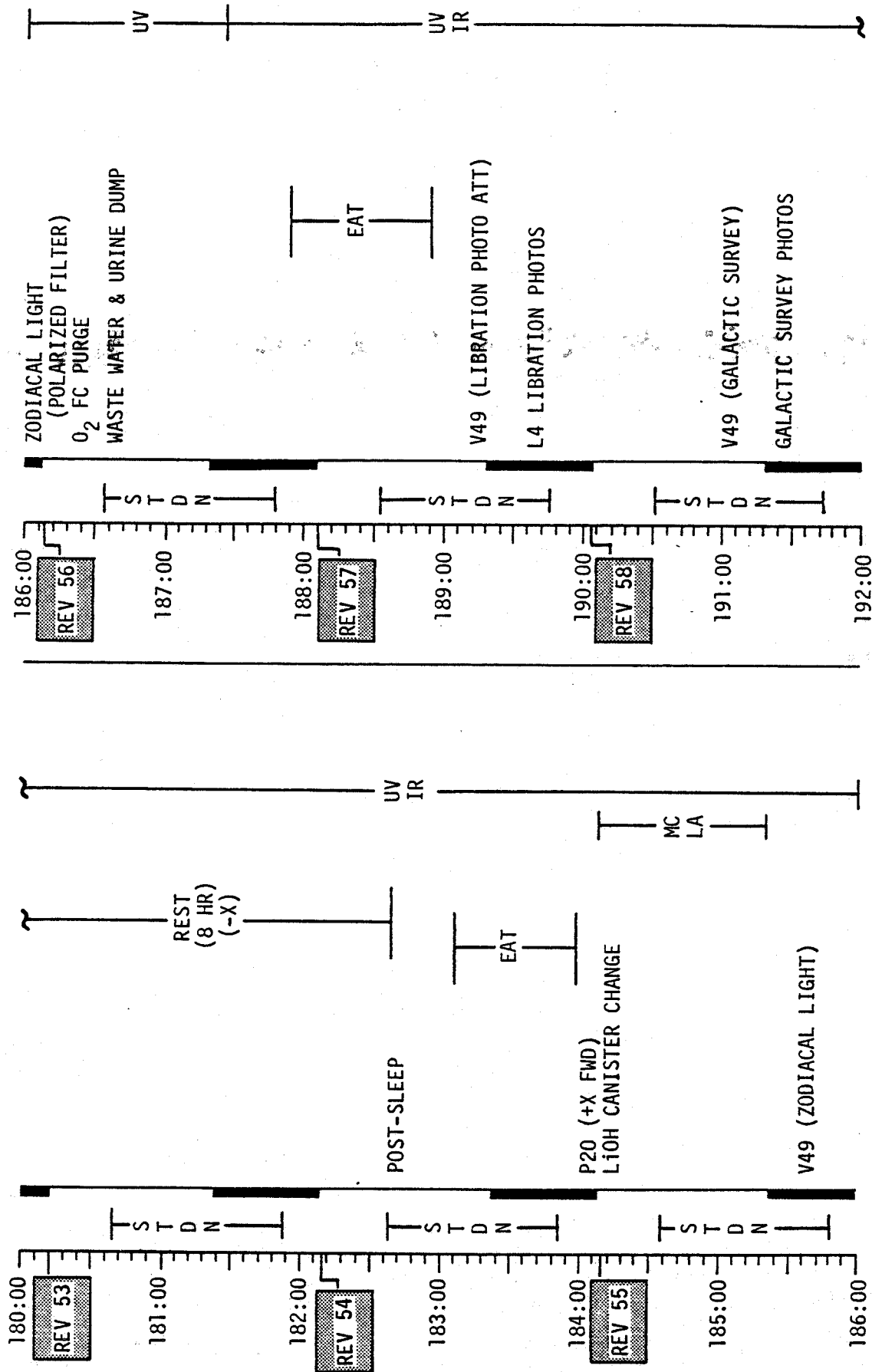
FLIGHT PLANNING BRANCH

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	168:00 - 180:00	8/47-52	6-51

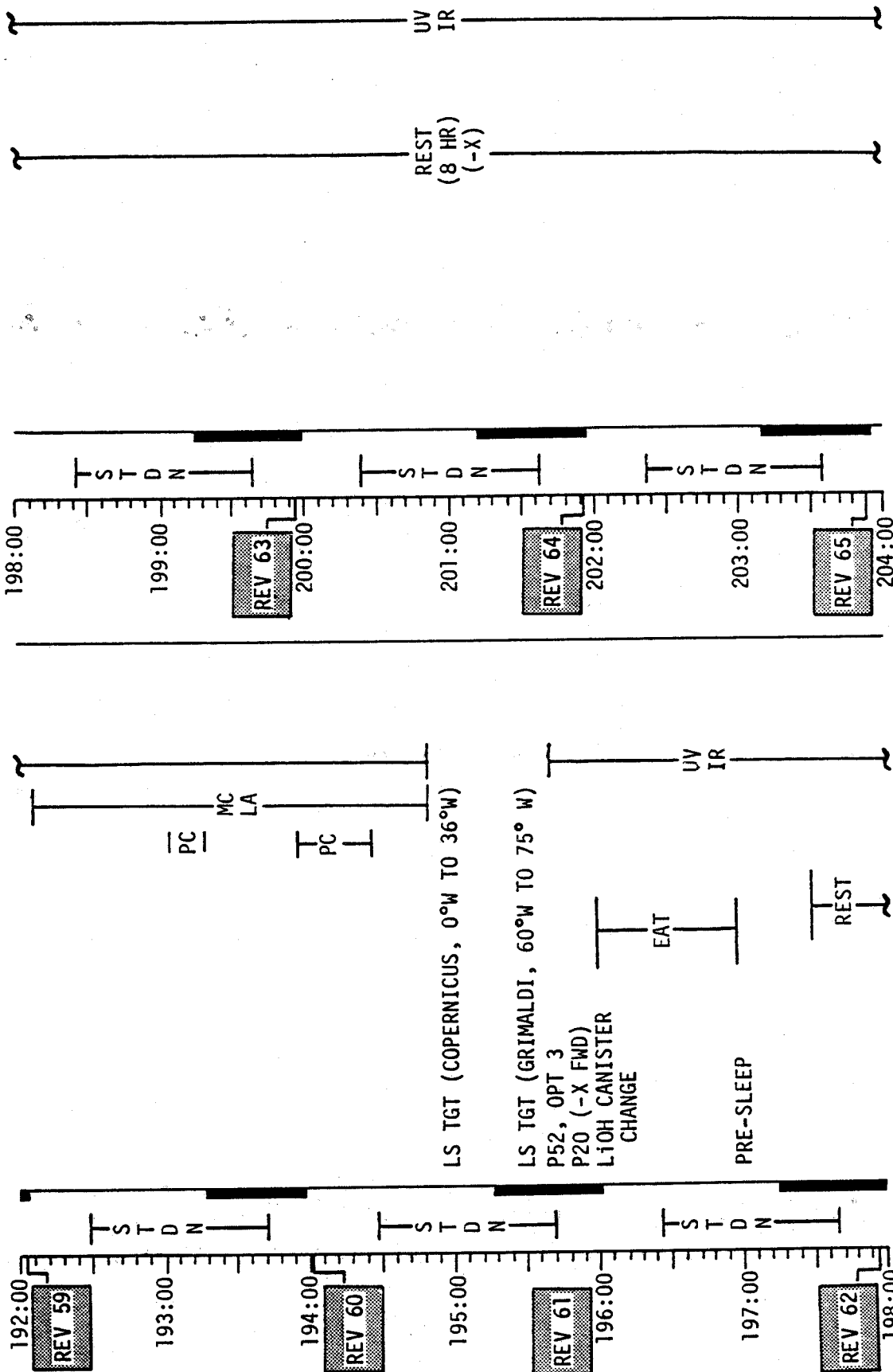
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	180:00 - 192:00	8-9/53-58	6-52

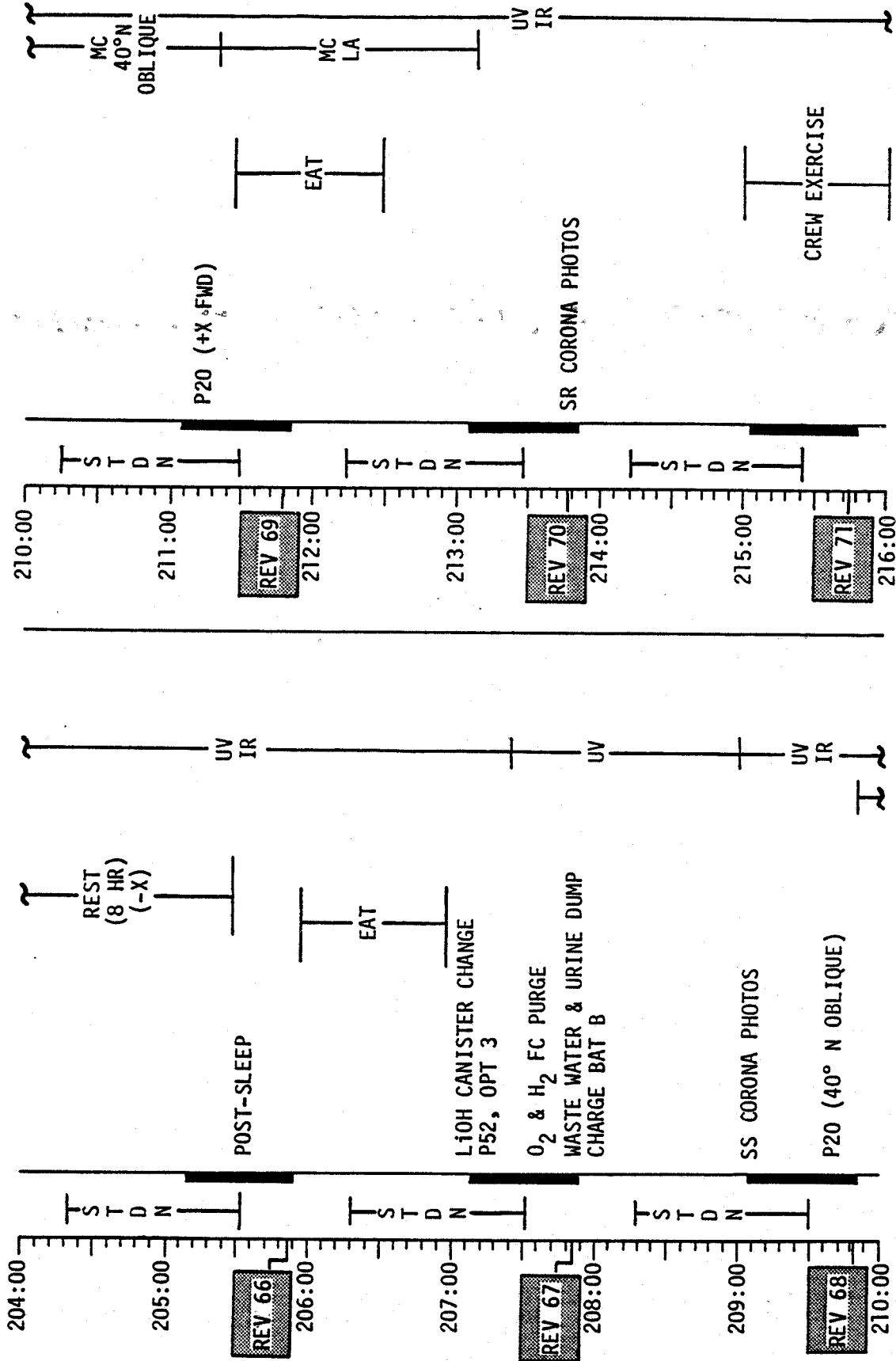
FLIGHT PLANNING BRANCH

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	192:00 - 204:00	9/59-65	6-53

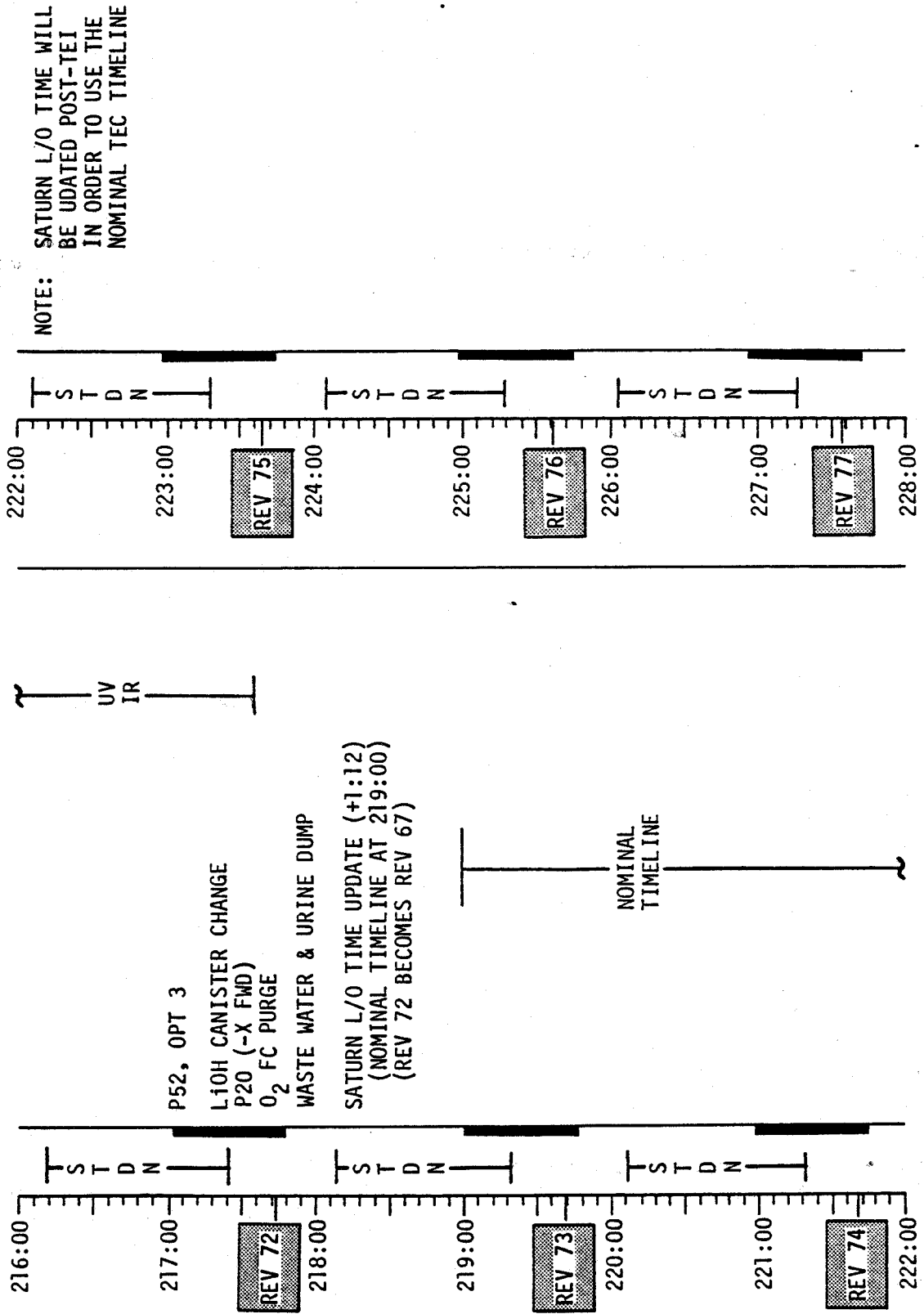
FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	204:00 - 216:00	9-10/66-71	6-54

FLIGHT PLANNING BRANCH

FLIGHT PLAN



MISSION	EDITION	DATE	TIME	DAY/REV	PAGE
APOLLO 17	CSM ONLY ALT	23 OCT 1972	216:00 - 228:00	10/71-72	6-55

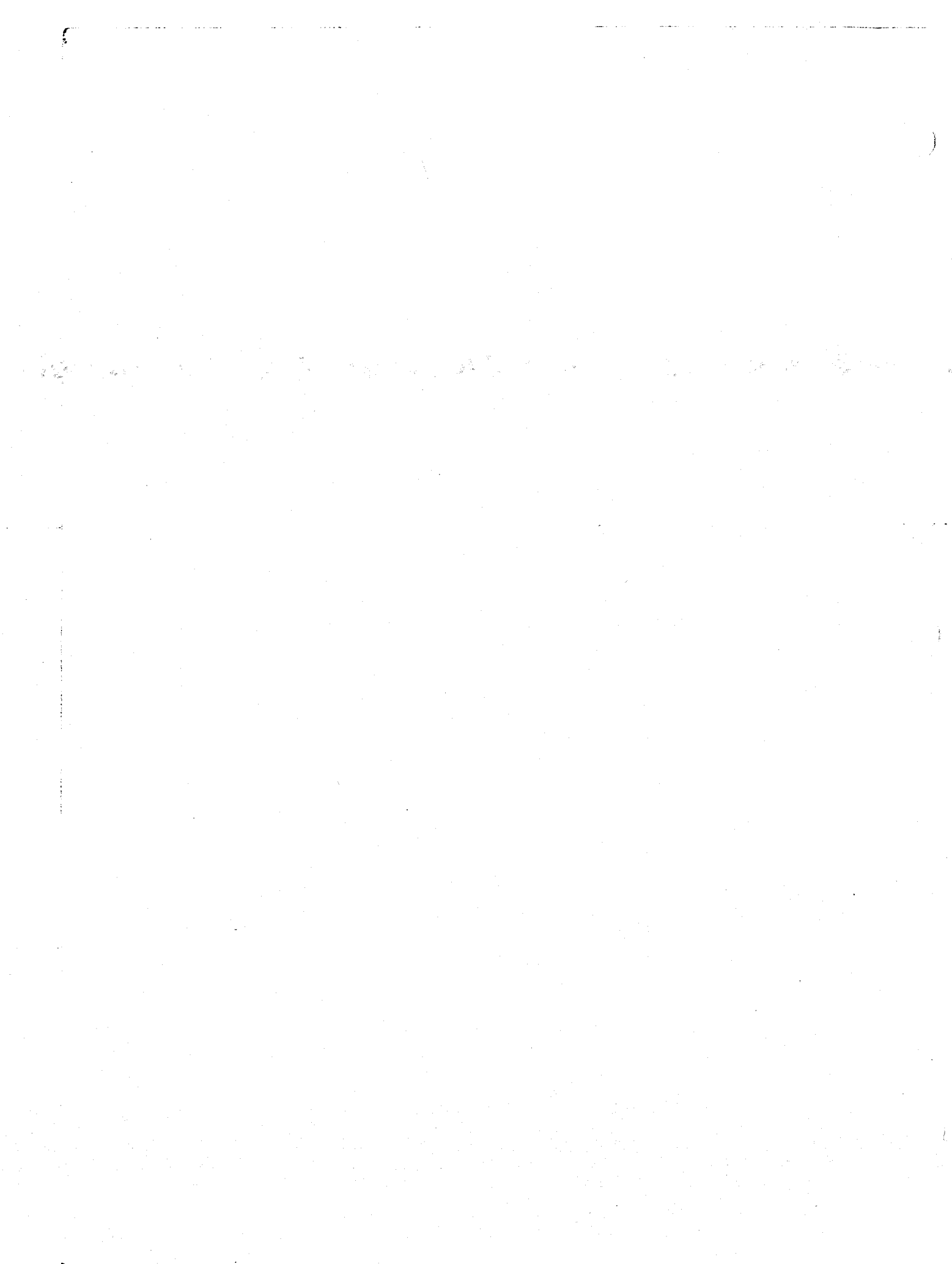
THIS PAGE INTENTIONALLY BLANK

APOLLO 17

FINAL (12/6)

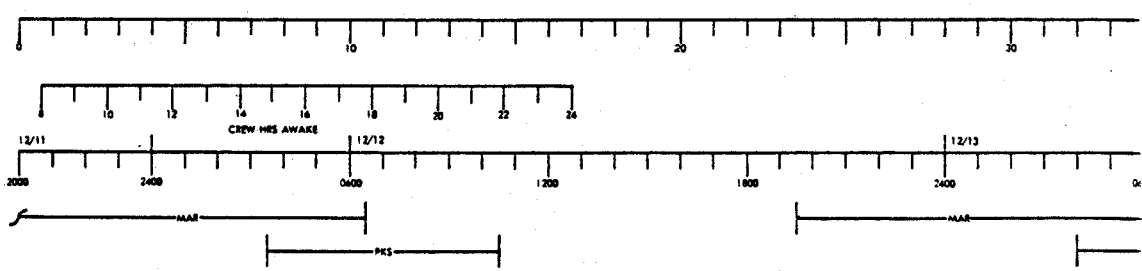
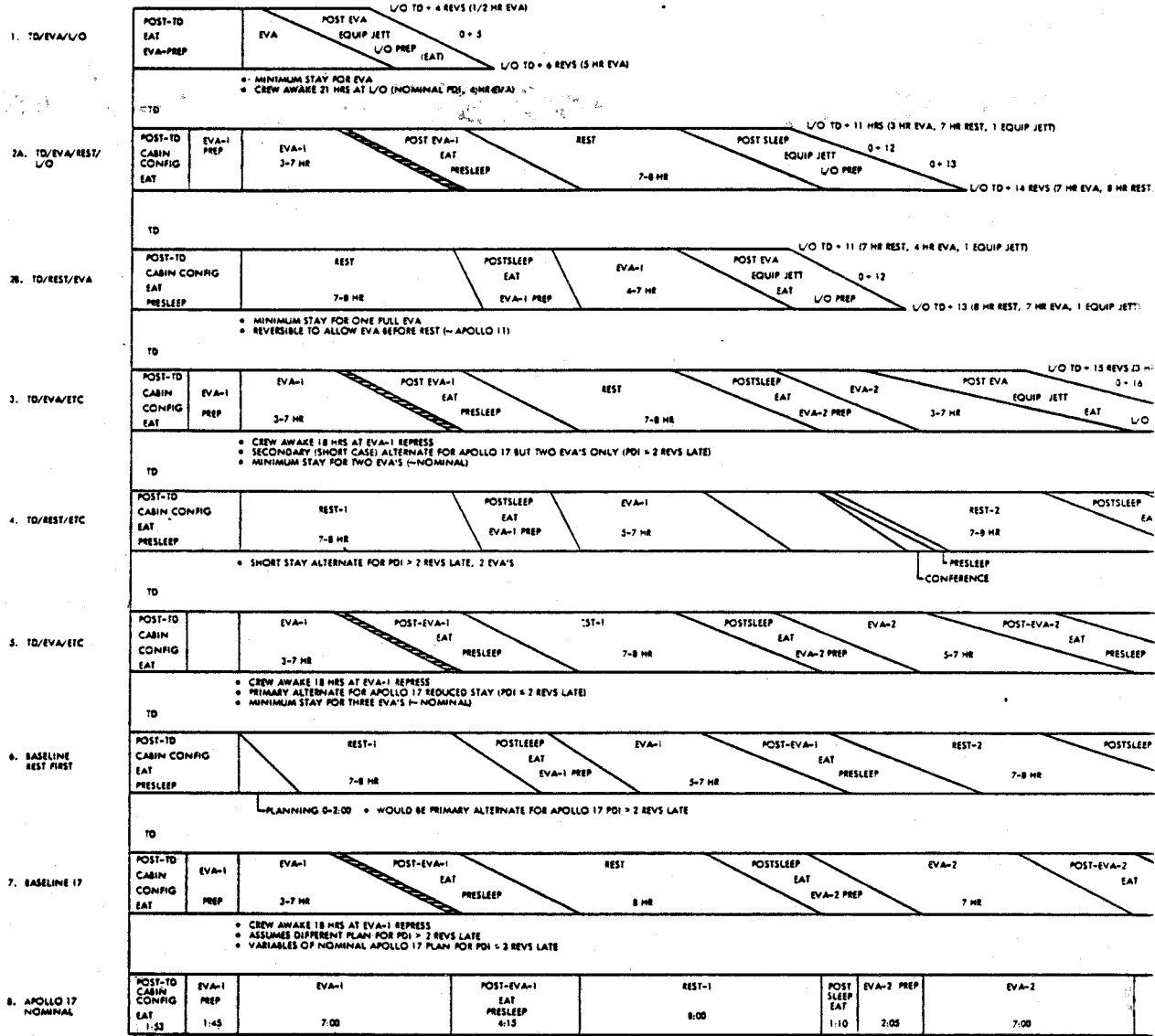
10/23/72

6-56



10/23/72

• ALL PLANS ASSUME L/O AT NEXT BEST OPPORTUNITY
 • 18 HRS SINCE CREW WAKEUP

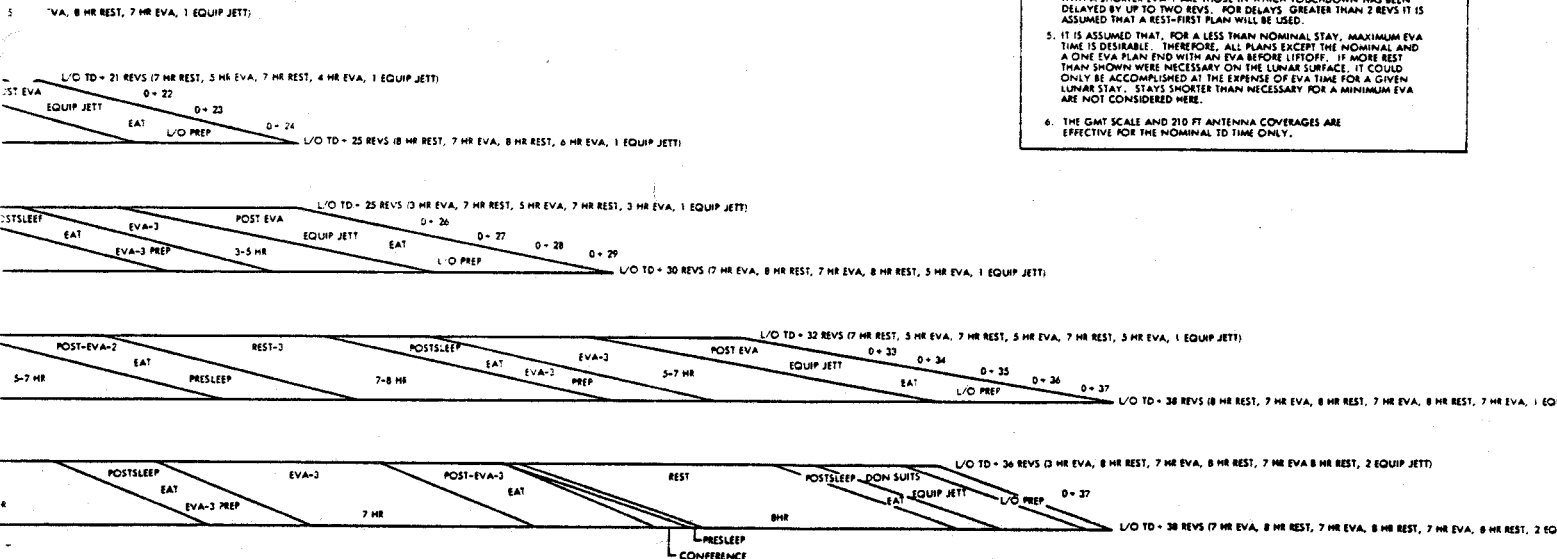


APOLLO 17
LUNAR SURFACE ALTERNATE MISSIONS

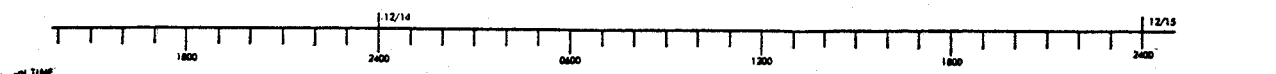
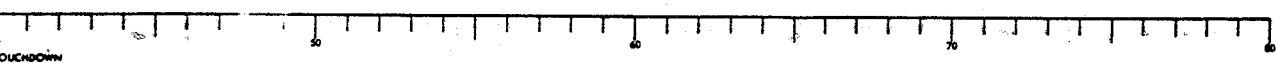
SEPTEMBER 21, 1972

LUNAR SURFACE ALTERNATE PLANS NOTES:

1. THIS CHART IS INTENDED AS A GUIDELINE FOR DETERMINING THE MOST EFFICIENT LUNAR-STAY PLAN FOR VARIOUS SURFACE STAY TIMES LESS THAN THAT NOMINALLY PLANNED FOR APOLLO 17. ALL PLANS ASSUME THAT THE LENGTH OF THE LUNAR STAY WILL BE KNOWN AT OR NEAR THE TIME OF TOUCHDOWN. HOWEVER, ANY OF THE EVA-FIRST PLANS COULD BE MODIFIED TO ASSIST IN PLANNING SHORTER STAYS REALIZED LATER AFTER TOUCHDOWN.
2. VARIABLES IN THE PLAN ARE INDICATED BY THE NUMBERS IN EACH BLOCK (E.G. REST, 7-8 HRS). OTHER TIME BLOCKS ARE ASSUMED TO BE FIXED AND, WHERE APPLICABLE, THE SAME LENGTH OF TIME AS ON THE NOMINAL APOLLO 17 PLAN.
3. ALL LIFTOFFS ARE INDICATED AT THE ACTUAL LIFTOFF OPPORTUNITY. THUS, THE TIME ALLOWED IN THE LAST BLOCK IN EACH PLAN MAY VARY FROM THE MINIMUM REQUIRED FOR THE ACTIVITIES INDICATED BY AS MUCH AS THE EXCESS REQUIRED TO GET TO THE NEXT OPPORTUNITY LIFTOFF.
4. ALL EVA-FIRST PLANS ARE CONSTRAINED BY A LIMIT OF 16 HOURS FROM WAKEUP TO EVA-1 REPRESS. THE 16 HOUR LIMIT IS INDICATED BY A DASHED LINE AT THE END OF EVA-1 ON THESE PLANS. THUS, THOSE WITH A SHORTER EVA-1 ARE THOSE IN WHICH TOUCHDOWN HAS BEEN DELAYED BY UP TO TWO REVS, FOR DELAYS GREATER THAN 2 REVS IT IS ASSUMED THAT A REST-FIRST PLAN WILL BE USED.
5. IT IS ASSUMED THAT, FOR A LESS THAN NOMINAL STAY, MAXIMUM EVA TIME IS DESIRABLE. THEREFORE, ALL PLANS EXCEPT THE NOMINAL AND A ONE EVA PLAN END WITH AN EVA BEFORE LIFTOFF. IF MORE REST THAN SHOWN WERE NECESSARY ON THE LUNAR SURFACE, IT COULD ONLY BE ACCOMPLISHED AT THE EXPENSE OF EVA TIME FOR A GIVEN LUNAR STAY. STAYS SHORTER THAN NECESSARY FOR A MINIMUM EVA ARE NOT CONSIDERED HERE.
6. THE GMT SCALE AND 210 FT ANTENNA COVERAGES ARE EFFECTIVE FOR THE NOMINAL TD TIME ONLY.



REST-2 8:00	POST SLEEP EAT 1:10	EVA-3 PREP 2:05	EVA-3 7:00	POST EVA-3 EQUIP JETT PRESLEEP 2:26	EAT CONF 2:33	REST-3 8:00	POST SLEEP EAT 1:20	DON SUITS EQUIP JETT 2:49	L/O PREP 1:15
----------------	---------------------------	-----------------------	---------------	--	---------------------	----------------	---------------------------	---------------------------------	---------------------



ANTENNA COVERAGES

