

APOLLO 16 LUNAR SURFACE ACTIVITIES DESCARTES LANDING SITE

LATITUDE 9° 00' 01" SOUTH; LONGITUDE 15° 30' 59" EAST

DATE	GET HRS:MIN	EST HRS:MIN	MAJOR EVENTS
4-20	101:00	5:54 PM	EVA-1 PREPARATIONS
	102:25	7:19	START EVA-1 (CABIN DEPRESS)
	102:41	7:35	CDR DESCEND TO LUNAR SURFACE
	102:48	7:42	TV DEPLOY
	102:55	7:49	LRV OFFLOAD AND CHECKOUT
	103:15	8:09	FAR UV CAMERA SETUP
	103:15	8:09	LRV LOAD-UP
	103:45	8:39	FLAG DEPLOY
	103:52	8:46	ALSEP PREPARATIONS
	104:02	8:56	ALSEP TRAVERSE AND DEPLOY
104:15	9:09	HEAT FLOW EXPERIMENT	
104:25	9:19	SEISMIC EXPERIMENT	
104:35	9:29	CORE SAMPLE DRILLING	
106:25	11:19	GEOLOGY TRAVERSE	
4-21	108:30	1:24 AM	LRV GRAN PRIX
	109:25	2:19	TERMINATE EVA-1 ACTIVITIES
4-21	123:16	4:10 PM	EVA-2 PREPARATIONS
	124:50	5:44	START EVA-2 (CABIN DEPRESS)
	125:10	6:04	TV ON
	125:36	6:30	ACTIVATE LRV
	125:40	6:34	FIELD GEOLOGY OUTBOUND
	126:08	7:02	CLIMB STONE MOUNTAIN
	127:13	8:07	FIELD GEOLOGY INBOUND
	131:50	12:44 AM	TERMINATE EVA-2 ACTIVITIES
4-22	146:55	3:49 PM	EVA-3 PREPARATIONS
	148:25	5:19	START EVA-3 (CABIN DEPRESS)
	148:45	5:39	TV ON
	149:05	5:59	ACTIVATE LRV
	149:10	6:04	FIELD GEOLOGY OUTBOUND
	151:47	8:41	FIELD GEOLOGY INBOUND
	154:39	11:33	RECOVER COSMIC RAY SHEETS
	154:49	11:43	PERFORM LRV GRAN PRIX
4-22	154:58	11:52	PARK LRV TO VIEW LM ASCENT
4-23	155:12	12:06 AM	RECOVER FAR UV FILM
	155:15	12:09	TRANSFER TO LM
	155:25	12:19	TERMINATE EVA-3
	156:15	1:09	JETTISON EQUIPMENT

SPACE DIVISION
APOLLO AND GROUND SYSTEMS
GENERAL ELECTRIC

APOLLO 16

LUNAR EXPLORATION MISSION

Casper (CSM-113)

Orion(LM-11)



JOHN W. YOUNG

THOMAS K. MATTINGLY II

CHARLES M. DUKE, Jr.

CDR

CMP

LMP



COUNTDOWN EVENTS FOR LAUNCH APRIL 16, 1972

TIME PRIOR TO LIFT-OFF (HOURS:MINUTES:SECONDS)	EVENT
3 :30 :00	PLANNED ONE HOUR HOLD
2 :40 :00	FLIGHT CREW INGRESS
55 :00	SPACECRAFT CLOSED FOR FLIGHT
43 :00	CREW ACCESS ARM TO PARK POSITION
42 :00	LAUNCH ESCAPE SYSTEM ARMED
15 :00	S/C TO FULL INTERNAL POWER
5 :00	CREW ACCESS ARM FULLY RETRACTED
3 :07	LV AUTOMATIC SEQUENCER STARTED
:08 :9	S-1C IGNITION
:00	LIFT-OFF

APOLLO 16 MISSION EVENTS

AS-511/CSM-113/LM-11 (CASPER/ORION)

MISSION DURATION IS APPROXIMATELY 12 DAYS 3 HOURS
 TRANSLUNAR FLIGHT TIME IS 71 HOURS 50 MINUTES
 LUNAR STAY TIME IS 72 HOURS 58 MINUTES
 TRANSEARTH FLIGHT TIME IS 68 HOURS
 LUNAR ORBIT STAY TIME IS 147 HOURS 47 MINUTES

DATE	GET** HRS:MIN	EST* HRS:MIN	EVENT
4-16	00:00	12:54 PM	LIFTOFF SUNDAY APRIL 16, 1972
	00:03	12:57	S-1C/S-11 STAGE SEPARATION (37 NAUTICAL MILES)
	00:03	12:57	LAUNCH ESCAPE TOWER JETTISON (54 NAUTICAL MILES)
	00:09	1:03	S-11/S-1VB STAGE SEPARATION (94 NAUTICAL MILES)
	00:12	1:06	EARTH PARKING ORBIT INSERTION (11 MIN., 57.2 SEC) (ORBIT 93 NM)
	2:33	3:27	TRANSLUNAR INJECTION (S-1VB BURN: 5 MIN., 44.2 SEC)
	3:04	3:58	CSM/S-1VB SEPARATION (SLA JETTISON)
	3:09	4:03	TV TRANSPOSITION AND DOCKING (APPROXIMATELY 20 MINUTES)
	3:14	4:08	CSM/LM DOCKING
	3:59	4:53	CSM/LM EJECTION FROM S-1VB (CSM RCS BURN: 3 SEC)
	4:22	5:16	S-1VB EVASIVE MANEUVER (GROUND COMMAND)
4-17	33:00	9:54 PM	LM INSPECTION AND CHECKOUT (APPROXIMATELY 2 HOURS)
4-18	53:30	6:24 PM	LM INSPECTION AND CHECKOUT (APPROXIMATELY 2 HOURS)
4-19	69:59	10:53 AM	SCIENTIFIC EXPERIMENTS DOOR JETTISON
	74:29	3:23 PM	LUNAR ORBIT INSERTION (SPS BURN: 6 MIN., 15 SEC) (ORBIT 58 X 170 NM)
	74:30	3:24	S-1VB PREDICTED LUNAR IMPACT (150 NM WEST OF APOLLO 12)
	78:35	7:29	DESCENT ORBIT INSERTION (SPS BURN: 24.1 SEC) (ORBIT 10.9 X 58.6 NM)
4-20	93:45	10:39 AM	PREPARE FOR CREW TRANSFER TO LM
	96:14	1:08 PM	CSM/LM UNDOCKING AND SEPARATION (REV 12)
	97:42	2:36	CSM CIRCULARIZATION (SPS BURN: 5.9 SEC) (52 X 60 NM)
	98:35	3:29	LM POWERED DESCENT INITIATION (BURN: 12 MIN., 1.5 SEC)
	98:43	3:37	CSM FIRST PASS OVER LANDING SITE (REV 13)
	98:47	3:41	LM TOUCHDOWN/DESCARTES LANDING SITE (LAT 9°S, LONG 15.3°E)
	102:25	7:19	TV LUNAR SURFACE EVA-1 (SEE BACK OF CARD)
4-21	124:50	5:44 PM	TV LUNAR SURFACE EVA-2 (SEE BACK OF CARD)
4-22	148:25	5:19 PM	TV LUNAR SURFACE EVA-3 (SEE BACK OF CARD)
	152:29	9:23 PM	CSM PLANE CHANGE (SPS BURN: 9.1 SEC) (ORBIT 57.3 X 62 NM)
4-23	170:08	3:02 PM	TV LUNAR SURFACE LIFTOFF PREPARATIONS (APPROXIMATELY 12 MIN)
	171:30	4:24	TV LUNAR SURFACE LM LIFTOFF (APPROXIMATELY 25 MIN)
	171:45	4:39	LM ASCENT FROM LUNAR SURFACE (BURN: 7 MIN., 14.3 SEC) (ORBIT 9 X 45 NM)
	171:46	4:40	CSM SECOND PASS OVER LANDING SITE (REV 50)
	173:20	6:14	TV LM/CSM RENDEZVOUS SEQUENCE (APPROXIMATELY 6 MIN)
	173:46	6:40	TV LM/CSM DOCKING (APPROXIMATELY 5 MIN)
	173:50	6:44	CSM/LM HARD DOCKING
	177:31	10:25	LM ASCENT STAGE JETTISON
	177:36	10:30	CSM/LM SEPARATION (RCS BURN: 13.2 SEC)
4-24	179:16	12:10 AM	LM DEORBIT (D/S BURN: 1 MIN., 35.6 SEC)
	179:39	12:33	LM IMPACT ON LUNAR SURFACE (12 NM WEST OF APOLLO 16)
	193:14	2:08 PM	CSM PLANE CHANGE (SPS BURN: 15.8 SEC)
4-25	216:49	1:43 PM	CSM SHAPING BURN (SPS BURN: 2.2 SEC) (55 X 85 NM)
	218:02	2:56	SUBSATELLITE JETTISON (55.4 X 85.0 NM LUNAR ORBIT)
	222:21	7:15	TRANSEARTH INJECTION (SPS BURN: 2 MIN., 30.5 SEC)
4-26	241:55	2:49 PM	TV TRANSEARTH EVA (APPROXIMATELY 1 HR., 10 MIN)
	242:03	2:57	RETRIEVE CAMERA FILM
4-28	290:08	3:02 PM	CM/SM SEPARATION (APPROXIMATELY 1971 NM)
	290:23	3:17	ENTRY INTERFACE (APPROXIMATELY 66 NM) (VELOCITY 36,176 FPS)
	290:23	3:17	ENTER S-BAND COMMUNICATIONS BLACKOUT
	290:26	3:20	EXIT S-BAND COMMUNICATIONS BLACKOUT
	290:30	3:24	DROGUE PARACHUTES DEPLOY (ALTITUDE 23,300 FEET)
	290:31	3:25	MAIN PARACHUTES DEPLOY (ALTITUDE 10,000 FEET)
	290:36	3:30	SPLASHDOWN PACIFIC OCEAN (LAT 5°N, LONG 158.7°W)

K. M. Matthey

* EASTERN STANDARD TIME GIVEN IS BASED ON A LAUNCH AT 12:54 ON APRIL 16 AND TRANSLUNAR INJECTION (TLI) DURING THE 2ND REVOLUTION IN EARTH ORBIT. ANY DEVIATIONS FROM THESE PARAMETERS WILL MAKE IT NECESSARY TO USE APPROPRIATE CORRECTION FACTORS.

**GROUND ELAPSED TIME (GET) GIVEN BEGINS WITH VEHICLE FIRST MOTION.

TV SCHEDULE SHOWN IS TIME OF TRANSMISSION FROM APOLLO 16;
 SEE LOCAL TELEVISION LISTING FOR NETWORK TELEVISION SHOWING.