First Man On Moon - July 21 At 2:17 AM

The flight plan for the AS-506 (Apollo 11) lunar landing mission, scheduled for launch on July 16, calls for touchdown on the Moon at 4:23 p.m. EDT July 20. Nine hours and 54 minutes later—at 2:17 a.m. July 21—Apollo 11 Commander Neil A. Armstrong, 38, is to step onto the Moon’s surface. Two revolutions of the Moon have been added to the flight plan for the Apollo 11 mission to improve communications during critical maneuvers and to allow more time for decontamination of equipment exposed to the lunar environment.

Adding a revolution just before the Lunar Module (LM) undocks from the Command/Service Module (CSM) will bring the LM within view of the 210-foot Pioneer tracking antenna at Goldstone, during its descent to the lunar surface. A second added revolution after redocking and before the LM is cast off will give astronauts Neil A. Armstrong and Edwin E. Aldrin an additional two hours to brush and vacuum Moon dust from the lunar sample boxes and other items before transferring them to the CSM for return to Earth.

This revision of the flight plan increases the planned revolutions of Moon to 30 for a total time in lunar orbit of 59 hours 30 minutes. It is expected that the added four hours will be made up by a faster return journey. Subject to change before launch, the time line for Apollo 11 has been announced by NASA. While the CM Pilot, USAF Lt. Col. Michael Collins, 38, orbits the Moon, Armstrong and Aldrin, LM Pilot, will gather a large amount of lunar samples, perhaps consisting of ten pounds to 15 pounds of rocks and dust. This sample will provide the means for locating the origin of rocks returned from the Moon. The LM, with a 38-foot ladder, with the Commander will be the first to descend the ladder to step onto the Moon at 4:20 p.m. EDT July 20.

Lunar Module (LM) undocks from the CSM for the first time at 4:14 p.m. EDT July 20. The LM, under the control of the CSM, will make four revolutions of the Moon, with its last orbit at 10:00 p.m. EDT, July 20. During its descent, Armstrong and Aldrin will pick up visual cues, helping them to find the correct landing site. Armstrong will take the LM to within 12 miles of the landing site to conduct a visual inspection of the site. As the LM descends, Aldrin will take control of the LM and will prepare the LM for lunar landing by releasing the retro-rockets. This will be the first time a landing will be made on the Moon's surface. After the LM's propellant tanks are emptied, Armstrong and Aldrin will place the LM on the lunar surface and unfold the ladder to step onto the Moon. The LM will remain on the lunar surface for 21 hours, 36 minutes, and 14 seconds, giving sufficient time for scientific experiments and sample gathering.

When a major system is listed, it is followed by a list of applicable subtopics. The alphabetical index also contains listings of general categories of information such as "Teletype formats", "Contingency procedures", "Forms", and "Scheduling" which are further broken down into specific topics.

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samples of lunar surface materials for return to Earth.

They are also scheduled to make photographs and leave an experiments package on the Moon which will include a laser reflector and instruments for measuring seismic activity.

Armstrong and Aldrin are to leave the Moon at 1:50 p.m. EDT July 21, rejoin the CM and complete the eight-day mission with splashdown in the Pacific Ocean at 12:49 p.m. July 24, for a total ground elapsed time of 195 hours, 20 minutes and 42.2 seconds.

All of the Apollo 11 crew members are veterans of the two-man Gemini space flight series flown during 1965-66. Backup crew members are USN Capt. James A. Lovell, USAF Lt. Col. William A. Anders and Civilian Fred W. Haise. Lovell and Anders, both Gemini veterans, were Command Module and Lunar Module Pilot, respectively, on the Moon-circling Apollo 8 mission last December. Haise has not flown in space.

Probable touchdown point for the Apollo 11 LM is Landing Site 2, located in the southwest corner of the Moon’s Sea of Tranquility, which was photographed by the Apollo 10 crew from an altitude of about 50,000 feet.

Apollo 11’s sequence of events follows closely the flight plan of Apollo 10 during which the astronauts tested all components which will be used in the lunar landing.

Grand Canary
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The NASA station director at CYI is Charles A. Rouiller, the M&O supervisor is David Wilkins; George Cantrell is assistant M&O. Other supervisory positions are held by M. Harris, administrative assistant; J. Waldo logistics; C. Manville, training; R. Lutz, communications; R. Lee, data systems; J. McCarthy, USB; and J. Best, facilities.

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Network Training Schedule
The NTTF resident training schedule for July through December 1969 is as follows: (Request for student enrollment may be made by course number or name.

Course     Course Dates
110 MSFTP-2  28 Jul - 26 Aug
200 642B Computer  29 Sep - 28 Oct
     28 Jul - 03 Sep
     29 Sep - 05 Nov
210 1218 Computer  28 Jul - 22 Aug
     03 Nov - 02 Dec
230 RSDP Peripheral  13 Jun - 18 Jul
     04 Sep - 07 Oct
     06 Nov - 11 Dec
320 USB Land Antenna  11 Aug - 29 Aug
     27 Oct - 14 Nov
330 Receiver/Exciter  16 Jun - 18 Jul
     02 Sep - 03 Oct
     17 Nov - 19 Dec
340 Power Amplifier  21 Jul - 08 Aug
     06 Oct - 24 Oct
     25 Aug - 12 Sep
     03 Dec - 23 Dec
360 TDP/APP  28 Jul - 22 Aug
     03 Nov - 02 Dec
510 MSFN Recorders  07 Jul - 08 Aug
     16 Sep - 17 Oct
     03 Nov - 05 Dec
520 Apollo Timing  09 Jun - 03 Jul
     15 Sep - 10 Oct
600 Apollo Program  23 Jun - 27 Jun
     04 Aug - 08 Aug
     25 Aug - 29 Aug
     29 Sep - 03 Oct
     10 Nov - 14 Nov
610 Digital Computer Fundamentals  30 Jun - 25 Jul
     02 Sep - 26 Sep
     06 Oct - 31 Oct
     30 Jun - 10 Jul
     02 Sep - 11 Sep
     03 Nov - 12 Nov
     18 Aug - 21 Aug
     20 Oct - 23 Oct
132 Network Data Flow  22 Aug - 27 Aug
     24 Oct - 29 Oct

The following courses are on a scheduled upon request (SOR) basis July thru December 1969.

Course     Duration
100 MSFTP-1  3 Weeks
120 RF Telemetry  3 Weeks
     8 Days
205 Computer Programming  5 Weeks
300 Acquisition Aids  3 Weeks
310 USB Ship Antenna  2 Weeks
400 Teletype Operations  8 Days
420 112A Key Intercom  2 Weeks
430 Data Modems  3 Weeks
470 RF Command  2 Weeks
631 NASA Hand Soldering  1 Week