



APOLLO 10

The Fourth Mission: Testing the LM in Lunar Orbit 18 May–26 May 1969

Background

Apollo 10 was a Type F mission, a piloted lunar module demonstration in lunar orbit, the dress rehearsal for the first piloted landing on the Moon. It was also the first time all members of a three-person crew had previously flown in space.



The primary objectives were:

To demonstrate crew, space vehicle, and mission support facilities performance during a piloted lunar mission with command and service modules and lunar module; and to evaluate lunar module performance in the cislunar and lunar environment.

The mission events simulated those for a lunar landing mission. In addition, visual observations and stereoscopic strip photography of Apollo Landing Site 2 (first planned lunar landing site) would be attempted.

The crew members were Colonel Thomas Patten Stafford (USAF), commander; Commander John Watts Young (USN), command module pilot; and Commander Eugene Andrew “Gene” Cernan (USN), lunar module pilot.

18 May 1969 00:49 GMT. Landing Date:

1969-05-26 00:52:23 PM. Flight Time: 8.00 days.

Flight Up: Apollo 10. Flight Back: Apollo 10. Call Sign: Charlie Brown/Snoopy. Crew: Cernan, Stafford, Young. Backup Crew: Cooper, Eisele, Mitchell. Location of Capsule: Science Museum, London, U.K. Program: Apollo.

Of note: Speed record (11,107 m/s).

On the lighter side: The astronauts swore a blue streak when their lunar module went out of control. More expletives followed in their enthusiastic descriptions of the lunar surface. When they returned, a banner awaited them: "THE FLIGHT OF APOLLO 10 - FOR ADULT AUDIENCES ONLY"

Contents Description:

Apollo 10 Sound pack and Scenarios were developed using AMSO ver 1.18 and IMFD ver 5.1m. Most of the sound files were captured from "Apollo 10: The Dress Rehearsal" DVD set and the NASA website. I am not proficient enough with IMFD to try to do in-depth step-by-step procedures for the scenarios but have managed to get the flight to coincide fairly well with the historical mission time line. Each scenario is easy to use, mostly by just pressing the IMFD (AB) function. The Launch and TLI sound sequence are quite extensive and one should stay in real time or you'll miss them. I set the sound quality to a low 8 mhz, mono to save space and emulated the radio quality of the time.

This has been quite a learning experience for me and makes one appreciate what a real adventure the crews of the space program went through. I am sure you IMFD wizards out there may find better ways of setting up the scenarios and I would appreciate you input.

Credits:

Martin Schweiger: for Orbiter Space Flight Simulator

DanSteph: for Orbiter Sound

AC Soft: for AMSO

Jarmonik: for Interplanetary MFD

Topper0710: for BurnTimeCalc MFD ver.1.5

If I have overlooked anyone for proper credit, please let me know and I add them – and apologize for the oversight.

Contact me at:

Orbiter Forum: CGrimes

or

cicero.grimes@gmail.com

Requirements:

1. Orbiter Space Flight Simulator, version 2006 patched to 2006-P1 (build Sep 29 2006).

Link: <http://orbit.medphys.ucl.ac.uk/orbit.html>

2. Orbiter Sound version 3.5.

Link: <http://orbiter.dansteph.com/index.php>

3. Apollo Mission Simulator for Orbiter (AMSO), version 1.18 or later.

Link: <http://www.acsoft.ch/AMSO/AMSO.html>

4. Interplanetary MFD, version 5.1.m

Link: <http://koti.mbnet.fi/jarmonik/Orbiter.html>

Optional: BurnTimeCalc MFD, version 1.5.

Link: <http://www.orbithangar.com/>

Installation:

Extract the zip file into the root of your Orbiter directory.

Special notes for installation

(root)\Config\Earth\Base\AMSO\A10_Splashdown.cfg is included as a splashdown aim point. The only time this base is available is when running the AMSO scenarios. All that is defined is the historic splashdown coordinates.

As an option, there is an alternative USA_Anthem.MP3 file that plays the actual welcoming ceremony aboard the USS Princeton. To activate, goto your (root)\Sound\AMSO\ directory and run "Use_AP10_USA_Anthem.bat". To recover the original, just run "Use_USA_Anthem_Orginal.bat".

Un-install:

Using the file list, delete those files from your Orbiter directories.

File list:

1. "(root)\Scenarios\AMSO\AS-505 Apollo 10" folder
2. (root)\Config\Earth\Base\AMSO\ A10_Splashdown.cfg
3. (root)\Html\Scenarios\Apollo10_FP.CHM
4. "(root)\A10_Sound_Scenario_Pack\Sound\AMSO\AS-505" folder
Be sure to run 'Use_USA_Anthem_Orginal.bat' then delete:
AP10_USA_Anthem.mp3
USA_Anthem.org
Use_AP10_USA_Anthem.bat
Use_USA_Anthem_Orginal.bat
5. (root)\Doc\AMSO\A-10
Apollo 10 Sound & Scenario pack.pdf