

ORBITER

Project Apollo Specification 1.0

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1. INTRODUCTION

This document outlines everything we need to do put together a Apollo module. The idea is to have as realistic of a simulation as we can.

2. OVERVIEW

Project Apollo has several parts. Launchers: Little Joe II, Saturn I, Saturn IB, and Saturn V. Spacecraft: Apollo Command Module (Block 1 & 2), Service Module (original, and J class), Lunar Module (original, and J class), Lunar Rover, Skylab, J mission satellite, Docking Adapter, and Soyuz.

3. SCENARIOS

SA 11,12,13, and 14	- Early manned test planned for Block I and Saturn I booster
AS-201, 202, and 203	- Early tests using Block I boilerplate
AS-204, 205	- Apollo I and II (C Missions)
AS-207/208	- Dual launch of Saturn IB to test Lunar Module
Apollo 4	- First Test of Saturn V
Apollo 5	- Test of the Lunar Module using the Saturn IB
Apollo 6	- Test of the Saturn V
Apollo 7	- First Manned Test of Apollo CSM using Saturn IB
Apollo 8	- First Manned Flight of the Saturn V, first flight to the moon
Apollo 9	- Earth Test of the Lunar Module
Apollo 10	- Lunar Orbit Test of the Lunar Module
Apollo 11	- First Lunar Landing
Apollo 12	- First pin point landing
Apollo 13	- CSM's oxygen exploded a successful failure
Apollo 14	- Return to the Moon with Alan Shepherd
Apollo 15	- First J Class Mission
Apollo 16	- 2 nd J Class Mission
Apollo 17	- Last Apollo Mission to the Moon.
Apollo 18, 19, & 20	- cancelled moon flights
Skylab I	- Launch of Skylab
Skylab II, III, IV	- Skylab Mission
Skylab Rescue (III)	- Skylab III CSM developed a truster leak, a CSM was adapted to carry 5.
ASTP	- Apollo and Soyuz met in orbit.

4. BREAKDOWNS

Little Joe II

One Stage (Little Joe II)

Saturn I

Three Stages (Saturn I, Saturn IV, Centaur C)

Saturn IB

Two Stages (Saturn IB, Saturn IVB)

Saturn V

Three Stages(Saturn IC, Saturn II, Saturn IVB)

CSM

Abort Tower/Boost Cover, Command Module (Block I), Command Module (Block II), Block II hatch mesh, Block II interior, Service Module (original), Service Module (J class). Service Module (J Class) Instrument cover), Satellite for J Class Service Module. Film Canister (J Class), Drogue Chutes, Main Chutes. EVA Apollo Astronaut (9, 15, 16, 17, SL II, SL III, & SL IV)

Lunar Module

Ascent Stage, Descent Stage. Hatch mesh, Ascent Interior. Lunar Rover (unfoldable). Lunar EVA Astronaut, Lunar EVA Astronaut sitting (for Rover). Surface Deployment packages (various types).

Skylab

Base model, wreckage (to be attached to base model), Skylab fixes (various to be attached to base model).

ASTP

Soyuz, Docking Adapter.

5. SIMULATION

This section is programming to make the models more realistic simulations.

Little Joe II, Saturn I, Saturn IB, and Saturn V

Guidance package, and Abort Sensing Electronics

CSM

Guidance Computer, Capsule Instrumentation, Service Module instrumentation, and Science Instrumentation

Lunar Module

Guidance Computer, Descent Instrumentation, and Service Module Instrumentation.