

## CENTER SERIES

### MCC DISPLAY/CONTROL SYSTEM SLIDES

The Mission Control Center at the Johnson Space Center became fully operational in 1965 with the formidable task of providing both routine and emergency support to flight crews assigned to increasingly complex space missions. The facility was designed under terms of contract NAS9-1261 with Philco Corp. The requirements for its Display and Control System were driven by a need for real-time support, reliability, equipment redundancy and computer driven data processing. Slides like the ones in this subseries were "inscribed" with critical mission data and rear screen projected onto the four 10' X 10' and one 10' X 20' group displays. Each display is backed by a background slide projector with a twenty slide capacity, a spotting projector capable of projecting a single symbol in one of four colors, and several plotting projectors that plot launch trajectories and orbital paths from radar coordinates. Each projector is a backup for the other thus allowing uninterrupted operation in the event of an equipment failure. The Display and Control System is one link in the integrated decision and command system in the Mission Control Center. Its direct interface with the Real-Time Computer Complex allowed for the rapid display of flight data for controllers seated in the Mission Operations Control Room. The system operated with slight modifications until it was upgraded in 1990. Detailed information about the system, the Philco contract and the Mission Control Center is available in the Mission Control Center and Real-Time Computer Complex subseries and the papers of Paul Vavra. Mr. Vavra was responsible for the technical management plan, specifications, contract negotiations and overall design, development and construction of the MCC. The large majority of the slides in this collection are special ones made to commemorate the successful completion of a mission or program. They are single symbol/single color slides that, when projected together, display a multi-colored mission patch or flag. There are also a few ground tracking slides showing orbital paths or satellite coverage zones. A minority of the slides are unidentifiable as they are marked with undescribed trajectory lines or graph lines. The subseries is arranged in rough mission order. It contains slides from the Apollo, Skylab, ASTP and Space Shuttle programs.

### Inventory

**SubHeading:**
**Box Number: 1**

Apollo Mission Phases (7 slides)

Apollo Tracking Sites, World Map,  
Launch and Abort Trajectories (7  
slides)

Apollo 8 - American Flag

Apollo 10 - American Flag

Apollo 11 - Lunar Descent / Lunar Map  
(3 slides)

Apollo 11 - "Task Accomplished" (5  
slides)

Apollo 13 - "Welcome Back" (5 slides)

Apollo 16 - Mission Patch (5 slides)

Apollo 17 - Program finale showing all  
Apollo Mission Patches (5 slides)

Skylab 1 - Mission Patch (5 slides)

Skylab II - Mission Patch (5 slides)

Skylab III - Mission Patch (4 slides)

Skylab III - Program finale showing all  
Skylab Mission Patches and Mission  
Operations Patch (5 slides)

Skylab Orbit Nominals (14 slides)

ASTP Splashdown "Mission  
Accomplished" (3 sets / 12 slides)

ASTP Mission Patch (3 slides)

ASTP Entry Mode and World Map (2  
slides)

STS-1 American Flag "For All  
Mankind" (2 sets / 10 slides)

STS-9 Spacelab-1 Special showing  
ESA Flags (5 slides)

Special "Future" slides showing STS-1

and Mission Operations Patches with  
Mercury through ASTP programs  
noted (2 sets/ 10 slides)

**SubHeading:**

**Box Number: 2**

Skylab Splashdown - multiple slides  
showing various geographical regions  
of the earth (1 carousel)

Miscellaneous Apollo orbital tracking  
charts and graphs (2 boxes)

Unidentified slides (1 carousel)