### United States Department of the Interior National Park Service

# National Register of Historic Places Inventory—Nomination Form

For NPS use only received

date entered

not for publication

code

201

Exploration

See instructions in *How to Complete National Register Forms* Type all entries—complete applicable sections

# 1. Name

historic Apollo Mission Control Center

and/or common Mission Control Center

# 2. Location

street & number Lyndon B. Johnson Space Flight Center

code

Houston

Texas

city, town

state

# 3. Classification

Category district building(s) structure site object	Ownership public private both Public Acquisition in process being considered	Status occupied unoccupied work in progress Accessible _X yes: restricted yes: unrestricted no	Present Use agriculture commerciai educationai entertainment government industriai military	museum park private residence religious scientific transportation other: Space
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vicinity of

county

48

congressional district

Harris

# 4. Owner of Property

name National Aeronautics and Space Administration (NASA)

### street & number

city, town	Washington	vicinity of	state	D.C.	20546	
5. Lo	ocation of Le	gal Description				
courthouse	, registry of deeds, etc. No	ational Aeronautics and Space	e Administrat	ion (N	ASA)	
street & nu	mber Real Property I	Management Office Code NXG				
city, town	Washington		state	D.C.	20546	
6. R	epresentatio	n in Existing Surv	eys			
title	None	has this property be	en determined el	igible?	yes	no
date			federai sta	te	county	_ local
depository	for survey records					
city, town		La come de	state			

# 7. Description

Condition		Check one	Check one	
<u>X</u> excellent	<u> </u>	unaitered	<u>X</u> original site	
good	ruins	_X_ altered	moved date	
fair	unexposed			

#### Describe the present and original (if known) physical appearance

The Apollo Mission Control Center is in Building 30 at the Lyndon B. Johnson Manned Space Flight Center in Houston, Texas. The three-story structure consists of a mission operations wing (MOW), operations support wing (OSW), and an interconnecting lobby wing. The MOW contains systems and equipment required to support the mission control function. The OSW contains offices, laboratory, and technical support areas for the flight operations directorate. The lobby wing provides additional office space and dormitory facilities utilized by flight controlers during space flights of extended duration. The mission control center is supported by an emergency power building that houses standby electrical power and air-conditioning systems in the event that primary sources fail.

Principal systems on the first floor are the real time computer complex and the communications systems. These systems support the dual mission facilities and systems on the second and third floors. The communications system provides the interface between the mission control center in Houston and the manned space flight network and the launch site.

Principal areas on the second floor are the mission operations control room (MOCR), the staff support rooms (SSR), the simulation facilities, and the master digital command system. The MOCR is the principal command and control center, staffed with key mission operations teams responsible for overall management of the flight.

Principal areas on the third floor are the MOCR, the SSR, the recovery control room, the meteorological area, and the display and timing area. The MOCR and SSR are exact duplications of the areas on the second floor.

The recovery control room, the meteorological area, and the display and timing areas support the dual mission facilities and systems on the second and third floors.

The MOCR on the second floor is the principal command and decision area in the MCC. Critical information related to spacecraft, launch vehicle, and ground systems, as well as aeromedical parameters from the worldwide stations, ships, and aircraft, is processed and displayed within the MOCR. Based on an analysis of this continuous flow of information, personnel in this room must assess the spacecraft flight status and progress, and then, in time-critical periods, determine the continuation, alteration, or termination of the space flight.

This is an ongoing NASA facility and is currently being modified to accommodate flights of the shuttle. The third floor of the facility has been turned over to the Air Force and is in the process of being converted into a secure area from which Air Force shuttle flights will be monitored. The second floor of the facility housing the mission control operations room is being divided into two rooms to accommodate increasing numbers of shuttle flights,<sup>1</sup>

### 8. Significance

Period prehistoric 1400–1499 1500–1599 1600–1699 1700–1799 1800–1899 1900–	Areas of Significance—C archeology-prehistoric archeology-historic agriculture architecture art commerce X communications	heck and justify below community planning conservation economics education _X engineering exploration/settlemen industry invention	Iandscape architectu Iaw Iiterature Iiterature Iiterature Iitary IIII music IIIII philosophy IIIII politics/government	re religion science sculpture social/ humanitarian theater transportation _X other (specify)
Specific dates	1965-Present	Builder/Architect N	ASA	

#### Statement of Significance (in one paragraph)

The Apollo Mission Control Center is significant because of its close association with the manned spacecraft program of the United States. This facility was used to monitor nine Gemini and all Apollo flights including the flight of Apollo 11 that first landed men on the moon. After the end of the Apollo Program this facility was used to monitor manned spaceflights for Skylab, Apollo-Soyuz, and all recent Space Shuttle flights.

The support provided by the Apollo Mission Control Center to the first manned landing on the surface of the moon was critical to the success of the mission. It exercised full mission control of the flight of Apollo 11 from the time of liftoff from Launch Complex 39 at the Kennedy Space Center to the time of splashdown in the Pacific. The technical management of all areas of vehicle systems of Apollo 11 including flight dynamics, life systems, flight crew activities, recovery support, and ground operations were handled here.

Through the use of television and the print news media the scene of activity at the Apollo Mission Control during the first manned landing on the moon was made familiar to millions of Americans. When Neil Armstrong reported his "giant leap for mankind" to Mission Control his words went immediately around the world and into history. The Apollo Mission Control Center and Launch Complex 39 at the Kennedy Space Center are the two resources that symbolize for most Americans achievements of the manned space program leading to the successful first moon landing during the flight of Apollo 11 in July 1969. NPS Form 10-900-a (7-81)

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### National Register of Historic Places Inventory—Nomination Form



2

Continuation sheet

Item number

7

Page

Footnotes

Harry Butowsky, et. al., <u>Man in Space Reconnaissance Survey</u> (Denver, National Park Service, 1981), pp. 57-8.

NPS Form 10-900-a (7-81)

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### National Register of Historic Places Inventory—Nomination Form



Continuation sheet

Item number

9

Page

1

Bibliography

Brooks, Courtney G., Grimwood, James M., Swenson, Loyd S. <u>Chariots for</u> <u>Apollo: A History of Manned Lunar Spacecraft</u>. Washington, D.C.: National <u>Aeronautics and Space Administration</u>, 1979.

Butowsky, Harry, et. al. <u>Man in Reconnaissance Survey</u>. Denver: National Park Service, 1981.

Mission Control Center. Washington, D.C.: National Aeronautics and Space Administration, No Date.

#### **Major Bibliographical References** 9.

See continuation sheets

### **10. Geographical Data**

Acreage of nominated property Less than 1 acre Quadrangle name League City

**UMT References** 

A 1,5 Zone	291761610 Easting	3   2 7 1 4 6 0 Northing
c		
E		
G		

B Zone	Easting	Northing
D		
F		
H		

Quadrangle scale 1:24,000

### Verbal boundary description and justification

The boundary of the Apollo Mission Control Center is defined by the outside perimeter of Building 30 at the Lyndon B. Johnson Space Center.

#### List all states and counties for properties overlapping state or county boundaries

state	code	county	code
state	code	county	code
11. Form Pre	epared By		
name/title Harry A. Bu	ıtowsky		
organization National	Park Service		date May 15, 1984
street & number Divisi	on of History		telephone (202) 343-8168
city or town Washingto	on, D.C. 20240		state
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#### 12. State Historic Preservation Utilicer Certification

The evaluated significance of this property within the state is:

national

_ state	local	
_ state	1008	U

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

State Historic Preservation Officer signature

For NPS use only I hereby certify that this property is included in the National Registe	1	
	date	



Apollo Mission Control Center UTM References: 15/297660/3271460



### Bldg.

- 2 Visitor Center
- 3 JSC Cafeteria and Gift Shop
- 5 Mission Simulation and Training
- 9A Space Shuttle Orbiter Training
- 30 Mission Control Center
- 31A Lunar Sample Building
- 32 Space Environment Simulation Laboratory

