

THE JET PROPULSION LABORATORY SPACE OPERATIONS MANAGEMENT RESPONSIBILITIES

MEMORANDUM OF AGREEMENT

BETWEEN

LYNDON B. JOHNSON SPACE CENTER (JSC)
SPACE OPERATIONS LEAD CENTER

AND

THE JET PROPULSION LABORATORY
CALIFORNIA INSTITUTE OF TECHNOLOGY

MAY 1997



National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
Houston, Texas

MOA -97-001	Memorandum of Agreement Between the Johnson Space Center and the Jet Propulsion Laboratory	
Author: John W. O'Neill		Rev.
Effective Date:	Termination Date:	Page 1 of _5_

**NASA SPACE OPERATIONS MANAGEMENT
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Approved:

Original Signed By:

George W. S. Abbey
Director, Johnson Space Center

Original Signed By:

Edward C. Stone, Ph. D.
Director, Jet Propulsion Laboratory

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1. INTRODUCTION

The purpose of this Memorandum of Agreement is to establish an agreement between the Johnson Space Center (JSC) , the NASA Space Operations Lead Center, and the Jet Propulsion Laboratory (JPL), a primary space operations support center. This agreement covers the major areas of NASA space operations functional delegation by JSC to JPL and the accompanying responsibilities of each of these centers.

2. BACKGROUND

JSC has been designated the NASA Lead Center for Space Operations and has created the Space Operations Management Office (SOMO) to manage the overall process. The approach to meeting space operations goals and objectives established by the NASA Administrator is one of delegation of responsibility to the Center level, under the overall leadership of the Director of Space Operations located at JSC. The JSC Director, in the role of Lead Center Director, establishes supporting assignments for other Centers (Supporting Centers) considering Center missions responsibilities and areas of expertise. The Space Operations Management Plan (JSC-27527) provides a more detailed description of this approach including the SOMO organization structure and the management and service provider roles of JPL.

3. PURPOSE

JPL has been a major participant in the overall establishment and management of the Space Operations initiative across NASA and in the development of the SOMO organization and processes. This agreement is intended to formalize and recognize the critical functions which are the responsibility of JPL. These functions are critical to the success of SOMO in providing the operations services which are required to support the Agency's missions.

4. RESPONSIBILITIES

a. JPL shall:

- (1) Manage the Deep Space Network (DSN) including the customer interface and reimbursable process.
- (2) Provide Data Services Management, including staffing the key position of Data Services Manager (DSM) in the SOMO organization. The DSM functions in a SOMO Agencywide capacity overseeing all of the Center Data Services Managers (CDSM's) and is responsible for managing the SOMO requirements generation and commitments process. This position also plays an important role in space operations technology programs and systems engineering oversight in conjunction with the SOMO Systems Engineer and the SOMO Mission Services Manager. Given the Agencywide responsibilities of the DSM and frequent interaction with the

MOA -97-001	Memorandum of Agreement Between the Johnson Space Center and the Jet Propulsion Laboratory	
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Effective Date:	Termination Date:	Page 3 of _5_

Director of Space Operations, it is important that a Laboratory senior manager staff this position.

The following SOMO functions have been assigned to other NASA Centers and are under the overall management responsibility of the DSM:

- (a) The GSFC responsibility for the space network including customer interface and reimbursable management and the low-Earth orbit ground network tracking and communications management.
- (b) The MSFC responsibility for the NASA Information systems Network (NISN).
- (3) JPL is also delegated the management responsibility for the Space Operations Standards Program. In addition, JPL is designated as having lead responsibility for the technology areas of Deep Space Communications and Operations, and Communications and Operations Standards. The technology responsibilities are executed through the SOMO Technology Program.
- (4) Support to SOMO as described below:
 - (a) Participate in the establishment of consolidated contracts that will provide various Space Operations services at multiple NASA Centers including JPL. This participation includes defining JPL requirements for operations maintenance and sustaining engineering. Once a contract is awarded, JPL is requested to support SOMO by providing contract oversight for work managed by JPL, financial and budgetary support, and performance evaluation of these contract-related activities.
 - (b) Staffing key positions in the matrixed SOMO organization to serve as the formal Center interface for services and functions required from the JPL Telecommunications and Mission Operations Directorate and Consolidated Space Operations Contracts (CSOC). These positions have been defined as the CDSM and the Center Mission Services Manager (CMSM). The CDSM is responsible for all services related to receiving data from a spacecraft and delivering it to a user. The CMSM is the JPL customer point-of-contact for acquiring services from SOMO and making commitments to the customer.
 - (c) Support to the GSFC for the TDRS-H, I and J satellite procurement and integration into the Space Network including launch vehicle procurement through the Lewis Research Center (LeRC).
 - (d) Support to the LeRC for the Agency's Spectrum Management execution. This will continue to require support from the JPL Spectrum Manager as related to new space science missions and Earth sensing missions operating in the radio frequency spectrum.
 - (e) Support to the SOMO Technology Program Integration and Management. This will include JPL membership on the Technology Working Group and the Integrated Mission Analysis Team.

MOA -97-001	Memorandum of Agreement Between the Johnson Space Center and the Jet Propulsion Laboratory	
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Effective Date:	Termination Date:	Page 4 of _5_

b. JSC SOMO Shall:

- (1) Provide management responsibility, authority and accountability for all space operations.
- (2) Develop the total space operations implementation plan including goals, objectives and implementing strategies for space operations functions based on coordination and negotiation with customers, JPL and the other operations services centers.
- (3) Maintain process standards and architectural control for space operations services and assets.
- (4) Provide financial management for space operations including management and coordination of the budget process and the integration and negotiation of cost commit and reimbursable agreements.
- (5) Develop and administer any new agency consolidated space operations contracts, including the Consolidated Space Operations Contract (CSOC), with JPL providing technical direction and performance evaluation for their elements.
- (6) Represent space operations including JPL interests and issues, and provide insight to the highest levels of NASA management at the Space Operations Management Council and other NASA Headquarters forums.
- (7) Provide management and integration for space communications and operations technology.
- (8) Provide space operations contract performance assessment management and integration for space operation activities.

GENERAL UNDERSTANDINGS

- a. Success will be determined by measurable results from the customer.
- b. Control boards and panels will be established as required.
- c. Management responsibilities will be delegated to the lowest practical levels.
- d. Controlled level items will be held to an absolute minimum.
- e. Reduce duplication, cooperate within and external to NASA, utilize commercial entities and standardize wherever possible.

MOA -97-001	Memorandum of Agreement Between the Johnson Space Center and the Jet Propulsion Laboratory	
Author: John W. O'Neill		Rev.
Effective Date:	Termination Date:	Page 5 of _5_