

AIR FORCE SYSTEMS COMMAND (AFSC)
OPERATIONS ORDER
FOR
MANNED ORBITING LABORATORY (MOL) PROGRAM

ANNEX Q

DEPARTMENT OF DEFENSE (DOD) MANAGER RELATIONSHIP
WITH THE
DIRECTOR, MANNED ORBITING LABORATORY PROGRAM

REFERENCES:

a. Secretary of Defense Memorandum, Subject: "Assignment of Responsibilities of the Department of Defense Manager for Manned Space Flight Support Operations," dated 8 September 1964.

b. Secretary of the Air Force Order No. 117.4, dated 25 August 1965.

1. SITUATION:

a. The Department of Defense has been heavily involved in the operational support of manned space flight since the early days of Project MERCURY. The Secretary of Defense emphasized the importance and priority of this support during 1959 by establishing a single point of contact within the Department of Defense designated the DOD Representative for Project MERCURY Support Operations. As the workload of manned space flight support operations increased, the directive designating the responsibility for this support was updated several times. The current directive (Reference a) applies in support of the NASA Manned Space Programs and the Air Force MOL Program. The individual responsible for exercising this charter is designated the DOD Manager for Manned Space Flight Support Operations.

Enclosure #1

b. Over the years the DOD Manager, his joint-staff and the operational support organizations have built up a wealth of professional support knowledge, world-wide points of contact and the coordinating procedures necessary to achieve responsiveness to manned space flight mission operational support needs. Close study of his directive will reveal he is not responsible for initiating development, programming for resources, the direct involvement in or usurping of any program responsibility for mission experiments, objectives, or its success. He is charged with providing a single point of contact for the coordination of and, during missions, control of sizeable operational support forces. These forces are marshalled and organized to be responsive to the Mission Director for the particular program. For example, the DOD Manager now assumes operational control of approximately ten thousand Department of Defense people in support of NASA Project GEMINI missions working under the GEMINI Mission Director. A common base line must be established so that the DOD Manager may quickly and efficiently shift this operational support from APOLLO to MOL or vice versa. Total DOD mission support to NASA may be reduced by the time MOL becomes operational but it can be expected to be comparable for any manned mission during that time period as a matter of national policy.

c. All elements of the MOL Program Office and supporting Systems Command organizations must understand the responsibilities of the DOD Manager and his relationship or interface with the MOL Program. There is a relatively clean-cut interface between NASA and the DOD Manager;

however, the interface between the MOL Program Director and the DOD Manager requires definition because both organizations are within the Department of Defense. This interface or dividing line will be the MOL Program organization and the Space Systems Division on the one side and the DOD Manager's organization and supporting DOD resources on the other. This dividing line is comparable to the NASA APOLLO Program organization and the NASA supporting centers on the one side and the DOD Manager and supporting DOD resources on the other. This will afford the DOD Manager a common operational support base line for all manned space flight. Therefore, the MOL Program Director and Mission Director will have three principal points of contact for specific mission planning and operations; i.e., the SSD Test Wing for launch operations, the SSD SCF for on-orbit network operations and the DOD Manager for recovery and all other operational support outside the resources of the Program Office and Space Systems Division. This interface will: (1) Result in approximately the same level of operational support responsibility for the DOD Manager for any and all manned space flight operations, (2) Be in conformance with the Secretary of Defense Memorandum, and (3) Offer efficient support service to the Air Force MOL Program (see Attachment 1).

2. MISSION:

The DOD Manager is responsible to the Secretary of Defense through the Joint Chiefs of Staff to provide mission operational support resources to the managers of manned space flight programs (see Attachment 2).

3. TASK ORGANIZATIONS:

The DOD Manned Space Flight Support Office (DDMS), acting for the DOD Manager, will exercise coordinating authority to insure that requested mission operational support is made available to the Director MOL (see Attachment 3).

4. PLAN OF OPERATIONS AND MANAGEMENT OF SUPPORT FORCES:

a. Under the direction of the DOD Manager, the DOD Manned Space Flight Support Office (DDMS) will receive the MOL recovery requirements from the MOL Systems Office. The Recovery Division, DDMS, will prepare a MOL Recovery Plan which will be submitted to the MOL Systems Office. During mission periods, the DOD Manager will exercise operational control of the recovery resources under the direction of the Mission Director.

b. The MOL Systems Office may require additional operational support resources to accomplish the MOL mission. If so:

(1) The Western Test Range (AFWTR) will accept launch operational support requirements from the MOL Systems Office. These requirements will also be submitted to DDMS for coordination with the entire manned space flight effort. The WTR point of contact will be with the SSD/Aerospace Test Wing (ATW) responsible for launch.

(2) The Assistant for Communications to the DOD Manager (DDMS-C) will accept requirements for operational communications support from the MOL Systems Office. The DDMS-C points of contact will be the SSD/ATW responsible for launch, the SSD/Satellite Control Facility (SCF) which is responsible to meet the on-orbit requirements, and the Recovery Division, DDMS, responsible for MOL recovery operations.

(3) The Assistant for Network to the DOD Manager (DDMS-H) will accept requirements for network operational support from the SSD/SCF. Operational support for network is defined as support from network stations other than SCF network stations; this support will include both DOD and NASA network stations if required by the MOL Systems Office. The DDMS-H point of contact will be with SSD/SCF.

(4) The Assistant for Meteorology to the DOD Manager (DDMS-W) will accept requirements for weather reconnaissance and other weather support from the MOL Systems Office. The DDMS-W point of contact will be with the SSD/SCF weather detachment.

(5) The Assistant for Public Affairs/Information to the DOD Manager (DDMS-P) will receive guidance and requirements from the MOL Systems Office. The DDMS-P points of contact are the MOL Public Affairs Office (PAO), the Secretary of the Air Force Office of Information (SAFOI), and the SSD Office of Information.

(6) The Assistant for Bioastronautics to the DOD Manager (DDMS-M) will accept requirements for ground medical support from the MOL Systems Office. The DDMS-M point of contact will be the SSD/Assistant for Bioastronautics (AMB).

c. Attachments 4 and 5 are added to show the flow of MOL Operations Support Requirements and the points of contact for coordinating and planning the support required.

5. TASKS FOR SUBORDINATE UNITS:

a. During non-mission periods, the DOD Manager has no subordinate units; however, he exercises coordinating authority under the Secretary

of Defense through the Joint Chiefs of Staff. This coordinating authority allows the DOD Manager to bring together the required DOD organizations and resources in order to develop plans for the use of operational support resources. Coordinating authority is defined in the JCS Publication 1 as:

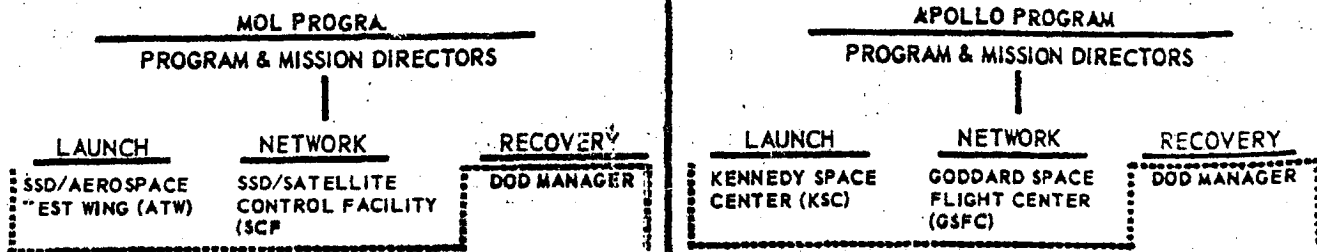
"A commander or individual assigned responsibility for coordinating specific functions or activities involving forces of two or more services, or two or more forces of the same service. He has authority to require consultation between the agencies involved, but does not have the authority to compel agreement. In the event he is unable to obtain essential agreement, he shall refer the matter to the appointing authority."

b. During mission periods, the DOD Manager exercises operational control, under the Mission Director, of the required DOD operational support resources outside the MOL Program organization and the Space Systems Division.

5 Atchs

1. Comparative Interface
2. Manned Space Mission Requirements and Mission Support Provided by DOD Manager
3. DDMS Organization
4. DOD Manager MOL Requirement Flow Diagram
5. DOD Manager MOL Support Flow Diagram

COMPARATIVE INTERFACE MOL/APOLLO - VS - DOD MANAGER



- SSD/ATW RESPONSIBLE FOR LAUNCH
- SSD/SCF RESPONSIBLE FOR ON-ORBIT
- DOD MANAGER RESPONSIBLE FOR RECOVERY
- DOD MANAGER PROVIDES OPERATIONAL SUPPORT TO SSD/ATW & SSD/SCF

- KSC RESPONSIBLE FOR LAUNCH
- GSFC RESPONSIBLE FOR ON-ORBIT
- DOD MANAGER RESPONSIBLE FOR RECOVERY
- DOD MANAGER PROVIDES OPERATIONAL SUPPORT TO KSC & GSFC

DOD RECOVERY FORCES

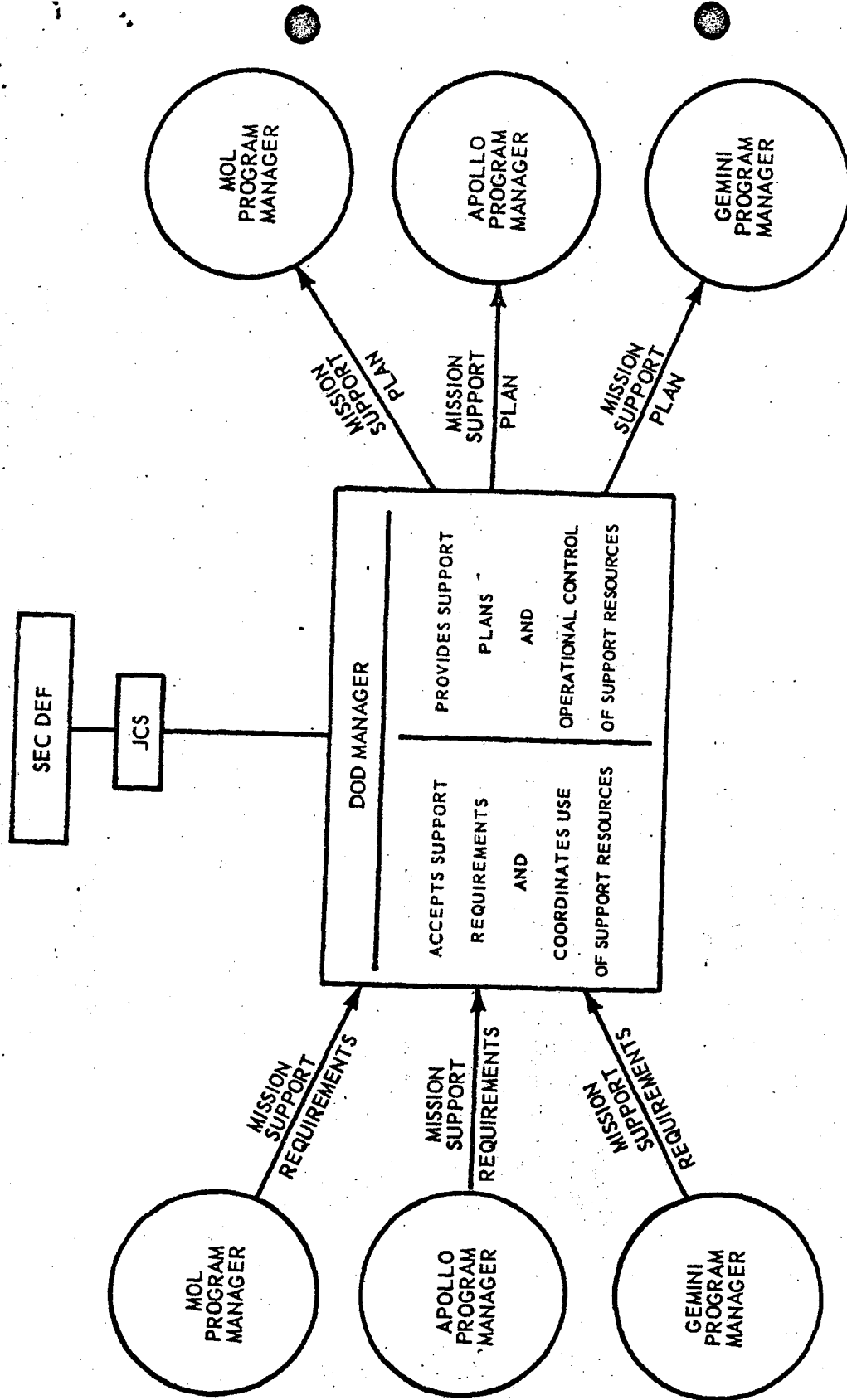
- NAVY
- ARRS
- WTR
- ETR

DOD MANAGER OPERATIONAL SUPPORT

- DOD COMMUNICATIONS SUPPORT
- DOD LOGISTICAL SUPPORT
- DOD MEDICAL SUPPORT
- DOD LAUNCH SUPPORT BY NRD - WTR, ETR
- DOD NETWORK SUPPORT
- DOD NETWORK STATIONS (OTHER THAN SCF STATIONS FOR MOL SUPPORT)
- DOD SHIPS
- DOD AIRCRAFT

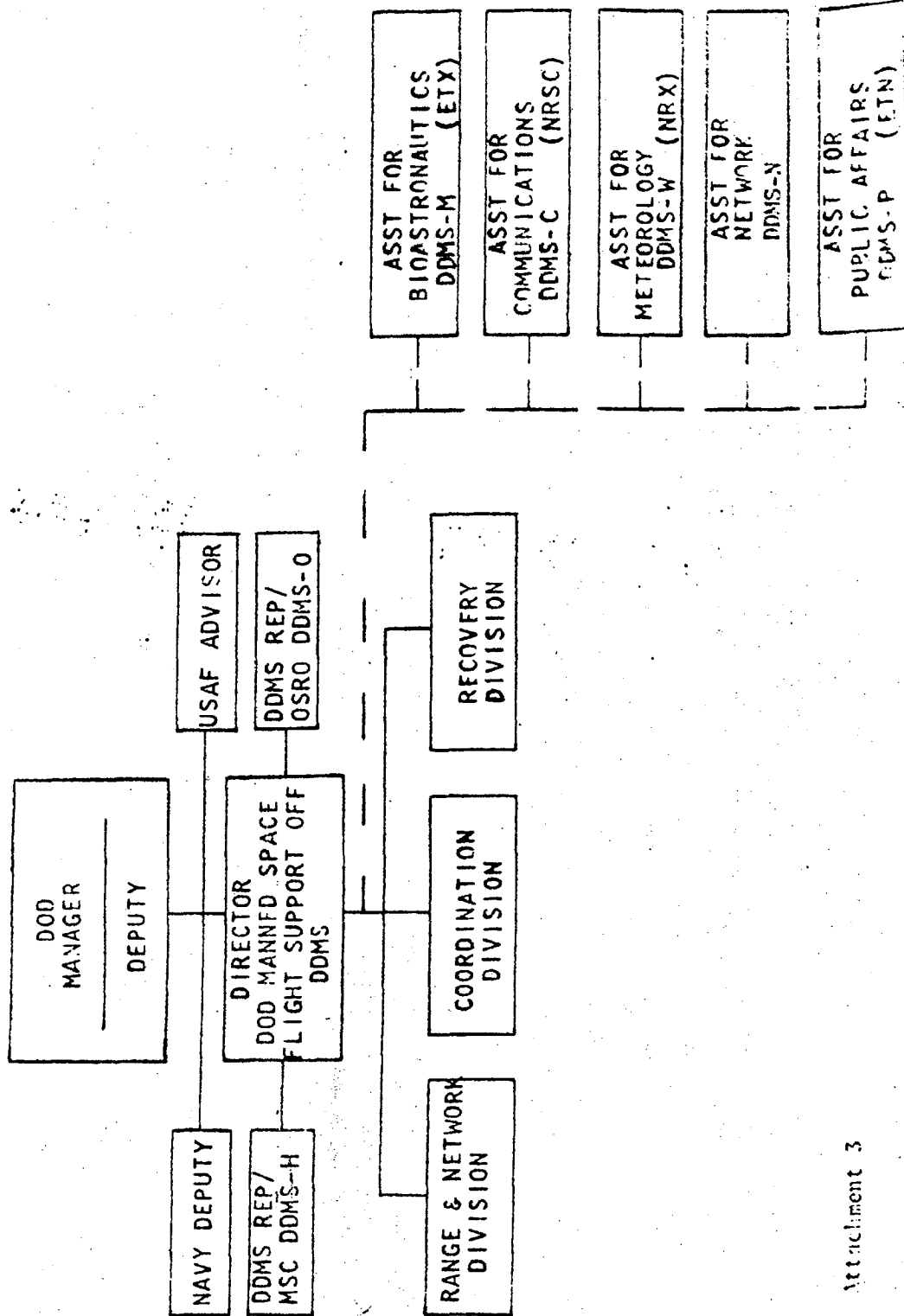
..... COMMON SUPPORT
TO BOTH PROGRAMS

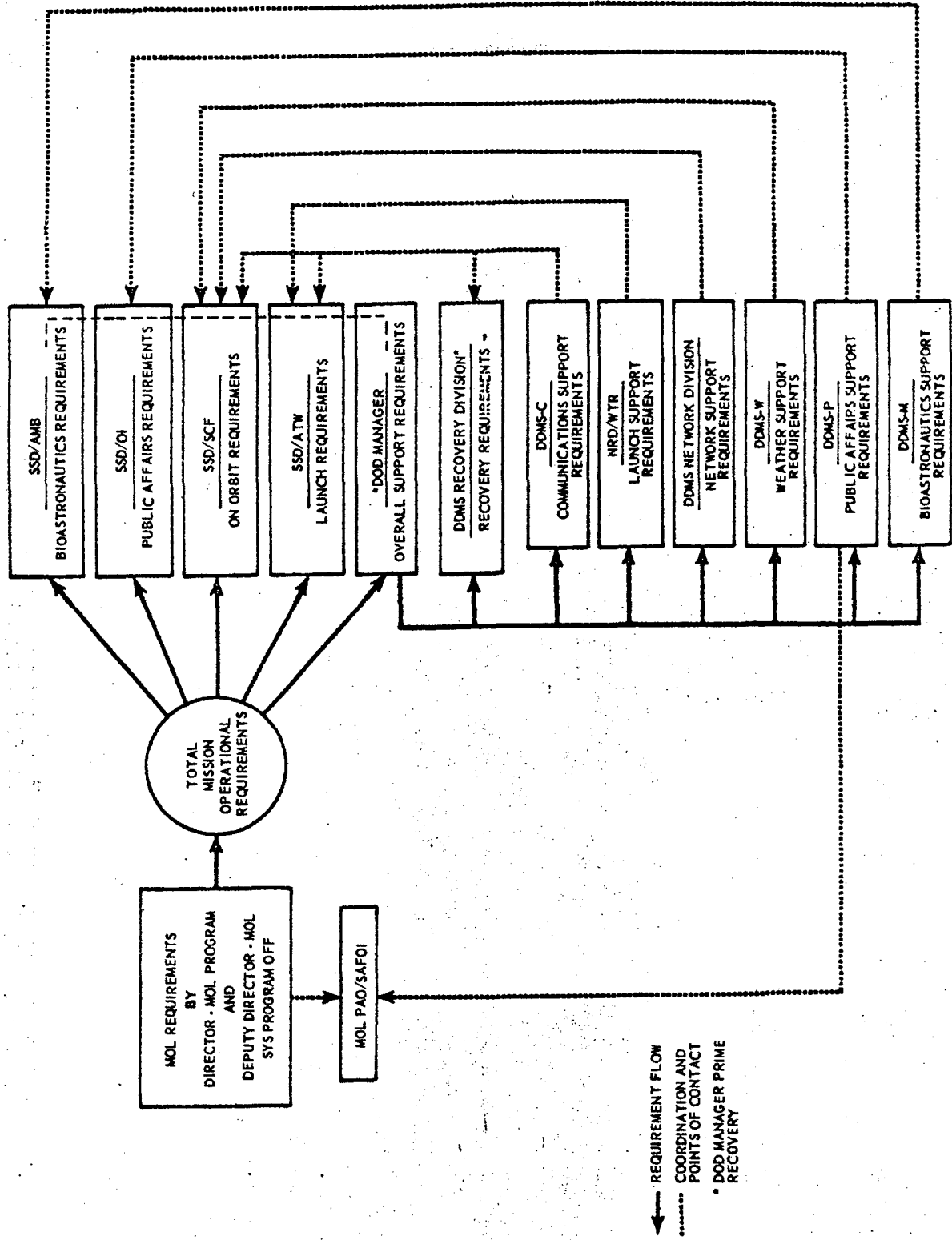
ATTACHMENT 1



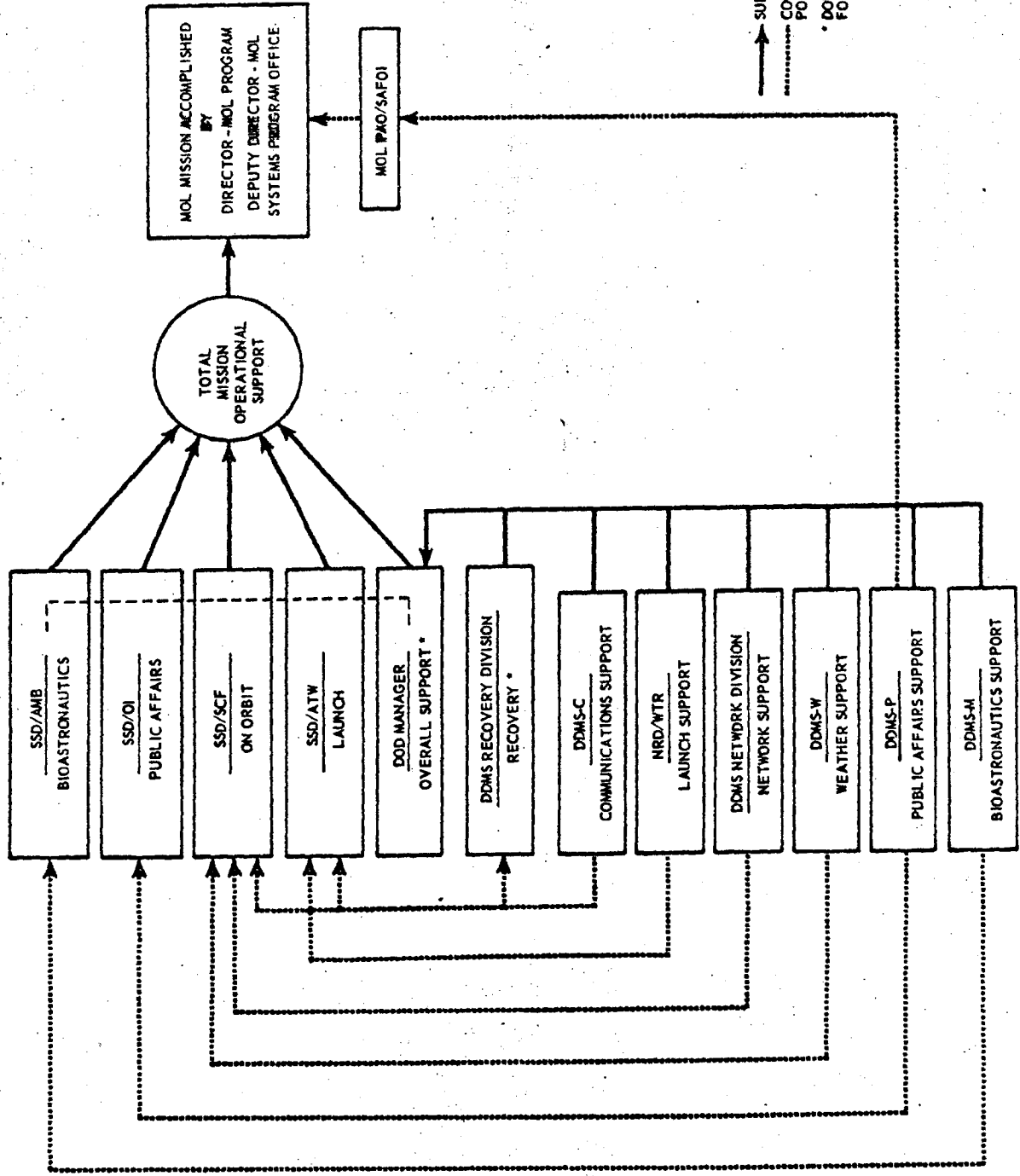
MANNED SPACE MISSION REQUIREMENTS AND MISSION SUPPORT PROVIDED BY DOD MANAGER

DDMS ORGANIZATION





DOD MANAGER MOL REQUIREMENT FLOW DIAGRAM



ALTERNATIVE ARRANGEMENTS

1. The purpose of this enclosure is to comment as to why the DOD Manager discarded two alternatives, the DOD Manager interface with the MOL Program at USAF level and the interface with the MOL Program at AFSC level.

2. First, we must look at the DOD Manager's task. He and his staff, the DOD Manned Space Flight Support Office (DDMS), are in the business of providing "support operations" to Manned Space Program Managers. The Secretary of Defense Memorandum of 8 September 1964, subject: "Assignment of Responsibilities of the Department of Defense Manager for Manned Space Flight Support Operations," defines the term support operations and it includes:

"Launch range support, network operations, planned and contingency recovery, communications, weather services, arrangements for medical personnel and supplies, public news media support and other support services such as transportation and photography."

Thus, "support operations" make use of support resources that are in being, planned and coordinated by the DOD Manager for a Program Manager a few months prior to a specific manned space mission. It is important to note that the extent of "support operations" furnished by the DOD Manager is entirely dependent upon the requirements levied upon the DOD Manager by the Program Manager. The DOD Manager provides only that support requested. The Secretary of Defense, realizing that economic use of a limited supply of support resources is mandatory, designated the DOD Manager as a "single point of contact" for Manned Space Flight Program Managers. This means then that the DOD Manager should receive the support requirements from all Program Managers so that he can properly coordinate the use of these support resources and eliminate possible conflicts in scheduling. If the DOD Manager should receive only a portion of the total requirements for these resources and the rest of the requirements were levied in some other manner, proper coordination and scheduling would be impossible.

3. The problem then is to determine how the DOD Manager should interface with the MOL Program Director to best discharge responsibilities assigned to him by the Secretary of Defense.

Enclosure #2

4. One considered interface was between the DOD Manager and the Secretary of the Air Force (SAF). This would mean that the DOD Manager when coordinating MOL support would consider only the DOD resources outside of USAF. It could mean that the Secretary of the Air Force would require an organization similar to DDMS to coordinate required Air Force resources and then insure the proper interface with the rest of DOD. This would mean that another organization would be inserted in the loop and possibly the DOD Manager would not be aware of the total requirement for the use of common support resources and, therefore, conflicts in scheduling could result. It would cause confusion in the coordination and control of Air Force recovery resources. If the DOD Manager were supporting a current NASA mission it would be difficult to switch support to MOL on a compressed follow-on schedule because there would be no continuity in the management of the supporting forces. This interface would not be in conformance with the DOD Manager's charter. Attachment One contains a chart depicting this interface and shows those support resources that would be subject to conflicts and lack of efficient coordination and control. If the requirements were sent directly to DDMS, direct points of contact are established to quickly resolve this type of problem. Minimum time and people would be involved.

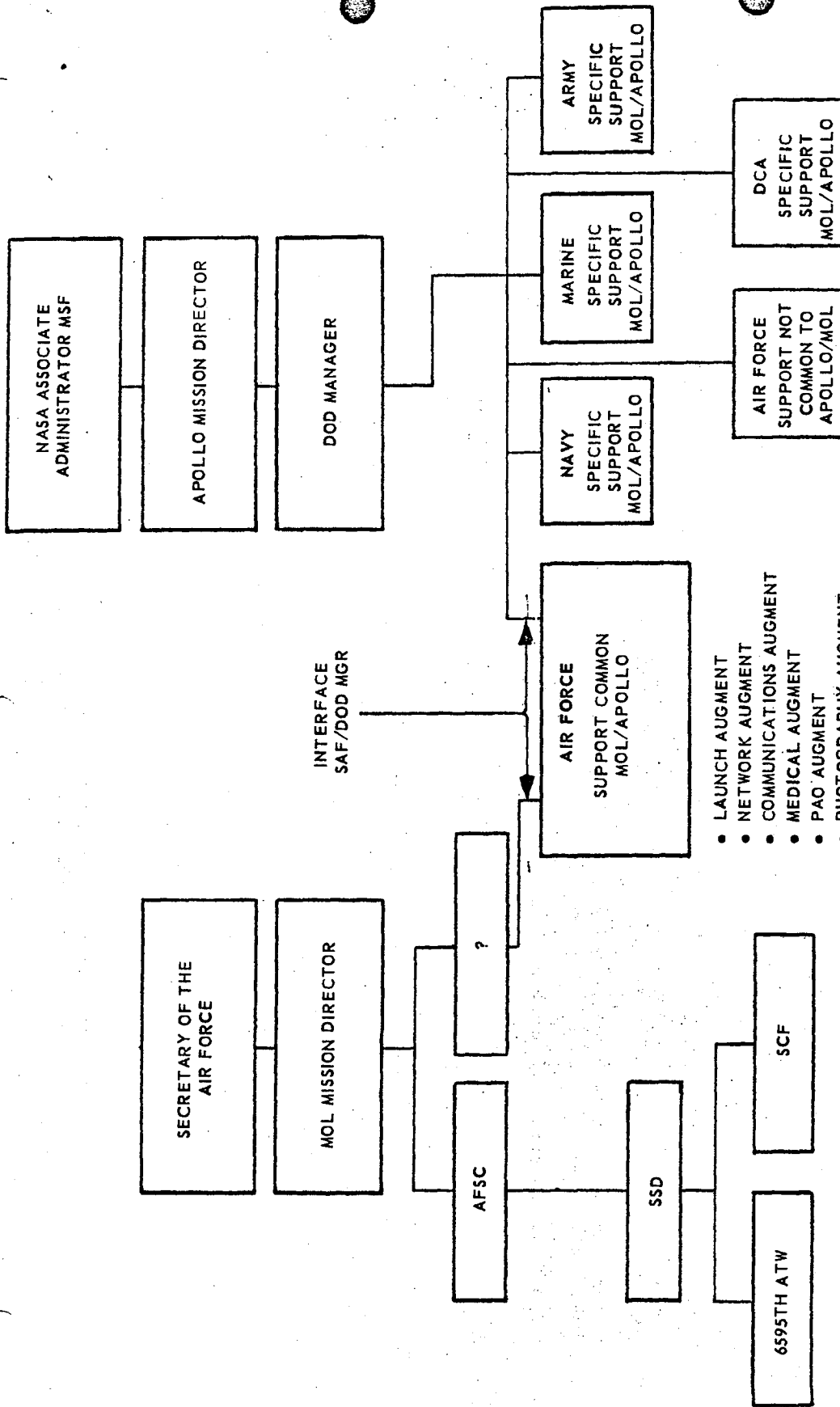
5. Another interface considered was between the DOD Manager and the Commander AFSC. This arrangement brings about a similar problem as the interface with the USAF except on a reduced scale. However, it still might require an additional AFSC organization to be responsive and to coordinate AFSC support resources common to MOL and NASA missions. For example, if the MOL flight plan required augmentation or support from an APGC radar at Eglin and it was committed to support NASA earth orbit operations and under the coordination and control of the DOD Manager, someone would have to coordinate with the DOD Manager. Attachment Two contains a chart depicting this interface and lists those AFSC resources that would be subject to conflict.

6. The MOL Program Director can go direct to coordinate operational support; however, the nature of operational support would require several points of contact for the Mission Director. In cases where resources are required that are used to support NASA, those several points of contact would have to come to the DOD Manager for coordination. It would be more efficient to levy the requirement on the DOD Manager in the first place. Today the DOD Manager's operating procedures are such that in the exercise of coordinating authority the free exchange of information is encouraged to foster people and organizations to work and plan together. Assistance is offered to solve problems and insure that the required support is marshalled and ready to support the mission at lift-off.

7. The DOD Manager's directive is worded so that he may also be of assistance to arrange for and coordinate the use of NASA resources to support the MOL mission. The close operational relationship with the NASA mission operations people in the common functional areas of support provide an ideal arrangement to insure NASA resources as required are properly committed to support. In fact, this arrangement is working at the present time; for example, the DOD Manager's organization has been arranging for NASA recovery resources to be made available to the MOL Systems Office for R&D test purposes.

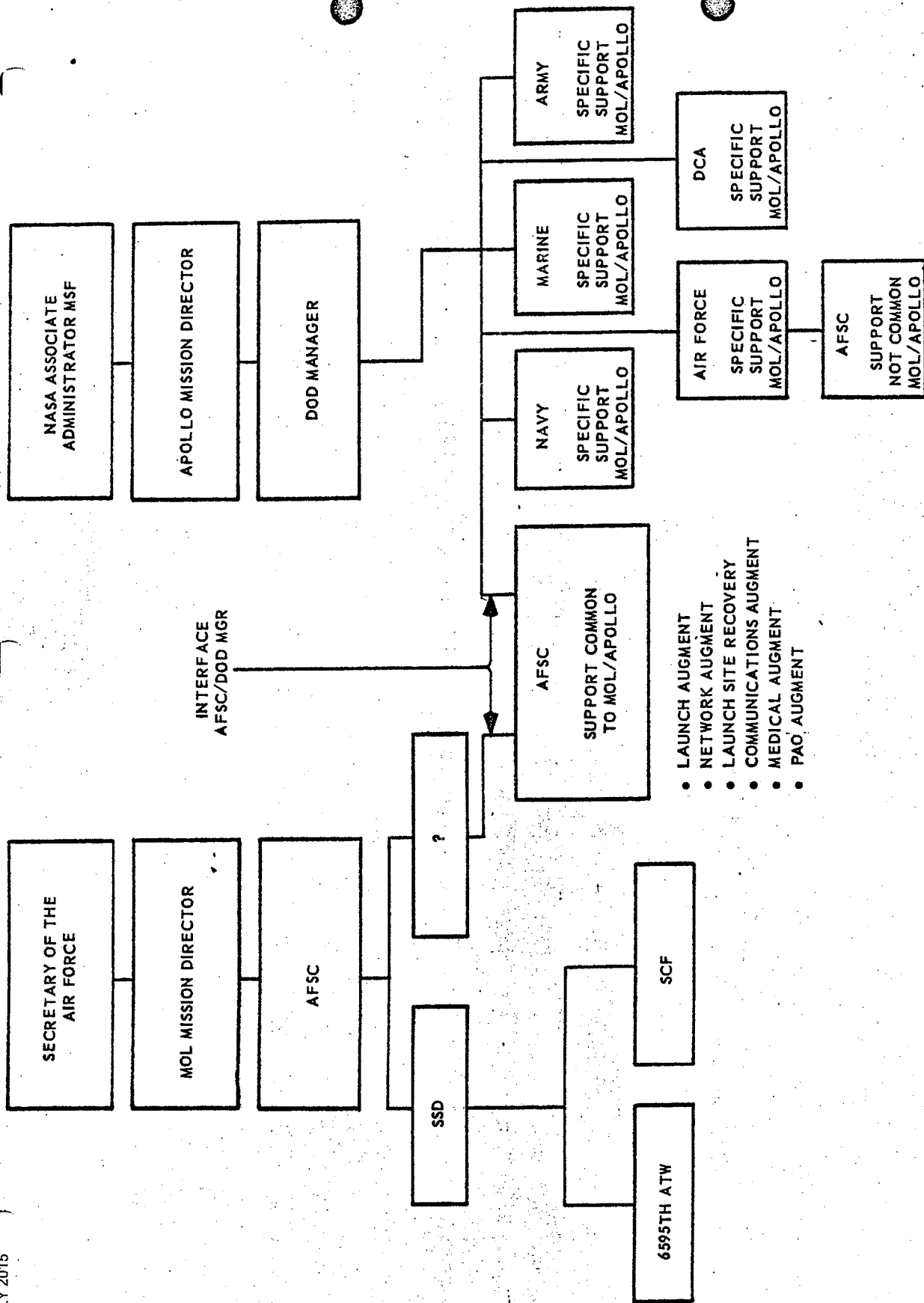
2 Atchs

1. Interface SAF/DOD Mgr
2. Interface AFSC/DOD Mgr



SUPPORT OPERATIONS FOR MANNED SPACE FLIGHT PROGRAMS

Atch # 1



SUPPORT OPERATIONS FOR MANNED SPACE FLIGHT PROGRAMS

Atch # 2

FEB 21 1966

DDMS

MEMORANDUM FOR DCS PLANS (SCLSS/LCol Maynard), AIR FORCE SYSTEMS COMMAND

SUBJECT: Operations Order for Manned Orbiting Laboratory Program

The purpose of this memorandum is to transmit recommendations on how to include proper reference to the DOD Manager for Manned Space Flight Support Operations in the Air Force Systems Command operations order. The recommendations are:

a. A reference section appear in the basic document and this reference section include:

(1) Secretary of the Air Force Order No. 117.4, dated 25 August 1965, subject: Director of the Manned Orbiting Laboratory (MOL) Program.

(2) Secretary of Defense Memorandum of 8 September 1964, subject: Assignment of Responsibilities of the Department of Defense Manager for Manned Space Flight Support Operations.

(3) MOL Government Plan for Program Management, dated August 1965.

b. The operations order format include a listing of cooperating agencies outside of the Air Force Systems Command. The DOD Manager for Manned Space Flight Support Operations should be included in this section.

c. An additional paragraph be included in the "General Situation" section of the operations order. This paragraph should follow paragraph 1e and read:

"The Secretary of Defense has designated and assigned responsibilities to the Department of Defense (DOD) Manager for Manned Space Flight Support Operations (Reference a(2)). To meet these responsibilities, the DOD Manager has established the DOD Manned Space Flight Support Office (DDMS). This office as a central point of contact for the DOD Manager will coordinate

Enclosure #3

the use of operational support resources that are common to all manned space flight programs. By Reference a(3), the Director MOL has requested that the DOD Manager provide a MOL Recovery Plan and that he conduct MOL Recovery Operations (See Annex Q)."

d. The Table of Contents should reflect the addition of Annex Q - Department of Defense (DOD) Manager Interface with the Director, MOL Program.

Annex Q is under development and coordination with the MOL Program Office at the present time. If this action is not complete in time to meet your suspense date, it is suggested the notation "to be published at a later date" be made concerning Annex Q.

(Original Signed By)
ROYCE G. OLSON
Colonel, USAF

ROYCE G. OLSON
Colonel, USAF
Director, DOD Manned Space
Flight Support Office