

myh

1 WAC

Management Practices

13 APR 1960

Mr. Marshall Brown
Vice-President and General Manager
Lockheed Aircraft Corporation
P.O. Box 34
Beverly Hills, California

Dear Mr. Brown:

1. There have been several events in the recent past which seem to be connected over the manner in which Lockheed is accomplishing its part in our highest priority space program. Review by members of my organization leads me to conclude that these difficulties, examples of which I will cite, stem largely from the general confusion and less-than-optimum performance within the DMB Satellite System organization which, in turn, is brought about by inadequate direction and leadership.

2. I grant that the effective development of these systems has been impeded by some program instability on the part of the Department of Defense; however, this does not relieve Lockheed Martin & Space Division of the fundamental responsibility for the best possible performance of the job at hand.

3. The following specific examples of problems are cited:

a. Recent detailed physical examination of all completed Athena vehicles has disclosed an unacceptable condition of the wiring harness. These deficiencies are the result of improper procedures, inadequate supervision and ineffective quality assurance. I have touched upon this problem in my message DMB 1194 dated 25 March 1960. The DMB reply of 19 March 1960 signed by Mr. Harting has been reviewed and our comments in regard thereto are being forwarded to DMB by a separate message.

b. Following our investigation of the incident concerning the attempted launch of Athena 1029 on 21 January 1960, DMB drawing practices and procedures were reviewed (reference letter from General E. A. Schriever to Mr. L. E. East, 16 February 1960). Our findings at that time, which were communicated to DMB, indicated that the DMB Drafting Practice Manual used by the Space Systems organization was inadequate and that accuracy of drawings was not properly maintained. A recent check shows that fifteen months later these deficiencies still exist and represent a serious program hazard.

OFFICE SYMBOL	DATE	INITIALS	DATE	INITIALS	DATE	INITIALS	DATE
	10 Apr 60	<i>[Signature]</i>	10 Apr 60	<i>[Signature]</i>			

c. I have been advised that many important I&D procurements of components and parts are accomplished by Engineering Procurement Documentation for which acceptance and qualification specifications are either non-existent or inadequate. There is evidence that flight hardware has been accepted by I&D with no more than a "Count and Damage" inspection. This deficiency in I&D's parts qualification program has already caused appreciable program delays and costs as, for example, when it recently became necessary to replace defective diodes throughout several ASHMs and may well have contributed to some of the costly flight test failures that have occurred.

d. Certain component problems have existed since the early part of the program and as of this date we have no valid assurance of their solution. An example of this is static inverters.

e. The large number of modifications identified with recent ASHMs as well as the large number of changes (RIs) requested by I&D after their acceptance by the Air Force lead me to suspect that either I&D's change control procedures are still not adequate (reference per RI, "Report of NS 117L Management Survey Team," 23 September 1958) or that I&D's design engineering is not properly accomplished prior to the manufacture of the vehicles or that both these conditions obtain.

f. During the launch preparation and checkout of MINAS I there was damage to equipment and schedule delays resulting from inadequate procedural observance.

g. I am advised that quite often the ASHM/IDC numbers become aware of problems which will result in schedule slippage but for some reason there is reluctance on I&D's part to acknowledge these slippages until too close to the time of the flight test resulting often in an appreciable amount of wasted effort.

h. The senior management level of I&D's Satellite Systems organization appears to require clarification of purpose and individual responsibilities as well as possible staff level augmentation.

i. There are only some of the examples relevant to a generally unsatisfactory situation. I am seriously concerned with this state of affairs since in most instances the underlying areas of deficiency have existed for some period without significant improvement. Up to now this situation has resulted in a general I&D inability to meet program goals and schedules with accompanying increased costs. Continued contractor performance difficulties will seriously jeopardize the future of these space programs as well as I&D's role therein; accordingly, I feel that serious and effective remedial action is

OFFICE SYMBOL	ORIGINATOR				
NAME (SIGNATURE)					
DATE					

Summary. The Air Force Ballistic Missile Division plans to conduct
intensive technical management surveillance of ICBM's actions.

Summary

SIGNED

O. J. RITLAND
MAJOR GENERAL, USAF
COMMANDER

This information has been read by
Lt Col Phelps
Lt Col Gubert (KING ON LEAVE)
Col McKim
WAC B. H. B...
Lt Col Custer (Dattle TDY)
Lt Col D...

OFFICE SYMBOL	ORIGINATOR				
NAME (SIGNATURE)					
DATE					