



UNITED STATES GENERAL ACCOUNTING OFFICE

WASHINGTON, D.C. 20548

20779
117486

MISSION ANALYSIS AND
SYSTEMS ACQUISITION DIVISION

B-196893

FEBRUARY 10, 1982

The Honorable Caspar W. Weinberger
The Secretary of Defense

Attention: Director, GAO Affairs

Dear Mr. Secretary:

Subject: MX Program Cost and Schedule Milestones Could Be
Adversely Impacted If Certain Matters Are Not
Resolved (MASAD-82-17)

We recently completed our review of the MX weapon system program and identified certain matters which we would like to bring to your attention. If these are not resolved in a timely manner, they could adversely affect the program's cost and schedule milestones for the first test missile flight in January 1983 and its initial deployment in late 1986. These matters fall into the following three areas.

First, there have been delays in the development and demonstration of the liquid propellant tank for stage IV of the MX missile's propulsion system. Delays have also occurred in the construction of the integrated test facility at Vandenberg Air Force Base and in the delivery of software for the test program's instrumentation and the flight safety system. Although Air Force officials have been concerned that these delays have increased the risk of not meeting future milestones, they believe the scheduled milestones will be achieved as planned.

Second, there appears to be a limited production capacity for certain critical materials needed for constructing the MX missile. These materials include ammonium perchlorate, beryllium, carbon/carbon, and nuclear materials for the warhead. Specifically:

--There are only two manufacturers of ammonium perchlorate, an essential propellant ingredient. There are indications that there may be difficulties in meeting MX propellant production needs if the MX program does not maintain its acquisition priority over that of the Space Transportation System program.

(951628)

220577



117486

- There is only one manufacturer of beryllium, an essential material used in the manufacture of the MX missile's guidance and control system. There have been indications that the manufacturer may have to cease operations because of the health hazards associated with beryllium production.
- There are only two manufacturers of carbon/carbon materials used in certain MX missile components such as the stage I propulsion nozzle. Air Force officials said that an adequate supply of these materials can only be assured if funding supports sufficient acquisition leadtimes.
- There has been some degree of uncertainty about the availability of nuclear materials, in part because of the production requirements of other nuclear weapon systems.

Third, Air Force and contractor officials at Vandenberg Air Force Base have said that there is a concern over the shortage of affordable housing near the base. This could preclude contractors from being able to hire sufficient numbers of technicians to support currently scheduled MX missile and Space Transportation System launches. This concern is not unfounded, as current Space Transportation System delays have been directly attributed to the housing situation by Air Force and contractor officials.

We understand that the Air Force is aware of the matters addressed in this letter, and they have indicated that steps are being taken to resolve them.

We plan to do additional reviews of the MX weapon system program in the future. We wish to thank your staff and the Air Force Systems Command's Ballistic Missile Office for their cooperation and assistance. We are sending copies of this report to the Director, Office of Management and Budget; the Secretary of the Air Force; and to the chairmen, Senate and House Committees on Armed Services and Appropriations, the House Committee on Government Operations, and the Senate Committee on Governmental Affairs.

Sincerely yours,



W. H. Sheley, Jr.
Director