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# UNITED STATES GENERAL ACCOUNTING OFFICE

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## STATEMENT OF

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### BEFORE THE

#### SUBCOMMITTEE ON DEFENSE

## COMMITTEE ON APPROPRIATIONS

## UNITED STATES SENATE

ON

## PEACEKEEPER (MX) INTERCONTINENTAL BALLISTIC

#### MISSILE SYSTEM



Mr. Chairman and Members of the Subcommittee:

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We are here today to discuss our work on the Peacekeeper (MX) Intercontinental Ballistic Missile System. The results of our work are preliminary and we have not had time to formally present a draft report to the Department of Defense for its comments.

In April 1983, the President's Commission on Strategic Forces recommended restructuring the intercontinental ballistic missile modernization efforts. A program was established consisting of three elements:

--Deployment of 100 Peacekeeper missiles in existing Minuteman missile silos.

--Development of a small ICBM and hard mobile launcher. --Development of follow-on basing technology.

GAO reviewed these developments as part of its continued monitoring of major Department of Defense weapon acquisition programs. With respect to the Peacekeeper program, GAO followed up on cost, performance, and system development issues presented in a prior report on the Peacekeeper (GAO/NSIAD-84-112, dated May 9, 1984). Our review did not include Peacekeeper basing hardware development and production facility construction, or survivability in existing Minuteman silos. With respect to the small ICBM and follow-on basing technology programs, GAO reviewed the progress being made by the Air Force in developing and implementing an acquisition strategy, in defining system operational concepts and designs, and in developing the information necessary to make a proper assessment of the

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feasibility and acceptability of the small ICBM in one or more survivable basing modes.

My comments will focus on the results of our work on the Peacekeeper program, however, because of its relationship to the Peacekeeper, several observations on the small ICBM might be of interest to the Subcommittee. Preliminary information available on the small ICBM suggests that the program will be costly, perhaps a \$50 billion life cycle cost for a 500 missile force on mobile launchers; that it will require a large personnel force of perhaps 20,000 to operate, maintain and secure the system; and that it will require access to from 4,000 to 28,000 square miles of land for basing. These costs and the small missile's operational effectiveness assume deployment of 100 Peacekeeper missiles with 1000 warheads.

## PEACEKEEPER DEVELOPMENT

The Peacekeeper weapon system continues to progress toward deployment of the first 10 missiles by December 1986. The design of the Peacekeeper missile is essentially complete, and the results of ground testing provide confidence in the integrity of the missile design with added assurance to be provided through remaining tests. Flight worthiness of the missile has been demonstrated by the results of the first 7 Peacekeeper test flights and most problems experienced during those flights have been corrected. The flight test program is 35 percent complete with 13 more flights remaining in the development program to conclusively demonstrate the operational effectiveness and suitability of the Peacekeeper weapon system.

As the remaining 13 test flights are performed, the configuration of the missile will transition from a developmental to an operational configuration. Examples of some changes to be made in subsequent test flights include:

- --The Stage IV propellant storage assembly tank used for the first 8 test flights is not suitable for operational use and a new propellant tank designed for operational use will be flown on flight test 9, in the third quarter of calendar year 1985.
- --Development software used for the first 8 test flights will be replaced with operational ground and flight software beginning with flight test 9.
- --The full capability of the warhead fuse to detonate at the altitude necessary for optimum accuracy will be first tested on flight test 9. The production design of the fuse will be first flown on flight test 10, in the fourth quarter of calendar year 1985.
- --The composite substructure used on the MK 21 reentry vehicle will be replaced with an aluminum substructure on flight test 9.
- --Several redesigned components of the guidance and control system will be first flown on flight 9, followed by the development program to conclusively demonstrate the test of the operationally configured inertial measurement unit on flight test 11. While most of the individual components of the guidance system will have already been flight tested, a fully operational configuration guidance

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and control system will not be flown until flight test

14, in the third quarter of calendar year 1986.

To meet the deployment date, the flight test program is being done concurrently with production and deployment activities. The Peacekeeper flight test program to date has shown good performance and the Air Force plan to phase in operational components during development flight testing is not unusual. While problems during flight testing are not unexpected, we believe that the development and testing schedule must maintain the relative success experienced to date if the Air Force is to meet the congressionally mandated initial operational capability date of December 1986.

#### PRODUCTION STATUS

The Air Force plans to procure 223 Peacekeeper missiles -100 for deployment, 108 for operational test and evaluation, and 15 to monitor the effects of aging.

Production of components for the first 21 operational missiles began in fiscal year 1984. The program office awarded production contracts for missile components during the period January to November 1984, and it is expected that components will be delivered on schedule.

The Congress appropriated \$2,102 million for the fiscal year 1984 Peacekeeper procurement program. As of January 31, 1985, \$1,618 million, or 77 percent had been obligated.

In fiscal year 1985, the Air Force requested funds to buy 40 operational missiles. Congress authorized \$2.5 billion for 21 operational missiles and spare parts. Of that total, \$1.0 billion was available to be obligated. The Air Force plans to

use \$852 million for procurement of missile long lead materials and basing and support for the 21 missiles and \$148 million for spare parts. We were advised by the Air Force yesterday that as of the end of February, \$312.7 million was obligated for basing and \$72.8 million for spare parts. At the end of March, the Air Force expects to have \$845 million obligated for basing and \$85.6 for spare parts.

## PEACEKEEPER RANGE

To be an effective deterrent, the Peacekeeper missile must be able to successfully attack the full spectrum of Soviet targets, including superhardened targets. This requires the missile to deliver warheads to intended targets and to inflict the desired level of damage. The Peacekeeper missile, with 10 MK 21 reentry vehicles, deployed near Warren Air Force Base in Wyoming, has the range needed to reach the most distant planned targets. As discussed in our 1984 report, reductions in missile range capability have occurred. We subsequently found that missile range capability is continuing to decline but only slightly with 1 percent excess range capability remaining.

Program officials remain confident that the Peacekeeper missile with 10 MK 21 reentry vehicles will have the desired range. They state that the design of the missile is essentially complete and proven through flight testing with added assurance to be provided by scheduled test flights. However, retention of the current range capability is dependent upon successful repair of the Stage III extendable nozzle exit cone which failed on the third and seventh test flight.

## MISSILE ACCURACY

The accuracy achieved by the first 6 Peacekeeper test missiles has been significantly better than the design requirement directed by the Secretary of Defense. To be effective against the hardest Soviet silos, as currently estimated, the Peacekeeper must continue to achieve current demonstrated accuracy.

Conclusive demonstration that Peacekeeper will continue to have the higher accuracy awaits future test flights, some at extended ranges, with operationally configured reentry and guidance and control systems.

## PROGRAM COSTS

The estimated cost for the Peacekeeper program in December 1984 was \$16.6 billion in 1982 dollars, or \$21.7 billion in then year dollars. The current estimate has not changed since the first Peacekeeper program Selected Acquisition Report was submitted, for the period ending June 30, 1983.

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In summary, the design of the missile is essentially complete, flight worthiness of the missile has been demonstrated, and production of components for the first operational missiles has begun. As the missile transitions from a development to an operational configuration, ground and flight testing is scheduled to provide a level of confidence that operational requirements will be met. This testing will be done concurrently, however, with missile production and deployment activities with a corresponding risk of not meeting cost, schedule, or performance goals if unforeseen problems do occur.

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This concludes my prepared testimony. If you have any questions we will be pleased to answer them.

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