SURPLUS MISSILE MOTORS

Sale Price Drives Potential Effects on DOD and Commercial Launch Providers

What GAO Found

The Department of Defense (DOD) could use several methods to set the sale prices of surplus intercontinental ballistic missile (ICBM) motors that could be converted and used in vehicles for commercial launch if current rules prohibiting such sales were changed. One method would be to determine a breakeven price. Below this price, DOD would not recuperate its costs, and, above this price, DOD would potentially save. GAO estimated that DOD could sell three Peacekeeper motors—the number required for one launch, or, a "motor set"—at a breakeven price of about $8.36 million and two Minuteman II motors for about $3.96 million, as shown below. Other methods for determining motor prices, such as fair market value as described in the Federal Accounting Standards Advisory Board Handbook, resulted in stakeholder estimates ranging from $1.3 million per motor set to $11.2 million for a first stage Peacekeeper motor.

| Estimated Per Motor Set Breakeven Price after Storage and Disposal Cost Avoidance |
| Discount | Dollars (in millions) |
| Peacemaker motors (3) | 8.54 | -0.18  |
| Minuteman motors (2) | 4.08 | -0.12  |

The prices at which surplus ICBM motors are sold is an important factor for determining the extent of potential benefits and challenges of allowing the motors to be used for commercial launch. Potential benefits include:

- increasing the global competitiveness of U.S. launch services, and
- providing customers more launch options and greater flexibility.

Potential challenges include:

- affecting private investment negatively, hindering innovation, and disrupting competition among emerging commercial space launch companies; and
- expanding the workload of the Air Force program office responsible for maintaining and refurbishing the motors.

Further, uncertainties in underlying assumptions and cost estimates—such as Peacekeeper motor storage and disposal costs—could hinder effective decision making. DOD is also conducting a study on the potential effects of allowing surplus ICBM motors to be used for commercial launch. Because DOD’s study is not completed, it is not clear the extent to which its study addresses such uncertainties.

What GAO Recommends

GAO is not making recommendations in this report.