Our examination into the justification and the first-year savings included in the postanalysis reports of five contractors, which had acquired machines under this program, indicated that savings had not been achieved as planned by four of the five contractors and that planned savings had been exceeded by the fifth contractor, as shown below. We did not review the savings reported by the contractors.

Contractor	Number of machines acquired	Cost of machines	1st-year savings		Justifications in excess of
			Included in justification	Estimated amount realized	amounts realized
A	25 18 4 3 10	\$3,223,000 2,438,000 886,000 471,000 1,490,000	\$1,876,000 1,600,000 405,000 272,000 1,380,000	\$855,000 520,000 49,000 176,000 2,164,000	\$1,021,000 1,080,000 356,000 96,000 —784,000
Total	60	8, 508, 000	5,533,000	3,764,000	1,769,000

Although the savings were not achieved as planned by four contractors, it appears that the reported first-year savings would have provided for the recovery of the Government's investment approximately in the 3½-year guideline prescribed by the Department for three of the five contractors. However, for contractor A, one of the machines used on military production during the first year, which accounted for \$450,000 of the reported first-year savings, was subsequently diverted to commercial work for about 75 percent of the production time. For contractor E also, machines usage in later years for commercial work began at 12 percent and, in one instance, reached as high as 97 percent of production time. Most of these machines were subsequently sold to the contractor.

We found differences between the savings proposed in the justifications and the reported savings due to the failure of Department guidelines to recognize the lead time needed to acquire and put the machines in operation and due to numerous errors in justification documents for contractor machinery acquisitions.

## Acquisition lead time

The present Department of Defense guidelines for the computation of cost savings to be realized through the use of new machines do not recognize the time required to approve, procure, and install a machine and to make it operational. Instead, the guidelines require that contractors use the 12-month period immediately following the date of preparation of the formal justification as the base period for computing savings expected to result from the use of the new machinery.

In our review of the five contractors' machine acquisitions, we found that a considerable amount of time had elapsed from the date the justifications were prepared until the machines were put into operation. For one contractor, for example, the elapsed time averaged 20 months. In the case of two contractors, we noted no appreciable adverse effect; however, three contractors had substantially less Government production for the machines involved than they had estimated when justifying the machine acquisition.

For example, a contractor justified acquisition of machines on the basis of known or anticipated production under certain programs for the 12-month period immediately following the date of preparation of the justifications. However, from 9 to 36 months, or an average of 20 months, elapsed before the machines became operational. After the first year of production, contractor reports showed savings of \$855,000 resulting from the use of these machines compared with the \$1.9 million annual savings utilized to justify acquisition. The reports showed that, during the first year, the actual use was only 53,000 hours whereas it had been estimated at 152,000 hours.

Three machines costing \$345,000 had not been used to any great extent at the time of our review because they had not become operational until 19 months after completion of the production order for which the acquisition was justified. Savings attributable to these machines amounted to only about \$2,000 during the first year after acquisition compared with estimated savings of \$165,000 used to justify their procurement. Another contractor included in the justification the production requirements for three different missile configurations for which it was known that production would be virtually completed or substantially