

these two aircraft, the Air Force had determined that the failure of these components had caused several F-100 aircraft to crash and had initiated special projects to replace these components. However, sufficient controls were not established to ensure that timely replacement of the defective components actually had been made by the various commands.

In May 1961 the Air Force established a special project to replace defective support weldments in engines for F-100 aircraft. Replacement of the components was not accomplished in a timely manner, however, and in March 1964 failure of a support weldment caused the crash of an F-100 aircraft.

The Air Force established another special project in November 1962 to replace defective fuel manifolds in engines for F-100 aircraft. Again replacement of the components was not accomplished in a timely manner, and in September 1963 failure of a fuel manifold caused the crash of another F-100 aircraft.

Absence of control over these projects continued to exist after the crashes. As late as February 1965 Air Force records showed that defective weldments and manifolds still were installed in a significant number of engines for F-100 aircraft. At the conclusion of our review in June 1966 the records showed that significant progress had been made and that the modifications necessary to remove the defective components had been completed on all but a small number of engines for F-100 aircraft.

The Air Force advised us that it acknowledged the difficulties experienced in the technical order program and cited a history of actions which had been initiated to improve technical order compliance. The Air Force also emphasized that, while its program was not perfect, discernible improvements in technical order compliance were a matter of record.

The Air Force has made many changes and improvements in its technical order management system in past years, but our review, as well as internal Air Force examinations, has shown that the operation of the system lacks sufficient controls to insure accomplishment of Air Force objectives. We believe that there has been recent improvement in the accuracy of engine management records, but still greater and continuing accuracy in such records and the reports based upon them will be critical to the future effectiveness of the technical order management system.

Because of the complexity of the technical order program and the various organizational elements involved, we recommended to the Secretary of the Air Force that technical order compliance be subjected to close and vigorous administration. We believe that the following areas require the immediate attention of Department of the Air Force officials.

1. Accuracy of records and reports relating to technical order actions.
2. Clarity of lines of authority and responsibility for implementation of required technical orders.
3. Adequacy of coordination between logistics and maintenance activities.
4. Adequacy of accountability for modification kits and control over modification scheduling.