Highly automated processes were developed to machine and control the quality of airfoils on the blisks and impeller which are the principal rotating components of the compressor for the T700-GE-700 engine, which powers advanced military helicopters. This development was carried out under a Manufacturing Methods and Technology contract awarded by the Army Aviation System Command, which later became the Army Aviation and Troop Command (ATCOM), to the Aircraft Engines Business Group of the General Electric Company in Lynn, Massachusetts. Processes which were previously available, and which were used to produce airfoils for development engines, were too costly and too dependent on manual skill to meet volume production requirements. Five-axis precision contour milling was developed to machine the airfoils of the five axial flow blisk stages and the impeller, all of which are integral with their supporting disk. A new milling machine was designed for this process, which machines four identical parts simultaneously. This machine is directed by advanced computer numerical control. The programs which supply positioning information to this control for machining blisk airfoils were developed with APT; and special programming techniques that were devised for these programs. The programs for machining impeller airfoils were developed with HECTRAN, which is a proprietary processor for impeller machining programs.

A viator Qualification Course

Department of Defense Authorization for Appropriations for Fiscal Year 1983

BOTH MANUALS: Approved for public release; distribution unlimited. DESCRIPTION. This manual contains the complete operating instructions and procedures for UH-60A, UH-60Q, UH-60L, and EH-60A helicopters. The primary mission of this helicopter is that of tactical transport of troops, medical evacuation, cargo, and reconnaissance within the capabilities of the helicopter. The observance of limitations, performance, and weight and balance data provided is mandatory. The observance of procedures is mandatory except when modification is required because of multiple emergencies, adverse weather, terrain, etc. Your flying experience is recognized and therefore, basic flight principles are not included. IT IS REQUIRED THAT THIS MANUAL BE CARRIED IN THE HELICOPTER AT ALL TIMES.
The History of North American Small Gas Turbine Aircraft Engines

The publication of The History of North American Small Gas Turbine Aircraft Engines represents an important milestone with pioneers, current project engineers, and company managers, engineering papers published by the manufacturers, and historical materials at the National Air and Space Museum, the book captures and memorializes small engine development from its earliest development up to the present. See for yourself why The History of North American Small Gas Turbine Aircraft Engines is...