



DEVELOPMENT OF AUTOMATED MAINTENANCE DIRECTORATE (AMD) MAINTENANCE MANUAL TASKS PROCEDURES (FLEXIBLE ENGINE DIAGNOSTIC SYSTEM) (AMD FEDS)

Client: AMCOM LCMC

Task:

INNOLOG's first task was to develop the work packages that outline step-by-step procedures for removing and replacing key components and assemblies on the Army's Flexible Engine Diagnostic System (FEDS). The FEDS consists of five major components – a Fuel Skid, Large Trailer with dynamometer, Small Trailer with dynamometer, Junction Box and Control Cab - used to diagnose maintenance and repair requirements on helicopter engines. In addition to the step-by-step remove and replace procedures, the work packages contained detailed illustrations, graphics and tables to assist maintenance personnel in performing the maintenance requirements.

Upon completion of the remove and replace work packages for the five components of the FEDS, INNOLOG's second task was to develop a maintenance manual for the FEDS. The maintenance manual contained detailed instructions for maintaining and repairing the FEDS. When completed, the manual's 1,600+ pages contained over 3,000 step-by-step remove and replace procedures, 1,800 illustrations, figures and tables with 600+ callouts.

Solution:

Using Government Furnished Information (GFI) consisting primarily of an AMCOM Technical Data Package (TDP), INNOLOG's Technical Writers wrote detailed step-by step remove and replace procedures. Writers worked in concert with a team of Illustrators to incorporate required illustrations, graphics or tables into the manual. Technical Illustrators produced the required illustrations, graphics and tables using selected automated authoring tools. On occasion, the Illustrators relied on photos of the FEDS components to supplement the Government TDP. The Technical Illustrators produced exceptionally detailed drawings depicting various views of the parts and components to enable a maintenance person to perform a particular maintenance task.

To ensure their procedures and illustration were in fact correct, the INNOLOG team conducted Verification and Validation trips to Army sites where the FEDSs were in operation. Checking each step-by step procedure and illustration with the on-the-ground technician, the team thus verified that what they had produced was in-fact correct and complete.

The quality of the work packages produced was attested to be the over 97% Quality Assurance (QA) ratings achieved during the course of the contract.

Value:

- Provided the Army with detailed instructions for maintaining and repairing the FEDS.
- Provided detailed illustrations, graphics and tables to assist in performing maintenance requirements.
- Developed a maintenance manual for an Army system that previously did not have documented detailed procedures to address its maintenance requirements.