

<b>DATA ITEM DESCRIPTION</b>			Form Approved OMB No. 0704-0188	
Public reporting burden for collection of this information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. TITLE User's Manual for Gas Turbine Engine Steady State and Transient Performance Digital Computer Program			2. IDENTIFICATION NUMBER  DI-TMSS-81515	
3. DESCRIPTION / PURPOSE  3.1 The user's manual provides a detailed description of the characteristics and use of the engine steady state and transient computer program (herein referred to as the model).				
4. APPROVAL DATE 960715	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR) F/ASC-ENF		6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP 7.1 This data item description (DID) contains the format and preparation instructions for data resulting from the work task described by the Society of Automotive Engineers (SAE) Aerospace Standard 681 and SAE Recommended Practice 755.  7.2 This DID is applicable to the acquisition of gas turbine engines. It may be applied in any acquisition phase				
8. APPROVAL LIMITATION		9a. APPLICABLE FORMS		9b. AMSC NUMBER  F7191
10. PREPARATION INSTRUCTIONS 10.1 <u>Reference Documents</u> . The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract.  10.2 <u>Format</u> . Contractor format is acceptable.  10.3 <u>Content</u> . The user's manual shall contain the information required by SAE Aerospace Standard 681. In addition, the user's manual shall contain the following:  a. A detailed explanation of the performance calculation process for each engine component, including an index of all subroutines in the model including explanations of their purpose, and identification of the function of each programming variable and array element, detailed explanations of the derivations of all empirical functions used in the model, and the rationale for all reference values used for normalized parameters.  b. An identification of any limits on the values of input parameters.  c. Accurate graphic component performance maps of the fans, compressors, turbines, and exhaust nozzles simulated in the model.  d. A detailed description of the major engine control loops, the hierarchy of the loops, the control limits, and graphs of all engine control schedules represented in the model.				
11. DISTRIBUTION STATEMENT  DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.				