

<b>DATA ITEM DESCRIPTION</b>			Form Approved OMB No. 0704-0188	
<b>1. TITLE</b> Users Manual for Gas Turbine Engine Steady State and Transient Performance Digital Computer Program		<b>2. IDENTIFICATION NUMBER</b>  DI-IPSC-81490		
<b>3. DESCRIPTION/PURPOSE</b>  3.1 The users manual provides a detailed description of the characteristics and use of the engine steady state and transient computer program (herein referred to as model).				
<b>4. APPROVAL DATE</b> (YYMMDD)  950731	<b>5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)</b>  F/ASC-ENF	<b>6a. DTIC APPLICABLE</b>	<b>6b. GIDEP APPLICABLE</b>	
<b>7. APPLICATION/INTERRELATIONSHIP</b> 7.1 This Data Item Description (DID) contains the format and content 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 acquisition of gas turbine engines. It applies to all acquisition phases.				
<b>8. APPROVAL LIMITATION</b>		<b>9a. APPLICABLE FORMS</b>	<b>9b. AMSC NUMBER</b>  F7158	
<b>10. PREPARATION INSTRUCTIONS</b> 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 users manual shall contain the information required by SAE Aerospace Standard 681. In addition, the users 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, an 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.				
<b>11. DISTRIBUTION STATEMENT</b>  DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.				