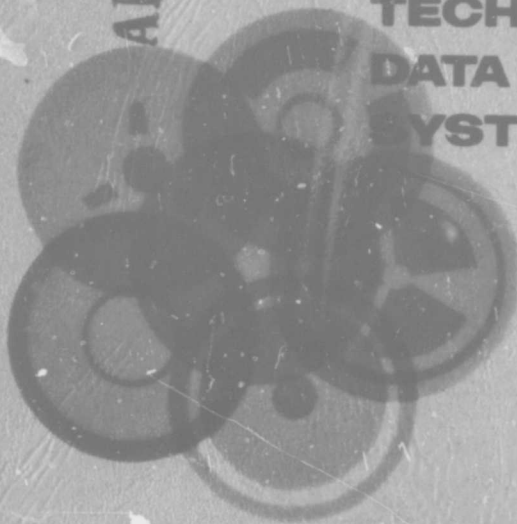


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# INTEGRATED TECHNICAL DATA SYSTEM



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## DATA OPERATIONS SUBSYSTEM:

### PERSONNEL POSITION DESCRIPTIONS

JUNE 1969

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PREPARED FOR  
U.S. ARMY MATERIEL COMMAND  
CONTRACT NO. DA-49-186-AMC-324 (X)

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**TRW**  
SYSTEMS GROUP

WASHINGTON OPERATIONS  
1216 I STREET, N.W. • WASHINGTON, D.C. 20004

17  
SET I

**INTEGRATED  
TECHNICAL  
DATA  
SYSTEM**



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## FOREWORD

TRW Systems was awarded a contract [Contract Number DA-49-186-AMC -324 (X)] by the U.S. Army Materiel Command to develop an Integrated Technical Data System (ITDS). The ITDS is intended to assist the Army Systems Manager in performing his management and technical tasks by operating on relevant data to produce, summarize, and condense information. This allows the manager and technical support personnel to a) determine status and monitor technical progress, b) identify and predict system technical/management problems and their impact, c) comprehend and evaluate proposed system changes, and d) assign and maintain awareness of responsibility for action.

The ITDS is composed of personnel, procedures, equipment, and computer programs. The organization of these elements provides a capability for the processing of systems program data, including the following functions:

- Data receipt and indexing
- Validation and verification for authenticity
- Storage
- Manipulation
- Retrieval
- Display and dissemination.

The organization is divided into three major subsystems: the Functional Disciplines Subsystems, the Data Operations Subsystem, and the Computer Subsystem. ITDS user documentation, of which this manual is a part, is oriented to the above subsystems, with the exception of an overall System User's Guide and a Configuration Management Plan.

Following is a tabulation of ITDS user documentation (title of this volume is heavily underscored):

### ITDS - Overall

- System User's Guide
- Configuration Management Plan

### Functional Disciplines Subsystem

- Administrative Manual
- Operations Manual
- Personnel Position Descriptions

### Data Operations Subsystem

- Administrative Manual
- Operations Manual
- Equipment Description
- Personnel Position Descriptions

### Computer Subsystem

These 12 manuals, in general, cover administration of the subsystem, operating and maintenance instructions for the programs, computing equipment description, and personnel position descriptions.

- Administrative Manual
- Generalized Processing Program, General Description
- Applications Programs, General Description
- Peripheral Programs, General Description
- Computer Programs Maintenance Manual
- Computer Programs Operations Manual
- Data Processing Center Operator's Manual
- Equipment Description
- Personnel Position Descriptions
- Generalized Processing Program, Programming Documentation
- Applications Programs, Programming Documentation
- Peripheral Programs, Programming Documentation

This manual describes the personnel position descriptions for the Data Operations Subsystem.

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**DATA OPERATIONS SUBSYSTEM:  
PERSONNEL POSITION DESCRIPTIONS**

**1. INTRODUCTION**

This document contains the approved position descriptions of personnel required to operate and maintain the data operations subsystem of the Integrated Technical Data System (ITDS). Data operations personnel provide data handling capabilities to move data from point of entry through the ITDS to point of dissemination. These personnel provide the interface between the functional disciplines and computer subsystems.

**1.1 PURPOSE**

The purpose of this document is to specify the minimum personnel skills required to operate and maintain a data operations subsystem within an ITDS. These personnel requirements are expressed in qualitative (not quantitative) terms. Each individual position description is placed separately on a standard format. Each description has a cross-reference to the appropriate function block on the ITDS Summary Function Flow Chart contained in the System Description, Part II Production Description in order to reflect the functional location of each position within the system.

**1.2 SCOPE**

This document identifies and describes only those personnel positions specified for the operation and maintenance of the Data Operations Subsystem in the System Description, Part II. The data operations covered include the functions specified in paragraph 3.3 "Data Operations Subsystem." Personnel of this subsystem perform data management, analysis, and processing functions as outlined in brief below:

- a) Input processing functions/tasks
  - acquisition
  - control
  - preparation of input
  - storage (hard copy and microform)

- b) Output processing functions/tasks.
  - output edit and review
  - output quality control
  - output dissemination
- c) Data base management functions/tasks.
  - management of data files (lists)
  - retention and disposal of data

## 2. APPLICABLE DOCUMENTS

### Specifications

06349-W510-RO-00

System Description, Part II: Product Description for the Integrated Technical Data System, dated 7 March 1969

### Manuals

06349-W527-RO-00

Data Operations Subsystem: Operations Manual

## 3. PERSONNEL REQUIREMENTS

The personnel required for the Data Operations Subsystem are described in succeeding paragraphs. The position descriptions are presented in qualitative terms only, because the number of personnel required for the Data Operations Subsystem is dependent upon the nature, volume, and complexity of technical data being handled by the ITDS. For that reason typical types of personnel skills that are required to operate and maintain an ITDS which is supporting a large, complex aircraft weapon system are described.

Each position description has been allocated an individual paragraph and page, with descriptions grouped and presented in the following sequence:

- a) Data Operations Management
- b) Data Control and Processing
- c) Quality Control
- d) Documentation Analysis
- e) Inquiry Terminal Operations
- f) Technical Data Analysis
- g) Hardcopy/Microform Library
- h) Microform Equipment Operator

- 3.1 DATA OPERATIONS MANAGER
- 3.2 DATA CONTROL AND PROCESSING SUPERVISOR
- 3.3 DATA QUALITY CONTROL ANALYST
- 3.4 DOCUMENTATION ANALYST
- 3.5 INQUIRY TERMINAL OPERATOR
- 3.6 DOCUMENTATION CONTROL CLERK
- 3.7 TECHNICAL DATA ANALYST
- 3.8 HARDCOPY/MICROFORM LIBRARIAN
- 3.9 MICROFORM EQUIPMENT OPERATOR

**3.1 POSITION DESCRIPTION: DATA OPERATIONS MANAGER**

**POSITION TITLE:**

Data Operations Manager

**PRIMARY RESPONSIBILITY:**

Assist applications subsystem personnel in the determination of data requirements, plan for the timely and economical acquisition of data, and insure the adequacy of the acquired data for its intended use.

**FUNCTIONS:**

Perform overall management, operation, and maintenance of the data base. Provide for continuous data base systems analysis, data system error analysis and validation program, and evaluate all recommended changes for the data base and insure that proper change control procedures are followed. Provide for administrative control for all data being transferred from point to point through the system. Supervise and insure that required procedures for data storage and retrieval of hardcopy and microform documents are being taken. Supervise the maintenance of the documentation files. Provide liaison between the applications subsystem and the computer subsystem.

**REQUIRED QUALIFICATIONS/SKILLS:**

College degree required, master's degree in business administration preferred.

Minimum five years experience in operation of data management system plus at least three years supervisory experience. At least two years experience in working with data processing personnel

**REFERENCE FUNCTIONAL BLOCK:**

Prepared by:

Approved by:

Date:

Date:

**3.2 POSITION DESCRIPTION: DATA CONTROL AND PROCESSING SUPERVISOR**

<b>POSITION TITLE:</b> Data Control and Processing Supervisor	
<b>PRIMARY RESPONSIBILITY:</b> Supervise the control and operation of the data retrieval operation and the operation of the data inquiry terminal.	
<b>FUNCTIONS:</b> Supervise the receipt and sorting of data from internal and external sources. Supervise the assignment of DAI forms to system data and insure that documents are reproduced as required. Maintain system of distribution accountability and control and establish and maintain permanent hardcopy files. Supervise and carry out the approved system of purging of the hardcopy files. Provide retrieval service for hardcopy files.	
<b>REQUIRED QUALIFICATIONS/SKILLS:</b> High school education required; college degree or equivalent preferred.  Minimum three years experience as a data analyst. This experience should include previous knowledge of data processing terminology and functions.	
<b>REFERENCE FUNCTIONAL BLOCK:</b>	
<b>Prepared by:</b>	<b>Approved by:</b>
<b>Date:</b>	<b>Date:</b>

**3.3 POSITION DESCRIPTION: DATA QUALITY CONTROL ANALYST**

<b>POSITION TITLE:</b> Data Quality Control Analyst	
<b>PRIMARY RESPONSIBILITY:</b> Assure that system integrity is maintained with optimum cost effectiveness.	
<b>FUNCTIONS:</b> Responsible for system integrity and interact with system users to insure that the data base is designed and organized to function within optimum cost effectiveness guidelines. Integrate user requirements to insure that data base elements are not duplicated or that user data requirements do not needlessly overlap one another. Analyze data requirements in conjunction with computer equipment capacities.	
<b>REQUIRED QUALIFICATIONS/SKILLS:</b> College degree or equivalent preferred; high school education required. Minimum one and one-half years experience as a data analyst, part of which must include experience in interfacing with a computer department.	
<b>REFERENCE FUNCTIONAL BLOCK:</b>	
<b>Prepared by:</b>	<b>Approved by:</b>
<b>Date:</b>	<b>Date:</b>

**3.4 POSITION DESCRIPTION: DOCUMENTATION ANALYST**

<b>POSITION TITLE:</b> <p style="text-align: center;">Documentation Analyst</p>	
<b>PRIMARY RESPONSIBILITY:</b> <p style="text-align: center;">Review all project data received; determine and perform required input processing.</p>	
<b>FUNCTIONS:</b> <p style="text-align: center;">Provide for the review of all project data received and insure that all log-in and control requirements are satisfied. Determine the necessary and/or required input processing of data into the system and make decisions as to the necessary distribution within the project organization and supporting activities.</p>	
<b>REQUIRED QUALIFICATIONS/SKILLS:</b> <p style="text-align: center;">High school education required; some college level experience desired.</p> <p style="text-align: center;">Minimum one and one-half years experience as a documentation analyst, part of which must include experience in interfacing with a computer department.</p>	
<b>REFERENCE FUNCTIONAL BLOCK:</b>	
<b>Prepared by:</b>	<b>Approved by:</b>
<b>Date:</b>	<b>Date:</b>

**3.5 POSITION DESCRIPTION: INQUIRY TERMINAL OPERATOR**

<b>POSITION TITLE:</b> <p style="text-align: center;">Inquiry Terminal Operator</p>	
<b>PRIMARY RESPONSIBILITY:</b> <p style="text-align: center;">Operate the input/output remote on-line terminal of the random access data system.</p>	
<b>FUNCTIONS:</b> <p style="text-align: center;">Operate printing card punch for input of variable data recorded. Operate card reader to input punch card via remote on-line stations into computer random access memory. Operate keyboard printer to make direct inquiry to computer data files and receive response on printer. Operate data phone, requiring correct usage of restricted codes necessary to maintain integrity of system. Perform miscellaneous duties such as punching cards, filing, keeping records, and coordinating with related working groups.</p>	
<b>REQUIRED QUALIFICATIONS/SKILLS:</b> <p style="text-align: center;">High school education with one year of experience and/or technical trade school or equivalent on-the-job training and experience.</p>	
<b>REFERENCE FUNCTIONAL BLOCK:</b>	
<b>Prepared by:</b>	<b>Approved by:</b>
<b>Date:</b>	<b>Date:</b>

**3.6 POSITION DESCRIPTION: DOCUMENTATION CONTROL CLERK**

<b>POSITION TITLE:</b> Documentation Control Clerk	
<b>PRIMARY RESPONSIBILITY:</b> Receive and control all system documents.	
<b>FUNCTIONS:</b> Log in all documentation received and distribute for necessary action. File and retrieve documents as directed.	
<b>REQUIRED QUALIFICATIONS/SKILLS:</b> High school education required. Minimum one year experience in data handling procedures required.	
<b>REFERENCE FUNCTIONAL BLOCK:</b>	
<b>Prepared by:</b>	<b>Approved by:</b>
<b>Date:</b>	<b>Date:</b>

**3.7 POSITION DESCRIPTION: TECHNICAL DATA ANALYST**

<b>POSITION TITLE:</b> <p style="text-align: center;">Technical Data Analyst</p>	
<b>PRIMARY RESPONSIBILITY:</b> <p style="text-align: center;">Abstraction and extraction of data elements and keywords for entry into data base and establishment of data base dictionaries.</p>	
<b>FUNCTIONS:</b> <p>Assist in the selection, extraction, and key wording of data to be entered into the data base. Assist in the acquisition and validation of input source data. Establish and initially load system dictionaries. Prepare load sheets and perform data loading operation. Receive and analyze diagnostic error messages. Structure and maintain records of all data inquiries. Assist in the formatting and processing of periodic and exception reports. Coordinate the processing of changes to the system dictionaries and data base formats.</p>	
<b>REQUIRED QUALIFICATIONS/SKILLS:</b> <p style="text-align: center;">College degree or equivalent preferred.</p> <p>Minimum three years experience as a data analyst with experience in interacting within a data processing environment. Ability to communicate effectively, in both written and oral form.</p>	
<b>REFERENCE FUNCTIONAL BLOCK:</b>	
<b>Prepared by:</b>	<b>Approved by:</b>
<b>Date:</b>	<b>Date:</b>

**3.8 POSITION DESCRIPTION: HARDCOPY/MICROFORM LIBRARIAN**

<b>POSITION TITLE:</b> <p style="text-align: center;">Hardcopy/Microform Librarian</p>	
<b>PRIMARY RESPONSIBILITY:</b> <p style="text-align: center;">Analyze hardcopy documents and which data require microfilming, and maintain hardcopy and microfilm storage.</p>	
<b>FUNCTIONS:</b> <p style="text-align: center;">Examine technical documents and, following prescribed standards and other directives, indicate which documents are to be microfilmed and which are to go into the hardcopy files. Supervise file maintenance activities and insure that purging is done only when those persons whose activities are responsible for the data agree to those which are to be purged.</p>	
<b>REQUIRED QUALIFICATIONS/SKILLS:</b> <p style="text-align: center;">High school education required; some college level experience is preferable.</p> <p style="text-align: center;">Minimum three years experience in data management and related data processing experience. One year supervisory experience necessary.</p>	
<b>REFERENCE FUNCTIONAL BLOCK:</b>	
<b>Prepared by:</b>	<b>Approved by:</b>
<b>Date:</b>	<b>Date:</b>

**3.9 POSITION DESCRIPTION: MICROFORM EQUIPMENT OPERATOR**

<b>POSITION TITLE:</b> Microform Equipment Operator	
<b>PRIMARY RESPONSIBILITY:</b> Operate microfilm camera and aperture card equipment.	
<b>FUNCTIONS:</b> Take microfilm or microfiche reproductions of system documents and make aperture cards as directed.	
<b>REQUIRED QUALIFICATIONS/SKILLS:</b> High school education required. Minimum of one to two years experience in the operation and use of microfilm, microfiche, and aperture card equipment.	
<b>REFERENCE FUNCTIONAL BLOCK:</b>	
<b>Prepared by:</b>	<b>Approved by:</b>
<b>Date:</b>	<b>Date:</b>