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# TECHNICAL MEMORANDUM

(TM Series)

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Personnel Planning Information - 1604  
Transition Programs Operations

by

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3 May 1963

SYSTEM

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TM-1243/000/00

#### INTRODUCTION:

The purpose of this document is to update the information pertaining to \*STIN and \*STOUT on the original Personnel Planning Information (PPI) document (TM(L)-979/000/00), and add information regarding the new 1604 communications programs SBRDTLK and SMERGE, which will become operational in the A-1 time period along with \*STIN and \*STOUT. Specifically, this means updating the \*STIN and \*STOUT summary of tasks statements (sections 3.5.7.1 and 3.5.7.2 of the referenced PPI document), and briefly describing SBRDTLK and SMERGE, indicating their interfaces, and providing the summary of tasks for each of these programs. Note that the sections of the original PPI document (sections 3.2., 3.2.3, and figure 2 and 3) containing the equipment and position allocations, equipment layout recommendations, and interface diagrams for \*STIN and \*STOUT are not affected by these additions.

- 1.0 SUMMARY OF TASKS - \*STOUT
- 1.1 Start \*STOUT
  - 1.1.1 Obtains basic information and transmission instructions for generating \*STOUT function card from TWREA, TWREP, TWRCO.
  - 1.1.2 Obtains and compiles, as per instructions, the necessary data inputs for processing and transferring prepass data and assembles these data in the order of expected processing as specified on the \*STOUT function card.
    - 1.1.2.1 Generates and/or assembles on magnetic tape and paper tapes required command messages, text messages and Antenna Pointing data messages from unaugmented 1604 programs for processing and subsequent placement on the 1604 Change tape.
    - 1.1.2.2 Generates and/or assembles on data cards and paper tapes required latitude crossing, command and text message inputs from TWREA, TWREP, and TWRCO for processing and subsequent placement on the 1604 Change tape.
    - 1.1.2.3 Generates appropriate control cards for \*STOUT processing of text messages and command messages.
  - 1.1.3 Loads, mounts, or exchanges magnetic tapes, paper tapes, and punched cards in accordance with program instructions for placement of prepass data onto 1604 Change tape and for transferring processed data from Change tape to the 1604-Bird Buffer Transfer tape.
- 1.2 Data Checks (modifies Step 3.5.7.1.3.3)
  - 1.2.1 Determines level of reliability and/or validity of data being processed and placed on the Change tape by viewing on-line printouts of data and/or errors, and coordinating with representatives of other STA operational units which have responsibility for data being processed to determine final disposition of prepass messages.
    - 1.2.1.1 Coordinates with Aces Control Directory, TWREA, TWRCO, or TWREP, for error corrections on all punched cards.
    - 1.2.1.2 Coordinates with TWRCO representative for error correction and final disposition of command messages.
    - 1.2.1.3 Coordinates with TWREP representative for error correction and final disposition of Latitude Crossing message, and command messages.
    - 1.2.1.4 Coordinates with TWREA representative for error correction and final disposition of Antenna Pointing data, Acquisition and TPOT messages.

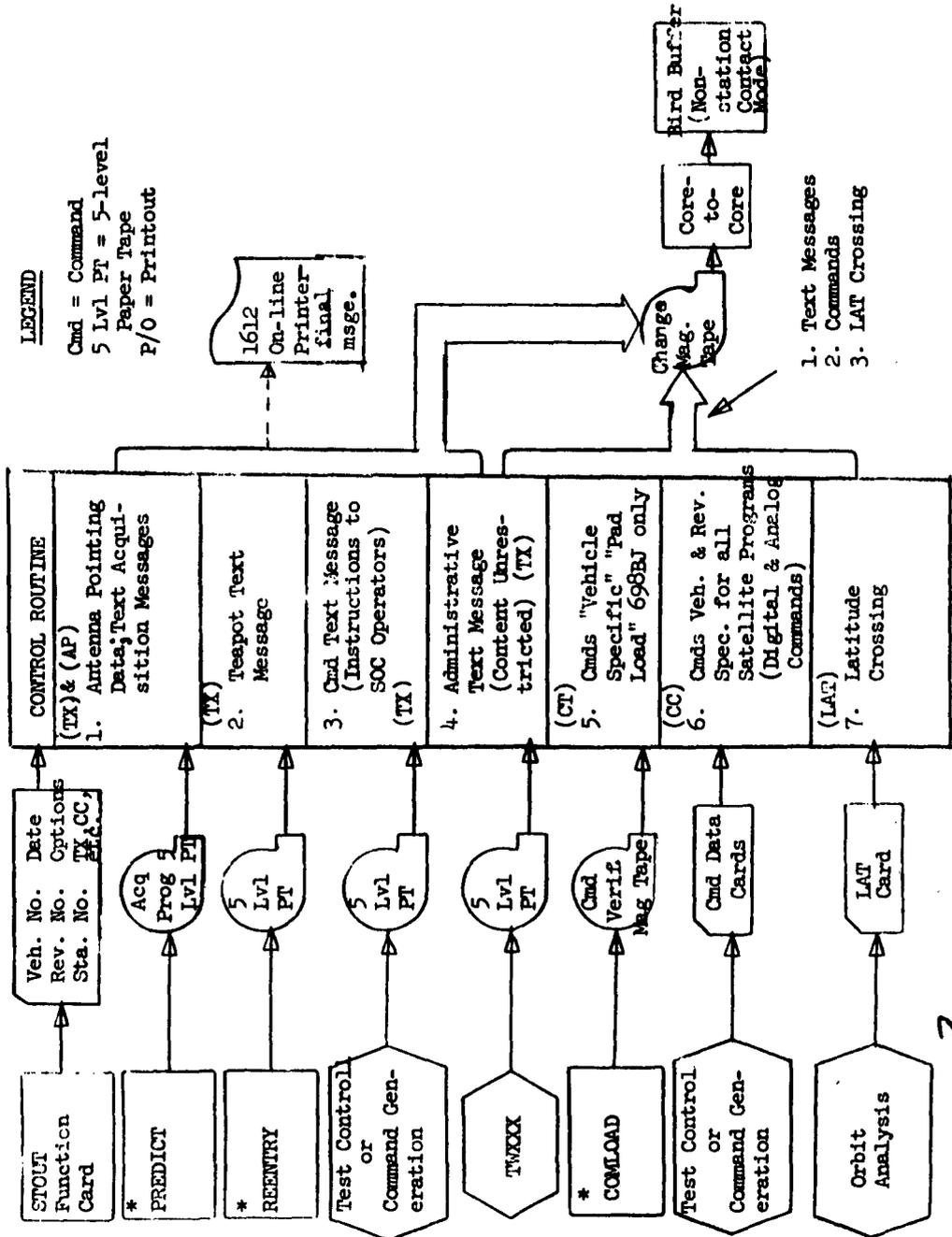


Figure 1. \*STOUT Operational Interfaces - Prepass Operations A-1 Period

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2.0 SUMMARY OF TASKS - \*STIN

2.1 Procedures

- 2.1.1 Load the appropriate Bird Buffer Transfer tape and enter the appropriate function card in the reader.
- 2.1.2 Observe printed outputs of processing error conditions and take the corrective actions detailed in SDC document TM-1165, "Integrated Bird Buffer-1604 System Operational Procedures, A-1 Period."
- 2.1.3 Observe printed outputs of data errors and make certain such messages are forwarded to those personnel (TWREP, TWREA, etc.) who will use them in interpreting the results of the programs using \*STIN's tape output.
- 2.1.4 Check for paper tape outputs (one for each antenna number) and store these tapes for future use with other unaugmented 1604 programs (e.g., CCORD, DATLAP, ONAGER, etc.).

### 3.0 GENERAL FUNCTION OF THE PROGRAM SBRDTLK

SBRDTLK performs the function of transferring \*STOUT processed prepass data to the Bird Buffer and recording (on tape) "raw" tracking and vehicle time calibration data (hereafter referred to as "tracking data") received from the Bird Buffer. The tracking data are for later use by the 1604 transition program, \*STIN. In addition, SBRDTLK updates prepass tapes. In no single run of SBRDTLK are all functions exercised. Either tracking data are received and prepass tapes updated, or prepass data are sent. In addition, it provides, upon request from the Bird Buffer, SCHOPS scheduling information which is transmitted to the stations.

#### 3.1 SUMMARY OF TASKS - SBRDTLK

##### 3.1.1 Start Procedures

- 3.1.1.1 Load the proper tapes for operating the program module (e.g., prepass data transfer, tracking data transfer, update prepass tapes, SCHOPS data transfer).
- 3.1.1.2 Set up the tape cabinets for operation.
- 3.1.1.3 Initiate the operation of the program according to printed instructions.
- 3.1.1.4 Check the 1612 printer and console typewriter for indications of error conditions and correct such according to the procedures specified in TM-1165, "Integrated Bird Buffer-1604 System Operational Procedures, A-1 Period."

##### 3.1.2 TRACKING DATA TRANSFER, UPDATE PREPASS TAPE, SCHOPS DATA TRANSFER MODULES PROCEDURES.

- 3.1.2.1 Check the console typewriter for indications of error conditions and instructions for eliminating them.
- 3.1.2.2 Correct error conditions and perform the instructions given by the program.

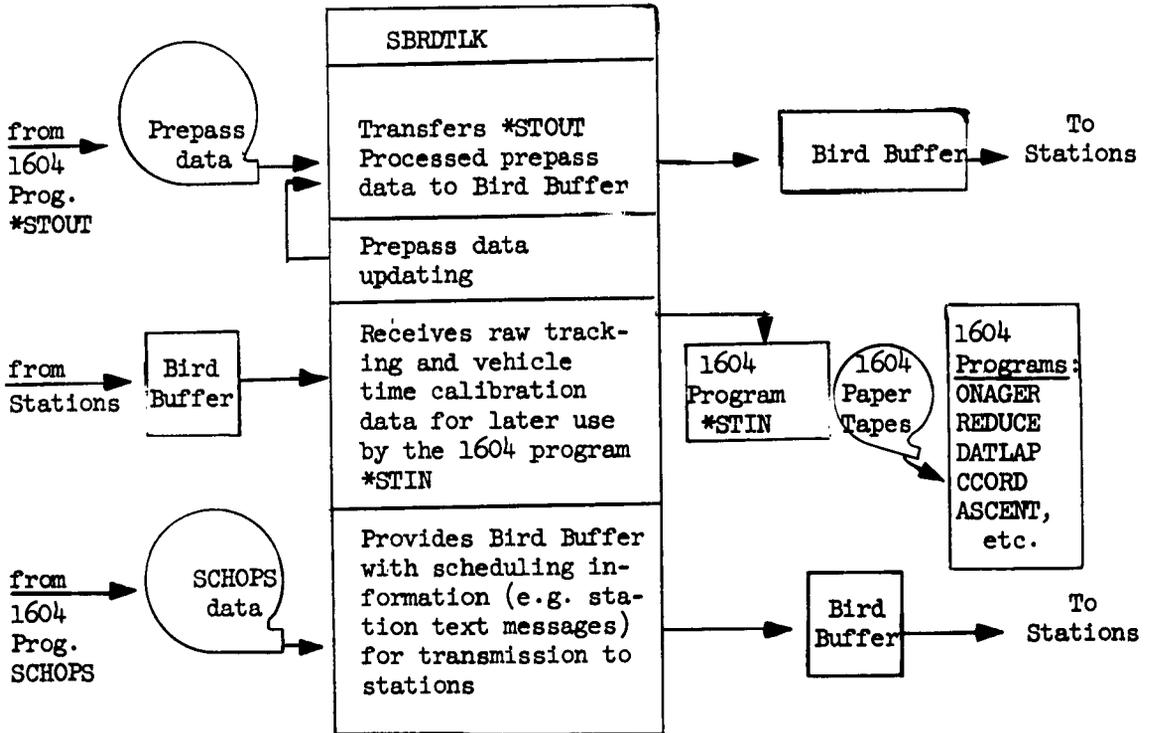


Figure 2. SBRDTLK Operational Interfaces (A-1 Period)

#### 4.0 GENERAL FUNCTION OF THE COMMUNICATION PROGRAM SMERGE

SMERGE is called into operation by the program, SWRTOUT, which functions as a part of the Transition Program, \*STOUT. It is operated each time SWRTOUT indicates receipt of a block of information such as Text Messages, Antenna Pointing Data, etc., from \*STOUT and has placed it upon the Change Tape. The operation occurs only during the pre-pass phase. The function of SMERGE is to order, according to vehicle number, revolution, and data type, the information contained on the Change Tape, then to merge it in proper context on the Transfer Tapes (sometimes referred to as the prepass tapes).

#### 4.1 SUMMARY OF TASKS - SMERGE

##### 4.1.1 Procedures

4.1.1.1 Prepare the tape units for operation of SMERGE.

4.1.1.2 Restart SMERGE when various read and write errors occur.

4.1.1.3 Provide SMERGE with a longer tape for creating the new transfer tape.

4.1.1.4 Change tapes (when indicated) to permit copying the new transfer tape.

4.1.1.5 Remove tape rings when operations are complete.

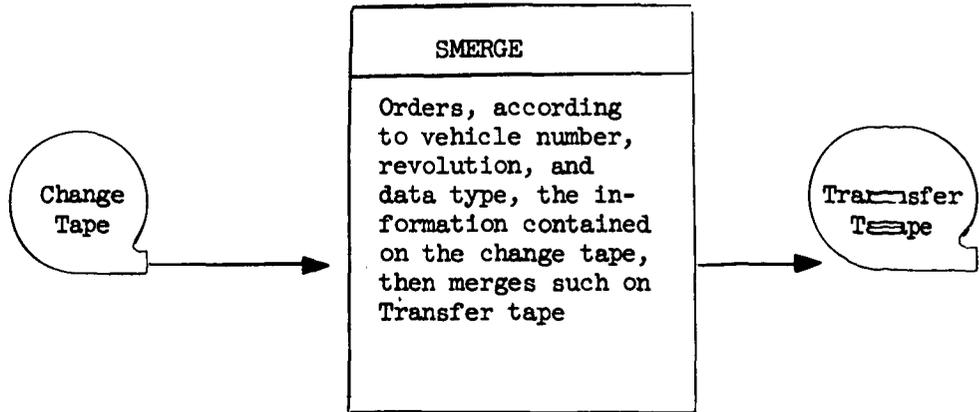


Figure 3. SMERGE Operational Interfaces (A-1 Period)

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