U. S. ARMY
COMPUTER SYSTEMS COMMAND

TASCOM(S) FACT SHEET - REVISED*   FORT BELVOIR, VA. 22060

ORGANIZATION

The Theater Army Support Command (Supply) (TASCOM(S)) Computer System which supports the U.S. Army Materiel Command Europe (USAMATCOMEUR) came under the jurisdiction of the U.S. Army Computer Systems Command (USACSC) on 1 April 1970.

The USACSC Support Group (Europe) is responsible for the continued maintenance of the TASCOM(S) system. This group discharges its responsibilities through the USACSC Field Agency, Zweibruecken, Germany.

BACKGROUND

USAMATCOMEUR is a theater inventory control center having centralized accountability for command stocks in Europe. The USAMATCOMEUR computer support system, TASCOM(S), encompasses complete stock control, supply and financial management for these stocks. The system supports all Army, and various non-Army (Supreme Headquarters Allied Powers Europe (SHAPE), Cooperative Logistics (COOPLOG) countries, etc.), requisitioners in Europe.

The TASCOM(S) system has had a dynamic and varied history beginning with the establishment of the Supply and Maintenance Agency in Orleans, France in 1964 as a subordinate element of the U.S. Army Communications Zone, Europe. A major task of the new agency was to develop and implement a single centralized data processing system to replace the various systems and equipment configurations serving the then existent seven technical services. The initial computer system was installed at two computer sites, Orleans and Verdun in France, using a largely tape-oriented IBM 7010 equipment configuration. A major systems re-design effort was initiated early in 1966 to relieve equipment saturation by maximum utilization of random access storage. This project continued without significant interruption until September 1967, a period in which Project FRELOC (the re-location from France of all units, personnel, equipment and supplies) was also most active. The new system and equipment configuration was activated in specifically modified railroad cars located at Homulbach, West Germany immediately following the deactivation of the last computer site in France. Preparation of a permanent site and acquisition of third generation equipment for the system moved from Homulbach to its present location at Zweibruecken, where it was installed in emulation mode on the IBM 360 configuration. Project Recode, the second major system re-design and programing effort, requiring, insofar as possible, the modular replacement of emulated 7010 programs and functions by OS 360 native mode COBOL programs in a manner planned to minimize the disruption of production systems, was initiated immediately.

On 1 April 1969 the Supply and Maintenance Agency became the U.S. Army Material Command, Europe. From the foregoing, it is evident that the TASCOM(S) system has been extremely dynamic, undergoing two major hardware changes, system re-design efforts, and installation re-locations, since its inception.

THE FUNCTIONAL SYSTEMS

The TASCOM(S) system can be categorized generally into major subsystems, such as:

1.   Complete Stock Control

2.   Complete Supply Management

3.   Financial Accounting

4.   Depot Maintenance, TAERS, and Material Readiness

5.   Asset/Authorization Reporting Systems

6.   Reports required by higher authority

7.   Cataloging and Stock Record Support

For operational purposes, these subsystems are further subdivided into production cycles. For example, Cycle STC is the basic daily Stock Control cycle, DAF identified the weekly Financial Cycle, and SMG identifies the basic Supply Management cycle.

Some of the principal TASCOM(S) system cycles are:

1.   The Daily Stock Control Cycle (STC). Cycle STC processes recurring stock control functions. All transactions are validated for format and content, stock number and unit-of-issue changes are applied and, for transactions upon which document control is maintained, validation against previous activity for that document number is accomplished. Transactions are further validated against the current catalog file before entering accountable processing. Balance increasing transactions are processed first against the ASSET file followed by requisitions and other issue type transactions. Assets are applied to requirements through a stratification technique. Due-outs complete with new requisitions for available stock. Automatic in-line substitution is applied. Issues are made from available stock within the USAMATCOMEUR depot system. Unfilled demands are placed on due-out or passed to CONUS supply sources. The document control files are updated on disk to reflect the results of accountable processing and latest supply and shipment status. Responses to customer follow-ups generated. Outputs are selected and formatted for transceiving, mailing or punching. Displays of both ASSET and Document Control Files are printed to facilitate in-house research of error situations and aiding in exception type managerial decisions.

2.   The High-Priority Requisition Cycle (HIP). Cycle HIP is an abbreviated stock control cycle with input limited to the initial processing of IPG I and II requisitions. All edits and validations applicable to requisition processing are accomplished and appropriate outputs produced. Cycle HIP is designed for multiple daily runs as input volume warrants.

3. <u>The Monthly Catalog Maintenance Cycle (MCM)</u>. Cycle MCM accomplishes the monthly processing of CONUS and locally generated Army Master Data File (AMDF) broadcasts to update the USAMATCOMEUR Catalog, nomenclature and packaging data and stock number cross reference files. Required registers and reports are produced for managers and stock control personnel. Notification of these changes is perpetuated to USAMATCOMEUR depots through the mediaum of Storage Item Data Change cards.

4. <u>The Stock Record Support Cycle (SRS)</u>. Cycle SRS provides stock record support for all Army and COOPLOG USAMATCOMEUR customers. The Station Stockage File is updated monthly with catalog changes from CONUS, and request for changes, deletions or additions from USAMATCOMEUR customers. Interchangeability and substitution information along with notification of approved changes are furnished to customers on a monthly basis.

5. <u>The Supply Management Cycle (SMG)</u>. Cycle SMG performs routine/recurring basic supply management functions. These functions include maintenance of the Supply Management File, recomputation of peacetime, requisitioning objectives, determination of theater excess, and replenishment of USAMATCOMEUR depot stocks. In addition, the cycle initiates cancellation actions for excessive dues-in, notifies USAMATCOMEUR depots to begin minor repair actions based on requirements, and generates supply control studies for commodity manager review.

6. <u>The Weekly Financial Cycles</u>.

a. <u>The Accounts Payable Cycle (ACP)</u>. Cycle ACP processes the billing documents received from the various billing offices in CONUS. Bills are edited for completeness and processed against the Financial File to determine the validity of the charge or credit, the Financial File is updated and adjustments records are created to update the General Ledger Accounts. Charges or credits determined to be invalid are written to the Suspense File and requests for billing adjustments are created.

b. <u>The Accounts Receivable Cycle (ACR)</u>. Cycle ACR prepares billing lists and cards representing stock fund issues to DOD and non-DOD customers. Raw bills are generated during the Financial Cycle processing from transactions representing issues from USAMATCOMEUR depots, direct shipments from CONUS and from customer returns.

c. <u>The Financial Cycle (DAF)</u>. Cycle DAF establishes and updates records on the Financial file, creates general ledger activity, billing, adjustment and order/shipped time transactions for subsequent processing. The Financial file contains images of CONUS extracts and replenishment requisitions, catalog and miscellaneous data, and fields in which quantities of related accountable transactions are summarized.

7. <u>The Demand Files Maintenance Cycle (DMM)</u>. Cycle DMM maintains the Demand History file (3 million records) containing one year of detail demand and serviceable return history. An additional three years of summarized activity by stock number is contained in the Summary Demand File. Cycle DMM updates the Demand History File with requisitions, cancellations and serviceable return transactions processed through the daily Stock Control Cycle (STC). Documents over one year old are summarized and moved to the Summary Demand File. Stock number and unit-of-issue changes are applied to both files. A special summarized file is created for use in the Supply Management Cycle (SMG).

8. The Excess Control Cycle (EXC). Cycle EXC accomplishes the reporting of USAMATCOMEUR excesses to CONUS or Material Redistribution Center, Europe (MARCE), the screening of excess reports from MARCE, and the generation of MILSTRIP transactions which cause the redistribution of excess property. This cycle links with the STC stock control cycle, the SMG supply management cycle, and the DAF Financial cycle to meet the objective of reducing operating costs by eliminating through redistribution, unneeded inventory.

SIGNIFICANT TASCOM(S) CONCEPTS

The TASCOM(S) System contains many notable features, some of which are described below:

1. Disk oriented major Master files, such as the Catalog File, Document Control File, Assets and Requirements File and Stock Number Cross Reference File.

2. Stock Number sequenced Document Control File which also serves as the single repository of all open supply transactions to include dues-in and dues-out. This eliminates the necessity for subsidiary files such as due-in or due-out files and the incumbent "reconciliation" problems between them and a master.

3. Powerful automatic substitution system in all requisition and supply management processing. The substitution file maintenance system also permits automatic selection of "preferred" items when establishing "Family relationships" transferral of requirements to the new "preferred item" and after the fact notification for item managers.

4. Management by Family, rather than by item. This means that all actions concerning an item of stock are done in context of the total Family, and any manual processing that may be required is done by the preferred item manager.

5. Powerful data retrieval system that can provide on an almost instantaneous basis, displays from the major files. Displays are normally generated on a request basis or with candidate actions requiring item manager decision. Displays are modular in form, i.e., specific modules of data may be requested in any combination or these modules are generated based on systems rules to help the decision process needed for candidate actions. Typical modules are:

a. Catalog and Management Data

b. Detail Assets and Requirements at Depot Level

c. Family Stratification showing Stock Position

d. Document Control Activity for a particular Document Number

e. All or selected document control activity for a Family of items. Selection can be for dues-in, dues-out, interdepot transfers, PDO shipment, CONUS extracts in any combination

f. Demand and Return History for a Family of items

g. Open Reports of Excess for a Family of items

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6.   Management emphasis by Dollar Value Category of projected Annual Demand. Families are classified as low dollar value, medium, high, super-high and intensively managed. This facilitates the automation of almost all decisions for low and most medium dollar value items. It also aids in determining the amount and type of data that is retrieved and displayed for item managers for processing of candidate actions.

EQUIPMENT CONFIGURATION

The TASCOM(S) system utilizes two third generation IBM S/360-50 Model I Central Processing Units (CPUs). Each CPU can access 15 dedicated Type 2401 nine track Magnetic Tape Units (MTUs) and both CPUs can access three additional nine track and one-seven track MTU via a Type 2914 program controlled switch. Each CPU may also access the following additional equipment via the switch:
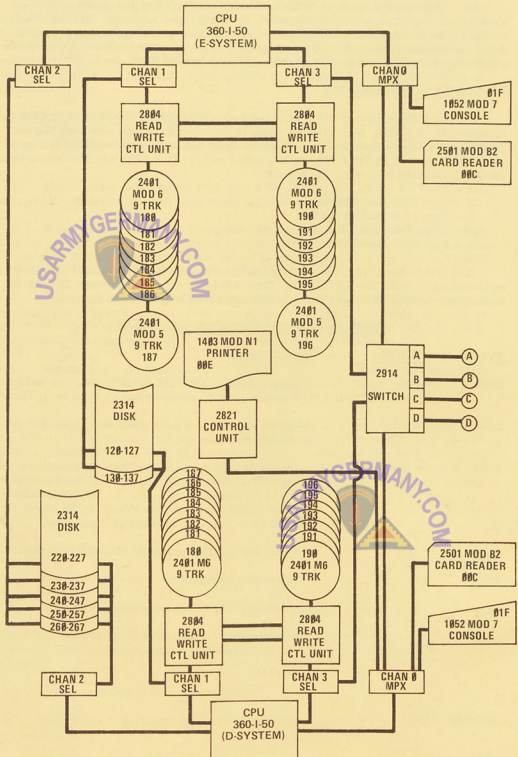
    2 - Type 1053 Mod 4 Printers
    3 - Type 1403 Mod N1 Printers
    16 - Type 2260 Mod 1 Display Stations
    4 - Type 2540 Mod 1 Card Read/Punch

Each system has a type 2501 Mod B2 Card Reader and a type 1052 Mod 7 Console for communication with the CPU. Seven Type 2314 Direct Access Storage Devices are accessable to both CPUs which provide 56 disk packs available for processing.

EQUIPMENT CHARACTERISTICS IBM S/360-50

TYPE	MODEL	DESCRIPTION
2050	I 50	Central Processor, 524, 288 bytes of processor storage, 2.0 microseconds to access 4 bytes.
2401	6	Magnetic Tape Unit, 9 track, 1600 BPI, 180K bytes per second transfer rate.
2314		Direct Access Storage Facility (DASD) with 8 independent disk sotrage drives, 312 kilobytes per second transfer rate, the 7 DASD's provide 1,633,800,000 bytes of disk storage to be shared by either CPU.
1403	N 1	Printer, 132 printing positions, 1100 lines per minute.
2260	1	Remote Display Station.
2501	B 2	Card Reader, 1100 cards per minute.
2540		Card Read/Punch reads at 1000 and punches 300 cards per minute, simultaneously.

November 1972

CPU
360-I-50
(E-SYSTEM)

CHAN 2
SEL

CHAN 1
SEL

CHAN 3
SEL

CHAN 0
MPX

01F
1052 MOD 7
CONSOLE

2501 MOD B2
CARD READER
00C

2804
READ
WRITE
CTL UNIT

2804
READ
WRITE
CTL UNIT

2401
MOD 6
9 TRK
180
181
182
183
184
185
186

2401
MOD 6
9 TRK
190
191
192
193
194
195
196

2401
MOD 5
9 TRK
187

2401
MOD 5
9 TRK
196

1403 MOD N1
PRINTER
00E

2914
SWITCH

A   Ⓐ
B   Ⓑ
C   Ⓒ
D   Ⓓ

2314
DISK
120-127

130-137

2821
CONTROL
UNIT

2314
DISK
220-227

230-237
240-247
250-257
260-267

187
186
185
184
183
182
181
180
2401 M6
9 TRK

196
195
194
193
192
191
190
2401 M6
9 TRK

2804
READ
WRITE
CTL UNIT

2804
READ
WRITE
CTL UNIT

2501 MOD B2
CARD READER
00C

01F
1052 MOD 7
CONSOLE

CHAN 2
SEL

CHAN 1
SEL

CHAN 3
SEL

CHAN 0
MPX

CPU
360-I-50
(D-SYSTEM)