3800 PLOTTING FACILITY
5785-AAA

This FDP, written in FORTRAN, allows the creation of precise drawings and graphs on the 3800 Plotting Subsystem. It uses simple commands, similar to those used for drawings on plotting devices.

The objective of the FDP is to produce on an 3800 Printing Subsystem more precise drawings and graphs than have been possible using periods or asterisks on conventional printers.

Highlights:
- Ease of use - the common interfaces to the plotting subroutines are identical, from a parameter standpoint, to those of available plotter packages.
- Higher quality graphs - the graphics output are of a quality acceptable for final copy in graphs not requiring a high degree of resolution, such as business trend analysis. In addition, it can be used to test programs which produce graphs requiring a high degree of resolution, such as engineering drawings.

Notice GB21-2154, PDOM SB21-2155.

INTERACTIVE PROJACS
5785-DAC

This FDP is a supplement to the Project and Analysis Control System (PROJACS) program product (5746-XP1). It supports all four PROJACS processors (main, network, preparation, resource allocation, and cost evaluation).

The FDP provides users with immediate access from their working place via a data display station to the data processing system. The user is able to continuously change, update, and revise the networks by passing back and forth between input and output.

Notice GB21-2447, PDOM SB21-2448, Systems Guide LB21-2449.

3850 TRACE INTERPRETATION PACKAGE
5785-DBW

This FDP is a set of programs for processing Mass Storage System Trace data to produce reports on Mass Storage System activity for status and performance analysis.

The raw Mass Storage System Trace data is the source of information for the evaluation of subsystem performance. A reformatted data set, created from the raw Mass Storage System Trace data, can be used as input to high-level language programs. The package contains programs written in Assembler language and PL/I to create various reports and statistical information about Mass Storage System activity. These reports assist the system programmer in determining the reasons for subsystem problems. The reformatted data set can serve users as a base for writing additional Mass Storage System Trace report programs of their own.

Notice GB21-2541, PDOM SB21-2542, Systems Guide LB21-2545.

STAIRS/VS MULTIPLE INVERTED KEY ENVIRONMENT
5785-DCE

This FDP brings to the application areas of non-textual data, the facilities offered to the application areas of textual data bases by STAIRS/VS. It is an addition to STAIRS/VS that implements STAIRS/VS functions in a non-textual or mixed textual/non-textual environment. It applies the power of the STAIRS/VS online inquiry facilities to data other than that stored in a STAIRS/VS data base, such as data in application areas that was previously batch-oriented or that required a considerable programming investment.

The user can implement an online inquiry system with new or existing data in a variety of common formats (DL/I, VSAM, or sequential). Programs already written to access or maintain such data under either CICS/VS or IMS/VS for use under OS/VS need not be modified.

Notice GB21-2657, PDOM SB21-2658, Systems Guide LB21-2678.

HOST DEVELOPMENT AND TEST SYSTEM FOR 8100 COBOL USING TIME SHARING OPTION
5785-DCF

HOST DEVELOPMENT AND TEST SYSTEM FOR 8100 COBOL USING CONVERSATIONAL MONITOR SYSTEM
5785-DCG

These FDPs are designed for interactive Distributed Processing Programming Executive (DPPX)/COBOL program development and testing on a host S/370, 303X or 4300 Processor using a simulated test environment.

Host Development and Test/COBOL processes all DPPX/COBOL source codes including COBOL Structured Programming statements.

Host Development and Test/COBOL simulates the COBOL-DPS Function Management interface as it would appear on an 8100/DPPX System.

Notices GB21-2570 (DCF) and GB21-2572 (DCG), PDOMs SB21-2571 (DCF) and SB21-2573 (DCG).

8100/DPCX 3790 DATASET UTILITY PROGRAM
5785-DCL

This FDP is an interactive data creation and manipulation utility providing the programmer with the capability to create, display, modify, extend, delete and print user records easily. In addition, the FDP supports the display, modification and printing of the common buffer.

The FDP is self-explanatory and runs interactively in full-screen mode under 8100/DPCX or 3790. All functions may be selected by program function keys. Modifications of data (update and delete) are password protected. Data may be entered and displayed in EBCDIC and hexadecimal representation. Both indexed and relative data sets are supported.

Notice GB21-2589, PDOM SB21-2590.

COPICS CUSTOMER ORDER SERVICING
Data Management
5785-DCN
Order Management
5785-DCP

COPICS COS Data Management consists of all the online and batch programs which are needed to make product, customer, and text data available.

COPICS COS Order Management provides all the online and batch programs necessary to make the customer order data available and to process customer orders.

The separation of COS into two FDPs is advantageous because a company must first provide the foundation for online customer order processing by creating the customer, product definition, and text data bases. This can be done with just the COPICS COS Data Management FDP.

Notice GB21-2633-0, PDOMs SB21-2635-0 (DCN) and SB21-2634-0 (DCP).

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FIELD DEVELOPED PROGRAMS

FDP 5785-EAH.1
Feb 83
Major Revision

NUMERICAL GEOMETRY SYSTEM
5785-EAH ... Basic
5785-EAJ ... Advanced
5785-EAN ... APT-AC Bridge

This FDP is a graphics-based, partly interactive, three-dimensional system for computer-aided design and manufacture. The system permits the design process to be carried out either by direct entry of numerical data or from existing design systems. Two-dimensional data can be incorporated into three-dimensional components with minimal effort.

The system provides the user with relatively simple facilities to create and manipulate doubly-curved, three-dimensional surfaces defining complex components.

Notice GB21-2608, PDOM SB21-2609, User's Guide SB21-2610.

COPICS PRODUCT COST CALCULATIONS
5785-GAD

The COPICS Product Cost Calculations application program is a tool for analyzing and simulating the impact of changing component material, labor, and burden costs. Using a 3270 display terminal, the user can change cost factors or simulate cost factor changes and immediately review the impact on the end item's profitability.

Notice GB21-2441, PDOM SB21-2442.

COPICS INVENTORY ACCOUNTING
5785-GAE

The COPICS Inventory Accounting application program addresses the administrative or record keeping aspects of inventory control. The application program supports online entry, editing and processing of a full compliment of COPICS inventory transactions with batch transaction history and audit trails.

The program automatically communicates unplanned inventory transactions to the Advanced Function MRP application program (5785-GAF) to replan those items in the next selective replanning run.

Notice GB21-2443, PDOM SB21-2444.

COPICS ADVANCED FUNCTION MATERIAL REQUIREMENTS PLANNING
5785-GAF

The COPICS Advanced Function MRP application program is a tool for managing dependent demand inventories. The application program enables the user to develop a time-phased material plan by date and to maintain that plan by processing only the changes to the plan (selective replanning).

Notice GB21-2445, PDOM SB21-2446.

CHAINED JOBS SCHEDULING
5785-GAK

This FDP, running under either OS/VS1 or OS/MVS JES2, automatically controls the execution sequence of a set of logically-dependent jobs. The program causes individual jobs to execute in a predefined sequence determined via user-written control cards that define the logical interdependencies of a group of jobs.

Notice GB21-2869, PDOM SB21-2870, Systems Guide LB21-2871.

COPICS BILL OF MATERIAL ONLINE II
5785-GBA

The COPICS Bill of Material Online application program brings the data base directly to user departments. Using IBM 3270 display terminals, users can maintain the product definition data base as well as make inquiries against it.

The program automatically communicates bill of material changes to the Advanced Function MRP application program (5785-GAF) to recalculate the material plan on items and assemblies modified or added.

Notice GB21-2638, PDOM SB21-2639.

COPICS BILL OF MATERIAL BATCH UTILITIES II
5785-GBC

The COPICS Bill of Material Batch Utilities application program provides the user with utilities that load, unload, and perform basic retrievals against the COPICS product definition data base. This application program is to be used in conjunction with COPICS Bill of Materials Online II (5785-GBA).

Notice GB21-2640, PDOM SB21-2641.

COPICS PRODUCT COST CALCULATIONS II
5785-GBD

The COPICS Product Cost Calculations application program is a tool for analyzing and simulating the impact of changing component material, labor, and burden costs. Using a 3270 display terminal, the user can change cost factors or simulate cost factor changes and immediately review the impact on the end item's profitability.

Notice GB21-2642, PDOM SB21-2643.

COPICS INVENTORY ACCOUNTING II
5785-GBE

The COPICS Inventory Accounting application program addresses the administrative or record keeping aspects of inventory control. The application program supports online entry, editing and processing of a full compliment of COPICS inventory transactions with batch transaction history and audit trails.

The program automatically communicates unplanned inventory transactions to the Advanced Function MRP application program (5785-GAF) to replan those items in the next selective replanning run.

Notice GB21-2644, PDOM SB21-2645.

COPICS ADVANCED FUNCTION
MATERIAL REQUIREMENTS PLANNING II
5785-GBF

The COPICS Advanced Function MRP application program is a tool for managing dependent demand inventories. The application program enables the user to develop a time-phased material plan by date and to maintain that plan by processing only the changes to the plan (selective replanning).

Notice GB21-2646, PDOM SB21-2647.

THE 14-DIGIT COMPUTATIONAL FIELDS
FOR PROGRAM CUSTOMIZER/3600
5785-KAA ... OS/VS
5785-KAB ... DOS/VS

These FDPs extend the Program Customizer for the 3600 (PC/3600) (5740-F11 for OS/VS and 5746-F11 for DOS/VS). With the FDP, PC/3600 can handle computational numbers and identifying numbers containing up to 14 digits. These numbers have a 9-digit limit in the program product. The FDP permits the user to specify the maximum permissible size for these numbers within the range of 9 to 14 digits. Multiplicands and dividends may extend up to the specified limit, but their multipliers and divisors are extended to 7 significant digits.

Notice GB21-2320, PDOM SB21-2321, Systems Guide LB21-2322.

FINANCIAL MANAGEMENT SYSTEM
5785-NAC

This FDP is a financial management system that incorporates the following facilities:

- An information systems framework which allows the building and consolidation of financial reports from transactions at different levels within a company and between different companies in a group.
- An easily-modifiable method of interpreting data from the same data base for the controller, the accounting departments, project managers, product managers.
- An information retrieval method whereby the required data from this data base can be presented on paper or on visual displays in a form which can be specified by the user.
- Functions, which can be simply modified, added to or replaced, based on either separate charts or on one unified chart of accounts.

Notice GB21-2679, PDOMs (Volumes I through V) SB21-2681, through 2685, Systems Guide LB21-2686.

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FIELD DEVELOPED PROGRAMS

FDP 5798-AAG.1
Feb 83
Major Revision

VEHICLE MAINTENANCE AND COST ANALYSIS
5798-AAG

This FDP provides programs which assist in controlling the maintenance cost of equipment by processing vehicle information in a manner that facilitates the measurement and evaluation of equipment performance.

Control of equipment maintenance costs requires an organized system of facts, measurements, and related evaluation criteria. The objective of this system is to provide the necessary figures for:

Improved efficiency of vehicle operations by providing management information from actual operating, maintenance and depreciation cost data.

Reduction of the overall maintenance expense, unscheduled maintenance, and breakdowns by producing an inspection listing and a controlled preventive maintenance schedule.

Better selection criteria of equipment, components, and accessories by providing cost-per-mile reports.

Notice GB21-0019, PDOM SB21-0020, Systems Guide LB21-0021.

CONVERSION AID: DOS TO OS ASSEMBLER MACRO
5798-AFL

This FDP is designed to assist medium to large-size DOS installations in moving into information systems, expanded multiprogramming, telecommunication, and time sharing. Their growth in those areas points to the extensive facilities of OS; however, they face a difficult, time-consuming task in converting DOS Assembler language programs to OS, a task that this FDP is designed to facilitate.

Notice GB21-0334, PDOM SB21-0335, Systems Guide LB21-0336.

CONVERSION AID:
IBM ANS COBOL FROM HONEYWELL 200 SERIES COBOL
5798-AGC

This FDP is a series of programs and procedures which will assist in the conversion of Honeywell 200 series (MOD 1 or OS 200) programs to IBM ANS COBOL.

Notice GB21-0387, PDOM SB21-0388, Systems Guide LB21-0389.

APL COORDINATE GEOMETRY SYSTEM
5798-AGF

This FDP is designed to solve coordinate geometry problems interactively at a terminal. It is written in APL to run with APL Program Products.

The FDP is based on ICES COGO, but the syntax has been modified to a form more appropriate for interactive use. It provides for points, lines, circular arcs, transition spirals, areas, and parabolic curves in three dimensions. Points can be plotted on output.

The FDP is for use by surveyors, civil engineers, urban planners, or any others who need to solve on the large class of geometric problems it handles.

Notice GB21-0399, PDOM SB21-0400, Systems Guide LB21-0401.

ZEROS AND INTEGRALS IN APL
5798-AGJ

This FDP is intended for scientists, engineers, and others who need to find roots of equations and compute integrals. Used interactively at a terminal, it is written in APL to run with APL Program Products.

Notice GB21-0408, PDOM SB21-0409, Systems Guide LB21-0410.

GRAPHS AND HISTOGRAMS IN APL
5798-AGL

This FDP produces curves and barcharts at a typewriter terminal. A wide range of options is provided. Several curves can be plotted on one graph. The user chooses size, position, orientation, linear or logarithmic scale and printing of axes, borders, or grids. All the computational power of APL is available for generating the data to be plotted, and the data can be stored using the APL library system.

The package is useful in a variety of fields, including engineering, science, descriptive geometry, demography, urban planning, budgeting, and market analysis.

Notice GB21-0414, PDOM SB21-0415, Systems Guide LB21-0416.

CONVERSION AID: DPS TO DOS
5798-ANJ (S/360 Mdl 20)
5798-BDA (S/370)

The Mdl 20 FDP executes on the S/360 Mdl 20 to allow most of the program conversion effort to be accomplished before the replacement DOS S/370 arrives. The S/370 FDP executes on the DOS or DOS/VS system so that all of the conversion can be accomplished after the DOS system is installed, or the remaining conversion can be finished.

Notice GB21-1336, PDOM SB21-0784, Systems Guide LB21-0783.

PRODUCTIVITY AID: CPU CONSOLE AS MASTER CICS TERMINAL
5798-ANK

This FDP allows the user to utilize the CPU console as a CICS master terminal, requesting CICS transaction through the console. Also, messages can be sent from any terminal to the CPU console, and CICS error and status messages can be route to the CPU console.

Notice GB21-0800, PDOM SB21-0801, Systems Guide LB21-0802.

CONVERSION AID: IBM ANS COBOL FROM NCR CENTURY COBOL
5798-APG

This FDP is not merely a language conversion program, but instead is an entire series of programs, subroutines, and procedures designed to address many of the major problems encountered when converting from NCR Century Series COBOL to IBM ANS COBOL.

Notice GB21-0839, PDOM SB21-0840, Systems Guide LB21-0841.

CONVERSION AID: IBM ANS COBOL FROM BURROUGHS 2500 SERIES COBOL
5798-APH

This FDP is not merely a language conversion program, but instead is an entire series of programs, subroutines, and procedures designed to address many of the major problems encountered when converting from Burroughs 2500 Series COBOL to IBM ANS COBOL.

Notice GB21-0836, PDOM SB21-0837, Systems Guide LB21-0838.

OS/DITTO
5798-ARD

This FDP reduces test time requirements by providing the facility to examine, alter, and modify data files used in both a testing and production environment. It provides the user with ability to access and display a file on any supported device. The Data Control Block (DCB) parameter is not needed or used by OS/DITTO; therefore, the user can quickly and accurately determine the file characteristic and initiate commands to provide the necessary data to continue testing.

OS/DITTO is a Generalized Utility Program that performs most of the normal card, tape, and disk utility functions, thus eliminating the awkward process of using several different utility programs. It also has a documentation print-out function which complements the reference manuals.

Notice GB21-0857, PDOM SB21-0858, Systems Guide LB21-0859.

DOS/DITTO
5798-ARN

Written in ALC, this general purpose utility program contains 37 utility functions for unit record, tape and disk input/output units.

Functional utilities are: Tape and Disk Record Scan, Disk and Tape Record Alteration, Disk ID Volume Number Charge, Deblocking and Tape Records when printing, and User Tape Error Correction.

DOS/DITTO is an enhanced version of the Type III program DITTO-360D.00.1.018 and requires a System/360 or System/370 with a minimum partition size of 16K.

Notice GB21-0875, PDOM SB21-0876, Systems Guide LB21-0877.

CONVERSION AID: IBM ANS COBOL FROM GE-415 COBOL
5798-ASY

This FDP is designed to assist in converting GE-415 MTPS COBOL to IBM ANS COBOL. It also has the facility to translate GE-mode tape data files into EBCDIC. The FDP operates under DOS or DOS/VS, but contains a facility to generate COBOL source programs for compilation under OS as well.

Notice GB21-0914, PDOM SB21-0915, Systems Guide LB21-0916.

HEALTH CARE SUPPORT: ADMISSIONS SYSTEM
5798-ASZ

This FDP uses CICS and is designed to allow the DOS user easy entry into online processing of admissions functions utilizing the IBM 3270 Information Display System. The system is compatible with SHAS (360A-UH-11X). However, other billing systems can be used with slight modification to the Admissions System.

Notice GB21-0935, PDOM 0936, Systems Guide LB21-0937.

DATA COMPRESSION/EXPANSION
5798-ATB

This FDP allows the user to reduce the DASD space requirements for alphameric fields by up to 24% and more readily justify placing a data base online. This space reduction is accomplished by a program subroutine which compresses the alphameric data before it is written on external storage. A second subroutine expands the data to its original state for display or printing. These Compress/Expand subroutines are link-edited to the user's program and are executed when needed. The user's program can be written in DOS or OS Assembler Language, COBOL, PL/I, or RPG.

Notice GB21-0938, PDOM SB21-0939.

ALPHA SEARCH INQUIRY SYSTEM/IMS INTERFACE
5798-AWB

This FDP extends the facilities and convenience of the Alpha Search Inquiry System program product to the IMS user to provide a conversational, name-oriented, information retrieval system.

Notice GB21-0987, PDOM SB21-0988, Systems Guide LB21-0989.

DOS SOURCE STATEMENT LIBRARY MAINTENANCE FOR ANS COBOL
5798-AWD

This FDP enables the programmer to update the library with the same control cards used to compile the program, thus eliminating the time required to make new control cards and correct errors. Programs can be compiled direct from the source statement library with changes submitted on cards. When the program has been fully tested, the change cards can be used to update the library, providing a final version for later use.

Notice GB21-0999, PDOM SB21-1000, Systems Guide LB21-1001.

DOS/VS DASD DEVICE INDEPENDENCE OPEN (DI-OPEN)
5798-AWH

This FDP is designed to dramatically reduce the time and effort which are generally required to convert to a new DASD device in a DOS/VS or DOS/VSE environment.

... Enhancement Feature (DI-OPEN)

This Enhancement Feature (Specify #9534, #9535) provides for execution of the DOS/VS DASD Device Independence Open (DI-OPEN), 5798-AWH, operating under DOS/VSE.

Notice GB21-2460, PDOM SB21-2461, Systems Guide LB21-1004.

PRODUCTIVITY AID:
DOS/VS ASSEMBLER LABEL-TRACE FACILITY
5798-AWJ

With this FDP, conceptually similar to COBOL Ready Trace, one of the most time-consuming aspects of program debugging can be reduced substantially - the task of deducing which logic path the processor took through the program. The programmer's source code labels are printed on SYSLST as the program executes, interspersed with the program's printed output, if any. Tracing can be turned on or off at any time during program execution. It can also be assigned to a separate printer or tape, if desired. When a program has gone into production use, the Trace Facility can be reactivated, or removed from the program altogether. Because the programmer can verify the various program paths taken during test execution, greater reliability may be achieved in the end product.

Notice GB21-1008, PDOM SB21-1009, Systems Guide LB21-1010.

PRODUCTIVITY AID: CICS/3270 SIMULATOR
5798-AXC

This FDP permits testing of CICS/3270 application programs using a sequential terminal. As an extension to the CICS sequential test facility, it accepts simple statements describing the test data and builds 3270 input data streams including all necessary control characters. It also accepts 3270 output data streams, interprets all control information, and prints the stream as it would appear on a real 3270 terminal. Thus, the effort of preparing test data and interpreting test results is significantly reduced. The aid also provides an optional facility for automatic documentation of 3270 screen layouts (outputs generated by CICS Basic Mapping Support). Users can use this aid to fully test application programs prior to installation of 3270 hardware.

Notice GB21-1035, PDOM SB21-1036.

PRODUCTIVITY AID: CICS DYNAMIC MAP
5798-AXR

This FDP provides visability into the realtime status and composition of an active CICS partition by combining a statistics-gathering capability with its own output writer facility.

These facilities give the user the ability to selectively display and/or log pertinent system statistics. These statistics include parameters which describe the partition composition, fragmentation and its effects, storage utilization by task and system, current and scheduled task activity, the effects of program residence and storage and system performance, and the average transaction rate experienced since system initiation.

While the user may be able to accurately compute the size of the CICS nucleus, it is often difficult to accurately estimate the amount of dynamic free memory storage which should be allocated. By using CICS Dynamic Map, the user can see how various changes in the dynamic free storage area can affect system performance and the utilization of the free memory storage area.

Available optional features include time initiation and memory dumping facilities. This means that the CICS user can gather and print relevant system and application performance statistics while CICS is operating and thereby more quickly determine system performance problems and take appropriate action to improve systems performance.

Notice GB21-1035, PDOM SB21-1075.

TSO COMMAND PROCESSOR
5798-AYF

This FDP enables the TSO terminal user to get hard-copy listings at a remote location, using a 3284 or 3286 printer attached to a 3270 information display system.

Notice GB21-1122, PDOM SB21-1123, Systems Guide LB21-1124.

VM/370 CONTROL AND ACCOUNTING PROGRAMS
5798-AYP

This FDP is designed to fulfill a number of requirements common to most VM/370 installations. Aids to facilitate accounting, directory maintenance, and DOS/OS-VM communication are provided. The FDP is modular, and the user can select just the desired functions. For CMS users, present education and training are sufficient to use its capabilities. All components are user-oriented.

Notice GB21-1110, PDOM SB21-1111.

ONLINE PREPARATION OF VIDEO/370 FORMAT
5798-BAC

VIDEO/370-DOS (5736-RC3) and VIDEO/370-OS (5734-RC5) are used for online data entry operations with display screens and prompting. Customized display screen formats are designed by the user, and allow data entry operators to simply fill in the blanks.

This FDP is designed to bring the fill in the blanks concept to the format definition process. It does not supersede the format definition language, but does assist in the creation of the language statements. The responses needed to create the formats using the FDP are very short. Often only a single character or lack of response is all that is needed to create the fully structured language statements. Syntax errors that cause frustrating reruns are eliminated because the keywords are generated by the FDP.

Notice GB21-1210, PDOM SB21-1211, Systems Guide LB21-1212.

TSO/VS2 PROGRAMMING CONTROL FACILITY
5798-BBJ

Integrity and security of system and user data are extremely important concerns in a multiple-user, online environment. This FDP provides significant enchancements to OS/VS2 TSO integrity and security features through individual user authorization codes to control program and file access and TSO command and program execution by the user.

Notice GB21-1273, PDOM SB21-1274, Systems Guide LB21-1275.

3330 DEVICE SUPPORT EXTENDED - S/370 OS/MFT/MVT
5798-BCE

This FDP provides OS Release 21 users with modifications and procedures required to extend 3330 support to the 3333/3330 mdl 11.

Notice GB21-1291, PDOM SB21-1292.

MICR DOCUMENT FINE SORT
5798-BCN

This FDP performs the fine sorting of MICR documents under program control. Relevant document MICR encoding is stored on disk in the S/370 after initially being read in a block sort program or transferred from a user application. These encoding images are matched to the physical documents subsequent fine sort passes. Through this image matching, documents are sorted based on their relative final position instead of their encoded value. Blocks of work can be defined so that high volume numbers receive fewer sort passes than low volume numbers.

The aim of the system is to save the user one or more sort passes. The system facilitates this with its number elimination techniques. The user environment and block definition skill will determine the actual number of passes saved. The FDP supports reader-sorters with up to thirteen pockets (1255, 1259, 1412 and 1419).

Notice GB21-1327, PDOM SB21-1328, Systems Guide LB21-1329.

1130 FORTRAN COMMERCIAL SUBROUTINES FOR DOS/VS
5798-BCT

This FDP offers the 1130 FORTRAN user converting to DOS/VS compatibility with the 1130 Commercial Subroutine Type II Program 1130-SE-25X, Version 3. It consists of Assembler Language subroutines which are functionally equivalent to each 1130 Commercial Subroutine. Also, it provides compatibility for the 1130 FORTRAN CALL DATSW Statement. The FDP allows 1130 FORTRAN Commercial Subroutine users to run programs under DOS/VS with minimal change.

Notice GB21-1318, PDOM SB21-1319.

3890 DOS/VS APPLICATION/INSTALLATION SUPPORT
5798-BDC

This FDP utilizes the standard user interfaces available to the DOS/VS user and provides him with the following capabilities:

- Sort control instructions with an editor facility.
- 3270 Jam Display Routine.
- Storage print facility.

These application functions will enable the user to increase his personnel productivity and facilitate 3890 program testing and analysis.

Notice GB21-1342, PDOM SB21-1343.

APL/FINANCIAL PLANNING SYSTEM
5798-BDE

This FDP allows the financial analyst or budget planner to rapidly design reports, specify calculation statements, enter and change data, and obtain printed reports with immediate turnaround. All of these capabilities are interactive and easy to use. Reports may be tabular or graphic in format and include annual, quarterly, or monthly columns. The program prompts the user whenever he requests guidance or makes an invalid entry. It identifies and rejects invalid logic syntax as it is being entered. A simple, English-like financial language is used so that the user does not have to learn APL. A large set of financial, arithmetic, and forecasting routines are included which perform the necessary computation normally required in the planning and budgeting environment.

This FDP was written and tested using the APL Shared Variables Programming RPQ (APL-SV), program number 5799-AJF, and the Time Sharing Input Output (TSIO) auxiliary processor supplied with APL-SV.

Notice GB21-1339, PDOM SB21-1340, Systems Guide LB21-1341.

HEALTH CARE SUPPORT: REVENUE MANAGEMENT SYSTEM
5798-BDG

This FDP is designed to provide the hospital financial director with accurate revenue classification information that he needs to help him effectively manage the complex revenue versus income situation that exists in hospitals today.

This FDP enhances the Health Care Support/Accounting System (program product 5746-H14), which is a prerequisite, and it uses the data files produced by the Accounting System to build and maintain a statistical data base of revenue by user specified payer classifications.

This statistical data base is then used by this system to produce detailed and summary reports for revenue classified by responsible payer categories.

Notice GB21-1345, PDOM SB21-1346, Systems Guide LB21-1347.

CMS SORT FOR VM/370
5798-BDW

This FDP provides several sort programs and subroutines which run under the CMS component of VM/370. They may be invoked from a COBOL, PL/I, FORTRAN, or BAL program, or as a CMS command. Compared with the SORT component of CMS, these programs offer a compatible replacement for the CMS sort command with improved function and performance.

Notice GB21-1376, PDOM SB21-1377, Systems Guide LB21-1378.

... Extension (Specify #9564, #9565)

The new "extension feature" of this FDP offers functional and performance improvements which include:

- Support for extended files in BSEPP Release 6 (over 65,533 records)

- Support for standard files (up to 65,533 records)
- Faster variable-length record sorting
- Specification of up to 16 sort fields.

Notice GB21-1376, PDOM SB21-2674, Systems Guide LB21-2687.

3890 OS/VS OFFLINE FINE SORT ENHANCEMENTS
5798-BDY

This FDP provides the user with the means to build and load programs into the 3890. The 3890 OS/VS Offline Fine Sort II FDP (5798-BDY) with the enhancement feature (specify 9526, 9527) will allow processing in an offline mode while taking advantage of new fine sorting techniques.

Notice GB21-1383-1, PDOM SB21-2436.

CONVERSION AID:
S/370 RPG II FROM S/3 RPG II
5798-CAA

This conversion aid, designed to aid users converting from S/3 operation to S/370 operation, assists S/3 RPG II users in converting to S/370 RPG II. The program reads in S/3 RPG II source programs, analyzes the statements, flags the most common differences and, where possible, makes the appropriate conversion. Assistance to the user is also provided in the areas of OCL, file, and SORT conversions.

Notice GB21-1389, PDOM SB21-1390, Systems Guide LB21-1391.

ACCOUNTS PAYABLE
5798-CAC

This FDP enables the small S/370 DOS/VS user to implement an accounts payable application. The FDP consists of a series of programs which provide accurate and detailed record keeping for vendor invoices from the time they are entered until they are paid.

Programs are furnished to enter the vendor's invoice into the system, prepare a Cash Requirements Report in due date sequence, print Voucher Checks and a Check Register, perform check reconciliation, prepare a Vendor Analysis, and provide a Distribution Report for posting to general ledger.

Notice GB21-1392, PDOM SB21-1393, Systems Guide LB21-1394.

ACCOUNTS RECEIVABLE
5798-CAE

This FDP is designed to provide an open-item method of maintaining accounts receivables. The user has the option of detailed or summary trial balance. If desired, the aged statements can be printed for selected customers only.

Notice GB21-1395, PDOM SB21-1396, Systems Guide LB21-1397.

DOS/DITTO EXTENSIONS
5798-CAF

This FDP extends the capabilities of DOS/DITTO (5798-ARN), and are available as source statement alterations to that FDP.

Existing DOS/DITTO functions have been enhanced to support the 2560, 5425, and 3420 series tape units.

Twenty-four new functions have been added to provide file-to-file capabilities for 2311, 2314, 3330 and 3340 direct access storage devices.

Notice GB21-1398, PDOM SB21-1399, Systems Guide LB21-1400.

CHECK PROCESSING SORT PATTERN GENERATOR
5798-CAH

This FDP is a series of programs which provides check processing departments with a convenient means of generating and maintaining reader/sort stacker select tables and routines.

The tables and routines generated are specifically tailored to work with IBM's Check Processing Control System, but could be used with other IBM check processing systems. Direct attached 1410/2956s, 2947 attached 1419/2956s, and IBM 3890s are supported.

With almost daily requirement for maintenance, check processing departments require a simplified, user-oriented means of creating and updating sort code. This FDP will supply the macro library necessary to create the output and appropriate supporting documentation.

Notice GB21-1410, PDOM SB21-1411.

VS1 UTILIZATION MONITOR
5798-CAK

This FDP is designed to measure, evaluate, and document application program characteristics while executing in a virtual (VS1) environment.

The program provides information on CPU activity, paging activity, channel activity, I/O device activity, main storage occupancy and working sets under varying paging conditions. Report options allow problem program analysis at the system, partition, job or step level in summarized or detailed form.

Notice GB21-1404, PDOM SB21-1405.

DL/I BASIC PROGRAMMING COURSE
5798-CBA

This FDP is a self-study course using Interactive Training System or Coursewriter III to teach application programmers how to code DL/I calls for either IMS or DOS-DL/I. The course includes an overview of DL/I, call functions, and an overview of DL/I access method. Upon completion the student should be able to code an application program to access a DL/I data base.

A prerequisite for the course is Assembler, COBOL, or PL/I programming ability.

Notice GB21-1416, PDOMs SB21-1417 and SB21-1418.

3890 OS/VS PROGRAMMING TESTING AID
5798-CBG

This FDP assists in the testing of programs which execute in the 3890 Document Processor. The program allows banking users to define test cases which extensively check the logic of 3890-resident stacker-selection programs. This testing can be performed in a DOS/VS or OS/VS environment without requiring use of the 3890. The output of the FDP is a report which can serve as a communication vehicle between bank check processing and data processing departments.

Notice GB21-1444-1, PDOM SB21-1445-2.

CICS/MTCS 3270 SCREEN FORMAT UTILITY
5798-CBH

This FDP consists of programs and procedures which simplify the creation of input and output maps for the 3270 under MTCS, CICS or CICS/VS. The teleprocessing control system may run under DOS, DOS/VS, OS/MFT, OS/MVT, OS/VS1 or OS/VS2 on a S/370. The main program allows the users to specify this screen layout directly on an 80-column form and have the necessary control blocks generated directly from the screen layout. This makes coding new screens and changing existing screens extremely simple while reducing the chance for error. The existing Basic Mapping Support Facilities of CICS are used to provide the execution time map retrieval, interpretation services.

Optional features allow the user to explicitly name fields, to repeat fields (VS), insert EDIT words in a DSECT (VS) and to preview an output screen on a 3270 prior to coding the application program.

Notice GB21-1441, PDOM SB21-1442, Systems Guide LB21-1443.

EXTENDED SEQUENTIAL DISK FILES
5798-CBN

This FDP can help improve performance and reduce disk storage requirements for applications that add records to the end of a sequential disk file, thus, eliminating the need to re-copy the files. The subroutines in this FDP will be included in the user's assembler or COBOL programs through a CALL instruction.

The FDP supports 2314, 3330, and 3340 DASD devices and does not require special preformatting of extents. Blocked or unblocked fixed-length records may be added to sequential files and subsequently access through the standard DOS/VS sequential access methods via logical IOCS. Multiple files may be accessed in a user's program though only one copy of the FDP is included in the user's program.

Notice GB21-1456, PDOM SB21-1457, Systems Guide LB21-1458.

PAYROLL MANAGEMENT SYSTEM
5798-CBR

This FDP, written in RPG-II, is a payroll system which provides basic payroll functions and comprehensive management reports.

The Payroll Management System is modular, allowing for easy implementation of only the payroll subsystems required. Included in the payroll system are file maintenance, time card preparation, time and attendance processing, payroll processing, file backup, check reconciliation, personnel record inquiry reporting, payroll history requests, vacation/sick pay reporting, workmen's compensation reporting, union reporting, labor distribution, deduction reports, employer contributions and quarterly/year-end processing.

Notice GB21-1453, PDOM SB21-1454.

PDQ7 V2
5798-CBT

PDQ7 is the most widely used program in the nuclear reactor industry for the design of nuclear reactors and for nuclear fuel management calculations. It can be used by a reactor vendor, fuel supplier, consultant, and operator of the reactor to assist in optimizing fuel performance.

This FDP is a conversion of PDQ7 and the environmental routines which provide the facilities required to interface PDQ7 to the S/370 operating systems. In addition to improvements in performance, this new version provides the opportunity for more accurate modeling of the reactor and enhanced productivity of the nuclear engineers involved in its use than is possible with the earlier S/360 version. These improvements can lead to substantial cost savings.

Notice GB21-1465, PDOM SB21-1466, Systems Guide LB21-1467.

FLEET DATA BASE REPORTING SYSTEM
5798-CBW

This FDP is designed for use with the Vehicle Maintenance Reporting Standard as published by the American Trucking Association, Inc. The system should remove the installation obstacles for most users, permitting them to obtain the direct financial benefits of better management information and more efficient maintenance and inspection procedures, provides actual operating maintenance and depreciation cost data, and produces an inspection listing, a cost-per-mile report and a controlled preventative maintenance schedule.

Notice GB21-1486, PDOM SB21-1487, Systems Manual LB21-1488.

BATCH QUERY FACILITY
5798-CBY

Providing a powerful tool for programmers and non-programmers alike. Batch Query Facility is designed to allow the user to selectively access disk data files to prepare reports and gather statistics. By using simple commands, the user can select records from a file, sort them using the DOS/VS Sort Program Product (5746-SM1), and print a report. Provides a quick turnaround, easy-to-use solution for one-of-a-kind needs.

Notice GB21-1495, PDOM SB21-1496, Systems Guide LB21-1497.

HEALTH CARE SUPPORT/DL/I: APPOINTMENT SCHEDULING
5798-CCA

This set of ANS COBOL, CICS/VS, and DOS/VS/DL/I programs provides for the Scheduling and cancellation of appointments, and inquiry for patient schedules or resource schedules.

Reports of appointments scheduled, resource status, and resource utilization are also included. Prerequisite is the HCS/DL/I - Patient Registration System 5798-CCB.

Notice GB21-1468, PDOM SB21-1469, Systems Guide LB21-1470.

HOSPITAL CARE SUPPORT/DL/I: PATIENT REGISTRATION SYSTEM
5798-CCB

This set of ANS COBOL, CICS/VS, and DOS/VS/DL/I programs provides the ability to create, maintain, and inquire into an alpha index and basic patient information record for all patients treated by a medical facility. Common routines are provided to allow terminal printing and processing of accounting transactions (compatible with the Accounting System - 5746-H14).

Marketing Aid G520-2958, Folder G520-2957, Slide Set and Script GV20-0538.

HOSPITAL CARE SUPPORT/DL/I: ADMISSIONS SYSTEM
5798-CCC

This set of ANS COBOL, CICS/VS, and DOS/VS/DL/I programs provides an online admissions capability for in-patients and out-patients. The program is built upon a patient data base established by the Patient Registration System (5798-CCB) by providing data entry and inquiry capability when a patient visits a medical facility. Included are admissions, transfers, and discharges. Accounting information is passed to the Accounting System (5746-H14).

Marketing Aid G520-2958, Folder G520-2957, Slide Set and Script GV20-0538.

HEALTH CARE SUPPORT/DL/I: ORDER COMMUNICATIONS SYSTEMS EXTENSION
5798-CCD

This set of programs is an extension of FDP 5798-AYG which provides DOS/VS/DL/I support, VSAM, and operation under CICS/VS.

The basic FDP is a set of ANS COBOL, CICS programs designed to allow the entry and communication of doctors' orders, requisitions, and general messages through a *menu-selection* process on the 3270. Transactions are created by selecting entries from a series of screens. The previous entries selected are displayed on each successive screen. Following visual verification by the operator, the transaction is communicated to selected 3270 printers. Charges associated with the transactions are passed through a disk file queue for processing by user accounting programs. Entries may be made at nursing stations or service areas. Batch programs build and maintain files and dump queues for processing or recovery procedures. Exits are provided for user-written routines to incorporate a Patient Master Record and service area functions.

The capability to enter complete batches of charges, review them, and pass them to the Accounting System (5746-H14) is also provided.

Prerequisites (or equivalents) are the Patient Registration System 5798-CCB, Admissions System 5798-CCC, and Order Communications System 5798-AYG.

Notice GB21-1477, Marketing Aid G520-2948, Folder G520-2957, Slide Set and Script GV20-0538. Notice GB21-1477 for 5798-CCD.

CICS PLOT
5798-CCG

This FDP allows the CICS user to manage the static storage requirements of CICS/VS and to optimize the real storage demands of the CICS system. The product displays both the virtual composition of the CICS/VS partition and the real storage residency of the virtual pages. It also can provide a working set summary which displays the total storage requirements for the resident operating system and the CICS/VS partition.

Notice GB21-1507, PDOM SB21-1508.

INTEGRATED FINANCIAL SYSTEM - CUSTOMER INFORMATION FILE:
5798-CCL ... S/370
5798-CCN ... Demand Deposit Accounting
5798-CCP ... Installment Loan Accounting
5798-CCQ ... Savings Accounting

These FDPs offer financial institutions the advantages of integrated processing of demand deposit, installment loan, and savings account with a Customer Information File (CIF).

Most of the relationships that a customer has with a bank or savings institution are contained in his record on CIF. Account balances and account status information are part of this record, and are kept up to date by automatic posting when the accounting applications are processed.

All accounts and services used by each customer are related, providing in one source a picture of the customer's total relationship. Inquiry is possible by customer name, name key, or account number.

The CIF can be built one application at a time, and the accounting functions implemented in any order.

CCL: Notice GB21-1552, PDOM SB21-1553, Systems Guide LB21-1554.

CCN: Notice GB21-1552, PDOM SB21-1555, Systems Guide LB21-1556.

CCP: Notice GB21-1552, PDOM SB21-1557, Systems Guide LB21-1558.

CCQ: Notice GB21-1552, PDOM SB21-1559, Systems Guide LB21-1560.

GENERAL LEDGER AND FINANCIAL ACCOUNTING
5798-CCZ

This FDP is designed to perform general ledger accounting and provide meaningful reporting of the accounting data as an aid in evaluating business performance.

Reporting flexibility is built into the system. At print time, the user can select detailed, summary-by-company, multi-company (combined), or comparative reports.

The system provides for transaction entries and editing, and produces the following reports: Transaction Register, Trial Balance, Budget and Forecast Report, Profit and Loss Statement, Common Size Profit and Loss Statement, Balance Sheet, Common Size Balance Sheet, Sources and Applications of Funds, and Summary of Financial Ratios.

Notice GB21-1525, PDOM SB21-1526, Systems Guide LB21-1527.

OS/DITTO EXTENSIONS
5798-CDA

This FDP includes the following extensions to OS/DITTO, 5798-ARD:

High Speed/Buffered Tape-to-Tape
Card-to-Disk
Disk-to-Card
Disk-to-Disk
Tape-to-Disk
Disk-to-Tape
Disk-to-Printer Variable Blocked/Spanned
Print Member of a PDS
Data Set Compare (Tape and Disk)
DATALOG
UNCATALOG
SCRATCH DATA SET/MEMBER
LIST VTOC
LIST SPACE on PACK
LIST CATALOG
LIST PDS members
Write Tape Mark Offline.

Notice GB21-1549, PDOM SB21-1550, Systems Guide LB21-1551.

1400 COMPATIBILITY ACCESS ROUTINE
5798-CDB

Using this FDP, a S/370 COBOL or Assembler Language program can access disk data files which are in the 1400 Emulator format. The FDP does not require the use of the 1400 Emulator, therefore, orderly conversion of 1400 emulated applications to S/370 native mode operations under DOS/VS is possible. The FDP supports 1311, 1301 and 1405 type files emulated on a 3330 or 3340 Direct Access Storage Device. Data files can be in the track or sector format and in either move or load mode.

Notice GB21-1546, PDOM SB21-1547, Systems Guide LB21-1548.

POWER/VS COST AND PERFORMANCE ANALYZER
5798-CDG

POWER/VS provides accounting records which contain important information concerning system utilization. This FDP reads those records and generates summary reports which should prove to be of significant benefit to data processing management. Reports include Execution (CPU), I/O Device Activity, RJE, and a Cost Analysis report based on user-specified cost figures. The FDP provides the facility to accumulate daily information for monthly reports. A user modification and/or addition may be developed to use these summary records for monthly billing.

The POWER/VS Cost and Performance Analyzer provides valuable operating information to Data Processing and Operation Managers. System tuning is possible by using the Performance Report to change placements of high activity files and indicate where excessive time and resources are used. From the Monthly Cost Analysis (which may be run at any desired frequency), a more enlightened view of computer costs can be obtained. Billing is facilitated because the data needed is available in a tape or disk record and need only be processed against the users customer data as bills are printed.

Notice GB21-1513, PDOM SB21-1514, Systems Guide LB21-1515.

RPG-II ANALYSIS AND DOCUMENTATION AID
5798-CDL

This FDP consists of two groups of programs and sorts which produce six different documentation/trouble shooting aids. The first group produces field and indicator cross-references on an individual RPG-II program. The second group uses as its input data all of the customer's RPG-II source decks from which it produces cross-reference analyses and documentation concerning programs, files and field usage in the users system.

Notice GB21-1566, PDOM SB21-1567, Systems Guide LB21-1568.

CERTIFICATE OF DEPOSIT ACCOUNTING
5798-CDP

This FDP is designed to process cash deposits for banks and savings and loan associations. Accounting procedures and management reports are provided including interest, checks, trial balance, exception reporting, and year-end interest reporting to depositors. It is a straight conversion of FDP 5798-AFR.

Notice GB21-1569, PDOM SB21-1570, Systems Guide LB21-1571.

INVESTMENT ADVISORY PACKAGE
5798-CDQ

The Investment Advisory Package provides an automated solution to client portfolio analysis and management. Standard accounting functions and the generation of operational, client, and management reports comprise the primary functions of the system. Basic input to the system is trade transaction data, while the primary outputs are client portfolio reporting as well as analysis and performance reports for internal management use. Additional output consists of detailed edit listings of input transactions, numerous audit controls, warnings for system exception management assistance and extensive reporting for both internal and external use.

In the Investment Advisory field, data processing gives the manager more time to evaluate the total investment objectives for each account. The Investment Advisory Package will handle the bookkeeping tasks and audit trails for the portfolio.

Notice GB21-1575, PDOM SB21-1576, Systems Guide LB21-1577.

BASIC AUTHOR TRAINING FOR ITS
5798-CEB

This FDP is designed to teach a student how to write a course for operation under the Interactive Training System 5734-XXC. The course includes instruction on:

Overview of Computer Assisted Instruction and the Interactive Training System.
Basic steps of course development.
Use of the Course Structuring Feature.
Basic use of the coursewriter language.
Course validation.
Basic course development procedures.

After completing the course, a student should be able to author a course for the Interactive Training System.

Notice GB21-1589, PDOMs SB21-1590 and SB21-1591, Course Description/ Administration Manual SB21-2201, Student Materials SB21-2202.

CICS/MTCS ONLINE PANEL ENTRY LIBRARY SYSTEM
5798-CET

This FDP provides a system for creating, storing, updating and retrieving screen formats for the 3270 Display System in an online, interactive mode. It operates as an application program under both CICS (DOS/VS and OS/VS) and MTCS.

Primary input to the FDP is from the 3277 via an interactive session. There are batch functions including several reports and the ability to input BMS macro statements for incorporation screen formats into Panels Library. Batch output also includes BMS macro statements corresponding to the screens in the library.

Notice GB21-1641, PDOM SB21-1642, Systems Guide LB21-1643.

MANPOWER MANAGEMENT
5798-CEY

This FDP is designed to assist management in determining manpower requirements for use in scheduling personnel. The system provides tools which can make a substantial increase in productivity in a selling environment (such as a supermarket or retail store) possible. The system is also applicable in any work environment where the amount of work can be quantified and a work standard can be applied.

Notice GB21-1650, PDOMs SB21-1651 and SB21-1652, Systems Guide LB21-1689.

DL/I ADVANCED PROGRAMMING COURSE
5798-CFC

This FDP is a self-study course using the Interactive Training System Coursewriter III to teach the advanced functions of DL/I. A student should have taken the DL/I Basic Programming Course FDP (#5798-CBA) or equivalent before taking this course. The expected course length is four to eight hours, and covers Command Codes ... Boolean Operators ... Programmer's view of Logical Relationships ... Programmer's view of Secondary Indexes ... CICS Interface ... Variable Length Segments.

Notice GB21-1665, PDOMs SB21-1666 and SB21-1667.

3890 DOS/VS OFFLINE SORT
5798-CFD

This FDP allows users to generate offline fine sort programs in a DOS/VS environment so as to take advantage of the increased capabilities of the 3890 Document Processor. These capabilities, in conjunction with the advanced functions in the FDP, will enable users to process documents faster and more efficiently to meet the demands of the rapidly increasing check volumes.

The offline sort program can sort documents on any of the desired data fields. The fine sort programs can be generated online and used at the time they are needed, or they can be standardized and loaded onto the diskette for recall froman offline load.

Some of the advanced functions that may be included in the fine sort program are Base Conversion, Number Compression, High Volume Kill, Block Sorting, High Order Zero Kill, Sequence Checking, Microfilming, and Multiple Column Control.

The 3890 DOS/VS Application/Installation Support FDP (5798-BDC) is a prerequisite for this FDP.

Notice GB21-1662, PDOM SB21-1663.

... Extension (Specify #9560, #9561)

This FDP is an extension and improvement of the original FDP (5798-CFD). It contains enhancements to the existing parameters while eliminating redundant and unnecessary functions. Fifteen new and dynamic functions have been added, making the total 29. The user now has more flexibility in producing fine-sort programs while reducing the need for additional programming. Another change is that Version II of the FDP will function under DOS/VSE, 5745-030, with the VSE/Advanced Functions Release 2, 5746-XE8, and VSE/3890 Document Processor Support, 5746-DC1.

Notice GB21-1662, PDOM SB21-2621.

INVENTORY FORECASTING AND REPLENISHMENT MODULES
5798-CFH

This FDP is a set of programs which generates ordering instructions for optimum replenishment of inventory items for retailers and wholesalers. These programs are designed to interface with a user's inventory status system via a common data transfer area.

The system consists of a series of modules performing these major functions:

* Monitoring and measuring the average current demand at the item level.
* Producing estimates of future item demand with allowances made for seasonality and trend.
* Developing ordering decision rules for the optimum restocking of an item for various types of merchandising and replenishment situations. This includes the calculation of order point, maximum quantity levels, and specific order quantities; and anticipates future item orders, where maximum order size restrictions may require it.
* Maintaining an accurate measure of lead-time at the item or vendor level, based upon current ordering experience.
* Simulating the performance of the system through a month, a season, or a full year. This simulation will show the expected performance for a group of items in terms of sales, level-of-service and inventory requirements by week for the duration of the simulation.

Notice GB21-1674, PDOM SB21-1675, Systems Guide LB21-1676.

ALPHA SEARCH INQUIRY SYSTEM/ONLINE UPDATE
5798-CFJ

This FDP adds online updating capability to the ASIS (Alpha Search Inquiry System) program product 5736-N14. Online update is an enhancement to the ASIS product. It provides the facility to make additions, deletions, and changes to records on the alpha search file via a 3270 Display System. The program product performs the update in batch mode.

Notice GB21-1677, PDOM SB21-1678.

MTCS/VS
5798-CFK

This FDP is a generalized data communication system designed for the smaller DOS/VS user. In addition to data communication facilities, it provides interface and control functions so that installation files and data bases can be accessed to implement a small scale data base/data communication (DB/DC) system.

MTCS/VS is designed to be installed quickly with a minimum expenditure for man and machine resources. The advantages of a DB/DC system can be realized sooner because long lead times are not required for specialized training of application and system programmers, and the low main storage requirements permit installation with minimum expenditure for additional equipment.

MTCS/VS is the third in a series of *MTCS* Field Developed Programs (the first was Minimum Teleprocessing Communication System (MTCS, 5798-AAY) the second was Minimum Telecommunication System for System/370 (MTCS/370, 5798-ALN).

MTCS/VS provides the following improvements to, and features not available in MTCS/370:

* Access to VSAM and DL/I Entry Databases.
* Enhanced CICS/DOS/VS Compatibility.
* Technological Improvements.

The technological improvements are achieved through the utilization of DOS/VS capabilities which are not available in DOS, the addition of new features, and improved installability, usability, and operational flexibility.

Notice GB21-1680, PDOM SB21-1682, Systems Guide LB21-1682.

CICS/VS PERFORMANCE ANALYZER II (PA II)
5798-CFP

This extended support FDP enhances design/performance evaluation by providing the CICS/VS user with the ability to collect and summarize selected information regarding resource utilization of the CICS/VS system. It may also be used by management to determine utilization of the CICS/VS system by department or location. CICS/VS Performance Analyzer II collects statistics on transactions as they flow through the system. Information collected on each task includes start and stop time, task number, count of access method calls, high-water mark for transaction and program storage, CPU and wait time. These statistics are collected on an external device and can be listed, sorted, selected, and summarized by a CICS/VS Performance Analyzer II batch program to provide task analysis reports. User exit is provided in this program for special reports as desired. PA II accounting facility provides an easy and flexible function to determine transaction billing data based on resource usage. PA II provides a user-specific billing algorithm.

Key Function, Facilities, and Features
- Tabulation of output of resource utilization information
- Identification of inefficient or heavily used tasks
- Flexible selection of transaction or terminal information over designated time periods
- Valuable accounting and billing data
- Task throughput data for application load analysis
- Techniques for problem determination
- DL/I timings
- Graphical output
- Multiple data sets
- Paging statistics on a task level
- Segmentation of conversational tasks.

Notice GB21-1862, PDOM SB21-1697.

SOURCE PROGRAM MAINTENANCE ONLINE II
5798-CFT

Program card handling can be eliminated by use of this extended support field-developed program. Source programs are held in a special library where they can be invoked and amended by the programmer from a 3270 and then submitted from the CICS partition to batch for compilation, etc. The facilities offered are similar to those of CMS EDIT mode of VM/370. Program directory status reports can be obtained on request and used to control the installations's program inventory. Operational programs can be archived to magnetic tape.

An optional feature is available for a comprehensive audit trail and reporting of changes made to all or selected programs. The audit and archive feature also provides a selective program archive and retrieval batch program.

Notice GB21-1696, PDOM SB21-1700, Quick Guide for Users, GX20-2006.

APL/CMS FINANCIAL PLANNING SYSTEM
5798-CFX

This FDP allows the financial analyst or budget planner to rapidly design reports, specify calculation statements, enter and change data, and obtain printed reports with immediate turnaround. All of these capabilities are interactive and easy to use. Reports may be tabular or graphic in format and include annual, quarterly, or monthly columns. The program prompts the user whenever he requests guidance or makes an invalid entry. It identifies and rejects invalid logic syntax as it is being entered. An English-like financial language is used so that the user does not have to learn APL. A large set of financial, arithmetic, and forecasting routines are included which perform the necessary computation normally required in the planning and budgeting environment.

This FDP is a multi-workspace system that runs under APL/CMS and uses the CMS stack processor to make the transition among the workspaces. The text, logic and data portions of the user-created systems are stored as CMS files. To save storage, all users share a single copy of the APL code.

Notice GB21-1705, PDOM SB21-1846, Systems Guide SB21-1706.

TERMINAL CONTROL
FOR DOS/VS ENTRY TIME SHARING SYSTEM
5798-CGC

This FDP provides the necessary terminal control facilities for users of DOS/VS Entry Time Sharing System (5798-CFL) who do not have Minimum Telecommunications S/370 (5798-ALN) installed. Unless the user has Minimum Telecommunications S/370 installed, the Terminal Control FDP (or a similar user-provided capability) is a prerequisite for operation of the DOS/VS Entry Time Sharing System. This program is intended for use only with FDP 5798-CFL.

Notice GB21-1683, PDOM SB21-1684, Systems Guide LB21-1685, Terminal User's Guide SB21-1719, Terminal User's Summary SB21-1735.

HEALTH CARE SUPPORT/DL/I:
OS PATIENT REGISTRATION SYSTEM
5798-CGE

This FDP updates the DOS Health Care Support/DL/I - Patient Registration System FDP 5798-CCB (prerequisite for 5798-CGE) to permit installation of the product in an OS environment.

The basic FDP is a set of ANS COBOL, CICS/VS, and IMS/VS programs which provides the ability to create, maintain, and inquire into an alpha index and a basic patient information record for the patients treated by a medical facility. Common routines are provided to allow terminal printing and processing of accounting transactions (compatible with Health Care Support/Accounting System 5746-H14).

Notice GB21-1729, PDOM SB21-1730.

HEALTH CARE SUPPORT DL/I: OS ADMISSIONS SYSTEM
5798-CGF

This FDP updates the DOS Health Care Support DL/I - Admissions System (5798-CCC) to permit installation of the product in an OS environment.

The resultant product is a set of ANS COBOL, CICS/VS, and IMS/VS programs which provide an online admissions capability for inpatients and outpatients. The system is built upon a patient data base established by the Health Care Support DL/I-OS Patient Registration System (5798-CGE) and provides data entry and inquiry capability concerning patient visits to a medical facility. Also handled are admissions, transfers and discharges. Accounting information is passed to an equivalent of the Health Care Support/Accounting System (5746-H14).

Prerequisites are Health Care Support DL/I FDPs OS Patient Registration System, 5798-CGE, Admissions System, 5798-CCC.

Notice GB21-1732, PDOM SB21-1733.

IMS DC PROGRAMMING COURSE
5798-CGX

This FDP is a course to teach application programmers how to write message processing programs to use with IMS/VS or IMS/360. The course will operate under control of the Interactive Training System (5734-XRC) or Coursewriter III.

The material covered is equivalent to IMS/VS DC Programming Course (U3697), and will cover the topics of IMS DC Overview ... Message Processing Functions ... Conversational Processing ... Batch Message Processing ... System Service Calls ... Device Support.

Notice GB21-1763, PDOMs SB21-1764 and SB21-1765.

CONVERSION AID: DOS DASDI JCL
5798-CHA

This FDP is designed to reduce the manual effort required to convert DOS Job Control Language decks when changing types of disk drives. Although changes for permanent assignments and standard labels can be manually accomplished without much difficulty, ASSGN, DLBL, and EXTENT cards imbedded in JCL decks can require many hours of manual labor. This FDP allows the user to define conversion requirements with one master control card and a series of cards which describe the relationship between the old and new devices. There may be as few as two cards per disk drive. The DOS DASDI JCL Conversion Aid can provide substantial savings in personnel costs when large program libraries must be converted to reflect installation of new disk drives.

Notice GB21-1773, PDOM SB21-1774, System Guide LB21-1775.

3741 SORT PROGRAM
5798-CHB

This FDP is a sort program for the 3741 mdls 3 and 4. There are two programs; one is a 4K program which sorts up to 1024 records; the second is an 8K program which sorts up to 1898 records using two diskettes. The sort field can start in any record position from 1 through 128 with a field length of 1 to 16 bytes. The program does not require diskette work space. Sort control data is specified by a user *sort control label* on track zero record 26 of Drive 1 or 2. The user can specify: input data set name (Drives 1 or 2) ... sort field description ... output data set name (Drive 1 or 2) ... name of next program (program chaining) ... request printout of records sorted.

Since this program is to be installed on a 3741 Programmable Workstation, it is licensed to operate on a designated 3741 rather than a designated CPU. Therefore, on the Supplement to Amended License Agreement for IBM Program Products (For Specially Developed Programs) in the column entitled *Designated CPU Type/Serial Number*, the 3741 Programmable Workstation on which the 3741 Sort Program is or will be installed should be designated by type/serial number. An asterisk (*) should be placed beside the serial number and the following statement inserted on the Supplement *For the 3741 Sort Program License, the term CPU in the License Agreement and Amendment and Supplement thereto refers to the 3741 Programmable Workstation.*

Notice GB21-1776, PDOM SB21-1777, Systems Guide LB21-1778.

3890 CYCLE SORT
5798-CHD

This FDP provides to commercial banks using the the 3890 Document Processor a major portion of the programming needed to implement cycle sorting for *on-us* items. It sorts documents by cycle while selecting items such as stop-payment suspects.

Notice GB21-1781, PDOM SB21-1782.

CHECK PROCESSING ARCHIVE RETRIEVAL SYSTEM
USING CPCS/3890 AND 3850 MASS STORAGE FACILITY
5798-CHH

This FDP provides a method utilizing the data base created by CPCS for purposes of look-ups and adjustments.

The input to the FDP is the history tapes created under CPCS (CRE) and MCRE tapes. Those tapes carry all information on each check leaving and entering the system, including the 3890 item sequence microfilm number.

A data base is created for storage on a 3850, which comfortably allows storage of three months of data for a bank that processes a million checks a day. The FDP also provides an inquiry facility to run under control of CPCS to access the 3850 data base. This facility replaces the printed reports or COM currently used to research adjustments. The inquiry task allows a clerk to identify an item's location on the 3890 microfilm and to retrieve available information from the data base. Conversationally, the inquiry task accepts sequence number, document fields, outgoing or incoming information for use in the search. The operator also is allowed to *comment* the file. (The FDP can be used on a 3330 interim to the installation of a 3850.)

Notice GB21-1789, PDOM SB21-1790.

PRODUCTIVITY AID:
IMS MONITOR SUMMARY AND SYSTEM ANALYSIS PROGRAM II
(IMSASAP II)
5798-CHJ

IMSASAP II, an Extended Support FDP, is a performance analysis and tuning aid for IMS/VS data base and data DOCUMENT communication systems. It provides key reporting and usability enhancements for users of IMS/VS 1.0.1, 1.1.1, 1.1.3, 1.1.4, 1.1.5.

IMSASAP II is a report program that executes under the system for Generalized Performance Analysis Reporting (GPAR). IMSASAP II processes IMS/VS DB and DC monitor data to provide summary, system analysis, and program analysis level reports that assist in the analysis of an IMS/VS system environment.

The monitor concept has proven to be a valuable aid in the performance analysis and tuning of IMS systems. IMS ASAP II extends this capability by providing comprehensive reports, from management summaries to detail program traces, to meet a broad range of IMS/VS system analysis objectives.

When used in an appropriate manner on a regular basis, IMSASAP II may help to:

- Improve system performance.
- Increase productivity of analysts and programmers.
- Provide on-going system measurement and management reporting capability.
- Assist in determining future requirements.
- Enhance system and program documentation.
- Provide pre-installation evaluation of applications and programs against installation standards.
- Reduce requirement to run DFSUTR20 and DFSUTR30.

Notice, GB21-1792, PDOM SB21-1793.

TSO/3270 DISPLAY COPY SUPPORT
5798-CHL

This FDP allows TSO 3277 terminal users to print a copy of their current terminal display on a 3284, 3286 or 3288 Printer of their choice. They can also print a selected number of preceding pages, in effect creating a hardcopy log of all or part of their session.

The program runs in an OS/VS2 environment as part of a TCAM MCP. It is compatible with a complementary offering, the TSO Command Processor (5798-AYF), which allows a TSO user to print data sets on the same 3284, 3286 or 3288 Printer. It also can reside in the same system with the TSO 3270 Structured Programming Facility even though SPF has its own facilities for printing displays.

Notice GB21-1795, PDOM SB21-1796.

APL DATA LANGUAGE
5798-CHR

This FDP expands the capability of APL by providing the APL application programmer with a data management facility. It complements APL's extensive data manipulation facilities with a dictionary driven, data independent, data storage and retrieval system. The user can retrieve data across a network of interrelated files.

APL Data Language can help eliminate the usually large amounts of user-written data manipulation and housekeeping code. Data handling can be standardized, improving code readability and documentation.

It improves programmer productivity through more problem solving ... less data handling activities. Applications previously abandoned or delayed due to complex data requirements may now be feasible.

The data base management services of APL Data Language assist the user in:

- handling complex data access and maintenance problems.
- describing and defining data bases.
- creating data bases.
- auditing data base activity.

Notice GB21-1804, PDOM SB21-1805, Systems Guide LB21-1806.

DOS/VS DASD SPACE UTILIZATION ANALYSIS
5798-CHW

This FDP produces three reports to assist the installation manager in analyzing disk space utilization.

A physical sequence report displays for each disk volume, the data sets, their record size, block size, lower extent, upper extent, and amount of space allocated to the data set. An alphabetic sequence report displays the same information in data set alphabetic sequence. In addition, there is a graphical representation report which graphically shows the physical location of each data set on the disk volume.

Notice GB21-1810, PDOM SB21-1811.

370X TRACE EDITOR
5798-CHZ

This FDP is designed to increase the usefulness of the 3704/3705 Dynamic Trace Output for users who are operating in emulation mode with either EP2.2 or EP2.3. The 370X Trace Editor allows the user to control the amount and type of output, in addition to reformatting the data into a more readable display. Output selections include:

* Up to four specific operation commands (the default is to all operation commands).
* A specific range of block numbers.
* Up to two types of final status and/or sense. (The default is to any status or sense.) The output is in a symbolic form, representing a CPU-to-370X-to-terminal line connection.

Notice GB21-1822, PDOM SB21-1823.

VIDEO/370 ONLINE STATUS DISPLAY
5798-CJA

This FDP allows the VIDEO/370 user to obtain the status of multiple input batches and availability of disk space via online inquiry/display from any VIDEO/370 terminal. Inquiries may be made using partial names. This FDP is similar to that provided by VIDEO/370s offline Job Status Report. Without this FDP, online status inquiries must be requested of an individual batch and may be obtained only if the full 12-character document name is provided. As this FDP is an extension to VIDEO/370 (5736-RC3 or 5734-RC5), it carries with it the security and auditability features of VIDEO/370.

Notice GB21-1840, PDOM SB21-1841.

OS/VS CAPACITY MANAGEMENT AID
5798-CJB

This FDP provides a profile of total system workload by day, shift and week. Each week's data is averaged into a 24-hour profile. This correlates the following: Total CPU Utilization, TSO plus Batch User Utilization, Batch Only Utilization, SWAP plus Demand Paging Rate, Demand Only Paging Rate.

Data is also summarized/averaged, both total and by shift for each week. Data items plotted are CPU available time, total CPU utilization, batch user utilization, TSO user utilization, operating system utilization, job-step count, TSO session count, SWAP page rate, demand page rate.

Notice GB21-1834, PDOM SB21-1835, Systems Guide LB21-1836.

CICS/VS DATASET RECOVERY FACILITY
5798-CJF

This FDP provides for forward recovery of OS/VS and DOS/VS data sets that have been physically destroyed. The FDP will recover all the activity (add, delete, update) that has occurred on a data set under CICS/VS between the time of previous backup and the current failure. The FDP works in conjunction with the CICS/VS journals. The CICS/VS journals are read and the activity in the journal will be restored to the appropriate data set.

Notice GB21-1837, PDOM SB21-1838.

VIDEO/370 REVERSE EXTRACT/OFFLINE DATA ENTRY
5798-CJG ... (DOS/VS)
5798-CJP ... (OS/VS)

This FDP provides the means for offline data entry onto VIDEO/370 data files for online correction and editing. The program accepts input data records from tape, disk, or card files in fixed or variable length record formats or optionally from user-written input exit. The fields within each data record are defined, edited, and reformatted according to the rules set up with the Format Definition Program of VIDEO/370. Applications for this FDP include:

* Reverse Extraction - allows the re-entry of VIDEO batches which have been extracted.
* Batch Data Entry - allows VIDEO editing and modification for data collected from other sources.

* Data Field Update/ADD - allows users files to be placed onto video files for online addition of updating.
* Improved File Flexibility - eases reorganization of VIDEO files and allows retention time for disk files to be decreased.

Notice GB21-1843, PDOM SB21-1844, Systems Guide LB21-1845.

CICS/VS DUMP READING
5798-CJX

This FDP is designed to create and display direct-access data sets containing an image of the partition or region at the time of an CICS/OS/VS ABEND. There are nine application modules which run under CICS/VS OS/VS to provide an online capability for analyzing and debugging of dumps via a 3270. The functions which can provide a productivity and problem solving tool consist of the following:

* Display on the 3270 from the dump data set, any core location specified by the user.
* Scan through the dump data set to find the combination of characters that the user requests, and display the location and data.
* Display General Purpose Registers and Program Status Word at time of ABEND.
* Locate and display from the FDP dump data set the following CICS Tables: Terminal Control Table, File Control Table, Destination Control Table, Program Control Table, and Processing Program Table.
* Format and display CICS Trace Table Entries for a given task within the dump data set.
* Map any area of core against any DSECT available to the user.
* Recap CICS status, number of active tasks, suspended tasks.

In addition, a program is supplied to print the dump data set if a hard copy is required.

Notice GB21-1874, PDOM SB21-1875.

ATMS BATCH BACKUP
5798-CJY

This FDP is designed to produce back-up tapes for ATMS permanent storage records without the need for CICS or ATMS modules being resident. The tape is compatible with current ATMS back-up tapes. The reporting facilities allow execution-time printing selections of detailed (operator master and document) records. A user exit facility is included which allows examination of back-up records and directs the control back-up program to skip a record, back it up, or end the job. A security function allows or prevents the printing of operator password and access words and passes this information to user exits.

Notice GB21-1880, PDOM SB21-1881.

DOS/VS INTERACTIVE DEBUG FACILITY
5798-CKF

This FDP extends the productivity benefits of the DOS/VS Entry Time Sharing System (ETSS) to include online program testing and debugging. It is an interactive command processing program which allows a terminal user to monitor and control the execution of a program from a terminal for the purpose of testing and debugging that program. From the terminal, a programmer will be able to: Start and stop at specified breakpoints, single cycle on instruction or branch basis, monitor changes to data areas or registers, display data areas or registers, change data or registers, locate strings of data or conditions, trace or alter the logical flow of execution, display source statements during the session, plus many other functions.

The program has its own command language, simple commands with few operands or delimiter requirements.

It is a read-only program which should reside in the DOS/VS shared virtual area where it is possible for a single copy to be in use by several terminal users at one time.

This program may be used in debugging most programs which may be loaded from the DOS/VS Core Image Library or from object modules loaded by the DOS/VS Time Sharing System LOADER utility. However, it is most effective with single phase programs written in: Assembler, COBOL, or PL/I and to a lesser degree, FORTRAN IV.

The Interactive Debug Facility will run on a S/370 with DOS/VS and a minimum of 128K bytes of memory. It is primarily intended for use with the DOS/VS Entry Time Sharing FDP (5798-CFL), however, an option is provided which allows the program to be used with a DOS/VS batch partition using the system console.

Notice GB21-1897, PDOM SB21-1898, Systems Guide LB21-1899.

DOS/VS LOADER
5798-CKG

This FDP provides link edit type capabilities in a compile (or assemble), load and go environment. Due to its performance characteristics, it can have a significant effect on total throughput where the compile-load-go type jobs are frequently executed.

The Loader program combines the basic editing and loading functions of the linkage editor and program fetch in one job step. Therefore, the function performed by the loader program is equivalent to the link edit and execute function.

The Loader program will load the basic input from either SYSLNK or SYSIPT. INCLUDE statements will be resolved from the relocatable library. Unresolved external references will also be resolved from the relocatable library unless NOAUTO has been specified.

The Loader program does not produce load modules for program libraries such as the core image library.

Notice GB21-1900, PDOM SB21-1901.

HASP-JES2 SPOOL TRANSFER PROGRAM
5798-CKJ

This FDP is designed to enable users to transfer all or select jobs from one system's spool file to the spool file of another system. This function allows the user to shut down one system (e.g., MVT) and bring up a new or test system (e.g., MVS) without waiting for the queues to become inactive. The transfer program will transfer spool files in either direction between systems.

The primary use of the program is to facilitate testing of new systems, but a secondary use is its ability to transfer all or portions of the spool file to tape for reloading and processing at a later time.

Notice GB21-1903, PDOM SB21-1904, Systems Guide LB21-1905, Marketing Guide ZZ20-3496.

CASHIER ASSIGNMENT SYSTEM
5798-CKQ

This FDP is designed to assist grocery management in planning the staffing required for checkout activities in supermarkets. Its objective is to more effectively use checkout personnel in providing the desired level of customer service. Major functions include:

- Developing historical workload patterns
- Establishing historical throughput rates
- Reporting individual throughput rates
- Projecting daily and hourly personnel requirements.

The system is also designed to provide management with information needed to more closely match individual skills with different job requirements. Other features of the system include an innovative use of standard 3660 Supermarket System functions to capture customer queue length and bagger sign-on information and the provision of a comprehensive set of options to tailor the system to specific customer requirements.

All operational data required by the FDP is collected by the 3660 Scanning and Key Entry Supermarket Systems. This data can be obtained directly from either the Supermarket Batch Communication Subsystem/Advanced Scheduling Environment FDP (5798-CJQ) or the Exception Log Processing Subsystem FDP (5798-CDN). The system is written in COBOL under DOS/VS using VSAM and operates on a S/370 mdl 115 (128K) and up.

Notice GB21-1921, PDOM SB21-1922, Systems Guide LB21-1923.

BOLDFACE PRINT PROGRAM FOR THE 3800
5798-CKR

This FDP provides highly visible over-sized printing from the 3800. In addition to uses requiring legible printing visible at moderate distances such as in the case of sign printing, printing of labels, or warehouse picking tickets, this program may be of use in text processing, computer printed addressing, or large graphics preparation. The FDP uses a half-inch alphameric character set which may be intermixed with a standard 3800 character set. Additional facilities are provided for underscoring and horizontal compression/expansion of printed material.

Notice GB21-1942, PDOM SB21-1943.

INTRODUCTION TO TSO
5798-CKT

This FDP is a computer-based training course, directed to new TSO users, which serves as an introduction to the concepts and facilities of TSO. The course guides a student interactively from an understanding of the concepts through LOGON and most of the TSO commands. This FDP is designed to shorten the training cycle of new TSO users by exposing them to the correct and productive uses of TSO. It is operational under Interactive Training System and Interactive Instructional System.

Notice GB21-1924, CDAM SB21-1925, Student Materials SB21-1926.

USING TSO EFFECTIVELY
5798-CKW

This FDP is a course of instruction which operates under the Interactive Training System program product (5734-XXC). The effective and productive use of TSO goes beyond what one gets from the command language reference manual. This course addresses many of the aspects of TSO not fully understood by most users. The course is not oriented toward the new TSO user, but rather toward experienced users who want to get more out of their system. The course sessions contain review material and cover the following topics: Data Set Naming Conventions ... Data Set Organization ... Control of Disk Space ... Advanced EDIT Techniques ... 3270 Techniques ... Program Testing Techniques ... Structured Program Facility ... Selected Command Operands ... Expanded MVS CLIST Capabilities.

Notice GB21-1927, Student Materials Manual SB21-1929, Course Description/Administration Manual SB21-1928.

COBOL INTERACTIVE DEBUG TRAINING COURSE
5798-CKX

This FDP is an Interactive Training System course designed to teach CMS and TSO COBOL programmers how to use the IBM program product, COBOL Interactive Debug (5734-CB4). The course covers the need for and advantages of COBOL Interactive Debug, the specification of the TESTCOB command under a variety of circumstances, the complete subcommand language, many examples, and two sample sessions.

Notice GB21-1930, Course Description/Administration Manual SB21-1931, Student's Materials Manual SB21-1932.

IMS/VS MESSAGE FORMAT SERVICES TRAINING
5798-CKY

This FDP is a course of instruction which runs under the Interactive Training System program product (5734-XXC) or the Interactive Instructional System program product (5748-XX6). The technical concepts taught in this course are intended primarily for the implementors of IMS 3270 screen designs. The topics covered by this course include: Overview of IMS ... Format Creation ... Message Input and Output Descriptions ... Mapping Options ... Paging ... Language Facilities ... Device Features ... Standards.

Notice GB21-1933, Course Description/Administration Manual SB21-1934, Student Materials SB21-1935.

3770 COMMUNICATIONS UTILITY
5798-CKZ

This FDP provides a host program that will maintain a library of 3770 function programs and transmit to and receive from the programmable models of the 3773, 3774 and 3775. The library maintenance function builds and maintains a VSAM library from the data set created by the Program Validation Services program (BQBLIBI). The transmission function will process function programs, terminal commands, and data through the Basic Telecommunications Access Method (BTAM) using BSC.

Notice GB21-1936, PDOM SB21-1937, Systems Guide LB21-1938.

3600 DATA ENTRY
5798-CLA

This FDP provides formatted data entry capability using a fill-in-the-blanks technique. The program monitors the data as it is entered to ensure data integrity with pattern parameters and provides operator options, such as forward and back tab functions, field and/or character correction, diskette logging, and print image capabilities. The user creates the data entry patterns by entering the pattern image on the 3604 Keyboard Display. This image is stored on the diskette and contains the name and descriptive information, the data to be entered, location of the data on the display, the type of data (alpha or numeric), and the length of the data field. This FDP is designed to operate as a standalone program in the 3600 system or to be included as a part of a 3600 application program.

Notice GB21-1939, PDOM SB21-1940.

IMS HISTORY REPORTING SYSTEM
5798-CLB

This FDP is designed to provide IMS/VS DC users with the ability to obtain information about the utilization and performance of their online system on an ongoing basis. The FDP provides routines which, using the IMS/VS log tape, edits and stores information pertaining to system load and performance in an IMS data base. A command language is then used to construct tailored reports from the data base on a demand basis.

Summary and/or detailed reports can be obtained for any desired combination of date range, time span, and transaction codes. The reports can be produced as a normal OS/VS batch job or can be invoked as terminal output to a TSO session. A method is provided to identify periods of deviation from the user-observed and/or statistically-defined performance norms.

The program can also be used to reconstruct transaction codes and conversational SPA contents for terminals active at the time of an IMS/VS system failure; the information can be used to assist in system reconstruction during exceptional IMS/VS emergency restart situations.

Notice GB21-1945, PDOM SB21-1946.

CHECK PROCESSING CONTROL SYSTEM (CPCS)
ONLINE ADJUSTMENTS
5798-CLD

At the completion of a day's check processing activity using CPCS (Check Processing Control System), 5734-F11, out-of-balance conditions may exist on one or more groups of work. These must be corrected by making the appropriate changes to the processed items, and by additions and deletions of certain documents. As a rule, this adjustment process is manual.

This FDP gives the user online access, via 3270, to strings of document images created by CPCS. Further, it gives the user several options for making online adjustments (CHANGE, INSERT, DELETE, INQUIRY, BALANCE) to correct, add or delete one item at a time, and obtain balance information, until the full day's check processing work is in balance. A variety of screens and hard copy aids the user in locating and correcting out-of-balance conditions, and in checking the work after adjustments.

Notice GB21-1948, PDOM SB21-1949. ... Enhancement (Specify #9562, #9563) CPCS Online Adjustments II is an enhanced version of the current FDP (5798-CLD). The enhancement offers extended central service maintenance and new and additional function, as well as correction of known problems not discovered during the original maintenance period. Additional displays are added to facilitate location of errors where balancing functions are invoked. When processing is completed for an entry, an updated M-string is created on the data base for user extraction, settlement, or other functions. Also, the adjustments list report has been reformatted to include additional information for preparation of customer advices.

Notice GB21-1948, PDOM SB21-2620.

STRUCTURED PROGRAMMING MACROS
5798-CLF

This FDP, used with OS/VS, DOS/VS and CICS Assemblers, is a set of macros designed to facilitate the use of structured programming.

Structured programming is the key element of the improved programming technologies. High productivity gains in all areas of the programming activity have secured a permanent place for structured programming methodologies as the discipline of the programming profession. Up to now structured programming has been restricted to higher level languages where existing functions are adaptable to the structure theorem's control figures. This FDP provides the full capabilities of the structure theorem to Assembler language users.

Assembler language programs are written in a top down fashion with the macros corresponding to the structure theorem's control figures.

Macros provided are: IF/ELSE/EIF ... DOWHILE/EDO ... DOUNTIL/EDO ... DOPROC ... PRO/EPROC ... DCL/EDCL ... CASE/ECASE.

Notice GB21-1957, PDOM SB21-1958.

ON-US EDITING FOR THE 3890
5798-CLJ

This FDP generates on-us editing code for the 3890 Check Processor and for the Check Processing Control System (CPCS) Online Reject Re-entry task. It provides a simple straightforward means of specifying MICR capture editing requirements for *on-us* documents. From these specifications, 3890 SCI routines are generated which perform, by *on-us* pocket, table lookups, range tests, modulus checks, and field validity checks.

Code generated is compatible with the Check Processing Control System (5734-F11) and the Sort Pattern Generator (5798-CAH). Code can be generated for both the 3890 and CPCS Online Reject Re-entry.

Notice GB21-1966, PDOM SB21-1967.

IMS MASTER TERMINAL OPERATOR ASSIST FACILITY
5798-CLK

This FDP is designed to assist the IMS master terminal operator perform complicated or voluminous IMS command entry required to control large telecommunication networks, applications, and data base and system resources.

Command sequences are precoded and stored for recall and execution as required by the master terminal operator, improving operator efficiency and eliminating entry of erroneous command keywords and parameters.

Existing master terminal operator capabilities and IMS recovery/restart capabilities are retained with this facility installed.

Notice GB21-1969, PDOM SB21-1970.

CONVERSION AID: DIRECT ACCESS STORAGE
5798-CLQ

This FDP is intended to reduce the manual effort required to perform Direct Access conversion. 3330 mdls 1 and 11, 3340, 3344, and 3350s are supported.

The FDP provides for:

- Generation for JCL and utility statements required to allocate space on the new device, move the data set to the new device, update the catalogue.
- Identification of affected data set JCL statements in the procedure library, and generates a jobstream to update the procedure library using user-supplied JCL parameter arguments.
- Space calculation routines to identify data sets whose current blocking factors do not effectively utilize space on the new device.
- Data set space requirements are calculated for the new devices.

Due to device independence, this FDP is not required for VSAM.

Notice GB21-1990, PDOM SB21-1991.

DOS/VS ENTRY TIME SHARING SYSTEM/II (ETSS/II)
5798-CLR

This FDP is an intermediate level interactive facility designed to provide terminal users with problem solving capability, source program maintenance, and librarian functions. End-user problem solving is accomplished via interactive use of languages such as PL/I, FORTRAN, and VS/BASIC. Source program maintenance is provided via features such as the ETSS/II context editor and the ability to test programs interactively. Librarian functions include the ability to update, edit, or otherwise maintain up to 32,767 separate libraries. The libraries can contain data in compressed format for increased direct access space savings. In addition, an archiving function is available to allow the libraries to be maintained in offline storage.

ETSS/II is an extension of ETSS (FDP 5798-CFL) and has many commands and functions not available in that program. These new functions have been designed to provide the terminal user with a much more powerful interactive facility. Some of these extended features are: Dynamic disk space allocation, dynamic file label definition, terminal retrieval of output from POWER/VS, pseudo-partitions of varying size, class scheduling of pseudo-partitions, availability of the pregenerated system, editing during pseudo-partition execution, data compression on the library, logic in procedures, multiple line input in a single terminal transmission, split screen use of 3270, buffered hardcopy output, lower case input facilities, editor full screen verify, linecode editing, and index editing for large library members.

ETSS/II runs on a S/370 with a minimum of 160K bytes of real storage. It supports local and remote 3270 configurations with or without hardcopy 328X printers. If hardcopy printers are available, they can be used for buffered (via disk) offline printing. Also supported are 2740, 2741 and 3767 terminals. All terminal support is handled by either CICS/VS or MTCS/VS. If CICS is used, the minimum storage requirement is 192K instead of 160K.

Normal batch compilers should function without modification in the ETSS/II pseudo-partition environment if they conform to standard DOS/VS coding conventions. Programs in Assembler, VS/BASIC, DOS/VS COBOL, DOS FORTRAN/IV, PL/I Optimizer, and RPG-II have been entered, compiled and executed from a terminal under ETSS/II.

ETSS executes in a single foreground partition. Batch processing, spooling, and remote job entry can execute concurrently outside the ETSS/II partition, and programs entered via terminal can be submitted for batch processing through a Submit-to-Batch facility.

Security features include user identification code, password, controlled access to public, private, and common data via user profile, and user storage protection.

... Release 3.0

ETSS/II Release 3.0 includes a new full screen editor.

The full-screen editor is a generation option of ETSS/II. With this option installed, a terminal user has additional facilities to:

- Make file changes simply by altering the corresponding records on the 3270 system display.
- Edit multiple files concurrently within the same edit session.
- Create one or more new files and save these files in the library without leaving the editor.
- Edit multiple files on the same physical display screen.
- Edit multiple non-contiguous areas with the same file independently of one another.
- View data in character of hexadecimal and in other than column 1 through 60 formats.

Notice GB21-1981, PDOM SB21-1982, Terminal User's Guide SB21-2145 with TNL SN20-6522, Terminal User's Summary SB21-2146, Systems Guide LB21-1983.

HIERARCHICAL MONITOR SYSTEM FOR THE 3600 (HMS3600)
5798-CLT

This FDP provides monitor functions that can significantly reduce the implementation time of a distributed function terminal based system. HMS3600 runs under the 3600 Finance Communication System which is supported by the S/370.

HMS3600 provides device and control functions, accessible via easy-to-use macros which can substantially reduce the burden of installing new 3600 applications. To minimize the need for the application programmers to repetitively code standard/functions such as transaction selection and dispatching, device control, and error recovery, these functions are included in HMS3600. This, in turn, means that user-written coding is reduced and simplified, checkout time is reduced, and redundant coding in certain areas is nearly eliminated.

Additionally, via the *HMS3600 linkage editor and relocatable 3600 code* concept, applications may be developed, programmed, assembled and checked out completely independent of other applications.

After HMS3600 has been link edited with application modules, an input format table and a transaction table, an APB (link edited object code) is ready to associate with configuration data and to trasmit to the IBM 3600 controller for either a host connected or standalone operation. The 3600 is now ready to execute the applications using distributed function.

Notice GB21-1984, PDOM SB21-1985.

TSO PROGRAMMING, CONTROL FACILITY II
5798-CLW

This FDP offers the features of the TSO/VS2 Programming Control Facility FDP (5798-BBJ) to users of MVS Release 3.7 with TSO/VTAM, RACF, or the TSO Command Package installed. It has all the features of 5798-BBJ plus:

- TSO command subsetting and program execution control by user.
- File access control by file category and PCF authorization level.
- SMF accounting data optionally recorded for each command and major subcommand.
- Use of a semicolon as command delimiter for multiple commands entered per line.
- User direct access space control by volume.
- Improved command authorization control.
- Volume control enhancements to support multiple volumes per user.
- Standardized system interfaces for each of MVS maintenance.
- Full SMP support for installation.
- Continuous support.

This package enhances the functional capabilities of MVS/TSO while providing basic security and integrity features, and complements other new functions such as RACF.

Prerequisite for this FDP is TSO/VTAM Selection Unit or TSO Command Package program product (5740-XT6).

Notice GB21-1987, PDOM SB21-1988, Systems Guide LB21-1989.

IMS/VS LOCAL COPY II
5798-CLZ

This Extended Support FDP provides the user with the capability of causing an image of the data displayed on a local 3277 mdl 1 or 2 to be printed on any 3284, 3286 or 3288. This support has been designed and implemented so as to be procedurally compatible with similar support provided for remote 3270 terminals and by IMS 3270 Local Copy.

Key Functions, Facilities, and Features

- A local display terminal user can cause the printing of the image of a display screen on local printer (3284, 3286 or 3288; mdls 1 or 2).
- User specifies PA3 or PFK12 keys, which invoke the copy function.
- The destination printer may be dynamically altered by the system operator.
- The program operates under BTAM or VTAM.
- The terminal ID of the requesting terminal is printed.
- The operator does not have to wait for any printer action before continuing with further terminal work.

Notice GB21-2005, PDOM SB21-2006.

IMS/VS VIRTUAL STORAGE ANALYSIS (IMSVSAP)
5798-CNC

This FDP is designed to assist the systems programmer in an IMS/VS DB/DC installation in the analysis and improvement of IMS/VS performance. IMSVSAP serves as a vehicle to study the effect of paging on overall IMS/VS performance, and in particular on response time.

IMSVSAP produces a detailed page fault report of all paging activity associated with the IMS/VS control region and IMS/VS message regions. A summary report is also provided which indicates the percentage of system page faults and the page faults per second associated with the IMS/VS control region, message regions, and non-IMS related jobs. Another summary report further breaks down the IMS/VS control region page faults into categories by pools, blocks, and code to enable the systems programmer to page-fix the portions of IMS/VS which are affecting response time the most.

Notice GB21-2002, PDOM SB21-2003.

PROGRAM VALIDATION SERVICES (PVS) UNDER CICS/VS
5798-CNG

This FDP provides an interface between CICS/DOS/VS and the Program Validation Services (PVS). Through the use of these programs, users of the 3601 Finance Communication Controller may test and debug their 3601 application programs and configuration deck in an interactive environment. This FDP allows PVS to run as a task under CICS/VS, thus not requiring any additional partitions to be allocated. Either VTAM or EXTM (5746-XXB) are supported with local and remote 3270 Information Display System terminals.

Prerequisites are CICS/DOS/VS (5746-XX3) and the 3600 Finance Communication System Host Services Program (5747-BR1).

Notice GB21-2017, PDOM SB21-2018.

CONVERSION AID:
AUTOCODER TO COBOL FOR CMS (ACCAP/CMS)
5798-CNH

This FDP is designed to aid in the conversion of 1400 series Autocoder and 1401 SPS programs to System/370 COBOL (DOS/VS and OS/VS versions). The FDP executes in a CMS Virtual Machine under VM/370.

The program provides the user all of the functions of the Type II program 1400 Autocoder to COBOL Conversion Aid Program (360A-SE-19X) plus the following new functions:

- Actual addresses for 1401 unit record areas accepted in 1440 programs.
- SELECT and FD statements generated via file control cards to support sequential, indexed sequential, and VSAM files. Either DOS/VS or OS/VS *sysnames* are generated for the ASSIGN verb.
- OPEN and CLOSE statements generated via file control cards. Files are opened for INPUT, OUTPUT and I/O.
- 1400 sense switches set via DOS/VS *UPSI* JCL statement and OS/VS *EXEC* JCL statement *PARM* operand.
- COBOL statements scanned and reformatted when required to produce a syntactically correct ANS COBOL source deck. A listing is provided to display all changes to the source deck.

Notice GB21-2022, PDOM SB21-2023.

OS/VS ONLINE PROBLEM TRACKING
5798-CNJ

This FDP is designed to assist management in coping with the problems that occur in the DP installation.

Installation hardware and software problems can be entered and maintained in an online environment. An inquiry capability is provided for researching the master problem file for previously encountered occurrences of the same or similar problems. Inquiry responses are provided for individual or multiple symptoms and/or specific dates. An audit trail is provided for view by management's designated problem coordinator.

There are two versions of the program: IMS/VS and CICS/OS/VS. 3270 support is provided for online input and update, and hard copy output of any inquiry response.

Notice GB21-2019, PDOM SB21-2020.

VTAM INTERFACE TO VIDEO/370
5798-CNK

This FDP provides a VTAM application program that allows OS VIDEO/370 (5734-RC5) to operate under VTAM. This interface provides all the functions of VIDEO/370 as well as providing for the operation of local 3270, BSC 3270, and 3270 systems operating in SDLC mode.

Notice GB21-2025, PDOM SB21-2026.

IMS AVAILABILITY REPORTS
5798-CNN

This FDP produces management-oriented reports which detail the availability of the major components of online system including the IMS control program, 3270 lines, online transactions, and data bases.

The package can either augment a user's existing availability reporting system or provide statistical data required to implement one. Four availability-oriented reports are produced: Daily summary, consolidated summary, daily detail, and pseudo-console listing. Each report is concise, easy to interpret, and is designed to focus management attention on potential problem areas. In addition, the consolidated summary report allows the customer to measure overall availability over extended periods of time.

A TSO interface is provided for timely summarizations of availability of remote locations.

Notice GB21-2030, PDOM SB21-2031.

DOS/VS INCIDENT REPORTING AND TRACKING
5798-CNP

This FDP is designed to formalize and automate the tracking and reporting of problems within a data processing installation.

It provides for online entry, update and display of current, detailed problem information. Reports are also provided in batch mode for detailed and summary data. The online display is based on selection criteria entered by the user. Some of the categories coded are: Department, application, problem type, failing component, system ID, ABEND code, plus others. Space is also provided for user comments.

Notice GB21-2047, PDOM SB21-2048.

3790 QUERY PROGRAM
5798-CNR

This FDP provides the 3790 user with an interactive selection program which allows the user to enter selection and sequence criteria to retrieve data from any data set contained on the 3790 disk. The retrieved records may be sequenced by the IBM 3790 Sort Program (5798-CKA). The number of records selected by the inquiry is displayed, and the user is given the option to display and/or print the data records.

Notice GB21-2035, PDOM SB21-2036, Terminal Operator's Guide SB21-2037.

STAIRS to ATMS DOCUMENT TRANSFER
5798-CNT

This FDP enhances the STAIRS/VS program product (5740-XR1) to enable a document or a group of documents to be transferred to the peripheral input queue of the Advanced Text Management System (ATMS) program product (5740-XX3). Through the execution of the STAIRS browse command, the FDP will access the text file to retrieve documents selected by the previous search command and copy the document to the ATMS peripheral input queue.

Notice GB21-2038, PDOM SB21-2039.

CICS/VS INTERFACE
TO CHECK PROCESSING ARCHIVE RETRIEVAL
5798-CNW

This FDP enhances the Check Processing Archive Retrieval System FDP (5798-CHH) to allow the Inquiry program to run under CICS/VS instead of the Check Processing Control System (CPCS). CICS/VS

functions will support the 3270 and 3600 systems. Interactive Query and Report Processor (5796-AEH) report, and file and security tables are also provided so a user can make online management inquiries into the data sets maintained by the Check Processing Archive Retrieval System FDP.

Notice GB21-2041, PDOM SB21-2042.

3770-P BATCH TRANSMISSION SERVICES
5798-CNX

This FDP provides a host program that will maintain a library of 3770 function programs and transmit to and receive from the programmable mdls of the 3774 and 3775. The library maintenance function builds and maintains a VSAM library from the data set created by the Program Validation Services program (BQBLIBI). The transmission function will process function programs, terminal commands, and data through either the BTAM using BSC or VTAM using SDLC. This FDP contains all of the function provided by the 3770 Communications Utility (5798-CKZ) plus SDLC support and other minor enhancements.

Notice GB21-2044, PDOM SB21-2045, Systems Guide LB21-2046.

3770 SORT PROGRAM
5798-CNY

This FDP sorts 3770 user data sets on the 3770 instead of on the HOST system. It accepts as input the SORT key and a reference back to the source data. The FDP sorts in either ascending or descending sequence ... uses sort key lengths of 8, 16, 32 or 64 ... sorts user data or new data being entered from a terminal. The program sorts user indexes so that user-indexed data sets may be accessed using binary search techniques.

Notice GB21-2050, PDOM SB21-2051.

DOS/VS 3540 DISKETTE UTILITY
5798-CNZ

This FDP is a generally applicable utility program for the 3540 Diskette I/O unit.

Functional utilities available in addition to normal card, tape, diskette, and printer utilities provide the facility to examine, alter, and modify diskette data files used in both testing and production environments.

Additional utilities provide the ability to perform full track read and write for 3540 I/O, emulate 3747 function, display records on the console, free format for multiple input parameters, allow control card input for function specification.

Notice GB21-2056, PDOM SB21-2057.

3790 DISK UTILITY
5798-CPA

This FDP provides the following functional utilities for the 3790:

- Display and/or print indexed records in both hexadecimal and character format. All sectors or multiple records can be displayed and/or printed.
- Display and/or print relative records in hexadecimal and character format. One record, a range of records, or a whole file may be retrieved.
- Display and/or print packed transaction records in hexadecimal or character format. Packed transaction records may be deleted, put in hold status, or put back in transaction data set for repacking.
- Add or delete records from indexed or relative data sets.
- Change contents of existing indexed records and relative records.
- Scan relative data sets for any occurrence of user-specified four bytes of data.

Notice GB21-2053, PDOM SB21-2054.

MVS/TSO/VTAM DATA SET PRINT
5798-CPF

This FDP enables a TSO user to have a specified data set directed to any 3284/3286/3288 Printer or 3790 Print Data Set that is attached and defined to the VTAM network.

The program is intended for use only on TSO/MVS systems that have a VTAM network. The system environment can be either VTAM only or mixed TCAM and VTAM, but the designated printer must be under control of VTAM.

The program provides the same facility to the TSO/VTAM user that the TSO Command Processor, 5798-AYF, provides to the TCAM-only TSO user.

Notice GB21-2069, PDOM SB21-2070, Systems Guide LB21-2071.

... SNA Extension (Specify #6025, #6026)

This FPD extends the existing FDP (TSO/VTAM Data Set Print - 5798-CPF) to support SNA character string (SCS) operation of 3287 and 3289 printers attached to 3276 and 3274 controllers operating in SNA mode. SCS operation allows overlap of printing and transmission and also permits implementation of the *CANCEL PRINT* key on the 3287/3289, enabling the terminal operator to stop printing the current file. The current version of TSO/VTAM Data Set Print only supports binary synchronous 3270 printers and, with maintenance modifications, SDLC operation in *Data Stream Compatibility* (DSC) mode.

PRODUCTIVITY AID:
3790/3770 PVS DATA SET TEST SUPPORT
5798-CPG

This FDP is designed to increase the productivity of 3790/3770 application programmers. Its use can simplify the testing effort and reduce the time required for debugging application programs. The program creates, from user input data and control statements, a VSAM file to use as a simulated 3790/3770 dataset when testing application programs.

Previously, under the 3790/3770 Program Validation Services (PVS), the user would create simulated datasets for program testing by one of two methods: Either by writing another 3790/3770 program to create the dataset or by writing a batch program to create a VSAM file properly structured for PVS.

Customers installing 3790 Controllers or Programmable 3770 Terminals and using Program Validation Services (PVS) to develop and maintain their application programs are potential users of this FDP, which is designed to:

- Improve the productivity of application programmers by eliminating the need for an *extra* program to load files for testing.
- Eliminate the need to write VSAM load programs to test each application system by implementing a generalized utility program.
- Allow the user to create a *baseline* set of 3790/3770 files for regression or recurrent testing during the life of an application program.
- Document, by a printed listing, the contents of the 3790/3770 dataset prior to the test.
- Accept as input either tape or disk sequential files or a card *image* file. These tapes are blocked together to create a record of the proper length.
- Using the card input capability, extend to the CMS, VSPC, TSO, and ETSS users the capability to create test files and prepare and submit batch tests for 3790/3770 application programs from their terminals.

Notice GB21-2073, PDOM SB21-2074.

POWER/VS RJE CONTROLLED ACCESS MONITOR
5798-CPH

This FDP is designed to allow a DOS/VS POWER/RJE Host system to restrict the data sets and programs which a remote terminal can access for processing through DOS/VS. The interface to POWER/VS is provided through the reader exit facility in the *POWER* macro. Users currently using a reader exit may continue to do so by linking this FDP to their current exit routines.

This FDP consists of a monitor program which scans job control statements for DLBL, EXEC, STDLABEL, and PARSTD cards. Any attempt by a remote station to change the permanent area on the label cylinder, access a data set not authorized by the user, or execute a program not authorized by the user will result in that job being flushed from the POWER/VS input queue.

In addition to the monitor program, three other macros are provided to generate a remote station control table (RCT), a program (phase) control table (PCT), and a file (label) control table (FCT). The RCT is used to determine which entries in PCT and FCT a remote station is allowed to execute or access. Changes to the monitor and/or tables can be made by recoding the macros and cataloging the new program. The new program becomes effective at POWER initialization.

Notice GB21-2066, PDOM SB21-2067.

GRAPHICAL DISPLAYS - CICS/VS
5798-CPJ

This FDP will accept, from a user-application program, captions and a series of fixed-point numbers. The numbers will be scaled and displayed on a 3270, along with the caption, in a graphical representation. The graphical screen can then be copied to a 328X printer for hard copy. The program will accept up to 60 values for plotting. Maximum graph size is 20 rows by 60 columns.

Notice GB21-2076, PDOM GB21-2077.

MVS/SMF PROBLEM PROGRAM: ACTIVITY REPORT PROGRAM
5798-CPP

This FDP selectively extracts and summarizes performance related data from SMF records. Each of three system resources, CPU, storage, and I/O, are reported on. Reports summarize the data into SMF Step End Summary reports, an SMF Job End Summary report, a non-VSAM I/O report, and a VSAM Data Set Activity report. An optional SMF step end summary report is provided if the Supervisor Performance #2 selectable unit is installed.

Notice GB21-2089, PDOM SB21-2090.

CONSOLE SPOOLING UNDER POWER/VS
5798-CPQ

This FDP collects the console messages generated in a POWER/VS controlled partition and prints them out on a line printer, following the normal printed output for the job.

Many DOS/VS users find that it is difficult and awkward to obtain information from the DOS/VS console. In many cases, vital debugging information is printed only on the console (SYSLOG) and not on the user's printout (SYSLST).

Providing the user with automatically generated console messages can improve programmer productivity, decrease the time required to determine why a job failed, and minimize the number of times the computer operator is interrupted with requests to locate previous console entries. Console messages can be automatically routed to the submitting RJE terminal.

CICS Source Program Maintenance Online II (5798-CFT) users can display their console listings on a local or remote 3270 display station.

Data processing managers and auditors may find the printed output provides valuable audit and control information showing which jobs were executed, when they were executed, and which devices were accessed.

Notice GB21-2084, PDOM SB21-2085, Systems Guide LB21-2086.

PRODUCTIVITY AID:
SYSTEM FOR GENERALIZED PERFORMANCE ANALYSIS
REPORTING (GPAR)
5798-CPR

GPAR, an extended support FDP, is the nucleus of a family of IBM products that assist in the analysis of performance of major hardware systems, system control programs, communications and DB/DC systems. The GPAR family provides a simpler, more efficient approach to the complex problems of performance analysis.

GPAR reads any performance data source only once and passes it to its dependent programs. This reduces the I/O and CPU time required for processing and simplifies operating the system. Other IBM products function under GPAR control to provide reports for the specific system being analyzed such as the SCP, communications, or DB/DC system. GPAR aids are also provided to assist the user in creating assembler language programs, graphs and distributions that further tailor reports to his needs.

Key Functions, Facilities, and Features
- Provides a base for an IBM-supplied family of report programs as well as user-written report programs.
- Provides common user access to all GPAR-dependent report programs.
- Reads sequential input files.
- Single scan of input files with no sorting.
- Includes SYNAD and STAE routines.
- Prints user-tailored graphs defined at execution time.
- Permits user exits from graph module.
- Provides report program development aids.

Notice GB21-2091, PDOM SB21-2092, Systems Guide LB21-1794.

... GPAR RELEASE 2.0

This FDP is a productivity aid which is the base for application-specific performance analysis sub-systems including IMSASAPII (5798-CHJ), IMSPARS (5798-CQP), GTFPARS (5798-CQQ) and VTAMPARS (5798-CTW).

Release 2.0 provides the following new functions:

- VSAM data set support
- Parallel access loader (PAL)
- Distribution record processor
- Execute command chaining
- GPAR programmer's guide
- Error correction and minor report format improvements.

By itself, GPAR provides facilities that can assist the writer of reporting programs and thus reduce cost and improve program quality.

A GPAR programmer's guide describes GPAR functions, macros and subroutines and illustrates how to use these programming productivity aids in the preparation of user-written reporting programs.

Notice GB21-2091, PDOM SB21-2092-2, Programmers Guide SB21-2500, Systems Guide LB21-1794-1.

VM/370 PERFORMANCE MONITOR ANALYSIS
5798-CPX

This FDP enables VM/370 systems analysts and administrators to obtain reports and graphs portraying the performance and utilization of a running VM/370 system. The FDP uses data collected by the VM/370 MONITOR command. It requires little previous knowledge of VM/370 and should be of value to new VM/370 installations as well as to experienced users.

Highlights:
- One pass reduction of multiple MONITOR tapes.
- Creation of condensed history files for further analysis.
- Defaults apply when user specifications are omitted.
- Parameter driven - no programming or recompilation.
- Comprehensive plot subsystem with user control options.
- Two MONITOR sessions can be compared on one plot.
- Documentation describes all phases and includes a *walk-through* section on Performance Analysis.

Notice GB21-2100, PDOM SB21-2101.

RELEASE 3

This new release of 5798-CPX contains support for VM/Systems Extensions (SEPP) 5748-XE1 and VM/Basic System Extensions (BSEPP) 5748-XX8 monitor data, enhanced processing of spool files, ACUM files and reports, plus error correction to Release 2.

The following new functions are available:

- Facilities to assist users in creating subsets of ACUM history files.
- A program to sequentially page number a set of VMAP reports.
- A new PROFILE EXEC for automatic data reduction of Monitor Spool files.
- Facilities to uniquely identify ACUM files based on the creation date and time of the original monitor data.
- A three-part report reflecting feedback information on the Resource Manager of the SEPP and BSEPP program products.
- Two additional SEPP reports: One summarizing migration activities, the other presenting shadow table maintenance activities.

Notice GB21-2100, PDOM SB21-2101-3.

FILE CABINET OPTION
5798-CPY

This FDP offers the user a new online option in handling data currently destined for printing or microfiche/film. The functions provided can be used to reduce operational costs associated with printing and computer output microfilm, as well as increasing availability, end-user productivity, and data security.

The FDP captures designated output data sets from the JES2 Spool and stores or archives them to the 3850 Mass Storage System, 3330, 3340, or 3350 DASD Facility. This data, which is printed or microfilmed today, can then be viewed via a 3270 terminal system and reprinted on demand. Powerful terminal commands aid the user in viewing authorized output images either to answer inquiries directly from the online data or to request reprint of individual pages, range of pages, or entire data sets.

Notice GB21-2103, PDOM SB21-2104, and Systems Guide LB21-2105.

... Wide Screen TCAM Feature (Specify #6013, #6014)

This feature provides a user of the File Cabinet Option-TCAM FDP with new capabilities to view reports with 3270 Display mdls 2, 3, 4 and 5. Report pages of up to 132-character width can now be viewed without lateral screen manipulation. This feature is intended to replace the VIEWER program of the prerequisite File Cabinet Option FDP.

Systems Guide LB21-2705.

PRODUCTIVITY AID: TPNS SCRIPT GENERATOR
5798-CPZ

This FDP allows the Teleprocessing Network Simulator (TPNS) (5740-XT4) to simulate an actual production environment for IMS, CICS, TCAM (TSO), VTAM and other online systems. From a user-created log tape, this FDP produces TPNS script statements for input into a TPNS test run, substantially reducing the effort in using TPNS.

The FDP can reproduce production system workloads, and help identify most problems without impacting the end-user, thus improving productivity. It is particularly valuable in the following areas:

Testing/evaluating new releases of online systems.
Identifying performance variables and evaluating corrective action.
Testing system maintenance changes.
Testing application changes.
System performance for benchmarking/evaluation purposes.

Notice GB21-2106, PDOM SB21-2107.

ATMS-II SUPPORT FOR THE 6640 DOCUMENT PRINTER
5798-CQA

This FDP provides ATMS-II (5740-XXV) support for the 6640 Document Printer as an input/output device. The 6640 provides the ATMS-II user with a quiet, high-quality ink-jet printer, plus offline document storage on mag cards. The FDP provides the ATMS-II operator with easy-to-use commands, including *send, receive, queue list,* and *delete.* The FDP creates a new ATMS-II formatter allowing the ATMS-II operator to use most of the document formatting facilities of ATMS-II and properly handle the 6640 special codes and Operator Control Language (OCL).

Notice GB21-2109, PDOM SB21-2110.

3760 BATCH DATA TRANSFER UNDER CICS/VS
5798-CQB

This FDP is a data transmission aid for the data entry configuration of the 3790/3760 communication system, and runs as a task under CICS/VS using either EXTM, TCAM-10 or VTAM. The FDP initiates the transmission of jobs from one or more 3791/3760 controllers to the S/370 host. Jobs are written on sequential tape or disk files at the host system for further processing by user-written programs. The information received can either be printed on a line printer, a console, or a 3284/3286 printer, or returned to the initiating terminal.

Six types of jobs are supported by the FDP:

- Route Job - Messages are entered via the dual entry station.
- List Job - Records of complete format definition created by the data entry supervisor.
- Print Job - Records of complete format screen images entered by the data entry operator by means of the 3790 *copy* command.
- Report Job - A statistical report about dual key entry station operations.
- Data Job - Data entered from dual key entry stations that are to be used as input for user-written programs at the host.
- Reverse Extract - Data sent from the host from a data set to the 3791 storage for later correction/editing.

Notice GB21-2112, PDOM SB21-2113.

CICS/VS MVS PEER ADDRESS SPACES
5798-CQE

This FDP facilitates the running of multiple copies of CICS/VS in an MVS environment. It helps users to realize the performance potential of a multiprocessing environment (AP and MP configurations). This is achieved by distributing the function over multiple copies of CICS/VS.

One copy of CICS/VS (designated as the DC copy) is concerned primarily with controlling the terminal network. It passes transactions via this FDP to the other copies of CICS/VS (designated as TX copies) for processing. Terminal I/O requests in the TX copies are intercepted and passed to the DC copy for execution.

The FDP and this concept of operation offer greater CICS/VS system protection from errant application programs. New applications, for example, can be brought up in their own TX copy of CICS/VS, but still use the same terminal network which supports the production system.

All MVS CICS/VS users (including UP configurations) can benefit from this aspect of the FDP.

All copies of CICS/VS can retain the capability to perform all CICS/VS functions. The DC copy can process transactions, and the TX copies can control additional terminals at the user's option.

Notice GB21-2121, PDOM SB21-2122.

FINANCIAL INFORMATION SYSTEM
5798-CQF ... BACIS
5798-CRW ... ONLINE BACIS

CQF: This FDP will record, accumulate, and present financial data by source, organizational unit, project, fund, function, activity, line item, object code, or other user determined classifications. This permits revenue and expenditure analyses to be accomplished by function or other categories as well as by departmental or object code account structures.

This function has previously been available to DOS users via the BACIS program product (5736-G25). This FDP provides similar function for the OS/VS user with options for VSAM data sets or root only IMS data bases. If necessary, ISAM data sets may also be used. Suggestions for adaptation to hierarchical data bases are also provided.

CRW: This FDP provides online terminal access to the financial files created and processed by the prerequisite FDP, Financial Information System/BACIS (5798-CQF). It provides online updating of budget preparation records in conjunction with the budgeting subsystem of the base product and inquiry capability for the balance forward, open item, vendor activity, and the accounting transaction records.

It operates under CICS/VS and uses the features of the 3270, including light-pen. It requires CICS/OS/VS (5740-XX1) and Financial Information System/BACIS FDP (5798-CQF).

CQF: Notice GB21-2123, PDOM SB21-2124, Systems Guide LB21-2125.

CRW: Notice GB21-2209, PDOM SB21-2210, Systems Guide LB21-2208.

PRODUCTIVITY AID: HDAM SEQUENTIAL RANDOMIZER GENERATOR
5798-CQG

This FDP analyzes a set of data base keys and generates a load module that can be used by IMS DB, 5740-XX7. The randomizer generates DASD addresses which are in the same relative sequences as the data base key, providing the capability of retrieving data base records from an HDAM data base in ascending logical sequence by processing the data base sequentially.

Notice GB21-2126, PDOM SB21-2127.

CONVERSION AID: S/3 TO S/370
5798-CQH

This FDP is designed to assist in the transition from S/3 CCP to S/370 CICS/VS, and should reduce the time required for the conversion by eliminating the routine, repetitive aspect of the task. S/3 DFF screen maps are converted to equivalent S/370 CICS/VS maps, CCP duplication function is supported, field names are edited to meet COBOL conventions, and autoskip fields are generated if necessary.

Notice GB21-2128, PDOM SB21-2129, Systems Guide LB21-2102.

CONVERSION AID: S/3 OCL TO S/370 DOS/VS JCL
5798-CQJ

This FDP is designed to assist S/3 users in converting their Operating Control Language to S/370 DOS/VS Job Control Language. It reads OCL statements, analyzes them, and makes the appropriate conversion to JCL. It issues warning messages when no JCL counterpart exists or when an inconsistency is detected. It also takes advantage of user-supplied tables to correlate S/3 and S/370 devices and data set names with DOS/VS system numbers. The FDP is written in DOS/VS Assembler and employs device-independent techniques and VSAM.

Notice GB21-2130, PDOM SB21-2131.

3614 USAGE REPORTING SYSTEM
5798-CQK

This FDP provides data to a financial institution's management, planning, and marketing personnel to assist them in evaluating the usage made of their 3614s and planning future installations. Data is provided in both graphic and statistical form to assist in:

Development of new business.
Tracking the success of the 3614 system.
Measuring the impact of advertising campaigns.
Predicting activity levels at 3614 installations.
Measuring work offloaded from tellers.
Creating forecasts of 3614 usage levels.
Comparing 3614 usage between branches.

The programs can be run daily, weekly, monthly, or for any desired period to provide a broad spectrum of reports reflecting 3624 usage both graphically and in statistical form.

Notice GB21-2132, PDOM SB21-2133.

GIS/VS 3270 FORMATTING AID
5798-CQN

This FDP is designed to assist the user of GIS/VS in an IMS/VS terminal environment. The user is provided with a series of 3270 IMS/VS screen formats which guide him through a terminal session and enable him to enter GIS/VS queries easily. Screen formats are provided which help him enter queries from a skeletal 3270 screen, edit queries, and maintain the GIS/VS task data base, call a GIS/VS 'HELP' function, and review user data base segment and field names as defined to GIS/VS.

The FDP enables users to converse with the system to submit data base queries. A tailoring facility lets users standardize queries in any form desired. Users are able to concentrate on the logic of their queries instead of syntax requirements.

Notice GB21-2137, PDOM SB21-2138.

IMS/VS PERFORMANCE ANALYSIS AND REPORTING SYSTEM
5798-CQP (IMSPARS)

This extended support FDP is a performance analysis and tuning aid for ISM/VS DB/DC systems. IMSPARS is a tool for management as well as for system programmers and technical support personnel. It provides management-oriented summary reports, as well as detailed information reports for those directly involved in improving system performance. The reports are derived from the IMS/VS log tape and provide information in the areas of transaction response times, IMS/VS system resource usage, IMS/VS system resource availability.

When used in a regular manner on a regular basis, IMSPARS can help the user to:

- Improve transaction response times.
- Make more efficient use of IMS/VS regions and message queues.
- Reduce virtual and real memory requirements in buffer pools.
- Increase availability of IMS/VS resources.
- Provide preinstallation evaluation of applications and programs against system standards.
- Provide on-going system measurement and management reporting capability.
- Improve productivity of analysts and programmers.
- Assist in determining future system requirements.
- Reduce the need to run IMS/VS utilities.

Notice GB21-2139, PDOM SB21-2140.

GENERALIZED TRACE FACILITY PERFORMANCE ANALYSIS
5798-CQQ

This extended support FDP generates a comprehensive set of reports for OS/VS users that may be used in performance analysis and as a tuning aid for OS/VS systems. Input to GTFPARS is the output from the Generalized Trace Facility (GTF), and output reports include job summaries, system summaries, detail traces and other special reports.

When used in an appropriate manner, and on a regular basis, GTFPARS may help to:

- Provide system performance evaluation data.
- Aid in system tuning efforts.
- Assist in the evaluation of application programs.
- Reduce the need to run a number of different, limited function GTF analysis programs.

Notice GB21-2142, PDOM SB21-2143.

CONVERSION AID:
CALL/OS TO VSPC ENVIRONMENT TRANSITION PROGRAM
5798-CQR

This FDP provides CALL/OS installations with the ability to selectively or totally convert their users to the VSPC environment with little manual effort. The FDP is a utility program which uses the CALL/OS backup tape to create an archive tape compatible with the VSPC archive tape. The program provides the means for dynamically transferring and converting all user profiles and programs/data files from CALL/OS to VSPC.

Highlights:
- Automatic definition of user profiles based on installation specifications.
- Automatic definition of project libraries to VSPC.
- Conversion of BASIC, PL/I and FORTRAN programs under CALL/OS to meet the specifications of those compilers under VSPC.

- User options to convert internal data files under CALL/OS to either internal or external data files under VSPC.

Notice GB21-2151, PDOM SB21-2152, Systems Guide LB21-2153.

3890 DOS/VS CYCLE SORT
5798-CQX

This FDP provides the software required to sort On-us items into the following general categories (based on input from the user's Demand Deposit Accounting system):

- Items requiring special handling.
- Signature verification items.
- High item-volume items.
- Items sorted by statement cycle for bulk filing.

Software for the 3890 Document Processor features:

- 3277 Display Station for control of 3890 functions.
- Full restartability with restart display.
- Jam display.
- Status display of current status of 3890 including item and reject statistics.
- Asynchronous tasks for 3890 and 3277 allow resumption of reading when 3890 is made ready, without operator action at 3277.

Reports are provided which show the distribution of low-speed items and the intended distribution of items rejected during the cycle sort.

Notice GB21-2165, PDOM SB21-2166.

CICS/VS FORMATTED TRANSACTION DUMP - ONLINE
5798-CQY

This FDP makes CICS/VS transaction dumps available to online CICS/VS users in formatted mode for display and analysis on a 3270 terminal with optional CICS transaction security.

Notice GB21-2156, PDOM SB21-2157.

PRODUCTIVITY AID:
3770/3790 ASSEMBLER LISTING POST EDITOR
5798-CQZ

This FDP edits 3770/3790 Assembler listings to assist in improving their readability and their usefulness in debugging, tuning, and maintaining 3770/3790 user programs. Principal features include:

- For first level macros, the macro generated location address and object code is moved from the macro expansion statement to the macro statement, and the macro expansion statement is eliminated.
- For both user- and IBM-supplied second level macros the macro generated first level macros are shown in the listing instead of the first level macro expansion statement.
- Effective addresses are generated for branch type instructions.
- Sector boundaries are flagged in the listing.
- The op-code mnemonic of the referencing instruction for each reference in the cross-reference listing is added to the cross-reference table.
- Duplicate references in the cross-reference listing are eliminated.

Notice GB21-2159, PDOM SB21-2160.

BUSINESS GRAPHING ON THE 3800
5798-CRB

This FDP with its new functions creates a new dimension for providing information to the end-user. Normally, the output from impact printers is tabular data or text and, until now, the printing and integration of business graphs and charts into reports has not been practical.

This FDP utilizes new functions of the 3800 Printing Subsystem to provide the capability to generate graphs as part of printing reports. The resulting graphs can represent multiple plot lines with identifying text and references.

The use of business graphs may enable the end-user to more effectively utilize information by obtaining a visual representation of relationships and trends.

Notice GB21-2167, PDOM SB21-2168, Systems Guide LB21-2168.

3890 ONLINE FINE SORT - OS/VS/CPCS
5798-CRC

This FDP is designed to improve fine sort productivity by eliminating one or more document passes per run and by processing multiple banks and related control documents in a single run, resulting in reduced setup and handling. Sorting is achieved by host program communication with 3890 SCI using pocket assignments calculated at the host.

Facilities of this FDP include radix sorting (number compression by assigning an alias and base number conversion of the alias); image matching; multiple sort specifications per run; high volume account kill; divider insertion; processing of on-us tracers and bank control documents; operator communication via CRTs; restart/recovery; high volume accounts report and sort statistics report.

Notice GB21-2170, PDOM SB21-2171.

MVS SECONDARY OPERATOR FACILITY
5798-CRE

This FDP provides facilities to simplify MVS console operation and reduce the possibility of operator delays and errors. The FDP runs as an MVS job and has two major functions: Command/Job Procedure Processing ... Time-of-day Event Scheduling.

Command/Job Procedure Processing allows operators to request execution of complex procedures containing OS/MVS, JES, VTAM and/or TCAM commands. Parameter substitution and control logic facilities are provided. Procedures may submit jobs to MVS for execution.

Time-of-day Event Scheduling will automatically submit production and/or backup jobs for execution at dates and times specified by the user. A checkpoint/catch-up facility covers the possibility that the system is down at the requested schedule time. Command procedures and write-to-operator messages may also be executed at specified dates and times.

Notice GB21-2179, PDOM SB21-2180, Systems Guide LB21-2181.

3790 DISKETTE UTILITY
5798-CRF

This FDP provides the following utility functions on a 3791 Controller.

- Load and restore 3790 indexed and relative data sets using diskettes formatted for 3790 Batch Data Exchange (BDE).
- Unload and restore 3790 user data sets to 128-byte diskettes in a format defined by the FDP for better space utilization.
- Allow 3790 operator to build on a diskette, records that will create DSCBs, delete DSCBs, and delete programs under control of SYSBDISK.
- Display, print, or change 128 byte diskette records.
- Abend dump diskettes created by SYSBDISK are formatted and printed in a report. Indicators, registers and save areas are formatted and printed.

Through a combination of the above functions, backup and reconstruction of 3790 files may be accomplished without host intervention, with other 3790 programs executing concurrently.

Notice GB21-2182, PDOM SB21-2183.

3790 KEY SEQUENTIAL FILE MACROS
5798-CRG

This FDP provides important functions which are not available with the standard 3790 programming language. These functions include retrieving small records (1 to 256 bytes), executing an exact or generic search by key for a record, and allowing records to be read sequentially, starting at any key. Emphasis is on high-speed, efficient retrieval.

The files read by the retrieval macro are initially loaded onto 1 to 4 relative data sets in a special format by file-writing macros. Two of those are supplied; one executing in the 3790; and one executing in the host computer, in which the formatted blocks of the files are developed in a form suitable for transmission to the 3790. No capability is provided for inserting additional records into a file once it is formatted for retrieval purposes.

Notice GB21-2176, PDOM SB21-2177.

ATMS II FONT CHANGE COMMANDS FOR THE 3800
5798-CRH

This FDP provides additional capabilities for inhouse publishing using ATMS-II and the 3800 Printing Subsystem.

High quality output with mixed fonts, which may be suitable as final composed copy, can be generated using this FDP. Simple font change controls can be embedded in the original text which will cause the text to be printed using the font specified when output to the 3800. New character sets provided include eight 12-pitch and one 15-pitch which allow 20% or 50% greater page density, respectively.

Additionally, the nine new character sets provided can be used by themselves without ATMS II for other existing or new 3800 printer applications.

Notice GB21-2184, PDOM SB21-2185.

PL/I PROGRAMMING
5798-CRJ

This FDP is a computer-based training course designed to teach the programmer with no prior knowledge of PL/I enough of the language to program a wide variety of applications. All but the most advanced facilities of the language are covered.

In addition to the tutorial material, the course contains three intermediate quizzes and one final quiz.

A set of problems that parallel the material are also included to give the student an opportunity to make use of the material covered.

Notice GB21-2187, CDAM SB21-2188, Student Materials SB21-2189.

3800 INTERACTIVE CHARACTER DESIGN
5798-CRK ... ATMS
5798-CTJ ... TSO
5798-CTH ... CMS
5798-CTK ... VSPC

These FDPs provide the JCL and the data initiation facility to allow the online creation of characters for the 3800 Printing Subsystem. Prestructured dot matrices are provided for each of the three standard pitches used for the 3800 (10, 12 and 15 pitches). The matrices also contain design guidelines (center lines, normal character location lines) and pitch boundary design limits to aid in character creation while avoiding out-of-boundary error conditions. Using the different modules of the program, any user of an IBM program with an interactive source program editing capability (ATMS, CMS, TSO or VSPC) can easily develop graphic character modification modules, update SYS1.IMAGELIB, create or change character arrangement tables, and create or change COPYMODs to use or test standard characters or special characters, such as signatures or logos.

Notice GB21-2191, PDOM SB21-2192, Systems Guide LB21-2193.

PURCHASE VERSUS LEASE UNDER PLANCODE/I
5798-CRN

This FDP is an interactive, conversational, financial planning model that utilizes the power and speed of an online computer to aid the decision maker in evaluating the most economical way to acquire capital equipment.

The user is provided with the capability of executing multiple iterations of a purchase/lease analysis, in a *what if* environment, interactively changing input assumptions from a terminal.

Cashflow and profit and loss impact reports provided as output from each execution.

Purchase versus Lease runs as a model under PLANCODE/I and does not require any additional hardware or software other than what is required to execute PLANCODE/I.

The user is not required to have any programming knowledge, but needs to be familiar with the financial terminology of a purchase versus lease analysis.

Notice GB21-2197, PDOM SB21-2198.

TERMINAL CONTROL PROGRAM FOR ETSS/II
5798-CRX

This FDP provides the terminal control function for the DOS/VS Entry Time Sharing System/II (ETSS/II), 5798-CLR, when neither MTCS/VS nor CICS/VS is available. It will allow ETSS/II to operate in those environments where there is no requirement for a transaction based data communication system.

Function and design are similar to that of the Terminal Control FDP (5798-CGC) which supports ETSS/I.

Notice GB21-2211, PDOM SB21-2212.

IBM BRAILLE UTILITIES
5798-CRZ

This FDP converts machine-readable EBCDIC data sets into a correspondence braille code to be embossed on IBM impact printers with appropriate braille RPQs attached.

The FDP is designed to provide visually-impaired braille readers employed in electronic data processing activities with access to information normally available through computer printouts. These computer printouts might include many conceivable types of listings generated during the course of job-related activities: reports, program listings, machine-readable text, etc.

Notice GB21-2215, PDOM SB21-2216.

3800 UPC PRINT
5798-CTA

This FDP provides the capability of printing universal product codes (UPC) on the 3800. A multi-pitch character set is used to print the UPC symbols. When intermixed with a standard 3800 character set, the FDP may be used to create customized forms such as shelf labels, turnaround documents, or any other material where UPC codes are used. The product can be called from a high level language or executed as an independent utility.

Notice GB21-2219, PDOM SB21-2220.

ATMS-II DOS/VS SUPPORT FOR THE IBM OFFICE SYSTEM/6
5798-CTB

This FDP provides ATMS-II (5746-XXG) support for the IBM Office System/6 as an input and output device. The IBM Office System/6 provides the ATMS-II user a quiet, high-quality ink-jet printer, and offline document storage on mag cards and diskette. The FDP will provide the ATMS-II operator with easy-to-use commands including send, receive, queue list and delete. The FDP will create a new ATMS-II formatter allowing the ATMS-II operator to use most of the document formatting facilities of ATMS-II and properly handle the IBM Office System/6 special codes and Operator Control Language (OCL).

Notice GB21-2109, PDOM SB21-2110, Terminal User's Guide SB21-2111.

DASD SEEK SIMULATOR
5798-CTD

This FDP helps solve an OS/VS (MVS, SVS, VS1) installation's performance problems associated with arm movement. It is a tool which can optimize the placement of data sets upon a DASD volume, and members within a PDS, to achieve minimal arm movement. The simulator allows evaluation of various data set placement strategies without moving any data sets. In a simulator run, the user may have the simulator optimize data set placement and/or have the simulator evaluate user specified data set placements. Simulation can be based upon data from a single GTF trace or merged data from a history of traces previously analyzed.

It provides:

- Reduction of time-stamp and time-adjustment.
- Conversion of UNIT addresses.
- Shared file support.
- Fixed head facility support.

Notice GB21-2217, PDOM SB21-2218.

SLSS CONTROL
5798-CTE

This FDP is an organizer for IBM SRL libraries. It is a productivity aid and control tool for personnel who have the responsibility to order, maintain, and distribute SRL manuals to local and remote users.

The FDP creates two data sets: The master file for all sets of manuals (libraries) and the detailed file that relates all manuals to the master file.

This FDP is designed for easy use in the batch environment. It creates, adds, changes, and deletes records via control information. In addition, it produces many sorted and group controlled listings for controlling and distributing IBM manuals.

Notice GB21-2222, PDOM SB21-2223.

PROGRAM FUNCTION KEY SIMULATOR FOR SPF-II
5798-CTF

This FDP provides the capability of using the TSO-3270 Display Support and Structured Programming Facility Version 2 program product (SPF-2) on 3277 mdl 2 terminals that do not have 12 program function keys. Prior to the availability of this FDP, SPF-2 required that the 3277 terminal have 12 program function keys. Now, SPF-2 can be used on any 3277 terminal mdl 2, regardless of keyboard arrangement.

This FDP may be of value to customers who desire to use SPF (or to enlarge their SPF User-community), but are unable to do so because of the lack of terminals with the 12 program function keys.

Notice GB21-2225, PDOM SB21-2226.

VSPC FULL SCREEN EDITOR
5798-CTG

This FDP provides the users of VSPC with a full screen editor capability for VSPC data files. It allows multiple line changes, FIND and CHANGE global commands, scrolling with PF Keys, and line repositioning via MOVE and COPY commands. Screen layout, syntax, and use conventions are similar to those of SPF in the TSO environment.

The program is written in APL and requires the VS APL program product (5748-AP1).

Notice GB21-2227, PDOM SB21-2228, Systems Guide LB21-2229.

VTAM CONFIGURATION AND GENERATION AID
5798-CTL

This FDP is an installation aid allowing for simplification of the initial generation process for a CICS/DOS/VS, VTAM or ACF/VTAM, and NCP/VS or ACF/NCP/VS system. Based on user input of macro statements defining a VTAM configuration, the aid produces sample DOS/VS input jobstreams and tables tailored to the generation of that particular system. Creation of generation jobstreams for all or a subset of supported products is selectable. The output of this FDP can eliminate much of the time consuming work associated with the generation process. Additionally, via review and modification of the output, it can be useful in the planning and generation of more complex configurations than those directly supported.

Notice GB21-2233, PDOM SB21-2234, Systems Guide LB21-2235.

CORMES DMS/VS DOS/VS INTERFACE
5798-CTR

This FDP provides the DMS/VS DOS/VS user with an aid for interfacing with Communications Oriented Message System (CORMES 5746-XXM). The FDP is used to generate customized user exit modules for inserting action/trigger messages.

The pregenerated object modules are provided to support invocation of DMS/VS application program by CORMES *work on* function, and the return from those DMS/VS application programs to CORMES.

The FDP inserts action/trigger messages into CORMES action/trigger files, interfaces to CORMES *work on* function; thereby, reducing DMS/VS user exit requirements for CORMES functions.

Notice GB21-2244, PDOM SB21-2245.

VTAM PERFORMANCE ANALYSIS REPORTING SYSTEM
5798-CTW (VTAMPARS)

This extended support FDP aids the system programmer in optimizing VTAM buffer pools, reducing VTAM storage requirements and improving overall system performance. This program is especially useful during installation for identifying buffer pool shortages for VTAM Level 2 users and optimizing a dynamic buffer allocation scheme for ACF/VTAM users. Periodic execution will aid in maintaining optimum system performance with both VTAM and ACF/VTAM systems.

When used in an appropriate manner, and on a regular basis, VTAM-PARS may help to:

- Optimize VTAM buffer pool allocation
- Reduce VTAM's fixed storage requirements
- Reduce VTAM's CSA requirements (MVS)
- Reduce system paging ratio
- Reduce VTAM/application installation time.

Note: Central Service is discontinued effective February 28, 1983.

Notice GB21-2246, PDOM SB21-2247.

TPNS LOG FORMAT
5798-CTX

This FDP provides a character printout of the TPNS hexadecimal dump and reformats it into a 3270 screen format. It also defines highlighting, cursor positioning, start of message, keys depressed (PF1-12, PA1, PA2, etc.), and other related TPNS information. The program contains a translation table to print all non-printable characters. To minimize print time, it translates characters that are on the customer's print train one time to characters that are on the train multiple times.

Notice GB21-2239 PDOM SB21-2240.

IMS/VS USER SECURITY
5798-CTZ

This FDP is designed to protect user sensitive data for the IMS/VS OS/VS1 and OS/VS2 Release 1.7 (SVS) user by allowing access only to those who are authorized. User identiity is verified prior to the access of data, thus providing an audit trail via the IMS/VS log tape. User identity is associated with each transaction, even if it is not a secure transaction. Bulletin type information is optionally provided in the sign-on format.

Utility programs are provided to maintain the security data base and provide lists and mailing information to distribute the user IDs.

Notice GB21-2252, PDOM SB21-2253.

CPCS ONLINE REJECT/RE-ENTRY TESTING AID
5798-CWE

This FDP is an aid for testing online reject re-entry routines written for the Check Processing Control System (CPCS). It allows testing or user routines without requiring a CPCS system or 3270 terminals.

The FDP:

• Provides regression test facility
• Simplifies testing of user routines
• Is compatible with 3890 OS/VS Program Testing Aid FDP (5798-CBG).

This product provides the online reject re-entry counterpart of the 3890 OS/VS Program Testing Aid FDP and may use the same input data. The report created by the program will indicate either the number of correct stacker selects or will print the document image, the expected pocket select, and the actual pocket select for all input records processed.

Notice GB21-2264, PDOM SB21-2265.

IMS/VS TIME-INITIATED INPUT FACILITY
5798-CWF

This FDP provides the IMS/VS customer with the capability of programmed entry of IMS transactions, message switches, or operator commands based upon time-of-day or initial startup of IMS.

Notice GB21-2255, PDOM SB21-2256.

3650 STORE PRODUCED ACCOUNTING REPORT CUSTOMIZER
5798-CWG

The FDP is designed to accept user processing and report definition in an easy-to-use format. The system then generates a customized transaction log processing program. The system also produces a 3653 interactive program to print each custom report requested by the user. The system may be run either concurrently with the sales function or overnight in a batch mode with reports printed the next day. This system allows the user to easily do distributed processing of information captured by the 3650 Retail Store System.

Notice GB21-2273, PDOM SB21-2274, System Guide LB21-2275.

3770 SUPERVISOR ASSEMBLER
5798-CWH

This FDP provides a symbolic language and associated Assembler code for the 3770 programmable terminal.

The FDP will decode and validate the input data, build a table of addresses, and generate text cards. Significant features of the assembler include:

• Symbolic addressing and definition of data areas.
• Assembly and symbolic linkage of multiple supervisor programs in a single pass.
• A cross-reference listing of source and object code.

Notice GB21-2278, PDOM SB21-2279.

TREND ANALYSIS/370 UNDER CICS/VS
5798-CWQ

This FDP allows the Trend Analysis/370 program product (5740-F12) and the S/7 Color Graphics Support feature (5707-F12) to run under CICS/VS. It is an enhancement to IBM's growing line of interactive, data handling products and is an easy-to-use information handling and maintenance tool which allows the user to display information based on organization, time, or item of interest in tabular report form on the 3270 Information Display System. It is designed to be adaptable to user needs, allowing flexibility of menu-design, report creation, and data entry. Using the S/7 Color Graphics Support feature, presentation can be done graphically on a color television monitor. Time series numerical information from either an internal organization or external environment can be formatted, stored, and maintained by the system.

Notice GB21-2299, Operations Guide SB21-2270, Program Reference Manual SB21-2300, Program Logic Manual LB21-2301.

3890 ONLINE FINE SORT - DOS/VS
5798-CWR

This FDP is designed to improve fine sort productivity by eliminating one or more document passes per run and by processing multiple banks and related control documents in a single run, resulting in reduced setup and handling. Sorting is achieved by host program communication with 3890 SCI using pocket assignments calculated at the host.

Facilities of this FDP include radix sorting (number compression by assigning an alias and base number conversion of the alias), image matching, multiple sort specifications per run, high volume account kill, divider insertion, processing of on-us tracers and bank control documents, operator communication via CRTs, restart, high volume accounts report, and sort statistics report.

Notice GB21-2276, PDOM SB21-2277.

3800 FORMS UTILITY
5798-CWW

This FDP eases and speeds the process of designing and implementing new or converting existing reports and formatted listings from an impact printer to the 3800 Printing Subsystem. The user is given flexibility in specifying the kind of formatting operations desired through use of control statements to describe an input file and direct the formatting for the output file.

Once the desired format has been achieved, this FDP provides a significant assist to the user by generating source code which is suitable for inclusion in a system Assembler, ANS COBOL, or PL/I Optimizer program. Instructions or statements generated provide procedural code which may be used to achieve results similar to those provided when using the formatting program itself.

Notice GB21-2287, PDOM SB21-2288.

GRAPHIC ONE-LINE DIAGRAM DISPLAY
5798-CWX

This FDP uses electric utility transmission system data provided by two of the industry's widely used network modeling programs (load flows). The program automatically draws one-line diagrams on a graphic display station attached to a 3277 display via the 3277 Graphics Display Attachment RPQ. Utility planning engineers, operation engineers, and other users can interactively modify and display data for network modeling. Several menus and a powerful query command language facilitate these functions. The one-line network diagram can be windowed and scaled, and the associated network data can be deleted, added, or changed by use of a *joystick* cursor control or alphameric keyboard. Once modified, the diagram and data are provided by the FDP to the utility's load flow program. Utility network modeling is a prime means by which electric utilities perform high voltage transmission system network expansion planning and daily operations planning. These applications are now done principally using batch programs. Used in conjunction with a utility's load flow program, this FDP can potentially provide significant productivity improvements for utility engineers.

This program is designed for use with the 3277 Graphics Attachment RPQ (7H0284) and the 3277 Graphics Attachment Support PRPQ (5799-AXX).

Notice G320-6059, PDOM SH20-2087, Systems Guide LY20-2366.

3276/3278 OPERATOR TRAINING
5798-CWZ

This FDP is a course which will instruct operators on how to use the 3276 and 3278 terminals. Where possible, the student learns the functions of the terminal by actually performing each function. The course material includes an introduction to the terminal, how to turn the terminal on and off and make adjustments for brightness and contrast, recognizing the indicators in the operator information area, using the problem determination guide, using all the standard keys on the keyboard, and using the optional features. This FDP will run under either the Interactive Training System or the Interactive Instructional System.

Notice GB21-2290, CDAM SB21-2291, Student Materials SB21-2292.

ROUTING-TRANSIT CHECK DIGIT
5798-CXD

This FDP provides the facility to handle the changes in the standards for MICR encoding of checks which are effective July 1, 1978. Virtually every user of MICR reader/sorter equipment must make changes to process checks encoded with the new format. The Routing-Transit Check Digit FDP provides a series of routines which can assist in making these changes. Included are routines to convert new format items to the old format, to perform modulus self-checking, to regenerate single digit errors, and to calculate the appropriate check digit for a given routing-transit code. Routines are included for users of 1255 and 1419/2956 reader/sorters (attached to a S/360 or S/370) and for users of the 3890 Document Processor.

Notice GB21-2317, PDOM SB21-2318.

COPICS ROUTING DATA CONTROL
5798-CXE

The COPICS Routing Data Control application program organizes information defining an item's manufacturing process (routing) within a COPICS data base architecture. The routing information can subsequently be used in cost planning, shop order release, and shop order tracking systems. This package is written in DMS/VS.

Notice GB21-2311, PDOM SB21-2312.

3800 REPORT FORMAT AND SEGMENTATION PROGRAM
5798-CXF

This FDP splits a single report into mini-reports ... extracts and prints totals ... reformats reports ... without application program changes.

The FDP divides a report into individual mini-reports. Using the features of the 3800, each mini-report can be individually printed and addressed with a different number of copies per mini-report.

Conversion to smaller size forms with less print space is accomplished by reducing the number of lines per page and characters per line - an option of this FDP. Headings and page counts will be appropriately maintained.

Notice GB21-2314, PDOM SB21-2315, Systems Guide LB21-2316.

INVENTORY FORECASTING AND REPLENISHMENT MODULES - ALLOCATION
5798-CXG

This FDP is designed to be used in conjunction with the Inventory Forecasting and Replenishment Modules FDP 5798-CFH. It is designed to be used in either a replenishment (PULL) or redistribution (PUSH) mode. It uses the technique of variable interval time allocation to generate an order for a group of items so that uniform time supplies are ordered. In addition, it ensures that user-defined weight (pounds, cube, dollars, etc.) constraints are met.

Notice GB21-2323, PDOM SB21-2324, Systems Guide LB21-2325.

SNA/RJE PRINT OUTPUT ANALYSIS
5798-CXH

This FDP will analyze data and/or reports to be transmitted with SNA/RJE systems, determine the most efficient compaction character set to be used with SNA compaction, and project the reduction in character transmission compared to BSC compression.

Notice GB21-2326, PDOM SB21-2327.

BTS - TPNS
5798-CXJ

This FDP is a program that generates scripts for the Teleprocessing Network Simulator (TPNS) program product (5740-XT4) from input decks created for the Batch Terminal Simulator (BTSII). A BTSII input deck consisting of commands and 3270 simulator statements is converted to an equivalent TPNS Advanced Language message deck. This FDP will also function using input decks from BTSVS with the 3270 format feature.

Notice GB21-2328, PDOM SB21-2329.

HDAM SEQUENTIAL RANDOMIZER GENERATOR EXTENSIONS
5798-CXN

This FDP generates a randomizer which has the capability of placing keys of an IMS/VS HDAM data base into collating sequence. It is an extension to IMS/VS Sequential Randomizer Generator FDP (5798-CQG), which is a prerequisite. The enhancements allow the generation of randomizers that utilize less storage due to the implementation of advanced compression techniques. Improved handling of large irregular key sets, key analysis routines, and zone sequential randomizer generation are provided.

This FDP will analyze data and/or reports to be transmitted with SNA/RJE systems, determine the most efficient compaction character set to be used with SNA compaction, and project the reduction in character transmission compared to BSC compression.

Notice GB21-2326, PDOM SB21-2327.

FINANCIAL PLANNING SYSTEM - TSO
5798-CXP

This FDP will be useful to the financial analyst who needs to obtain printed financial reports with quick turnaround. Functions provided are:

- Interactive design of financial reports
- Terminal data entry and editing
- Interactive definition of financial calculations to be performed, including APL code and/or any of the financial, arithmetic, and forecasting routines of FPS
- Execution of the financial algorithms which the user has defined
- Printing of the financial report
- Consolidation of financial reports (e.g., produce a corporate report by consolidating divisional data).

This FDP is designed to operate with the VS APL for TSO IUP (5796-ALB).

Notice GB21-2325, PDOM SB21-2336, Systems Guide LB21-2337.

OS/VS DATA SET EDITOR
5798-CXQ

This FDP is a productivity aid designed to help reduce the time and effort required to modify data sets or members that result from hardware and/or software changes.

The program provides the user with editing capability for sequential data sets and libraries. It can process the library as a single entity or by selecting members.

Notice GB21-2350, PDOM SB21-2351.

POWER/VS 3777 MDL 2 WORKSTATION PROGRAM
5798-CXR

This FDP, written in Assembler, provides the necessary programming support to allow the 3777 Communication Terminal mdl 2 to function in a DOS/VS POWER/VS Remote Job Entry environment. The 3777 mdl 2 is supported as the 3780 Communication Terminal and requires no modification to POWER/VS.

All I/O features of the IBM 3777-2 are supported including card transmission, diskette transmission (80-byte records or less), printed output, and punched card output. When the Console Display feature is installed, all POWER/VS messages appear on the display instead of the printer. POWER/VS remote operator commands may be entered from the keyboard without the remote operator command identifier ('*..').

Notice GB21-2338, PDOM SB21-2339.

IMS FAST REORGANIZATION RELOAD
5798-CXT

This FDP is designed to rapidly reload an IMS/VS data base. It uses as input the unloaded data set produced by the IMS Fast Scan Utility FDP 5798-CTP or the IMS HD Reorganization Unload Utility (5740-XX2). It produces a data base that is IMS/VS Version 1 compatible, but does not utilize IMS/VS facilities. The program operates as a non-DL/I batch job under OS/VS.

This product is designed to reduce the time required to reorganize HD-type data bases. It also generates data set, segment, and segment pointer statistics that may be a valuable data base tuning aid. Although this FDP is particularly applicable to large data base users, it offers performance improvements to most IMS/VS DL/I users. Faster reorganization should allow more frequent data base organization, thus enhancing the performance of jobs accessing the data base. Faster reorganization also means the data base is unavailable to the online IMS control region for a shorter period of time.

Notice GB21-2341, PDOM SB21-2342.

S/370 APPLICATION-WIDE COBOL DATA-NAME CROSS REFERENCE
5798-CXW ... OS/VS
5798-CYG ... DOS/VS

These FDPs are programmer aids for debugging, changing, maintaining, or converting a multi-program COBOL application. The report produced gives a single cross-reference report for multiple programs and displays the program and source statement for each occurrence of each data name. It helps the programmer identify names that are currently in use, identify the attributes of any name, and locate all occurrences of any name in the application.

The programs will accept both IBM and non-IBM source COBOL, and optionally will cross-reference COBOL reserved words, making these FDPs valuable tools in program conversion by identifying all uses of each non-standard word.

Notice GB21-2344, PDOMs SB21-2345 (CXW) and SB21-2378(CYG).

PRINT LOAD ANALYZER
5798-CXY

This FDP is designed to allow users to create an accurate picture of their printing environment. It totals the print volumes by job name, system, job origin, printer, or form. This FDP can be used as an audit tool to measure forms usage and is useful in the following circumstances:

- User is evaluating 3800 Subsystem
- User is evaluating remote printing requirements
- Multiple local and/or remote printers in use
- Multiple system environment
- User needs to control and track forms used by processor, remote ID and/or job ID.

Notice GB21-2355, PDOM SB21-2356.

VM/CMS LIBRARY MAINTENANCE AND SPMOL-II SIMULATOR
5798-CYA

This FDP is made up of two major functions, either of which may be implemented independently of the other. The Library Maintenance Function controls a central library which is kept in compressed format and is protected against multiple updates. Programs are never directly updated unless a new version or modification is created. Original sequence numbers will be maintained and all changes are applied temporarily when a program is compiled. This gives the user a good audit trail and an easy method of backing out changes. The second function is a simulator of most of the SPMOL edit commands which allows the programmer to use program sequence numbers or relative line numbers within a screen to make changes. This FDP should ease the transition for users moving from SPMOL-II to VM/CMS.

This FDP runs under VM/CMS and requires the Display Editing System for CMS IUP (5796-PJP).

Notice GB21-2361, PDOM SB21-2362.

FINANCIAL INFORMATION SYSTEM/ONLINE BUDGET
AND ACCOUNTING INFORMATION SUBSYSTEMS (FIS/BACIS) - DOS/VS
5798-CYB

This FDP provides fiscal accountability and accessibility of information which are two of the critical requirements of an effective financial system. In order to maintain financial control, information must be available on demand and at the level of detail needed to respond to varying management and operational requirements. This FDP uses data created and maintained by the DOS/VS FIS/BACIS FDP (5798-CYC). It operates only with data sets created using the DL/I and/or VSAM options of DOS/VS FIS/BACIS. This product provides the ability to view, through a video display terminal, an institution's precise financial position across all funds (general ledger, revenue, or appropriation account balances) as well as supporting detail. To assist in the budgeting process, it provides for online inquiry and update of budget preparation data.

Note: Program Services to be discontinued effective February 28, 1983.

Notice GB21-2367, PDOM SB21-2368, Systems Guide LB21-2369.

FINANCIAL INFORMATION SYSTEM/BUDGET
AND ACCOUNTING INFORMATION SUBSYSTEMS (FIS/BACIS) - DOS/VS
5798-CYC

This FDP is a highly flexible application program package containing the nucleus of application functions required to implement the budget, central accounting, and departmental accounting subsystems of a Financial Information System (FIS).

IBM designed FIS for public agencies to integrate the financial functions of diverse operational activities while maintaining the independent organizational identities.

With this FDP, the user has the option of implementing a system using IBM's data base manager, DL/I, or other standard data management methods. Online functions are provided in a companion FDP, FIS/ON-LINE BACIS DOS/VS (5798-CYB).

Note: Program Services to be discontinued effective February 28, 1983.

Notice GB21-2364, PDOM SB21-2365, Systems Guide LB21-2366.

TSO/JES2 BATCH DISPLAY FACILITY
5798-CYE

This FDP will allow TSO users on an MVS/JES 2 system to receive enhanced status information about batch jobs in the JES2 system. This information, which a TSO user can receive at a terminal, will be equivalent to the following JES2 commands:

$DA,JOBS; $DA,TSU; $DQ; $DN,Q=XEQa (where a=A,,Z,$,@ $DF; $DJ; $D'.

In addition, if a TSO user has OPERATOR authorization, any JES2 command may be entered via the TSO terminal.

Notice GB21-2373, PDOM SB21-2374.

RACF PRODUCTIVITY AID
5798-CYF

This FDP is a step-by-step guide to converting an organization to the full use of RACF with minimum disruption to the existing users of the system.

Notice GB21-2370, PDOM SB21-2371.

AUTOMATIC TCAM NETWORK DEFINITION
5798-CYH

This FDP will allow a user of either a TCAM/NCP or TCAM/PEP network to define the network resources in one place, i.e., the NCP or PEP source. That information will then be automatically propagated to the TCAM source, eliminating the need for duplication of effort in coding the network definitions into both control programs (host and controller).

Any change required in TCAM as a result of alterations to the network will come about as a by-product of the NCP or PEP source modification. If the network is accessed through more than one communication controller (local or remote), the TCAM network definition will be generated from all NCP or PEP sources in unison. If the multiple system networking facility is being used, a network resource defined in one NCP source can be included in the TCAM network definitions for any hosts that are specified.

Notice GB21-2375, PDOM SB21-2376.

DL/I FAST SCAN UTILITY DOS/VS
5798-CYJ

This FDP is a DOS/VS version of the IMS Fast Scan Utility FDP (5798-CTP). It is designed to rapidly read a selected HIDAM or HDAM physical data base in hierachical (GET NEXT) sequence and produce multiple output data sets for subsequent use by other DL/I utilities (HD REORG RELOAD) or user programs. Optionally, through the use of user exits, the FDP may be used as a high-speed retrieve module to directly process the data base segments. The extensive data base statistics produced can be used to monitor the record fragmentation and, therefore, the need to reorganize the data base.

Notice GB21-2380, PDOM SB21-2381.

3630/3600 BULK DATA TRANSFER
5798-CYK

This FDP is a 3630/3600 application program that provides the user with a powerful and flexible method for sending/receiving sequential files to/from S/370 hosts. Written as a standalone program, it requires no workstation terminal, is quickly installed, and may accelerate the installation cycle of an 3630/3600 system. This FDP has been designed to operate with the S/370 host program for 3630/3600 Bulk Data Transfer FDP (5798-CYL) or any equivalent host program.

Notice GB21-2385, PDOM SB21-2386.

S/370 HOST PROGRAM FOR 3630/3600 BULK DATA TRANSFER
5798-CYL

This FDP is a S/370 host program for use with the above FDP (5798-CYK) or equivalent. It is a batch VTAM application program that provides the user with a powerful and flexible method for sending/receiving sequential files to/from remote 3630/3600 workstations. Written as a standalone program, it can be quickly installed and may accelerate the installation cycle of a 3630/3600 system.

Notice GB21-2388, PDOM SB21-2389.

3760 BATCH TRANSFER PROGRAM INSTALLATION AID
5798-CYN

This FDP provides an exit program for the 3760/3790 Batch Transfer Program (BTP) which extends its capabilities and eases the installation of the 3760/3790 Data Entry System under DOS/VS.

Notice GB21-2383, PDOM SB21-2384.

COBOL PAYROLL MANAGEMENT SYSTEM
5798-CYP

This FDP includes the basic payroll functions of wage and tax calculation, quarterly 941s, year-end W-2s, personnel reporting, and union and workmen's compensation reporting. This set of programs will provide the small system customer with comprehensive management reporting and strict audit controls.

Notice GB21-2399, PDOM SB21-2400.

EXTENDED AUTHOR TRAINING FOR INTERACTIVE INSTRUCTIONAL SYSTEM
5798-CYQ

This FDP is an extension of the Interactive Instructional System Author Training Course FDP (5798-CEB). It is designed to teach course authors how to use the special facilities available under the Interactive Instructional System.

Notice GB21-2402, CDAM SB21-2403, Student Materials SB21-2404.

VSAM OPERATIONS UTILITY
5798-CYR

This FDP helps manage the utilization, relocation, and reorganization of VSAM files, data spaces, and catalogs. The utility retrieves information contained in the VSAM catalogs and produces VSAM access method services (IDCAMS) jobstreams to back-up or reorganize the requested object (cluster, space, user catalog, master catalog).

A powerful set of run time options allow the operations or systems programming staff a wide range of flexibility in manipulating VSAM objects.

Notice GB21-2393, PDOM SB21-2394.

ISAM - DL/I BRIDGE
5798-CYT

This FDP is an execution time interface between DL/I and an ISAM application program. Data in a DL/I data base may be accessed by DL/I or ISAM programs. No modification to source programs, recompilation, or re-link editing will be required. Application programs will run under the Bridge program, and all languages which support ISAM or DL/I are supported, as the bridging is done at execution time. Hierarchical data bases are supported. Field sizes in both the ISAM file image and the DL/I data base must be identical.

Notice GB21-2396, PDOM SB21-2397.

CAPACITY PLANNING EXTENDED
5798-CYW

This FDP is a capacity planning and analysis aid which executes under the system for Generalized Performance Analysis Reporting (GPAR), Release 2. CPX reports, measurements, and computational facilities are designed for use by Data Processing management and their staffs to assist with both planning and analysis activities in either OS/VS1 or OS/VS2 (MVS) installations.

CPX is compatible with USAGE (Understanding Your System and Application Growth Environment), and automates many of the calculations associated with capacity planning techniques. The use of CPX, however, extends capacity planning and analysis beyond USAGE, which concentrates on measurements of CPU utilization.

CPX is a member of the GPAR family of performance and capacity planning products that includes GTFPARS (5798-CQQ), VTAMPARS (5798-CTW), IMSPARS (5798-CPQ), IMSASAP II (5798-CHJ), and the recently announced NETPARS (5798-CZX).

Notice GB21-2391, PDOM SB21-2392.

ETSS/II PROGRAMMING AID
5798-CYY

This FDP consists of a series of programs and functions designed to aid the ETSS/II user in job stream creation, use of access method services, creation of DL/I data base definitions, and other related functions.

Notice GB21-2408, PDOM SB21-2409.

ETSS-II BATCH LIBRARY INTERFACE TO POWER/VS
5798-CYZ

This FDP will allow members in the ETSS-II library file to be inserted logically in normal DOS/VS batch job streams. ETSS-II library members may be logically inserted into batch job streams in a manner similar to the existing SLI (Source Library Inclusion) facility of POWER/VS.

ETSS-II users with this product may now make the ETSS-II library file the focal point of their entire DOS/VS installation.

The user may include ETSS-II library file members into a standard DOS/VS batch job stream simply by specifying the name of the member on a standard POWER/VS SLI control card.

Notice GB21-2411, PDOM SB21-2412.

S/370 ANS COBOL CONVERSION AID FOR NCR NEAT/3
5798-CZC

The FDP is designed to aid in the conversion of NCR NEAT/3 source programs into S/370 ANS COBOL programs. In addition, the program converts selected file specifications and input/output statements to VSAM processing. This FDP is based on the S/3 COBOL Conversion Aid for NCR NEAT/3 (5798-AYA).

Notice GB21-2420, PDOM SB21-2421.

S/3 TO S/370 NUMERIC FIELD EDIT AND REPLACEMENT
5798-CZD

This FDP was designed to assist S/3 users in editing and correcting data files when moving to a DOS/VS or DOS/VSE system. However, this FDP can be used in other environments where the user wishes to check the validity of numeric fields. The program will print errors along with the corrective action taken. The corrective action to be taken is specified by the user by field. A corrected output file may be written at the user's option.

Notice GB21-2423, PDOM SB21-2424.

8100/DPCX 3790 DISTRIBUTED ENTRY/QUERY SYSTEM
5798-CZE

This FDP provides end-users with many basic data processing functions on the 8100/DPCX or the 3790 remotely and independently from a S/370 host. The functions include key entry, verification, query, record selection, sorting, reporting and utilities. The system is designed to generate and maintain local data files and reports to support daily

operational needs.

Notice GB21-2431, PDOM SB21-2432.

CHARACTER EXTENSIONS FOR 3800
5798-CZG

This FDP provides the scan patterns for new text printing characters for the 3800 Printing Subsystem in the form of IEBIMAGE utility data statements. Any group of characters can be installed in the user's system by processing the data statements from that group using standard JCL with IEMIMAGE then stores them in SYS1.IMAGELIB as graphic character modification modules. The user can build, modify, and name character arrangement tables with IEBIMAGE to include the graphic character modification and thus make them accessible for printing.

Notice GB21-2429, PDOM SB21-2430.

COPICS FACILITIES DATA CONTROL
5798-CZH

The COPICS Facilities Data Control application program is a tool for capturing plant resource data within a data base architecture. This data can subsequently be used in planning systems for effective utilization of the available plant resources.

Notice GB21-2433, PDOM SB21-2434.

3650 SIMULTANEOUS PRINTING OF OBSERVED TRANSACTIONS
5798-CZK

This FDP provides the 3650 user with a flexible facility for terminal monitoring.

The FDP is written in 3650 SPPS Assembler and runs under the control of DOS/VS and the 3650 Retail Store System (RSS) host support.

Notice GB21-2469, PDOM SB21-2470, Systems Guide LB21-2471.

3790 DATA ENTRY PROGRAM FOR *MASTERCHARGE* AND *VISA* MERCHANT SALES DRAFTS
5798-CZL

This FDP provides full function editing and validation of the data required for processing merchant deposits of both MASTERCHARGE and VISA sales transactions. A control function is provided for automated monitoring of the status of batches of work in process as well as operator statisitics. A separate balancing program permits modification of entered data as well as insertion and deletion to achieve a balanced condition prior to host transmission.

All panels contain operator prompting, initialization of static fields, and full screen editing and correction capabilities. Validation and editing of entered data are consistent with industry requirements and the standards required for communication between card processing associations.

Notice GB21-2453, PDOM SB21-2454.

8100/DPCX AND 3790 DATA ENTRY ENHANCEMENTS FOR *MASTERCHARGE* AND *VISA* PROCESSING
5798-CZN

This FDP contains the necessary support for data entry of several functions frequently associated with merchant sales draft processing. As an extension to the 8100/DPCX 3790 Data Entry Program for *MASTERCHARGE* and *VISA* Merchant Sales Draft (5798-CZL), this FDP utilizes screen formats and editing and validation standards similar to the base product. It also includes a direct VTAM transmit function that reduces time to prepare and transmit data to the host.

All panels contain operator prompting, initialization of static fields, and full-screen editing and correction capabilities. Validation and editing of entered data is consistent with industry requirements and the standards required for communication between card-processing associations. The FDP also provides operator statistics, including time-stamping for operator activity, for improved management reporting.

A separate license is required for each 8100/DPCX or 3791 Controller.

Notice GB21-2472, PDOM SB21-2473.

3790 INTERACTIVE FILE MAINTENANCE
5798-CZQ

This FDP is a 3790 application development productivity aid which consists of six full screen panels and four generalized, application independent programs distributed on a Batch Data Exchange Diskette. It is capable of storing end-user definitions of indexed and relative data sets and providing, based upon these definitions, the record maintenance functions of adding, deleting, changing, and inquiring.

An optional audit trail of additions, changes, and deletions can be printed. It is also possible to automatically record in the record the ID of the operator entering or last changing the record, and the date and time the function was performed.

Advanced capabilities provide multiple views of a record and a vertical multiple sector support.

The functions provided by this FDP can save a great deal of the programming effort typically expended in the development of a new application.

Notice GB21-2476, PDOM SB21-2477.

NETWORK PERFORMANCE ANALYZER
5798-CZR ... HOST
5798-CZT ... CONTROLLER

This FDP collects communications network operating data for analysis.

NPA data may be helpful in highlighting the causes of performance degradation, such as excessive traffic at certain periods, or insufficient line capacity. It may also aid in isolating performance problems induced by high line or cluster error rates caused by temporary errors or wide fluctuations in message rates.

With NPA data, networks may be tuned for greater efficiency and potentially improved response times. Elements such as polling rates, ntwork parameters, and line loading may be modified and performance improved. Tuning may also free up capacity.

NPA consists of a host application program and one or more modified NCP programs. It runs under VS1 or MVS, with VTAM and/or TCAM. NPA can coexist with subsystems such as CICS, IMS, or TSO, but operates independently of them.

Notice GB21-2478, PDOM SB21-2479.

INSTALLATION MANAGEMENT DOCUMENTATION AID
5798-CZW

This FDP is an installation planning and operations management tool, particularly useful in a large complex DP environment. Its functions include creation and maintenance of the following:

- Computer room layouts (Note: If a 3800 is available, these are drawn to the same scale as IBM-provided equipment templates).
- CPU to channel to control unit cable diagrams.
- Subsystem cabling diagrams (DASD, Tape, 2914).

This FDP is parameter driven and may be executed under TSO or in batch.

Notice GB21-2481, PDOM SB21-2482.

NETWORK PERFORMANCE ANALYSIS AND REPORTING SYSTEM (NETPARS)
5798-CZX

NETPARS is a productivity aid which will assist the system programmer to diagnose and investigage the NCP SDLC/BSC network operation, design, and usage. NETPARS uses data collected by the Network Performance Analyzer FDP (NPA, 5798-CZR), and executes under the system for Generalized Performance Analysis Reporting (GPAR, 5798-CPR).

NETPARS reads the chronological data collected by NPA to: Produce meaningful reports to assist in analysis for network capacity planning, resource optimization, and problem management; help tune VTAM, TCAM, NCP; compare installation-defined criteria and actual operation on a timely basis.

Notice GB21-2487, PDOM SB21-2488.

DOS/VS SYSTEM FOR GENERALIZED PERFORMANCE ANALYSIS REPORTING (DOS/GPAR)
5798-DAA

This FDP is a productivity aid for the development of performance evaluation, capacity planning, tuning, and general-purpose data reduction and analysis programs.

This FDP is designed to present data from performance data logs or other sequential files, and is the base for CICSPARS (FDP 5798-DAB).

It is similar to the GPAR base product (FDP 5798-CPR) previously released for OS/VS environments.

DOS/GPAR provides facilities designed to reduce the cost and effort of complex report program development, while increasing the quality of dependent report programs.

Notice GB21-2491, PDOM SB21-2492, Programmer's Guide SB21-2500.

CICS PERFORMANCE ANALYSIS REPORTING SYSTEMS RELEASE 2
5798-DAB

This FDP is a performance reporting and capacity planning aid which gives users information about their CICS/VS systems. The functions which are available include storage analysis, data gathering and reporting capability, and a CICS/VS Monitoring Facility (CMF) data reporting capability.

The storage analysis function provides the user with information gathered online and reported with online displays or batch reports. These reports range from general management level reports to detailed system information. They give information regarding real and virtual storage utilization and page fault activity. The CMF data reporting capability takes data captured by CICS V1 R5 and provides the user with list, summary, and final total reports.

The batch reporting function of CICS Performance Analysis System (CICSPARS) requires the system for Generalized Performance Analysis and Reporting (GPAR) FDP (5798-CPR for OS/VS and 5798-DAA for DOS/VS), a productivity aid which provides facilities designed to reduce the cost and effort of complex report program development.

Release 2 adds to the CMS data post-processing capability. In addition to the reports currently available, 19 different graphs may be produced. Release 2 also provides a detail list report for CMF's exception and accounting data.

Notice GB21-2494, PDOM SB21-2495.

FORMAT/3800 II
5798-DAC

This FDP is a productivity aid for producing "pre=printed" or "formatted" forms for use on an IBM 3800 Printing Subsystem. FORMAT/3800 II includes the same functions as FORMAT/3800, 5798-CPN, and provides the user with a quick and simple method of preparing "formatted" forms using the FORMAT character set.

In addition, it generates online or offline syntax and allows "free-text" input in either character or hexadecimal form. As options, it has the ability to: optimize generated COPYMOD statements for any line where there is no user data; optimize "free-text" input even if the free text data contains blanks; produce COPYMOD statements with syntax as required for the IBM 3800 OFFLINE utility; produce an OPTION OVERRUN card for any specified lines per inch or not produce an OPTION card.

Notice GB21-2496, PDOM SB21-2497.

CROSS DOMAIN NETWORK DATA TRANSFER
5798-DAE

This FDP is designed to simplify the transfer of problem determination data between nodes in the network. In a communications network consisting of multiple CPUs at different geographic locations, problem determination expertise often exists at a single node in the network. In order to properly diagnose network problems and monitor the status of network components, the problem determination node needs access to traces, abend dumps, error logs, and other listings which document network problems but may exist only at the node where the problem occurred.

Notice GB21-2498, PDOM SB21-2499.

8100/DPCX 3790 SORT/MERGE PROGRAM
5798-DAF

This FDP provides 8100/DPCX and 3790 customers with a general purpose sort/merge capability which provides performance capability sufficient to permit its use in interactive applications. It may be called from either a full screen operator interface program that is provided or from a user program. The FDP will sort tags of any length between 2 and 128 bytes into ascending or descending order.

A subprogram is provided which can build a tag data set from a relative data set or an indexed data set based on up to 16 user-specified fields from each input record. Another subprogram provides the capability to resequence the original input records. For typical sorts, this sort is from 5 to 20 times as fast as the previously available 3790 sort.

A separate license is required for each 3791 or 8100/DPCX controller.

Notice GB21-2501, PDOM SB21-2502.

STORAGE TUBE AND PLOTTER SIMULATOR FOR THE 3277 GRAPHICS ATTACHMENT
5798-DAG

This FDP is a set of FORTRAN routines that allows existing customer application programs written for a Tektronix * Storage Tube or Calcomp ** plotter to execute on the IBM 3277 Display Station with the graphics attachment RPQ 7H0284 and the PRPQ 5799-AXX. These FORTRAN routines replace routines of the same names in the Tektronix 'Plot 10' or Calcomp 'Plot R' software packages for execution with the 3277 Display Station with the graphics attachment. The FDP gives the user the ability to generate a graphic image rapidly and provides a dual-screen facility: One, graphic; the other, alphanumeric.

* Registered trademark of Tektronix Corporation
** Registered trademark of California Computer Corporation

Notice GB21-2503, PDOM SB21-2504, Systems Guide LB21-2505.

3630 PLANT MONITORING AND CONTROL TRANSACTION DRIVER
5798-DAH

This FDP is a 3631/3632 application program that provides an easy method for capturing shop floor activity. The program provides an efficient, modularized, table-driven structure which may accelerate the installation cycle, simplify customization, and ease expansion of online shop floor applications. The FDP has been designed to operate with CICS/VS.

Notice GB21-2506, PDOM SB21-2507.

... Enhancement (Specify #9566, #9567)

The enhancement includes four additional transactions and host VTAM Communications Support.

Notice GB21-2506, PDOM SB21-2735.

LEARNING TO CODE OS/VS JCL
5798-DAJ

This FDP describes the structure and function of Job Control Language (JCL) statements and how to code them. It is designed for application programmers, system programmers, computer operators, and other personnel working in an OS/VS environment. The course operates with either the Interactive Instructional Presentation System (5668-012) or the Interactive Instructional System Release 6.0 (5748-XX6).

Topics include: An OS/VS overview, the JOB, EXEC, and DD JCL statements, JCL procedures, and JCL for Generation Data Groups, plus three JCL case studies to be run "live" on an OS/VS system. This FDP replaces Basic OS JCL Training (5798-CJC).

Notice GB21-2508, CDAM SB21-2509, Student Materials SB21-2510.

**3650 PHARMACY APPLICATION/CENTRAL ENVIRONMENT
5798-DAK**

This FDP provides support at the user's host site for the operation of pharmacies at remote locations using the 3650 Programmable Store System Pharmacy Application/Store Environment program product (5735-H11).

This FDP has been designed and tested with the Advanced Data Communication for Stores program product (5735-XR2).

Notice GB21-2513, PDOM SB21-2514.

**SYSTEM LOG DISPLAY AND SEARCH FACILITY
5798-DAL**

This FDP is a systems management aid for controlling and analyzing the operation of an MVS/JES2 system. It can improve the productivity of operations, scheduling, control, and systems programming personnel by providing much needed operational information. In many cases, problem-determination time may be significantly reduced through the use of this FDP.

Information is provided in four displays: System Log (SYSLOG), which allows the user to dynamically display (SCHROLL) all MVS SYSLOG data sets; Display Active; Input Queue; and Output Queue. Much of the information provided by these displays previously had been unavailable or hard to obtain. Information is displayed on 3270 display stations with 24, 32, or 43 lines. This FDP will run either as a menu option to the TSO 3270 Display Support and Structured Programming Facility (SPF/TSO) program product (5740-XT8 Version 2.1 or 2.2), or as a TSO command processor. The display formats and command syntax of this FDP are similar to that of SPF/TSO.

Notice GB21-2511, PDOM SB21-2512.

**VSAM AND ACCESS METHOD SERVICES FOR PROGRAMMERS
5798-DAN**

This FDP operates with the Interactive Instructional System (5748-XX[) and is primarily for application programmers who write programs that access VSAM data sets. The course is designed to teach students how to create and process VSAM data sets; to define, load, print, and delete VSAM data sets; and to recognize JCL requirements for VSAM. Included are these key topics: VSAM data set and index structures and space management; Access Method Services (AMS)/VSAM catalog; AMS data set definition; DB/DC considerations; ISAM interface program; and VSE/VSAM. Optional hands-on exercises are provided for students to code basic utility functions of the Access Method Services.

Notice GB21-2518, CDAM SB21-2519, Student Materials SB21-2520.

DEVELOPMENT MANAGEMENT SYSTEM (DMS)/CICS/VS BASIC APPLICATION PROGRAMMING
5798-DAP

This FDP is a computer-based training course operating with the IBM program product, Interactive Instructional System (5748-XX6). The course is designed for users of the Display Management System or the Development Management System (DMS), especially application programmers and end-users. Included are practical case studies and specific training on these session topics: Introduction to DMS; DMS Application Design; File Description and DMSDBD Coding; DMS Panel Coding; and DMS Offline Modules. Course objectives are to enable students to identify and describe the facilities and supervisor functions of DMS, and to code DMS file and panel descriptions. Students may take the course at any terminal device supported by the Interactive Instructional System and, typically, need five to seven hours to complete it.

Notice GB21-2515, CDAM SB21-2516, Student Materials SB21-2517.

ACCOUNT NETWORK MANAGEMENT PROGRAMS
5798-DAQ ... CICS/OS/VS
5798-DAT ... CICS/DOS/VS

These FDPs are specifically designed to automate the core elements of system management with an integrated set of interactive application programs and batch report programs as follows:

- The problem management application provides preformatted screens to ensure consistent problem reporting, assignment, and resolution of system or network incidents.
- The change management application provides preformatted screens to enable planned, coordinated change activities including: Equipment installation or relocation; new application programs; PUT and engineering changes; and feature changes.
- The network configuration application provides an online data base of network components, and the ability to create, update, and display records containing component details.

Notice GB21-2521, PDOMs SB21-2522 (DAQ) and SB21-2524 (DAT), Reference Card SB21-2546.

NETWORK ERROR MANAGEMENT FACILITY
5798-DAW

This FDP enables the user to perform problem determination of incidents on communications networks in the OS/VS and DOS/VS operating environments. The design of this FDP permits a structured approach to problem determination through a hierarchical display of error information for each of the operating modes beginning with all errors summarized by each attached resource. Successive iterations lead quickly to the failing component, whereupon the detailed data of the error event and the probable cause are available.

Notice GB21-2527, PDOMs SB21-2526 (OS/VS) and SB21-2528 (DOS/VS).

VS/APL FINANCIAL PLANNING SYSTEM CICS/VS AND VSPC
5798-DBA

This FDP is a financial application program written in APL which will be useful to the financial analyst who needs to obtain printed financial reports with quick turnaround. Functions provided are:

- Interactive design of financial reports
- Terminal data entry and editing
- Interactive definition of financial calculations to be performed, including APL code and/or any of the financial, arithmetic and forecasting routines of the Financial Planning System
- Execution of the financial algorithms which the user has defined
- Printing of the financial report
- Consolidation of financial reports (e.g., produce a corporate report by consolidating divisional data).

Notice GB21-2538, PDOM (CICS/VS) SB21-2529, PDOM (VSPC) SB21-2539, Systems Guide LB21-2540.

CONVERSATIONAL MONITOR SYSTEM (CMS) FUNDAMENTALS
5798- DBB

This FDP is a computer-based training course that operates with the program product, Interactive Instructional System (5748-XX6). The course is designed for various users of the Conversational Monitor System (CMS) including text processors, system programmers, and application programmers.

Objectives of the course are to: Enable students to describe functions of Virtual Machine components, CMS file handling capabilities, CMS

commands, CP and CMS utility functions, facilities to manage a CMS virtual machine, VSAM features for CMS user, and characteristics of CMS user application packages; create and change CMS data files and a program using CMS; create and use a simple EXEC procedure; and prepare and submit a job to a CMS batch virtual machine.

The course can be installed on any IBM system that supports the Interactive Instructional System (IIS). Students may take the course at any terminal device supported by IIS and, typically, need 14 to 18 hours to complete it.

Notice GB21-2532, CDAM SB21-2533, Student Materials SB21-2534.

DATA RETRIEVAL/MANIPULATION UTILITY
5798-DBC

This FDP is a general-purpose, control-card-driven, multi-phase program designed to perform a wide range of file-to-file functions, including most of the functions formerly available through the DOS Type I Utility Programs. File types supported include card (device independent), sequential disk (2311, 2314, 3330, 3340, 3350 and FBA), diskette (3540), tape, ISAM, VSAM, and printer. Fixed and variable length records are supported, up to a maximum length of 4,096 bytes.

Functions supported include verbatim copy from any of the above input file types to any of the above output file types and/or combinations of record selection and/or data reformatting. Up to 100 control totals can be maintained for audit purposes and to verify file integrity.

Notice GB21-2535, PDOM SB21-2536.

APPLICATION ENABLING FACILITY
5798-DBF

The Application Enabling Facility operates as a CMS virtual machine under VM. It is a set of CMS EXECS (procedures) and display panels which allow the user, through one interface, to access techniques such a capturing documentation using SCRIPT/VS or to compile and catalog a COBOL coded transaction for CICS. These procedures and interfaces to IBM products are light-pen selectable and menu-driven, providing productivity for the user.

Notice GB21-2551, PDOM SB21-2552.

ISAM - IMS/DB BRIDGE
5798-DBG

This FDP is an execution-time interface between ISAM application programs and an IMS data base. It is a migration aid designed for OS/VS users, which gives ISAM-based applications access to IMS data bases without the need of modifying the existing ISAM programs. This FDP is the OS/VS Batch version of an existing FDP, ISAM-DL/I Bridge, 5798-CYT.

Notice GB21-2547, PDOM SB21-2548.

CICS/VS ISAM - DL/I BRIDGE
5798-DBH

This FDP is an execution-time interface between CICS-ISAM application programs and a DL/I data base. It is a migration aid designed for DOS/VS, DOS/VSE, and OS/VS users, which gives ISAM-based applications access to DL/I data bases without the need for modifying the existing ISAM programs. This FDP is the DOS/VS/VSE or OS/VS online (CICS/VS) version of an existing FDP, ISAM-DL/I Bridge, 5798-CYT.

Notice GB21-2549, PDOM SB21-2550.

CICS/VS OPERATIONS SUPPORT PACKAGE
5798-DBJ

This FDP is a set of four CICS/VS online transaction programs designed to assist operations personnel monitor CICS/VS system status information and diagnose operational problems on a realtime basis. The system-status transaction will display, on a single screen, information about task class usage, dispatching queues, DL/I thread usage, transaction and paging rates, and other CICS/VS statistics and indicators which give a complete picture of current system performance. The task-list transaction will display on multiple pages, if necessary, information about every transaction on a CICS/VS dispatching queue. The terminal-status display will identify every terminal that is out of service or not in session with CICS/VS. The response-time transaction will measure the average turnaround time of messages from CICS/VS to a terminal operator and back.

Notice GB21-2554, PDOM SB21-2555.

PROGRAM FUNCTION KEY SIMULATOR FOR SPF/CMS
5798-DBK

This FDP will allow SPF/CMS (5748-XT3) to be used on 3270 terminals that do not have at least 12 program function (PF) keys. In addition, terminals with less than 24 PF keys may use a combination of keys and commands to achieve the function of all 24 PF keys. This program will have the same function as PF Key Simulator for SPF-2 FDP (5798-CTF).

Notice GB21-2556, PDOM SB21-2557.

3890 DOS/VSE ON-US EDITING
5798-DBL

This FDP provides a means of generating the 3890 and DOSCHECK (5746-F12) online reject re-entry code necessary to perform the on-us processing and document distribution functions required by the typical commercial bank's MICR system. The FDP has been designed to complement DOSCHECK's Sort Table Generator, but may be used in conjunction with other MICR systems. It also has been designed so that the input specifications may be maintained by non-programmers. To allow complete flexibility, provision has been made to allow direct insertion of 3890 stacker control assembly language instructions in the input specifications. In addition, provision has been made to generate the reject reason codes required by the Check Report program product (5748-F13).

Notice GB21-2559, PDOM SB21-2560.

NETWORK ERROR MANAGEMENT FACILITY - IMS (NEMF)
5798-DBN

This FDP enables the user to perform problem determination of incidents on communications networks containing 370X/EP or locally-attached terminals. The design of NEMF permits a structured approach to problem determination through a hierarchical display of error information for each of the attached two modes starting with all errors summarized by each attached resource. Successive iterations lead quickly to the failing component, whereupon the detail data of the error event and the probable cause are available.

NEMF records and displays error data in each of two modes - EP and local. In EP mode, error data from devices utilizing start/stop or bisync line disciplines is supported. Local mode supports error records from channel attached devices.

NEMF consists of IMV/VS applications programs. It runs under VS1 and MVS.

Notice GB21-2566, PDOM SB21-2567.

ACCOUNT NETWORK MANAGEMENT PROGRAM - IMS/VS
5798-DBP

This FDP is specifically designed to automate the core elements of system management with an integrated set of interactive application programs and batch report programs as follows:

- The problem management application provides preformatted screen to ensure consistent problem reporting, assignment and resolution of system or network incidents.
- The change management application provides preformatted screens to enable planned, coordinated change activities including: equipment installation or relocation; new application programs; Program Update Tape (PUT) and engineering changes, and feature changes.
- The network configuration application provides an on-line data base of network components and the ability to create, update and display records containing component details.

Notice GB21-2568, PDOM SB21-2569.

DOCUMENT COMPOSITION FACILITY POST PROCESSOR FOR THE 6670
5798-DBR

This FDP and the Document Composition Facility (DCF) may be used to produce multi-column, correspondence-quality text output for the 6670 Information Distributor. The user may highlight textual elements such as headings, paragraphs, or phrases for emphasis and clarity by mixing 10 and 12 pitch and proportional-spaced 6670 typestyles within the same document.

The user may request 6670 typestyle changes within a document to be processed by DCF. In addition, this FDP will automatically generate typestyle changes to the symbol font for box and other special characters.

This FDP includes 6670 post processor for DCF output. It also includes DCF font and character width definitions to support the mixing of 6670 typestyles.

Notice GB21-2563, PDOM SB21-2564.

PROGRAMMING IN VS BASIC
5798-DBX

This FDP operates exclusively with the program product, Interactive Instructional System (5748-XX6). It is designed for a broad range of personnel extending from students who only have a familiarity with data processing to employees who are experienced with other computer programming languages. The primary goal of the course is to teach personnel how to write BASIC programs. While it concentrates on proper use of the IBM program product, VS BASIC (5748-XX1), the course may also serve as a general introduction or review of the BASIC language. Forty-five intrinsic functions in VS BASIC are covered in the course along with a glossary of 75 key terms. Organized in 14 sessions including individual programming exercises, the course typically takes 14 to 16 hours to complete.

Notice GB21-2574, CDAM SB21-2575, Student Materials SB21-2576.

VTAM LEVEL SELECTOR
5798-DBZ

[NO LONGER AVAILABLE effective August 1983.]

This FDP will allow the co-residence of multiple copies of VTAM in the same MVS system. These copies can be at the same or different release or PTF levels. Any copy can be serially activated/terminated without the need to re-IPL.
Note: Central Cervice will be discontinued effective August, 1983.

Notice GB21-2580, PDOM SB21-2581.

DISTRIBUTED DATA TRANSFER
5798-DCA ... HOST
5798-DCF ... CONTROLLER

The Distributed Data Transfer Field Developed Program consists of two programs, one residing in the host (5798-DCA) and one residing in the distributed controller (5798-DCF). The purpose of the FDP is to provide the user with the interactive capability to move any combination of data sets between the host and a controller. Specifically, it is designed to transmit batch data to a host for later processing, retrieve data interactively, dump volatile files to a host, and to restore damaged or destroyed data sets.

The host program is designed to operate under the OS/VS (VS1 or MVS), DOS/VS, or DOS/VSE operating systems utilizing VTAM. The distributed program is designed to run on the IBM 8100/DPCX or 3790. The controller may be either locally or remotely attached.

Notice GB21-2594, PDOMs SB21-2595 (DCA) and SB21-2596 (DCF).

3650 PROGRAMMABLE STORE SYSTEM
MERCHANDISE MANAGEMENT
5798-DCB

This FDP, operating in 3650 Programmable Store System, provides assistance in controlling the flow of merchandise from point-of-sale through replenishment. It closes the loop for store level inventory processing providing the type of functions to store management that their warehouse counterparts have utilized for years.

Notice GB21-2583, PDOM SB21-2584, Systems Guide LB21-2585.

3650 PROGRAMMABLE STORE SYSTEM
RESOURCE MANAGEMENT
5798-DCD

This FDP, operating in 3650 Programmable Store System, provides store management with a wide range of new facilities for planning, reporting, and controlling usage of people and equipment resources in a store.

Notice GB21-2591, PDOM SB21-2592, Systems Guide LB21-2593.

PLOTTER AND TABLET SUPPORT FOR
THE 3277 GRAPHICS ATTACHMENT
5798-DCE

This FDP consists of two sets of functionally identical subroutines that provide high-level programming support of the Hewlett-Packagd HP*7221A Plotter and a variety of tablet (digitizer) manufacturers. The first set of the approximately 40 subroutines is written in FORTRAN; the second set is written in APL.

Although the 3277 Graphics Attachment (RPQ 7H0284) provides for the hardware attachment of a storage tube for graphic display, a digitizer for graphic data input, and a plotter for graphic hard copy, software support is provided for only the storage tube. This FDP will complement the storage tube software (PRPQs).

* Registered trademark of Hewlett-Packard Corporation

Notice GB21-2598, PDOM SB21-2599, Systems Guide LB21-2600.

FILE CABINET OPTION (FCO)/VTAM
5798-DCG

This FDP captures designated output data sets from the MVS JES2 or JES3 Spool queue and storing or archiving them in VSAM data sets on a VSAM supported online storage device (e.g. 3350 DASD facility or 3850 mass storage system). Data which is printed, stored on tape, or microfilmed today, can now be viewed via a 3277-2 or 3278-2, 3, 4 or 5 (wide screen) display terminal and reprinted on demand. Terminal commands aid the user in viewing the data. Hard copy print-outs can be made of part or all of a stored report.

Notice GB21-2604, PDOM SB21-2605, Systems Guide LB21-2606.

LABORATORY DATA MANAGEMENT SYSTEM II
NORMAL VALUE/DELTA CHECKING
5798-DCH

This FDP is built upon the Laboratory Data Management System (LDMS) II. Extensive delta checking function is added and the normal value checking capability is expanded to allow evaluation by age and sex or some other clinically-significant parameter.

The design utilizes online video terminals and printers in the clinical laboratory for printing of delta check and normal value check exception reports. The appropriate normal value range for each test is printed on the patient's interim report and cumulative summary and abnormal results are flagged. For ease of use, the delta checking and normal value parameter may be updated via a terminal or a batch program.

This FDP may be used by users of either LDMS with LDMS Enhancements or LDMS II.

Notice GB21-2602, PDOM SB21-2603.

IMS/VS DATA COMPRESSION FACILITY
5798-DCJ

This FDP is designed to reduce the amount of data actually written to DASD by compressing the data before it is written and expanding it when it is retrieved.

By using this FDP, an installation may:

- Reduce the DASD requirements for data base storage
- Simplify recovery procedures
- Reduce recovery processing time
- Obtain improved performance
- Eliminate the need for application-specific compressing logic - accelerating program development and easing program maintenance.

Notice GB21-2612, PDOM SB21-2613.

DATA SET MIGRATION AND PLANNING AID
5798-DCK

This FDP provides a current snapshot of an installation's permanent data files to assist the customer in ensuring that these files reside on the most efficient cost/performance storage media. Using SMF data to determine size and activity and user-supplied cost/performance parameters, the program provides up to nine different reports which suggest the best media and the most effective migration order for the data sets.

Notice GB21-2614, PDOM SB21-2615.

VS APL FINANCIAL PLANNING SYSTEM II for VM/370
5798-DCN

This FDP is a general-purpose, interactive, APL-based application program which provides the planning-level user with the capability to create a financial planning model flexibly and rapidly. This FDP is offered with extended support.

The product contains a set of dialogs (which run under the Interactive Productivity Facility, IPF, 5748-MS1) to provide the user with an interactive capability for invoking the product.

VS APL Financial Planning System II is one of the optional licensed extended support FDP/IUPs specified for the End-User Productivity Option announced on February 29, 1980.

Notice GB21-2622, PDOM SB21-2623.

COPICS SHOP ORDER RELEASE II
5798-DCQ

The COPICS Shop Order Release application program is a tool for opening and releasing shop orders to the production facility. The process of opening and releasing a shop order is driven by the planned orders developed in the COPICS Advanced Function MRP application program (5785-GAF). The AF MRP application program is prerequisite to COPICS Shop Order Release.

The program automatically communicates unplanned shop order transactions to Advanced Function MRP (5785-GAF) to replan the affected items in the next selective replanning run.

Notice GB21-2648, PDOM SB21-2649.

COPICS INVENTORY PLANNING AND FORECASTING II
5798-DCR

The COPICS Inventory Planning and Forecasting application program provides an inventory management technique for inventory items. The application program is useful for analyzing demand, forecasting sales, establishing order quantities, setting reorder points, and calculating safety stock for independent demand items.

The program communicates changes in safety stock or order quantity to the Advanced Function Material Requirements Planning application program (5785-GAF) to replan items in the next selective replanning run.

Notice GB21-2650, PDOM SB21-2651.

6670 INFORMATION DISTRIBUTOR SUPPORT
FOR 3730 DISTRIBUTED OFFICE SYSTEM
5798-DCW

This FDP provides the capability to print 3730 generated documents on the 6670. Support for the 6670 is provided for both BSC and SDLC under ACF/VTAM. The Document Transmission Function (DTF) of the 3730 is used to send documents to and receive documents from the 6670 via the host. Operator Control Language (OCL) may be imbedded within the 3730 documents to take advantage of many of the 6670 features.

A second function of the FDP allows previously-recorded magnetic cards to be transmitted by the 6670 to the host and converted into 3730 document format. The resultant document is then transmitted to the 3730 for permanent storage.

The FDP is implemented as a series of CICS/VS application programs.

Notice GB21-2631, PDOM SB21-2632.

8100/DPCX EMPLOYMENT SERVICE
JOB BROWSE FACILITY
5798-DCY

This FDP provides the local office of the state employment service agencies with an automated self-help job information system. This system is composed of 8100/DPCX programs that provide the facility to:

- Select the type of work required in the geographic work area desired in the state, region or city.

- Use the 3270/8775 selector light pen exclusively in browsing.

- Create and update the files, typically from a job bank tape, by authorized personnel using the 3270/8775 terminals.

This FDP is designed to replace the existing microfiche or computer listing job information center with an automated system that has the potential to increase the usefulness of the job bank by providing better service to both applicants and employers.

Notice GB21-2659, PDOM SB21-2660.

DOS/VSE 1419 PROOF OF DEPOSIT
MICR CAPTURE SYSTEM
5798-DDC

This FDP provides financial institutions with a series of application programs that will support the capture of MICR input. It allows for user preparation of multiple sort patterns and will support a multiple bank environment. Online operator communication provides for interactive control, item-level restart, and jam display. Balancing is performed on a deposit, batch, block, and run level. Pocket lights or separators are supported to provide bundle totals. The system supports up to 144 endpoints in a two-pass operation, and cash letters prepared upon request. A reject listing and file of all rejects is created to allow for user corrections. A consolidated cash letter recap is prepared at the end of the day. An extract is run at end-of-day, providing general ledger control totals by run. The MICR capture of documents is the foundation of the check processing environment for financial institutions. The FDP provides the necessary accounting controls and audit trail for 4300/1419-1255 users.

Notice GB21-2668, PDOM SB21-2669.

FUNDAMENTALS OF BANKING
5798-DDH

This FDP is a course that operates exclusively with the Interactive Instructional System (5748-XX6) and is primarily for bank employees who need to expand their knowledge of banking. The course is designed to help tellers and customer-service representatives cross-sell banking services and perform their jobs more effectively. Loan and trust officers should be better able to meet their customers' needs after taking this course. Major topics include: Money and Banking, the Federal Reserve System, Other Financial Institutions, Bank Loans, The Trust Department, and Other Bank Services (correspondent, retail, and commercial). The student is asked to do several exercises using the bank's own procedures. This course is available on the National Demo System.

Notice GB21-2652, CDAM SB21-2653.

8100/DPPX DTMS/DPS TRANSACTION SIMULATOR
5798-DDP

This FDP runs as a transaction process under DTMS to execute and document a sequence of DTMS and DPS application service requests specified by its user. User-coded commands with keyword operands corresponding to DTMS and DPS service-call parameters define the DTMS and DPS processing to be requested during each transaction's execution. Transaction execution is monitored to produce a report of all user-requested services and their results.

Notice GB21-2701, PDOM SB21-2702.

INVENTORY FORECASTING and REPLENISHMENT MODULES-II:
5798-DDR ... Base
5798-DDT ... Allocation
5798-DET ... Online Processor

The Inventory Forecasting and Replenishment Modules-II (INFOREM-II) system provides solutions for a wide variety of inventory management problems which exist in many business operations. Grocery, wholesale distribution, retail, drug, manufacturing, utilities and other industries have large investments in merchandise, spare parts, maintenance materials and other types of inventories.

The INFOREM-II system is designed to help maintain proper assortment of these inventory items while balancing two basic and conflicting inventory goals: Maximize inventory service level and minimize inventory investment.

INFOREM-II is designed to be used with an existing or planned customer stock status system, which is responsible for maintaining on-hand and on-order balances plus historical sales information.

Base: Notice GB21-2695, PDOM SB21-2696
Allocation: Notice GB21-2695, PDOM SB21-2699
Online Processor: Notice GB21-2695, PDOM SB21-2751

3279 EXECUTIVE PRESENTATION SYSTEM
5798-DEB

The objective of the 3279 Executive Presentation System is to provide a color-graphics capability to management and other organizational personnel who review and analyze financial time-series data. Significant productivity enhancements in data presentations, trend analysis, or spotting unusual data variations are achievable. The program uses the Standard and Poors COMPUSTAT® data base as the source of financial data.

The user is prompted for the companies and the data items to be graphed, and the type of chart to be displayed. Line graphs, surface charts, pie charts and histograms are supported.

No data processing knowledge is required to use the 3279 Executive Presentation System. The use of menus and the selection of program functions with a light-pen makes the system self-teaching and highly productive to use.

® Registered trademark of Standard and Poors.

Notice GB21-2725, PDOM SB21-2726, Systems Guide LB21-2765.

IBM 3800 SIDE-BY-SIDE PAGE PROCESSOR
5798-DFW

This FDP provides the data processing organization additional flexibility in creating and distributing reports to the user community. It takes an application report and places two pages side-by-side on one physical page. In addition, the FDP is capable of identifying different logical sections of the report, thus preventing one section from printing with another section on one page.

The FDP can process a report automatically or, with user-specified options, allow users to reformat the side-by-side pages to their new requirements. These additional functions for the IBM 3800 can be realized without any modification of the application code.

Since the number of physical pages of a report is essentially halved, the print time, paper use, and IBM 3800 use charge may be reduced. Thus significant savings may be realized in both performance and dollars.

Notice GB21-2816, PDOM SB21-2817.

FILE CONVERSION for WORD PROCESSORS
5798-DFY

This FDP provides the capability to convert SAM or VSAM data into a format acceptable for merging with letters on the IBM 6670, IBM Displaywriter, IBM OS/6, IBM Mag Card II/6240, or IBM 6640.

The conversion includes the following functions: Selection of specified fields; insertion of Operator Control Language (OCL); qualification of data based on field content; conversion and editing of packed, EBCDIC, or binary fields; substitution of data based on field contents; conversion of upper case names to a mixture of upper and lower case; deletion of trailing blanks in an alphabetic field; deletion of leading zeros in a numeric field; and insertion of correct delimiter (such as switch code) between fields.

Notice GB21-2821, PDOM SB21-2822.

SYSTEM ERROR MANAGEMENT FACILITY - CICS/DOS/VSE
5798-DGD

This FDP provides an online view of errors occurring in a central electronics complex. Machine checks, channel checks, miscellaneous data records (MDR) and outboard records (OBR) are recorded in a "HARDWARE" error data base. Additionally, all tape and disk MDR and media-related OBR records are recorded in a "MEDIA" error data base. The hardware data base (VSAM) is indexed by CPU name, channel name and device address, whereas the media data base (VSAM) is indexed by volume serial number. This method of logging errors allows a real-time analysis of system problems and provides the ability to differentiate between media and hardware failures.

Notice GB21-2834, PDOM SB21-2835.

TCAM SUBTASK TRACE ANALYSIS REPORT
5798-DGK

This FDP allows ACF/TCAM users the ability to analyze the performance of their MCPs. This is accomplished by providing time-stamp data in the Subtask Trace records which are analyzed by the FDP. Reports are produced to track such information as disk I/Os for TCAM buffers, MH elapsed time per message, number of buffers per message, and length of message by terminal.

Notice GB21-2860, PDOM SB21-2861.

THREE DIMENSIONAL PRESENTATION GRAPHICS FACILITY/
MATRIX MATH EDITOR
5798-DGP

This FDP is an interactive color graphics system which supports the IBM 3279 Color Display. It includes a full-screen editor designed to permit users to enter, manipulate and perform arithmetic operations on tabular data. It uses the Graphic Data Display Manager (5748-XXH) to manage menus and display data as three-dimensional graphs. Users may control the attributes of these graphs with selections of color, shading patterns, annotations, figure types, legends, pitch, depth, and height control.

Notice GB21-2867, PDOM SB21-2868.

NETWORK INTERFACE MODULE
5798-DGT

This FDP is a teleprocessing productivity tool which provides the systems or application programmer with a simple "GET/PUT" level interface to ACF/VTAM. It is designed to allow programmers with little or no teleprocessing experience to access ACF/VTAM attached 3270s using a simple high level language interface with no complicated data stream manipulation requirements. The interface further gives more experienced programmers the flexibility of supplying their own 3270 data streams, thus providing the user with the full, functional capability of the 3270, if required. Access is provided to any programming language which supports the standard call capability including Basic Assembler language, COBOL and PL/I. Designed for simple installation and use, no system generation or parameter specifications prior to use are required.

Notice GB21-2875, PDOM SB21-2876.

IBM 3650 APPLICATION DEVELOPMENT DEBUG FACILITY
5798-DGY

This FDP is an installation and development tool for the IBM 3650 Programmable Store System applications. This aid allows a programmer to use a 3275 Display Station to monitor an SPSS II program as it executes in the 3651 Store Controller. Among the diagnostic functions provided are the ability to halt program execution selectively, and the ability to inspect and alter the program and its data. This tool can be used to facilitate the implementation and customization of 3650 program products (e.g., the IBM 3650 PSS POS Application/Retail Environment or the IBM 3650 PSS POS Application/Supermarket Environment). Similarly, this facility can speed the implementation of new programs developed by the PSS user.

Notice GB21-2883, PDOM SB21-2884.

COST/BENEFIT MODELING AID
5798-DHE

This FDP is a cost/benefit analysis tool to support end-user involvement in the justification of complete applications and/or information systems. A unique design feature enables users to construct cash flow models that simulate the geographic and organizational structure of their corporation (a fundamental requirement for decentralized business functions and/or distributed processing solutions). Ten user-oriented output options provide explicit documentation of user assumptions and meet informational requirements of users to evaluate alternate plans and approaches as well as project risk. Module design facilitates the addition of user functions to meet unique customer requirements.

Notice GB21-2898, PDOM SB21-2899.

DEVELOPMENT MANAGEMENT SYSTEM/DPPX
MANAGEMENT AID
5798-DHH

This FDP provides reports about the contents of a Development Management System (DMS) DPPX Member Specification Library (MSL). These reports provide the DMS/DPPX user with a management tool to help evaluate the impact of proposed changes to user definitions of data items, records, programs, and terminal layouts. The reports can also be used to audit adherence to installation naming and usage standards, inventory the MSL contents, and determine when items were changed.

Notice GB21-2904, PDOM SB21-2905.

VM/370 RESOURCE LIMITER
5798-DKN

This FDP enables users, user management, and computing center personnel to monitor and control usage of various computing resources within a VM/370 system. If a user's consumption of a given resource exceeds a previously established limit, the Resource Limiter can take actions designed to improve system performance and resource availability. Possible actions include warning messages, adjustment of priorities, or terminating a user's terminal session.

Notice GB21-3005, PDOM SB21-3006.

IBM ISG

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FIELD DEVELOPED PROGRAMS

FDP 5798-DJP.1
Oct 83
New

APL2 for VM/SP
5798-DJP

APL2 provides major enhancements over previous IBM APL implementations. Extensive changes and improvements have been made to the language and environmental facilities as well as to the internal structure and operation of the system. APL2 has been in use and tested by a variety of VM/CMS internal IBM site users.

APL2 for VM/CMS was developed at the Santa Teresa Laboratory, San Jose, California. It will be maintained and supported by the APL2 development team via a customer service line. The service line number and hours are provided in the availability notice (GB21-2989).

This licensed program is not intended to be a replacement for VSAPL (5748-AP1).

As a result of user feedback, changes may be made to this product which would necessitate modification to previously working applications. Users are cautioned to consider this carefully before migrating products to APL2.

It is IBM's direction to incorporate into future APL licensed program products, in the VM/CMS and MVS/TSO environments, language and environmental enhancements similar to those provided with APL2.

HIGHLIGHTS

Language Extensions:

- General arrays may contain other arrays as well as a mixture of character and numeric data.

- New and extended APL operators including:
  - User-defined operators
  - Use of defined functions with operators

- Additions to APL primitive functions:
  - Picture format
  - Character sorting
  - Text and string handling
  - New mathematical functions

- Programmable error handling

- Complex arithmetic

Environmental Facilities:

- A new full-screen editor

- New shared variable processor

Note: No VS APL work spaces will be shipped with APL2. Users who require access to work spaces (such as GRAPHPAK) will require a VS APL license. Similarly, no macros for implementation of user-written auxiliary processors will be shipped with APL2. Users requiring continued use of these macros will require a VS APL license.

In addition, the Information Center products (A Departmental Reporting System II 5797-PLN, APL Data Interface II 5796-PNG, and Financial Planning System II 5798-DCN) and other APL licensed programs are not supported by APL2. Users of these products will also require a VS APL license.

Notice GB21-2989, Program Description and Operation Manual SB21-2990, Language Manual SB21-3015, Terminal User's Guide SB21-3014.

U.S. GEOGRAPHIC DEMOGRAPHIC SYSTEM
5798-DJQ

This FDP allows an individual to retrieve information from a file of geographic boundaries and statistical data and to plot it on a seven-color or monochrome display. One may plot the raw data or calculations performed with that data on a county or state map. As an example of the digitizing capability of the program, maps of area- or zip-codes can be generated. A distribution of the data may also be obtained as a histogram or a numerical listing. The program generates its output on the 3279, 3277GA, 3278 Printer, and the XY/750 plotter. It is an interactive graphics mapping program using menus and a light-pen. The program is distributed with the county and state outlines of the United States, and with Census Department statistics. It requires an S/370, 303X, 308X or 4300 Processor; VM/CMS or MVS/TSO; GDDM and the FORTRAN compiler and libraries.

Notice GB21-3020, PDOM SB21-3021, Systems Guide LB21-3022.

INTERACTIVE PRESENTATION GRAPHICS
5798-DJT

This FDP is a general purpose drawing facility for the 3277 Graphics Attachment. It generates computer artwork that can be used for a number of application areas, including preparation of text and artwork for overhead projection transparencies, creation of flip charts, design of illustrations to be used in publications, and creation of special symbols to be used in interactive graphic applications.

The FDP is a menu-driven, user-friendly system organized with simple instructions indicating the available options and providing a wide range of output options. These output options include display on a graphic storage tube as part of the 3277 Attachment Workstation, display on 3278 or 3279 Displays with the Programmed Symbols features, hardcopy output to a four- or eight-pen plotter attached to the 3277 Graphics Attachment Workstation via an RS232-C Interface, hardcopy output to a thermal copier as part of the 3277 Graphics Attachment Workstation, and color hardcopy to a 3287 Printer.

Notice GB21-2958, PDOM SB21-2959, User's Guide SB21-2960.

VISUAL AID PREPARATION SYSTEM
5798-DJZ

This FDP is designed to aid in the development and demonstration of visual aids for presentations utilizing the capabilities of the color graphics facilities of the Graphical Data Display Manager licensed program (5748-XXH), with the Presentation Graphics feature, and the 3279 Color Display. Written in PL/I and running under CICS/VS, the program provides the user with an easy-to-use method of describing individual screens made up of symbols and text, and a capability to make quick adjustments to these screens.

Notice GB21-2986, PDOM SB21-2969.