

IBM Internal Use Only

ZZ20-2422-0

Systems

Special Bibliography of Publications Supporting IBM System/370 Advanced Function

This is a temporary bibliography of publications, films, and slide sets that describe or document the System/370 Advanced Function. Available abstracts are also provided, including those available for the technical documentation required for planning, programming, installation, and operation.

This bibliography will be revised for a time to include new items and changes, after which it will be discontinued, and the titles and abstracts of all technical documents will be absorbed into permanent bibliographies and indexes.

IBM

PREFACE

Order numbers and titles of publications included in this temporary bibliography are listed below, normally in alphameric sequence within each group shown in the Table of Contents. Where a Technical Newsletter is indicated, support for Advanced Function is provided when the pages in the TNL are inserted in the manual to which it applies.

*An asterisk following the order number designates an item for World Trade use only; not available in U.S.A.

**A double asterisk will be used in revisions of this bibliography to indicate new items or changes to titles or order numbers.

Abstracts describing the documentation are in Part 2 of this bibliography. The abstracts available are listed in order-number sequence.

Order Number

The publication order number has eight positions, plus one or two positions for the edition suffix. The order number identifies various facts about a publication, including those described below.

Identification of Availability

The first character of the order number is the use key, which governs the availability of the document. Use key G means that the item is available to users and prospective users, through their IBM representative, without charge. Use key S means that the item is for sale through IBM branch offices. Use key L means that the item is available only to licensees for the IBM Program Product or other licensed program. Use key Z means that the item is not to be made available outside IBM.

Identification of Logic Manuals

Publications that explain program logic normally have a "Y" as the second character of the order number, e.g., SY28-1234-5. (They also include "PLM," "System Manual," "Logic," or similar wording in the title.) Such manuals are intended for use by persons involved in program maintenance or alteration of the program design; they are not required for normal use or operation of the program described.

Identification of Microfiche

An alphabetic character in the third position of an order number identifies a document on microfiche, e.g., LYB0-5432-1 or S2C0-0301-0.

First Edition (August 1972)

Comments on this publication may be addressed to DP Library Services Department 77A, 1133 Westchester Avenue, White Plains N.Y. 10604. Comments and suggestions become the property of IBM.

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ORDER NUMBER

TITLE

AUDIO-VISUAL SUPPORT

Films

GV20-4500-0
GV20-3129-0

Virtual Storage Film, "A Much Better Way"
Virtual Storage Product Overview Filmstrip

Slides/Tapescript

GV20-0374-0
GV20-0387-0
GV20-0375-0
GV20-0376-0
GV20-0362-0

DOS/VS Library Module - Slides
OS/VS1 Demonstration Slide Script
OS/VS1 Library Module - Slides
OS/VS2 Library Module - Slides
Virtual Storage, Intermediate Users -
Slides/Tape Script

GV20-0363-0
GV20-0364-0

Virtual Storage, Large Users -
Slides/Tape Script
Virtual Storage, Small Users -
Slides/Tape Script
Virtual Storage Library Module - Slides
Virtual Storage Performance Considerations
Library Module - Slides
Virtual Storage Product Overview (Part I)
and Virtual Storage Applications Advantages
(Part II) - Slides/Tape Script

GV20-0360-0
GV20-0388-0
GV20-0377-0

Virtual Machine Facility/370 (VM/370)
Demonstration - Slides
Virtual Machine Facility/370 (VM/370)
Library Module - Slides

GV20-0378-0
GV20-0379-0

VSAM Library Module - Slides
Model 135 (Virtual Storage) Library Module
Slides

GV20-0380-0
GV20-0385-0
GV20-0381-0

Model 145 (Virtual Storage) Library Module
Slides
Model 155 II Library Module - Slides
Model 158 Advanced Function Library Module
Slides

GV20-0386-0
GV20-0382-0

Model 165 II Library Module - Slides
Model 168 Advanced Function Library Module
Slides

GV20-0384-0
ZV20-0389-0

IBM 3330 Library Module (For External Use) -
Slides
IBM 3330 DASD - Internal Strategy (Slides)

Slide Sets for Specific Industries

GV20-0367-0
GV20-0365-0
GV20-0371-0
GV20-0369-0
GV20-0368-0
GV20-0372-0
GV20-0370-0
GV20-0366-0

Distribution Industry Virtual Storage - Slides
Education Industry Virtual Storage - Slides
Finance Industry Virtual Storage - Slides
Insurance Industry Virtual Storage - Slides
Manufacturing Industry Virtual Storage - Slides
Process Industry Virtual Storage - Slides
Scientific Programs Industry Virtual Storage -
Slides
State & Local Government Industry
Virtual Storage - Slides

FOLDERS, PROPOSAL INSERTS, FLYERS, AND BROCHURES

Facts Folders

G520-2443-4
G520-2398-2
G520-2634-0
G520-2633-0

System/370 Model 135 Facts Folder
System/370 Model 145 Facts Folder
System/370 Model 158 Facts Folder
System/370 Model 168 Facts Folder

Proposal Inserts

G221-2219-0
G221-2220-0
G221-0545-1
G221-2221-0
G221-0544-1
G221-2222-0
G221-2225-0

Model 135 Proposal Insert
Model 145 Proposal Insert
Model 155 II Proposal Insert
Model 158 Proposal Insert
Model 165 II Proposal Insert
Model 168 Proposal Insert
IBM 3330 Proposal Insert

Flyers

G520-2575-0
G520-2574-0
G520-2576-0
G520-2578-0
G520-2577-0
G520-2580-0
G520-2579-0
G520-2570-0
G520-2572-0

Virtual Storage for the Manufacturing Industry
(DOS Users) - Flyer
Virtual Storage for the Manufacturing Industry
(OS Users) - Flyer
Virtual Storage for the Manufacturing Industry
(Plant Automation) - Flyer
Virtual Storage for the Manufacturing Industry
(COPICS for Large and Intermediate User) - Flyer
Virtual Storage for the Manufacturing Industry
(COPICS Small User) - Flyer
Manufacturing Industry - Virtual Storage for
Engineering: Intermediate and Large User (Flyer)
Manufacturing Industry - Virtual Storage for
Engineering: Small User (Flyer)
Virtual Storage for State and Local Government
Flyer
Virtual Storage for State and Local Government:
Program Products - Flyer

Brochures

G520-2612-0
G520-2613-0
G520-2611-0
G520-2614-0
Z225-3767-0
G520-2616-1
G520-2617-0
G520-2618-1
G520-2619-0
Z225-3769-0
Z225-3768-0

System/370 DOS/VS - Brochure
OS/VS1 and OS/VS2 - Brochure
Virtual Storage and Virtual Machines - Brochure
Virtual Machine Facility/370 (VM/370) - Brochure
VM/370 FE Announcement Brochure
System/370 Model 135 - Brochure
System/370 Model 145 - Brochure
System/370 Model 158 - Brochure
System/370 Model 168 - Brochure
3158 FE Announcement Brochure
3168 FE Announcement Brochure

Literature Holders

G520-2599-0
G520-2606-0
G520-2601-0
G520-2603-0
G520-2588-0
G520-2604-0
G520-2595-0
G520-2581-0
G520-2585-0
G520-2600-0
G520-2594-0
G520-2582-0
G520-2583-0
G520-2610-0
G520-2598-0
G520-2591-0
G520-2590-0
G520-2597-0
G520-2609-0
G520-2608-0
G520-2589-0
G520-2596-0
G520-2587-0
G520-2602-0
G520-2586-0
G520-2592-0
G520-2607-0
G520-2593-0
G520-2584-0
G520-2605-0

Agribusiness Literature Holders
Airlines Literature Holders
Apparel Literature Holders
Associations Literature Holders
Chemical Literature Holders
Communications Literature Holders
Drug Chains and Wholesalers Literature Holders
Education Industry Literature Holders
Finance Literature Holders
Food Chains and Wholesalers Literature Holders
Food Processor Literature Holders
State Government Literature Holders
Local Government Literature Holders
Federal Government Literature Holders
Hardgood Literature Holders
Insurance Literature Holders
Manufacturing Industry Literature Holders
Media Literature Holders
Medicine Literature Holders
Motor Freight Literature Holders
Petroleum Literature Holders
Pharmaceutical, Soap, Cosmetic Literature Holders
Primary Metals Literature Holders
Printing and Publishing Literature Holders
Process Literature Holders
Public Accountant/Consultants Literature Holders
Railroads Literature Holders
Retailers Literature Holders
Securities Industry Literature Holders
Utilities Literature Holders

EDUCATION LITERATURE

GR20-4260-0

ZZ23-0122-0
ZY23-4030-0
ZY23-4031-0
ZY23-4032-0
ZY23-4033-0
ZY23-4034-0
ZY23-4035-0
ZR20-4317-0

Introduction to Virtual Storage in System/370
Student Text
Pre-Announcement Branch office Class - Education Guide
Virtual Storage Concepts (Module 1)
Operating System/VS1 (Module 2)
Operating System/VS2 (Module 3)
Virtual Systems (Module 4)
System/370 Virtual Architecture (Module 5)
Introduction to VM/370 (Module 7)
Value of Virtual Storage Workshop - Education Guide

PROGRAMMING DOCUMENTATION

OS/VS1 and OS/VS2

System Publications

GC24-5082-1
GC24-5095-0
GC24-5091-0
GC24-5090-0
GN24-5454 (TNL to GC24-5090-0)
GC24-5092-0
GC24-5094-0
SY28-0605-0
GC28-0600-0
GN22-0413 (TNL to GA22-7001-1)

DOS to OS/MPT, OS/MVT, OS/VS1 Management Planning Guide
DOS to OS/VS1 Implementation Guide
OS/VS Programmer's Reference Digest
OS/VS1 Planning and Use Guide
OS/VS1 Planning and Use Guide
OS/VS1 Release 1 Guide
OS/VS/1 Storage Estimates
OS/VS1 System Data Areas
OS/VS2 Planning Guide
IBM System/370 System Summary

Operator's Library

GC38-0120-0
GC38-0335-0
GC38-0255-0
GC38-0110-0
GC38-0305-0
GN24-0489 (TNL to GC38-0015-1)

Operator's Library: OS/VS Console Configurations
Operator's Library OS/VS1 CRJE
Operator's Library: OS/VS1 Display Consoles
Operator's Library: OS/VS1 Reference
Operator's Library: OS/VS TCAM
Operator's Library: IBM System/370 Model 145
Operating Procedures

Message Library

GC38-1007-0
GC38-1004-0
GC38-1006-0
GC38-1003-0
GC38-1001-0
GC38-1005-0

OS/VS Message Library: Linkage Editor & Loader Messages
OS/VS Message Library: Routing and Descriptor Codes
OS/VS Message Library: Service Aids and QLTPE Messages
OS/VS Message Library: System Codes
OS/VS Message Library: VS1 System Messages
OS/VS Message Library: Utilities Messages

Job Management

GC28-0618-0
GX28-0619-0
SY24-5161-0
GC28-0617-0
GC35-0004-0

OS/VS JCL Reference
OS/VS JCL Syntax Reference Summary
OS/VS1 Job Management Logic
OS/VS1 Job Management Services
OS/VS1 System Management Facilities (SMF)

Supervisor

SY24-5160-0
SY24-5155-0
GC27-6979-0

OS/VS1 IPL and NIP Logic
OS/VS1 Supervisor Logic
OS/VS Supervisor Services and Macro Instructions

Data Management

SY26-3789-0
GY21-0012-1
SY35-0003-0
GC26-3784-0
SY24-5159-0
SY26-3787-0
GC28-0631-0
GC26-3793-0
GC26-3783-0
GN21-5187 (TNL to GC21-5004-2)

GN21-7658 (TNL to GC21-5004-2)

GN21-5169 (TNL to GY21-0013-1)

GN21-7659 (TNL to GY21-0013-1)

GC21-5006-2

SY26-3785-0
SY24-5156-0
SY26-3786-0
SY26-3788-0
GC26-3795-0
GC26-3799-0

OS/VS BDAM Logic
OS BSAM Logic for IBM 1419/1275
OS/VS Catalog Management Logic
OS/VS Checkpoint/Restart
OS/VS Checkpoint/Restart Logic
OS/VS DADSM Logic
OS/VS Data Management for System Programmers
OS/VS Data Management Macro Instructions
OS/VS Data Management Services Guide
OS Data Management Services and Macro
Instructions for IBM 1285, 1287, and 1288
OS Data Management Services and Macro
Instructions for IBM 1285, 1287, and 1288
OS Data Management Macro Logic for IBM 1285, 1287,
and 1288
OS Data Management Macro Logic for IBM 1285, 1287,
and 1288
OS Data Management Services and Macro
Instructions for IBM 1419/1275
OS/VS Open/Close EOY Logic
OS/VS I/O Supervisor Logic
OS/VS ISAM Logic
OS/VS SAM Logic
OS/VS Tape Labels
OS/VS Virtual Storage Access Method (VSAM)
Planning Guide

Support Components

GC33-4010-0
GN33-8145 (TNL to GC33-4010-0)
GC33-4021-0
GN33-8146 (TNL to GC33-4021-0)
SY33-8041-0
GC26-3813-0
SY26-3815-0
SY26-3814-0
GN21-5184 (TNL to GC24-3337-5)
GC26-3790-0
GC26-3791-0
GC35-0005-0
SY35-0005-0

OS/VS and DOS/VS Assembler Language
OS/VS and DOS/VS Assembler Language
OS/VS Assembler Programmer's Guide
OS/VS Assembler Programmer's Guide
OS/VS Assembler Logic
OS/VS Linkage Editor and Loader
OS/VS Linkage Editor Logic
OS/VS Loader Logic
OS RPG Language Specifications
OS/VS System Generation Introduction
OS/VS1 System Generation Reference
OS/VS Utilities
OS/VS Utilities Logic

Teleprocessing

GC27-6980-0
SY27-7246-0
GC30-2034-0
SY30-2039-0

OS/VS BTAM
OS/VS BTAM Logic
OS/VS TCAM Programmer's Guide
OS/VS TCAM Logic

Information Display

SY27-7241-0
SY27-7240-0
GC27-6971-0

OS/VS Graphics Problem-Oriented Routines Logic
OS/VS Graphics Access Method Logic
OS/VS Graphics Programming Services (GPS) for
IBM 2250 Display Unit
OS/VS Graphics Programming Services (GPS) for
IBM 2260 Display Station (Local Attachment)
OS/VS Graphics Subroutine Package (GSP) for
FORTRAN IV, COBOL, and PL/I
OS/VS Graphics Subroutine Package (GSP) for
FORTRAN IV, COBOL, AND PL/I Logic
OS/VS Problem Determination Aids and Messages and
Codes for GPS and GSP

GC27-6972-0

GC27-6973-0

SY27-7242-0

GC27-6974-0

Remote Job Entry

GN28-0596 (TNL to GC30-2012-1)
GN28-0598 (TNL to GC38-2016-1)
GN28-0597 (TNL to GC30-2014-1)
GN28-0599 (TNL to GY30-2011-1)

OS/MFT, OS/MVT, and OS/VS1: CRJE Concepts and Facilities
OS/MFT, OS/MVT, and OS/VS1: CRJE System Programmer's Guide
OS/MFT, OS/MVT, and OS/VS1: CRJE Terminal User's Guide
OS/MFT, OS/MVT, and OS/VS1: CRJE Logic

Emulation

GC26-3777-3
GN26-8021 (TNL to GY26-3741-3)
GC33-2008-1
GC33-2009-1
GN33-7024 (TNL to GY33-7011-0)

Emulating DOS on IBM System/370 Under OS
DOS Emulator Logic (on IBM System/370 Under OS)
1401/1440/1460 OS Emulator on Models 135/145/155
Reference
1410/7010 OS Emulator on Models 145/155 - Reference
1401/1440/1460 OS Emulator on Models 135/145/155 - Logic

RAS

GC24-5093-0
GC28-0636-0
SY28-0637-0
SY27-7239-0
GC28-0642-0
GC28-0633-0
SY28-0635-0
CX28-0634-0

OS/VS1 Debugging Guide
OS/VS OLTEP
OS/VS OLTEP Logic
OS/VS Recovery Management Support Logic
OS/VS RDE Guide
OS/VS Service Aids
OS/VS1 Service Aids Logic
OS/VS Service Aids Reference Summary

System/7 Host Preparation

GN34-0092 (TNL to GC34-0007-0)

IBM System/7 Modular System Programs (MSP/7) Host
Preparation Facilities II on System/360 or/370: Introduction

DOS/VS

GN33-8717 (TNL to GC33-5370-0)
GC33-4010-0
GN33-8145 (TNL to GC33-4010-0)
GB20-1153-1

Introduction to DOS/VS
OS/VS and DOS/VS Assembler Language
OS/VS and DOS/VS Assembler Language
Honeywell Series 200 Emulator on System/370
using DOS and DOS/VS - Transition Guide
Honeywell Series 200 Emulator on System/370 Using
DOS - Planning Guide
RCA 301 Emulator on System/370 using DOS and
DOS/VS - Transition Guide
RCA 301 Emulator on System/370 Using DOS - Planning Guide

GN24-0499 (TNL to GA24-3595-0)

GB20-1152-1

GN24-0498 (TNL to GA24-3594-0)

VM/370

GC20-1800-0

IBM Virtual Machine Facility (VM/370) Introduction

Program Products

GC26-3758-2

OS Assembler H General Information Manual
Program Number 5734-AS1
OS Assembler H Language, Program Number 5734-AS1
OS Assembler H Logic, Program Number 5734-AS1
OS Assembler H Messages, Program Number 5734-AS1
OS Assembler H Programmer's Guide, Program Number 5734-AS1
OS Assembler H System Information, Program Number 5734-AS1
System/370 Program Products: Language and Sort Processors
OS, DOS, VM/370-CMS
IBM OS Full American National Standard COBOL Compiler & Library
Version 3, Programmer's Guide, Program Number 5734-CB1
IBM OS Full American National Standard COBOL Compiler & Library
Version 4, Programmer's Guide, Program Numbers 5734-CB2, 5734-LM2
OS FORTRAN IV (G1) Processor PPS
IBM OS Code and Go FORTRAN and FORTRAN IV (G1)
Programmer's Guide, Program Numbers 5734-FO1, FO2, LM1
OS FORTRAN IV (H Extended) Compiler PPS
IBM OS FORTRAN IV (H Extended) Compiler Programmer's
Guide, Program Numbers 5734-FO3, 5734-LM3
OS FORTRAN IV Library (Mod I) PPS
OS FORTRAN IV Library (Mod II) PPS
OS PL/I CHECKOUT Compiler PPS, Program Number 5734-PL2
OS PL/I Optimizing Compiler PPS, Program Number 5734-PL1
OS PL/I Resident Library PPS, Program Number 5734-LM4
OS PL/I Transient Library PPS, Program Number 5734-LM5
OS/MFT, OS/MVT, and OS/VS Data Set Utilities Support ASCII PPS,
Program Number 5734-UT2
OS Data Set Utilities Support for ASCII User's Guide,
Program Number 5734-UT2
OS Data Set Utilities Support for ASCII Logic Manual
Program Number 5734-UT2
Program Product Functional Description for IBM 1288 Basic Unformatted
Read System, Program Number 5734-UT3
IBM 1288 Basic Unformatted Read System: A Data Capture Utility

GC26-3771-2

LY26-3760-1

SC26-3770-1

SC26-3759-1

SC26-3768-2

GC28-8200-0

SN28-0497 (TNL to SC28-6437-0)

SN28-0498 (TNL to SC28-6456-0)

GC28-6854-1

SC28-6853-1

GC28-6862-1

SC28-6852-1

GC28-6850-1

GC28-6863-1

GC33-0030-1

GC33-0022-2

GC33-0023-2

GC33-0024-2

GC28-6759-2

SN33-8707 (TNL to SC28-6760-0)

LN33-8708 (TNL to LY28-6761-0)

GC21-5068-0

SC21-5014-1

LN21-5167 (TNL to LY21-0022-0)

Classified Marketing Aids

ZZ20-2362-1
ZZ20-2407-0
ZZ20-2341-2
ZZ20-2414-0
ZZ20-2420-0

ZZ20-2409-0
ZZ20-2408-0
ZZ20-2365-0
ZZ20-2349-0

ZZ20-2363-0
ZV20-0389-0

MACHINE DOCUMENTATION

GA22-7000-2
GN22-0413 (TNL to GA22-7001-1)
GN22-0439 (TNL to GA22-7001-1)
GN22-0446 (TNL to GA22-7001-1)
GA22-7002-2
GN22-0433 (TNL to GC22-7004-1)
GN19-0107* (TNL to GC19-0004-1*)
GN33-3006 (TNL to GA33-3005-2)
GN33-3012 (TNL to GA33-3005-2)
GN33-3010 (TNL to GC38-0005-0)
GN33-3009 (TNL to GA33-3008-0)

GN24-0482 (TNL to GA24-3557-2)
GN24-0489 (TNL to GC38-0015-1)
GA22-7012-0
GA22-7013-0
GA22-7017-0
GA22-7011-0
GA22-7014-0
GA22-7016-0
GA22-7010-0

Maintenance -- Theory and Education

SR25-5660-0
ZY25-2443-0
ZY25-2444-0
SR25-5669-0
ZY25-2450-0
SS25-0581 (TNL to SY24-3581-2)

Program (OS; Reference Manual), Program Number 5734-UT3
IBM System/360 Operating System, IBM 1288 Basic Unformatted Read
System, Program Logic Manual, Program Number 5734-UT3

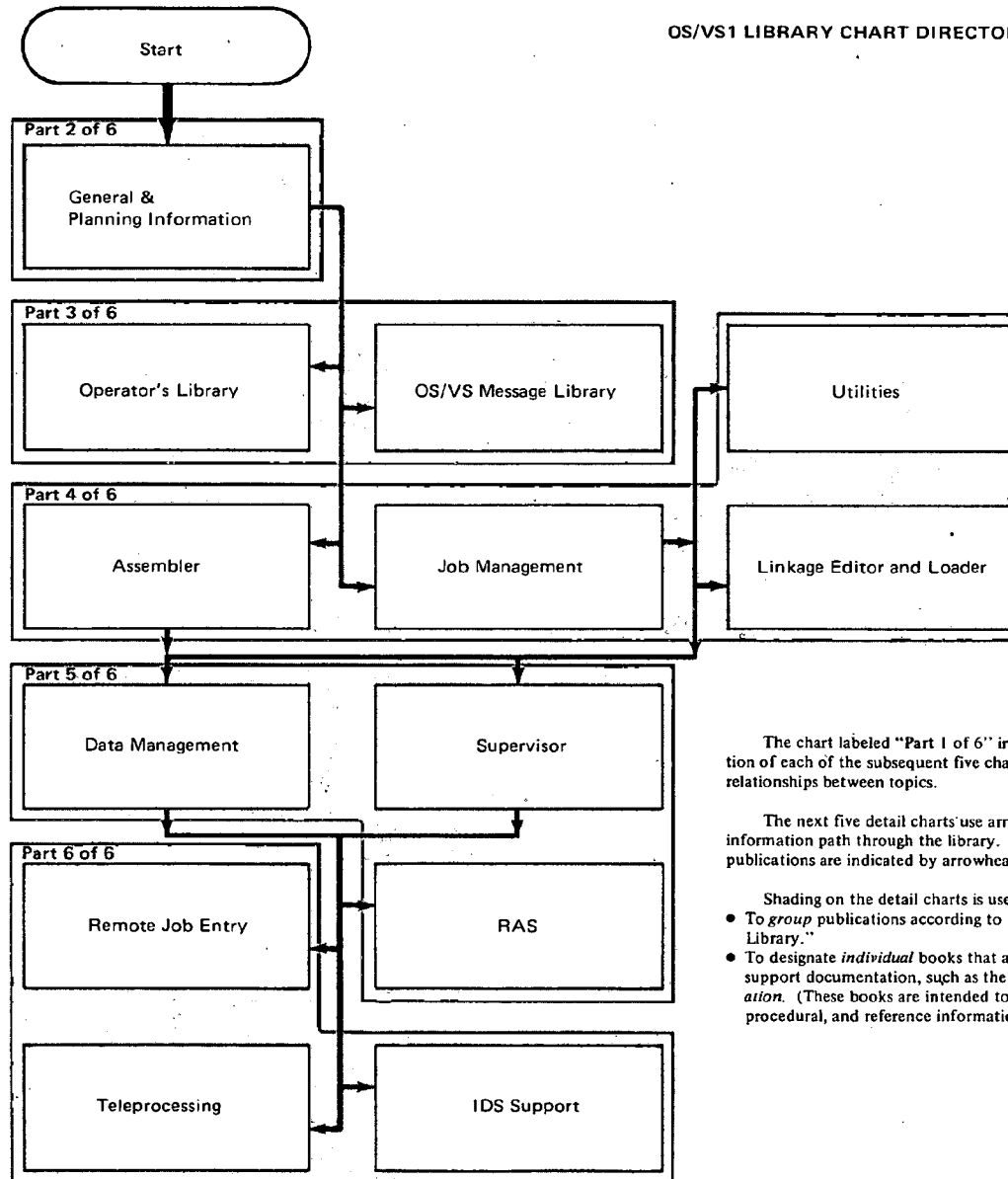
Advanced Function Marketing Guide
Advanced Function Marketing Education Guide
IBM Aids Reference Summary
IBM Aids Reference Binder
Communication Oriented Production Information
and Control System (COPICS) Marketing Guide
Motor Freight Industry Marketing Guide
Railroad Industry Marketing Guide
Value of Virtual Storage Marketing Guide
Introduction to System Performance Evaluation - Virtual
Storage Systems
OS/VS1 Performance Evaluation
IBM 3330 DASD - Internal Strategy (slide)

IBM System/370 Principles of Operation
IBM System/370 System Summary
IBM System/370 System Summary
IBM System/370 System Summary
System/370 Input/Output Configurator
IBM System/370 Installation Manual - Physical Planning
IBM System/370 World Trade Installation Manual - Physical Planning
System/370 Model 135 Functional Characteristics
System/370 Model 135 Functional Characteristics
Model 135 Operating Procedures
System/370 Model 135 Terminal Adapter Type III
For ICA: Special Feature Description
IBM System/370 Model 145 Functional Characteristics
Operator's Library: IBM System/370 Model 145 Operating Procedures
IBM System/370 Model 158 Channel Characteristics
IBM System/370 Model 158 Configurator
IBM System/370 Model 155 II Dynamic Address Translation Facility
IBM System/370 Model 158 Functional Characteristics
IBM System/370 Model 168 Configurator
IBM System/370 Model 165 II Dynamic Address Translation Facility
IBM System/370 Model 168 Functional Characteristics

IBM 3145 Processing Unit Extended Control - Self Study course
IBM 3145 Extended Control - Student Quiz 1
IBM 3145 Extended Control - Student Quiz 2
IBM 3145 Extended Control Support - Self Study Course
IBM 3145 Processing Unit Extended Control Support - Student Quiz
IBM 3145 Processing Unit Theory - Maintenance

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OS/VS1 LIBRARY CHART DIRECTORY

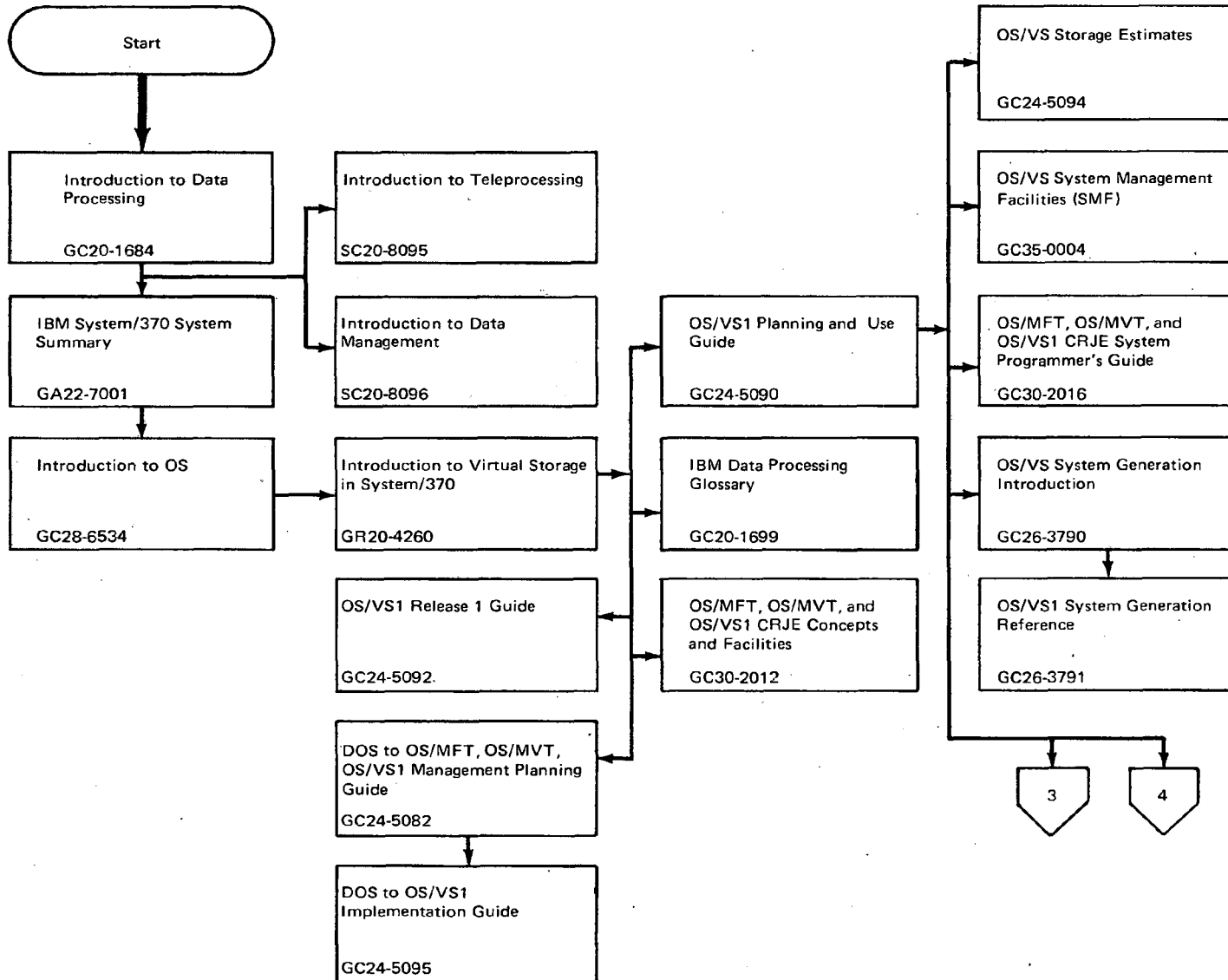


The chart labeled "Part 1 of 6" indicates generally the topic organization of each of the subsequent five charts. It also indicates the prerequisite relationships between topics.

The next five detail charts use arrows to suggest a reading sequence or information path through the library. Corequisite relationships between publications are indicated by arrowheads at both ends of the same line (↔).

- Shading on the detail charts is used in two different ways:
- To group publications according to topic, such as the "OS/VS Message Library."
 - To designate individual books that are not an immediate part of the OS/VS1 support documentation, such as the *IBM System/370 Principles of Operation*. (These books are intended to provide additional introductory, procedural, and reference information.)

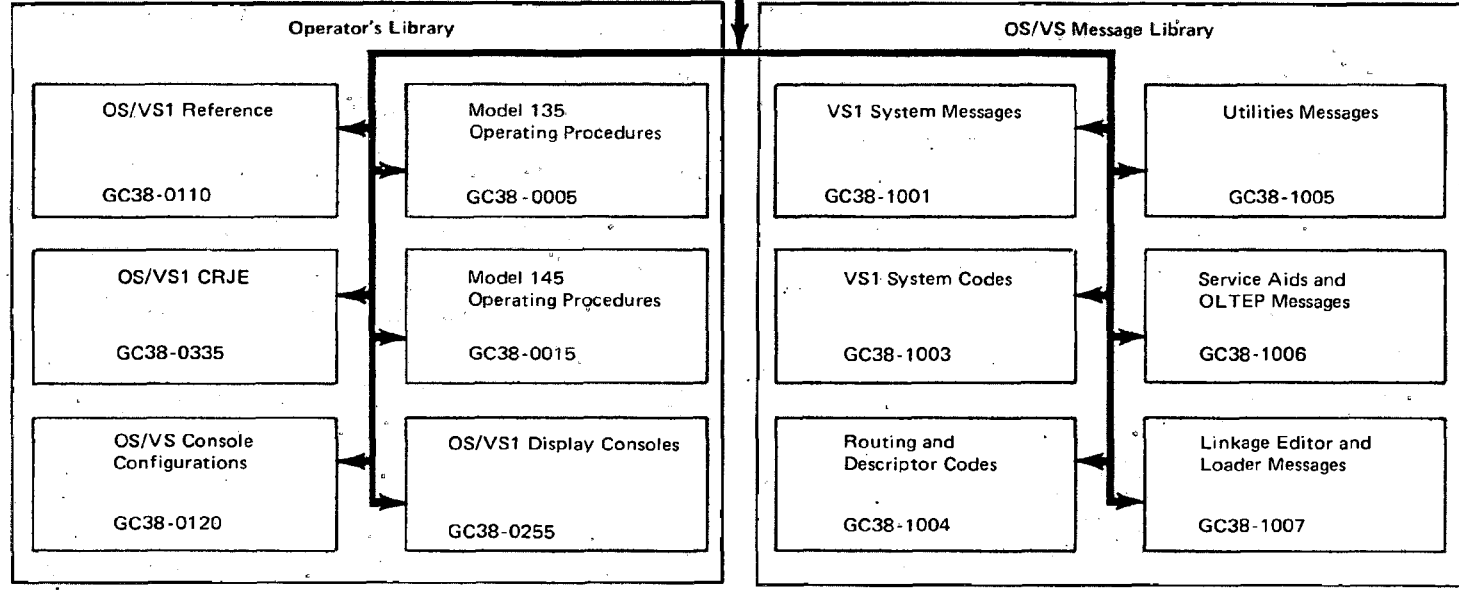
GENERAL & PLANNING INFORMATION



Part 2 of 6

IBM INTERNAL USE ONLY

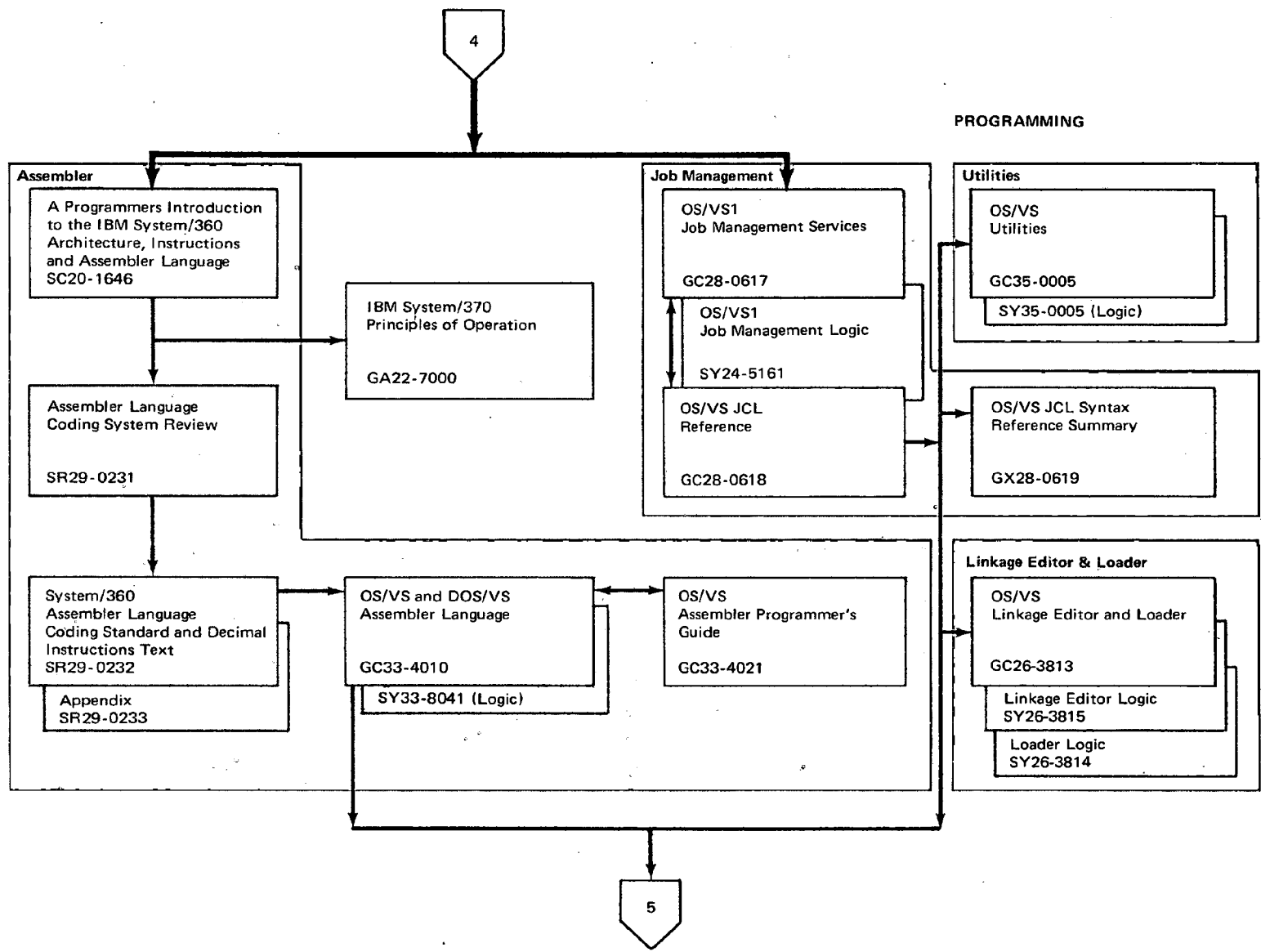
3



Part 3 of 6

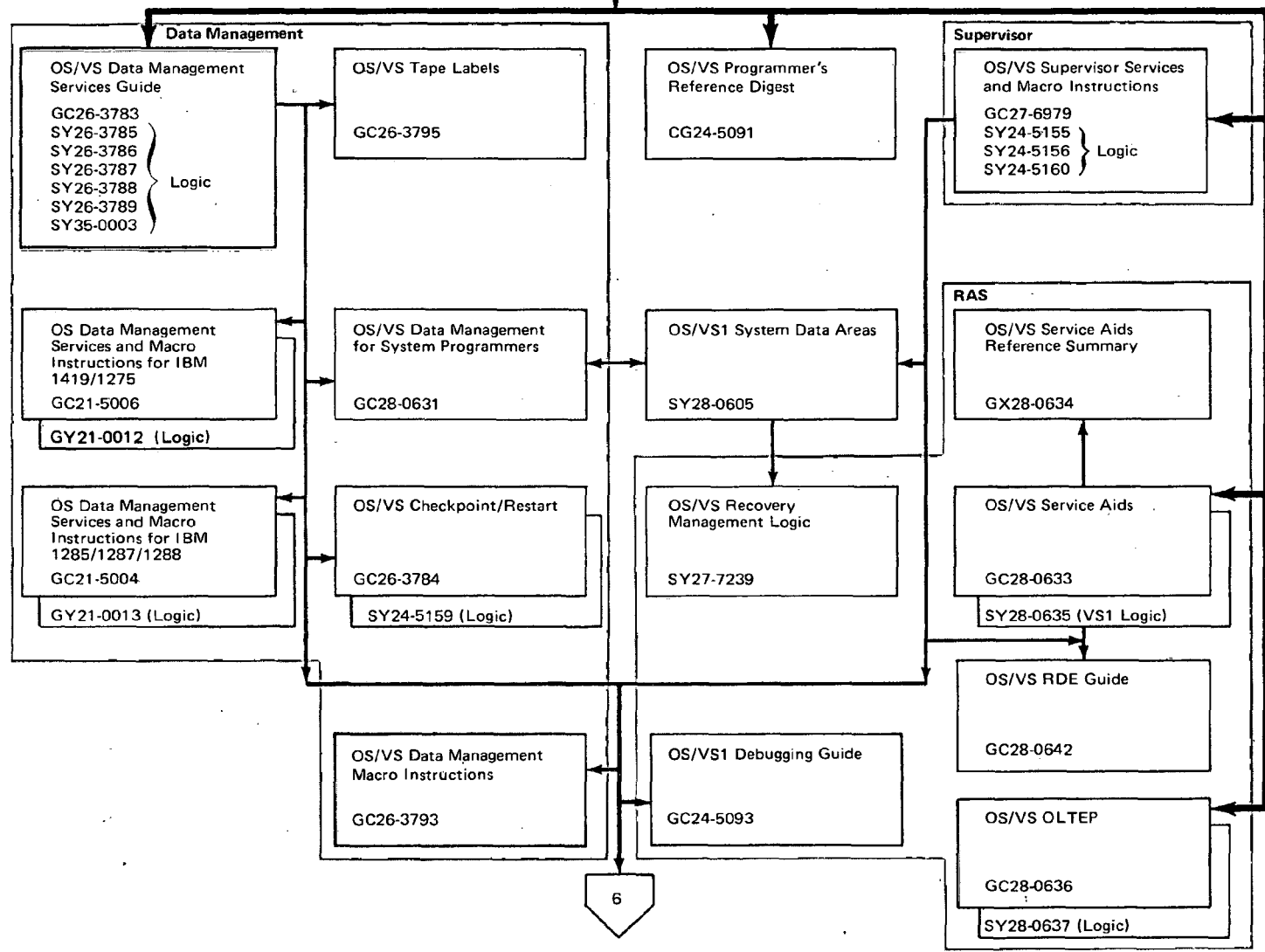
IBM INTERNAL USE ONLY

Part 4 of 6



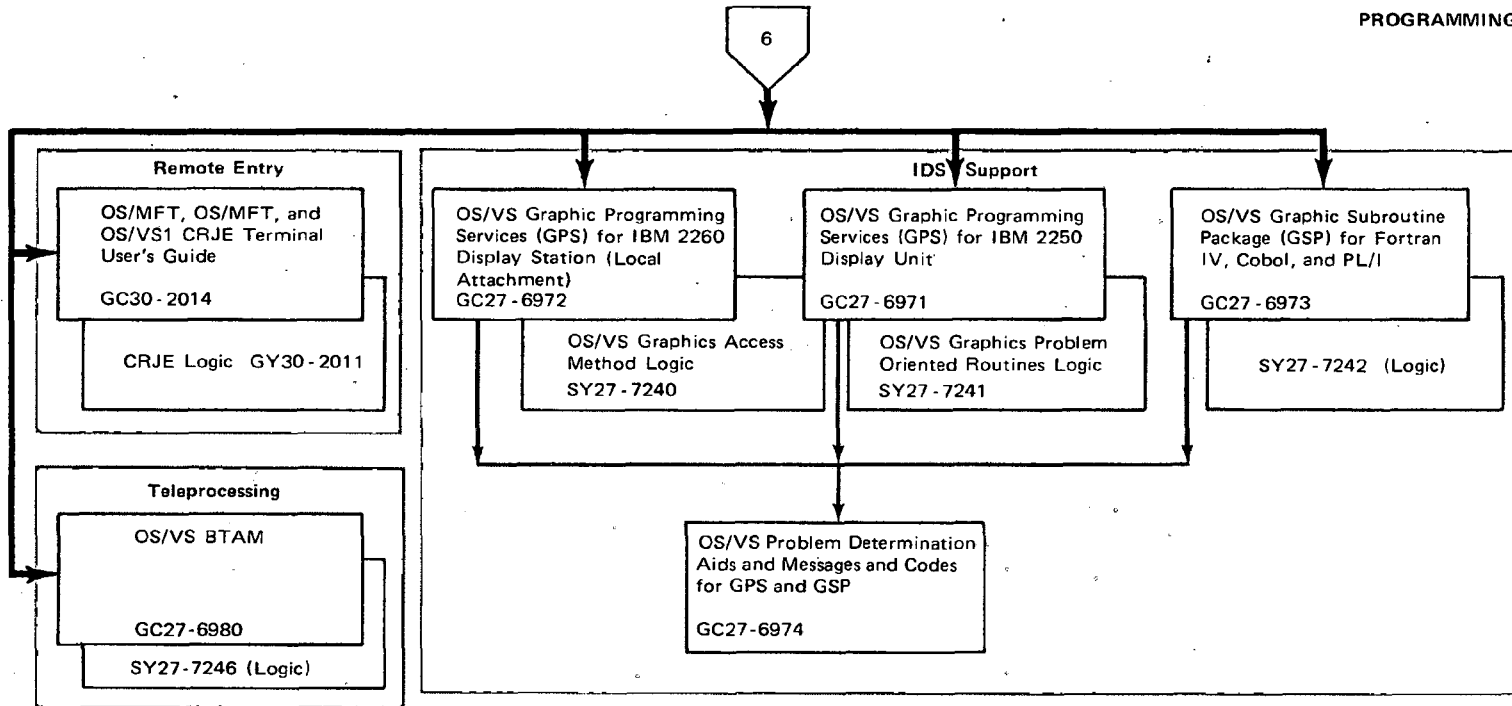
5

PROGRAMMING



Part 5 of 6

IBM INTERNAL USE ONLY



Part 6 of 6

IBM INTERNAL USE ONLY

GA22-7002

IBM SYSTEM/370 INPUT/OUTPUT CONFIGURATOR

This configurator, intended as a guide and reference for system planners, provides information about the attachment of current local and remote input/output (I/O) equipment used in System/370 Models 135, 145, 155, 158, 165, 168, and 195.

GA22-7012

IBM SYSTEM/370 MODEL 158 CHANNEL CHARACTERISTICS SYSTEM LIBRARY

This publication describes methods used to calculate System/370 Model 158 II data handling capabilities that are dependent on I/O - channel configurations and operations. In addition, consideration is given to priority attachment of I/O devices for maximum throughput, and to calculating CPU interference caused by channel operations. This manual is intended for users having system programmer experience, and a thorough background in I/O programming techniques.

GA22-7016

IBM SYSTEM/370 MODEL 165 II DYNAMIC ADDRESS TRANSLATION FACILITY

This manual is a general description of the field installable Dynamic Address Translation (DAT) facility and also the ancillary functions which implement the feature. Management, computer operators, system engineers, service personnel, programmers, and computer science students should refer to IBM System/370 Model 165 Functional Characteristics, GA22-6935, for an overall picture of the system.

GA22-7017

IBM SYSTEM/370 MODEL 155 II DYNAMIC ADDRESS TRANSLATION FACILITY

This publication describes the field-installable Dynamic Address Translation facility. It provides experienced management, programming and operations personnel with a fundamental understanding of this facility. For additional information concerning dynamic address translation, refer to IBM System/370 Principles of Operation, GA22-7000.

GC20-1800

IBM VIRTUAL MACHINE FACILITY/370 INTRODUCTION MANUAL

This manual describes the IBM Virtual Machine Facility/370 (VM/370), a System Control Program (SCP) that has been designed specifically for the IBM System/370. VM/370 manages the IBM System/370 in such a way that multiple remote terminal users appear to have a dedicated computing system at their disposal. Within this "virtual machine" the user may run the operating system of his choice, subject to the restrictions noted in "Appendix C: VM/370 Restrictions" of this manual. The design of VM/370 is based on the IBM Control Program-67/Cambridge Monitor System (CP-67/CMS) which is executed on an IBM System/360 Model 67.

The Conversational Monitor System (CMS) is the major subsystem of VM/370. CMS provides problem solving and program development services to the user, as well as supporting facilities for a remote user who chooses to run some other operating system in his virtual machine.

This machine provides introductory information about the facilities provided by VM/370, and

defines the minimum equipment configuration necessary for execution.

GC24-5090

VS1 PLANNING AND USE GUIDE

This publication contains planning information about OS/VS1, to assist installation personnel who are responsible for the selection and evaluation of an operating system.

The use part of the Guide contains information on implementing, modifying, or extending capabilities of VS1 control program.

The information in the Planning part is presented in two major categories: Concepts and Considerations. The Concepts section describes the facilities, features supported, and principles of operation of VS1. The Considerations section contains suggestions on how to make the most effective use of the system. The text is supplemented by illustrations showing a representative job input stream, the scheduling sequence of the system, and examples of possible partition configurations for various sized systems.

The information in the Use part of the Guide is presented in self-contained sections, each dealing with a separate capability or function of the control program.

The publication is intended for people who are familiar with the concepts and operation of the IBM System/360 Operating System.

Prerequisite reading should include the IBM System/370 Advanced Operating System, System Summary, GA22-7001, and its associated Technical Newsletters.

The Use part of the publication is intended for system-programmers responsible for maintaining and updating VS1.

GC24-5091

OS/VS PROGRAMMER'S REFERENCE DIGEST - SYSTEM LIBRARY HANDBOOK

This handbook contains quick reference information about most areas of OS/VS.

Included are:

- System/370 Instructions
- OS/VS System Assembler Language
- Hexadecimal and Decimal Number Conversion
- EBCDIC Codes
- Linkage Registers
- UCB sense Bytes
- OS/VS Completion Codes
- Supervisor Macro Outlines
- SVC List
- Tape Label Formats
- Data Management Macro Outlines
- JCL Reference Information
- SMF Reference Information
- CRJE Macro Outlines, Terminal Information, and System Commands
- Linkage Editor and Loader Job Control and Control Statement Outlines
- BTAM/TCAM Devices Supported and Macro Outlines
- Service Aid Reference Information

This book is designed for the programmer with a thorough knowledge of the material referenced and does not contain definitions, restrictions, or limitations. For detailed information on any topic in this book, refer to the publication referenced at the front of each section.

GC24-5093

OS/VS1 DEBUGGING GUIDE - SYSTEM LIBRARY

This publication is written for those involved in debugging application and system programs. It contains material on how to start debugging, a section on functional information (system concepts) to help the reader see the system as a whole and to give some particularly useful concepts, and a section on output formats and uses in the debugging situation. A series of appendices provide additional reference information for convenience.

GC24-5094

OS/VS1 STORAGE ESTIMATES - SYSTEM LIBRARY

This publication is intended for two types of users: system programmers, and problem programmers. It contains instructions, formulas, and charts that can be used to estimate the real, virtual, and auxiliary storage requirements for VS1. Real storage is system (hardware) storage and corresponds to main storage in other IBM operating systems. Virtual storage is an addressing storage concept that provides the installation with as many as 16,777,216 bytes of storage accessible to programs. Auxiliary storage is comprised of the input/output devices required to contain virtual storage, system residence libraries, job queues, spooled data sets, and work space required by control and processing programs.

Each type of user can use this publication differently.

- System programmers can use this publication to determine the amount of real virtual and auxiliary storage that must be allocated during system generation or Initial Program Load.
- Problem programmers can use this publication to determine the sizes of partitions in virtual storage.

GC24-5095

DOS TO OS/VS1 IMPLEMENTATION GUIDE - SYSTEMS REFERENCE

Provides information on areas in DOS programs and files which require changes for a transition from DOS to OS/VS1. VS1 equivalents to DOS facilities are also provided.

The manual is divided into self-contained sections covering:

System generation	Data management macros
Resource allocation	Utilities
Job Entry Subsystem (JES)	Sort/Merge
Linkage editor	Telecommunications
System Assembler	Emulation
Job Control Language	FORTRAN
Data sets (files)	PL/I-F

The intended audience is system and application programmers of an existing DOS installation making the transition to VS1. The reader should be familiar with DOS and its system facilities as well as the DOS versions of the compilers or assemblers used in the programs to be changed.

Prerequisite Publications:

DOS to OS/MFT, OS/MVT, OS/VS1 Management Planning Guide, GC24-5082
OS/VS1 Planning and Use Guide, GC24-5090

GC26-3791

OS/VS1 SYSTEM GENERATION REFERENCE

This publication is intended for system programmers who are to install an OS/VS1 System Control Program. It provides you with the information necessary to:

- Prepare for system generation
- Execute system generation
- Restart system generation if errors occur during processing
- Test the newly created System Control Program

GC26-3793

OS/VS DATA MANAGEMENT MACRO INSTRUCTIONS

This publication contains descriptions and definitions for the data management macro

instructions available in the assembler language. It provides application programmers who are coding programs in assembler language with the necessary information to code the macro instructions.

This publication is divided into three parts:

- "Introduction" - This section contains a general description of macro instructions, the rules to be followed when macro instructions are coded, and a description of the notational conventions used throughout the publication.
- "Macro Instruction Descriptions" - This section describes the function of each macro instruction and defines how each macro instruction is to be coded. The macro instructions are presented in alphabetic order with each macro instruction beginning on a right-hand page. The standard form of each macro instruction is described first, followed by the description of the list and execute form instruction; the list and execute forms are available only for those macro instructions that pass parameters in a list.
- "Appendixes" - This section includes information about error indications available following an input/output operation; a list of macro instructions available for each of the data management access methods; a list of device capacities; the format of the data control block exit list; and information about control characters used to control spacing and skipping (printers) and stacker selection (card read punch or card punch).

GC26-3795

OS/VS TAPE LABELS

This publication explains, for programmers and operations analysts, how OS/VS processes magnetic tape labels. The four main sections of the publication describe the specifications and processing of tapes with IBM standard labels, tapes with American National Standard labels, tapes with nonstandard labels, and unlabeled tapes. You need read only the section pertaining to the type of labels used by your installation.

If you are familiar with tape label processing for OS MFT and MVT, you will find that the tape label processing described in this manual for OS/VS is the same.

Also included are subjects of special interest, such as volume label editor routines, use of tape volumes from other systems, and external labels.

GC26-3813

OS/VS LINKAGE EDITOR AND LOADER

This publication provides applications programmers with the information necessary to use the OS/VS Linkage Editor and Loader to prepare the output of a language translator for execution. Additional information on the operation and use of the linkage editor and loader is directed to the system programmer responsible for installing and maintaining the operating system.

The Introduction briefly defines the functions of the linkage editor and loader and gives recommendations for the use of each. Part 1 describes the linkage editor, and should be read before Part 2, which describes the loader.

GC27-6971

OS/VS GRAPHIC PROGRAMMING SERVICES (GPS) FOR IBM 2250 DISPLAY UNIT - MANUAL

Describes macro instructions and routines provided under OS/VS to aid in writing assembler-language

programs that use the IBM 2250 Display Unit, Model 1 or 3.

These programming services are useful in:

- Displaying data in alphanumeric or graphic form
- Controlling input/output
- Communicating with the 2250 operator

This manual is intended primarily for application programmers coding in assembler language. It also provides installation managers, system engineers, and system programmers with general information about programming the 2250 display unit.

The reader should be familiar with the information in:

IBM System/360 Component Description:
IBM 2250 Display Unit Model 1, GA27-2701

IBM System/360 Component Description:
IBM 2250 Display Unit Model 3
IBM 2840 Display Control model 2, GA27-2721

GC27-6972

OS/VS GRAPHIC PROGRAMMING SERVICES (GSP) FOR IBM 2260 DISPLAY STATION (LOCAL ATTACHMENT) - SYSTEM LIBRARY MANUAL

Describes macro instructions provided under OS/VS to aid in writing assembler-language programs that use the IBM 2260 Display Station (Local Attachment).

These programming services are useful in:
Controlling input/output
Communicating with the 2260 operator

This manual is intended primarily for application programmers coding in assembler language. It also provides installation managers, system engineers, and system programmers with general information about programming the 2260 display station.

The reader should be familiar with the information in:

IBM System/360 Component Description:
IBM 2260 Display Station
IBM 2848 Display Control, GA27-2700

GC27-6973

OS/VS GRAPHIC SUBROUTINE PACKAGE (GSP) FOR FORTRAN IV, COBOL, AND PL/I - SYSTEM LIBRARY

Describes how a FORTRAN, COBOL, or PL/I programmer can write graphic programs for use with the IBM 2250 Display Unit under control of OS/VS. It also describes how the graphic subroutine package may be used in a program written in Assembler Language.

The graphic subroutine package (GSP) consists of sub-routines and functions for displaying characters or graphic forms on the 2250 screen and for controlling communication between the program and the 2250 operator. The subroutines may be called from a program written in the E, G, or H level of FORTRAN IV, in COBOL (F), in PL/I (F), or from a program written in Assembler Language. They are not an extension of the FORTRAN IV, COBOL, or PL/I languages, but may be used in conjunction with them.

GC27-6974

OS/VS PROBLEM DETERMINATION AIDS AND MESSAGES AND CODES FOR GFS AND GSP - MANUAL

Contains aids for determining and solving problems that involve display programs that use either the Graphic Programming Services (GPS) for the IBM 2250 Display Unit and IBM 2260 Display Station or the Graphic Subroutines Package (GSP) for the IBM 2250 Display Unit. The aids are directed to the display operator, application programmer, system operator, system programmer, and system maintenance personnel.

The manual is divided into an introduction and six sections of problem determination aids:

- Display operator aids
- Application programmer aids
- Messages

- Codes
- Generalized Trace Facility
- Problem-related data

The reader should be familiar with information in:

OS/VS Graphic Programming Services (GPS) for IBM 2250 Display Unit, GC27-6971
OS/VS Graphic Programming Services (GPS) for IBM 2260 Display Station (Local Attachment), GC27-6972
OS/VS Graphic Subroutine Package (GSP) for FORTRAN IV, COBOL, and PL/I, GC27-6973

GC27-6979

OS/VS SUPERVISOR SERVICES AND MACRO INSTRUCTIONS MANUAL

This book describes how to use the services of the supervisor, the macro instructions used to request these services, and the linkage conventions used by the control program to provide these services. The services provided by the supervisor include subtask creation and control, program management, resource control, virtual storage management, and termination, interruption, and dumping.

Intended mainly for the programmer coding in assembler language, this book is a guide to using the macro instructions described.

Use of this book requires a basic knowledge of the operating system and of assembler language.

GC27-6980

OS/VS BTAM

This publication describes the BTAM facilities and macro instructions needed to write an application program that defines, activates, and controls a System/370-based teleprocessing system or local 3270 display system or both. Effective use of this publication does not presuppose a knowledge of teleprocessing techniques, but it does require a knowledge of the System/370 assembler language and of data management techniques. The publication does not contain detailed information on the terminal equipment and computers that may be used as remote or local stations in a BTAM-controlled system.

GC28-0600

OS/VS2 PLANNING GUIDE

This publication describes OS/VS2. The purpose of the publication is to introduce VS2 concepts and provide planning information for users preparing to have VS2 installed. The publication assumes a basic knowledge of OS/MVT. (MVT is described in IBM System/360 Operating System: MVT Guide, GC28-6720.)

This publication is divided into the following chapters:

- Introduction -- This chapter presents an overview of VS2. The chapter also discusses the advantages of a virtual storage system, the new functions provided by VS2, and the basic configuration and supported devices of the system.
- System Control Program -- This chapter presents an overview of the five major components of the VS2 system control program: job management, task management, input/output supervision, data management, and recovery management. For each item discussed, a summary of the major changes from MVT is provided.
- Standard Support Programs -- This chapter presents an overview of the VS2 standard support programs (such as utilities, service aids, and linkage editor) that interact with the system control program. For each item discussed, a summary of the major changes from MVT is provided.
- Options -- This chapter presents an overview of

the optional facilities that can be added to the VS2 system during and after system generation.

For each item discussed, a summary of the major changes from MVT is provided.

- **Compatibility** -- This chapter describes the differences and incompatibilities that exist between VS2 and MVT. Where applicable, differences and incompatibilities that apply to MFT and VS1 are also discussed.
- The chapter provides basic information that the user can use in converting from MVT to VS2.
- **Defining the System** -- This chapter provides preliminary planning information that the user needs in defining his system. For example, the chapter describes the VS2 System generation procedures and macro instructions, and the VS2 system initialization procedures and parameters.
- **Glossary** -- This chapter defines new VS2 terms used in this publication. The chapter does not define data processing and MVT terms commonly in use.

Related Publications:

Introduction to Virtual Storage in System/370, GR20-4260.

This publication provides an overview of the advantages and concepts of virtual storage systems.

IBM System/370 System Summary, GA22-7001

This publication provides an overview of the system concepts and features of System/370, including a discussion of the components constituting OS/VS.

IBM Data Processing Glossary, GC20-1699

This publication defines terms and concepts used in IBM publications.

GC28-0617

OS/VS1 JOB MANAGEMENT SERVICES

OS/VS1 Job Management Services describes services performed by the job management area of the control program that an applications programmer can request through the use of the job control language and commands. The book is designed primarily for applications programmers who write job control language statements for their jobs; it is assumed that the user has a basic knowledge of computer operating systems and some familiarity with the job control language.

GC28-0631

OS/VS DATA MANAGEMENT FOR SYSTEM PROGRAMMERS - SYSTEM LIBRARY

This publication consists of self-contained chapters, each of which provides information on how to modify, extend or implement the data management capabilities of the OS/VS control program. It is designed primarily for system programmers responsible for maintaining, updating, and extending the operating system features.

Topics:

- Maintaining the VTOC and the System Catalog
- Using EXCP or XCAP to Execute a User-Written Channel Program
- Implementing Data Set Protection
- Using System Macro Instructions to Refer to or Modify System Data Areas
- Adding a UCS Image or an FCB Image to the System Image Library

GC28-0633

OS/VS SERVICE AIDS

This publication explains when, why, and how to use IBM service aids to diagnose and fix failures in system or application programs. Each service aid is described in a separate chapter. The service aids are:

- **IFCPDIP00** -- Initializes the SYS1.LOGREC data set.
- **IFCEREPO** -- Summarizes and prints records from the SYS1.LOGREC data set.

- **GTF (Generalized Trace Facility)** -- Traces selected system events such as SVC and I/O interruptions.
- **IMCJOBQD** -- Operates as a stand-alone program to format and print the system job queue.
- **HMBLIST** -- Formats and prints object modules, load modules, and CSECT identification records; maps reenterable load module area.
- **HMDPRDMP** -- Formats and prints dump data sets, which may include page data sets, and GTF data.
- **HMAPTFLE** -- Updates an operating system by applying PTFs or by generating job stream needed to apply PTFs or ICRs in a later step.
- **HMSADMP** -- Operates as a stand-alone program to produce a high-speed or low-speed dump of real storage. The high-speed version can also dump page data sets.
- **HMASPZAP** -- Verifies and/or replaces instructions and/or data in a load module.

Information about how to write EDIT user programs is provided in a separate appendix.

Messages issued by the service aids are described in OS/VS Message Library: Service Aids and OLTEP Messages, GC38-1006.

GC28-0636

OS/VS OLTEP

This publication provides customer engineers, other qualified personnel, and operators with the information required to use the Online Test Executive Program (OLTEP).

OLTEP is a standard component of OS/VS that is designed to run online test programs, under control of the operating system, for the testing of input/output devices.

Customer engineers should refer to IBM System/370 OLTS Customer Engineering Memorandum for ordering procedures for online tests and their documentation.

Messages issued by OLTEP are described in OS/VS Message Library: Service Aids and OLTEP Messages, GC38-1006.

GC28-0642

OS/VS RDE GUIDE

This publication describes the Reliability Data Extractor (RDE), a control program option in OS/VS. RDE allows the user to:

- Generate system initialization (IPL) and system termination (EOD) records, and collect them on SYS1.LOGREC.
- Print and accumulate the IPL and EOD records collected on SYS1.LOGREC.
- Write the records from SYS1.LOGREC to a measurement data set.
- Summarize and print the IPL and error data collected on the measurement data set.

This publication is intended for programmers who are using RDE and who are involved in maintaining or using SYS1.LOGREC.

Associated Publications: OS/VS1 System Generation Reference, GC26-3791
OS/VS Service Aids, GC28-0633

GC28-8200

SYSTEM/370 PROGRAM PRODUCTS LANGUAGE AND SORT PROCESSORS -- OS-DOS VM/370-CM2

This catalog is a quick reference to the IBM Program Products that provide language and sort/merge processing support for IBM System/370 and System/360 running

- OS (VS1, VS2, MFT, and MVT)
- DOS and DOS/VS
- CMS Subsystem of VM/370

The language products described here include compilers, their associated libraries, and various related user productivity aids for

- COBOL
- FORTRAN
- PL/I
- BASIC
- APL
- RPG
- Assembler

IBM Program Products are made available under a licensing agreement; consult your IBM representative for information on obtaining Program Products.

GC30-2034

OS/VS TCAM PROGRAMMER'S GUIDE

This book is a coding guide for the programmer who must construct or modify a TCAM message control program (MCP), or who must write a TCAM-compatible application program. It explains how to write a TCAM MCP, how to write a TCAM compatible application program, and how to use a variety of auxiliary service facilities. Also included is information that might be of use in planning and setting up a teleprocessing system incorporating TCAM. The reader is expected to be familiar with the contents of the publication (OS TCAM Concepts and Facilities,) Order No. GC30-2022.

GC33-4010

OS/VS AND DOS/VS ASSEMBLER LANGUAGE MANUAL

Provides the information necessary for programmers responsible for designing and writing programs in either the OS/VS or DOS/VS assembler language.

The assembler language is a symbolic programming language which allows the use of alphabetic and numeric characters to represent machine instructions and related data. Using symbolic language instead of the binary 1s and 0s required when coding in machine language makes coding easier to write, understand, and change. Either the OS/VS or the DOS/VS assembler can process a program written in assembler language to produce output in machine language suitable for linkage editing and subsequent execution. The book is divided into four parts:

- Part I: Coding and Structure
- Part II: Function and Coding of Machine Instructions
- Part III: Functions of Assembler Instructions
- Part IV: The Macro Facility

The first part describes the statements, character set, terms, literals, and expressions that make up the assembler language, and give the rules and conventions for writing code. The second part describes the alignment, statement formats, mnemonic operations codes, and operand entries of machine instructions. The third part describes the assembler instructions used for program sectioning, addressing, symbol and data definition, and controlling the assembler. Finally, the fourth part gives an introduction to the macro facility for beginners, and then describes the macro definition, the macro instruction, and the conditional assembly language, a language that can alter the contents and sequence of the output produced by the assembler.

GC33-4021

OS/VS ASSEMBLER PROGRAMMER'S GUIDE

This manual complements OS/VS AND DOS/VS Assembler Language, Order No. GC33-4010. It is intended for the programmer writing assembler language programs to be run under OS/VS. The manual contains the following major sections:

- Job control statements to run the assembler
- Including macro definitions in a library

- Interpreting the assembler listing
- Programming considerations

Other topics, covered in appendixes, are assembler data set requirements, the object module produced by the assembler, invoking the assembler dynamically, and the assembler error messages. Prerequisite reading is Introduction to OS and OS/VS and DOS/VS Assembler Language.

GC35-0004

OS/VS SYSTEM MANAGEMENT FACILITIES (SMF) SYSTEM LIBRARY MANUAL - PROGRAM NUMBERS 5741-010, 5741-020

This publication provides installation managers, system programmers, and operators with the information required to plan for, install, and use SMF (System Management Facilities).

SMF is an optional feature of the IBM System/370 OS/VS that can be selected at system generation.

SMF collects system, job-management, and data-management information and links to user-written routines that can monitor the operation of jobs or job steps.

This publication introduces basic SMF concepts; describes SMF record formats, control program exits, and data-management requirements; tells how to plan, write, and test user-written exit routines; tells how to incorporate SMF into the operating system; and describes IPL and data-management procedures.

GC35-0005

OS/VS UTILITIES

This publication discusses the capabilities of the OS/VS utility programs and the control statements used with each program. These programs are used by programmers responsible for organizing and maintaining operating system data.

GC38-0110

OPERATOR'S LIBRARY: OS/VS1 REFERENCE SYSTEM LIBRARY MANUAL - PROGRAM NUMBER 5741-010

This reference publication, part of a comprehensive operator's library, contains all OS/VS1 system commands. It is designed for use by any operator controlling OS/VS1, but is of primary interest to the operator at the master console.

This publication does not contain introductory or procedural information about OS/VS1. This information is provided by DP operator training courses. This publication also does not contain CRJE or TCAM information.

GC38-0120

OPERATOR'S LIBRARY: CONSOLE CONFIGURATIONS SYSTEM LIBRARY MANUAL - PROGRAM NUMBER 5741-010

This introductory and procedural operator publication describes OS/VS support for:

- the single console configuration
- the multiple console configuration

This publication is part of the operator's library and is intended to be used with Operator's Library: OS/VS Reference, GC38-0110.

GC38-0255

OPERATOR'S LIBRARY: OS/VS DISPLAY CONSOLES

Tells system operators how to use cathode ray tube (CRT) display devices as operator consoles to run a VS1 operating system. The display devices supported are:

- 2250 Display Unit
- 2260 Display Station

The book summarizes the basic procedures for operating a system through display consoles and includes detailed instructions for each device telling:

- How to start the system
- How to enter commands
- How to delete messages
- How to control the screen
- How to use the CONTROL command

The book must be used in conjunction with Operator's Library: OS/VS1 Reference, GC28-1001.

GC38-0305

OPERATOR'S LIBRARY: LS/VS TCAM - PROGRAM NUMBER 5741-SC1-21

Operating commands for Telecommunications Access Method (TCAM) for the operating System/Virtual Storage (OS/VS) are described for system operators. The commands are grouped by function for easier use. An alphabetical list of keywords from the operands, with definitions of the commands, is included for convenient reference. Brief sections on teleprocessing and TCAM concepts and procedures have also been included. A general knowledge of data processing and operating system OS/VS is assumed.

GC38-1001

OS/VS MESSAGE LIBRARY: VS1 SYSTEM MESSAGES

This manual is the basic manual of the message library for OS/VS1 systems. It contains messages for most system control program functions, including scheduler, supervisor, data management, system generation, and checkpoint/restart.

VS1 System Messages, when used with other appropriately chosen message library publications, enables effective use of VS1 messages.

For messages documented, it contains pertinent data about:

- an expanded explanation of the message text,
- the resulting action of the system,
- the response required of the operator and/or programmer,
- and how to obtain the information necessary for problem determination.

It is written for operators, programmers, system support personnel - anyone who responds to system messages.

GC38-1003

OS/VS MESSAGE LIBRARY: SYSTEM CODES

This publication lists, explains, and suggests appropriate responses to the system completion codes and wait state codes produced by the IBM-supplied components of OS/VS. The codes are presented in alphanumeric order.

GC38-1004

OS/VS MESSAGE LIBRARY: ROUTING AND DESCRIPTOR CODES

This publication is part of the OS/VS (Operating System/Virtual Storage) Message Library. Most OS/VS messages are issued by the WTO/WTOR macro instruction; routing and descriptor codes are parameter specifications of the WTO/WTOR macro instructions and are assigned by IBM Programming.

This publication is intended for the limited and specific audience of those who wish to alter the IBM-supplied code parameters.

GC38-1005

OS/VS MESSAGES LIBRARY: UTILITIES MESSAGES

This publication lists error and diagnostic messages issued by OS/VS Utility programs and describes the actions to be taken in response to them. It is to be used by programmers using the OS/VS Utility programs, and by operators responsible for running them. OS/VS Utilities, GC35-0005, is a prerequisite publication.

GC38-1006

OS/VS MESSAGE LIBRARY: SERVICE AIDS AND OLTEP MESSAGES

This publication lists, explains, and suggests appropriate responses to the messages produced by the OS/VS service aids and OLTEP programs. The messages are grouped by component and listed in alphanumeric order.

Associated publications:

- OS/VS Service Aids, GC28-0633, which tells how to use the OS/VS service aids programs.
- OS/VS OLTEP, GC28-0636, which tells how to use the OS/VS C-line Test Executive Program (OLTEP).

SR25-5660

IBM 3145 PROCESSING UNIT EXTENDED CONTROL STUDENT SELF-STUDY COURSE

This item is intended for use by FE personnel enrolled in and/or administering an FE Education training course. Descriptions of all FE Education training programs and the procedures for enrollment may be found in the Field Managers' Education Planning Guide, order number Z225-2596. Every FE branch office has a copy of the Education Planning Guide. IBMers outside of the FE Division having only an occasional need for training course information should not order the Field Managers' Education Planning Guide, but instead should contact FE management at the nearest branch office or FE education center.

GV20-0360

VIRTUAL STORAGE PRODUCT OVERVIEW (PART I) AND VIRTUAL STORAGE APPLICATIONS ADVANTAGES (PART II)

A two part taped slide show that outlines additions to the product line that implement virtual storage, and benefits that accrue to customer installations that move into the virtual storage environment. This slide set was distributed to all DP branch offices, education centers, and SD&I centers at announcement time. No additional sets are available.

GV20-0362

VIRTUAL STORAGE INTERMEDIATE USERS

A 30-minute, taped slide show that outlines for data processing managers the concepts and advantages of virtual storage as implemented for the intermediate customer set (users of Models 135 through 158). This slide set was distributed to all DP branch offices, education centers, and SD&I centers at announcement time. No additional sets are available.

GV20-0363

VIRTUAL STORAGE - LARGE USERS

A 30-minute, taped slide show that outlines for data processing managers the concepts and advantages of virtual storage as implemented for the large customer set (users of 168 and 158 user

VS2). This slide set was distributed to all DP branch offices, education centers, SD&I centers at announcement time. No additional sets are available.

GV20-0364

VIRTUAL STORAGE - SMALL USERS

A 45-minute, taped slide show that outlines for data processing managers the concepts and advantages of virtual storage as implemented for users of DOS. This slide set was distributed to all DP branch offices, education centers, and SD&I centers at announcement time. No additional sets are available.

GV20-0365

EDUCATION INDUSTRY VIRTUAL STORAGE SLIDE SET

An industry-oriented presentation of System/370 advanced function that emphasizes the potential benefits applicable to the Education industry. At time of announcement these slide sets were distributed to selected IBM locations as designated by Education Industry Marketing. No additional sets are available.

GV20-0366

STATE & LOCAL GOVERNMENT INDUSTRY VIRTUAL STORAGE SLIDES

An industry-oriented presentation of System/370 advanced function that emphasizes the potential benefits applicable to the Education industry. At time of announcement these slide sets were distributed to selected IBM locations as designated by State and Local Government Industry Marketing. No additional sets are available.

GV20-0367

DISTRIBUTION INDUSTRY VIRTUAL STORAGE SLIDE SET

An industry-oriented presentation of System/370 advanced function that emphasizes the potential benefits applicable to the Education industry. At time of announcement these slide sets were distributed to selected IBM locations as designated by Distribution Industry Marketing. No additional sets are available.

GV20-0368

MANUFACTURING INDUSTRY VIRTUAL STORAGE SLIDES

An industry-oriented presentation of System/370 advanced function that emphasizes the potential benefits applicable to the Education industry. At time of announcement these slide sets were distributed to selected IBM locations as designated by Manufacturing Industry Marketing. No additional sets are available.

GV20-0369

INSURANCE INDUSTRY VIRTUAL STORAGE SLIDES

An industry-oriented presentation of System/370 advanced function that emphasizes the potential benefits applicable to the Education industry. At time of announcement these slide sets were distributed to selected IBM locations as designated by Insurance Industry Marketing. No additional sets are available.

GV20-0370

SCIENTIFIC PROGRAMS INDUSTRY VIRTUAL STORAGE SLIDES

An industry-oriented presentation of System/370 advanced function that emphasizes the potential benefits applicable to the Education industry. At time of announcement these slide sets were distributed to selected IBM locations as designated by Scientific Programs Industry Marketing. No additional sets are available.

GV20-0371

FINANCE INDUSTRY VIRTUAL STORAGE SLIDES

An industry-oriented presentation of System/370 advanced function that emphasizes the potential benefits applicable to the Education industry. At time of announcement these slide sets were distributed to selected IBM locations as designated by Finance Industry Marketing. No additional sets are available.

GV20-0372

PROCESS INDUSTRY VIRTUAL STORAGE SLIDES

An industry-oriented presentation of System/370 advanced function that emphasizes the potential benefits applicable to the Education industry. At time of announcement these slide sets were distributed to selected IBM locations as designated by Process Industry Marketing. No additional sets are available.

GV20-0373

VIRTUAL STORAGE LIBRARY MODULE

A customer presentation of Virtual Storage, an element of System/370 Advanced Function. The detailed description of Virtual Storage is designed to satisfy the information requirements of all levels of data processing personnel in the customer's environment. This slide set was distributed to all DP branch offices, education centers and SD&I centers at announcement time. No additional sets are available.

GV20-0374

DOS/VS LIBRARY MODULE

A customer presentation of DOS/VS, an element of System/370 Advanced Function. The detailed description of DOS/VS is designed to satisfy the information requirements of all levels of data processing personnel in the customer's environment. This slide set was distributed to all DP branch offices, education centers and SD&I centers at announcement time. No additional sets are available.

GV20-0375

OS/VS1 LIBRARY MODULE

A customer presentation of OS/VS1, an element of System/370 Advanced Function. The detailed description of OS/VS1 is designed to satisfy the information requirements of all levels of data processing personnel in the customer's environment. This slide set was distributed to all DP branch offices, education centers and SD&I centers at announcement time. No additional sets are available.

GV20-0376

OS/VS2 LIBRARY MODULE

A customer presentation of OS/VS2, an element of System/370 Advanced Function. The detailed description of OS/VS2 is designed to satisfy the information requirements of all levels of data processing personnel in the customer's environment. This slide set was distributed to all DP branch offices, education centers and SD&I centers at announcement time. No additional sets are available.

GV20-0377

VM/370 LIBRARY MODULE

A customer presentation of VM/370, an element of System/370 Advanced Function. The detailed description of VM/370 is designed to satisfy the information requirements of all levels of data processing personnel in the customer's environment. This slide set was distributed to all DP branch offices, education centers and SD&I centers at announcement time. No additional sets are available.

GV20-0378

VSAM LIBRARY MODULE

A customer presentation of VSAM, an element of System/370 Advanced Function. The detailed description of VSAM is designed to satisfy the information requirements of all levels of data processing personnel in the customer's environment. This slide set was distributed to all DP branch offices, education centers and SD&I centers at announcement time. No additional sets are available.

GV20-0379

135 (VIRTUAL STORAGE) LIBRARY MODULE

A slide set-plus-script presentation providing a comprehensive overview of the System/370 Model 135 Advanced Function, including CPU, real storage, operating systems, virtual storage, performance, channels, I/O, teleprocessing, emulation, RAS, and RCS. At time of announcement, this slide set was distributed to all DP branch offices, education centers and SD&I centers. No additional sets are available.

GV20-0380

145 (VIRTUAL STORAGE) LIBRARY MODULE

Designed for modification to meet the presenter's needs, this slide module provides a total overview of System/370 Model 145, including reference to such enhancements as virtual storage, and coverage of the new System Control Programming -- DOS/VS, OS/VS and VM/370.

This slide set was distributed to all DP branch offices, education centers, and SD&I centers at announcement time. No additional sets are available.

GV20-0381

158 ADVANCED FUNCTION LIBRARY MODULE

This presentation introduces the System/370 Model 158, and discusses many of the outstanding features and advantages that contribute to simplification of program modifications, reduction of new application startup costs, and accelerated expansion of online applications.

This slide set was distributed to all DP branch offices, education centers, and SD&I

centers at announcement time. No additional sets are available.

GV20-0382

168 ADVANCED FUNCTION LIBRARY MODULE

This presentation introduces the System/370 Model 168, and discusses many of the outstanding features and advantages that contribute to simplification of program modifications, reduction of new application startup costs, and accelerated expansion of online applications.

This slide set was distributed to all DP branch offices, education centers, and SD&I centers at announcement time. No additional sets are available.

GV20-0383

VIRTUAL STORAGE PERFORMANCE CONSIDERATIONS LIBRARY MODULE

Describes and discusses the advantages of virtual storage as it is used in OS/VS1, OS/VS2 and DOS/VS, and its effects on System/370 performance. It uses charts and graphs to illustrate some points, and is based on a limited number of pre-announcement measurements. Conceptual in nature, it may not apply to all installation situations. At time of announcement this slide set was distributed to all DP branch offices, education centers and SD&I centers. No additional sets are available.

GV20-0384

3330 LIBRARY MODULE

This slide set discuss the new methods of attachment for IBM's direct access storage devices, and points out the advantages and economies that can result by implementing these new attachment methods. This slide set was distributed to all DP branch offices, education centers and SD&I centers at announcement time. No additional sets are available.

GV20-0385

155 II (155 WITH DAT) LIBRARY MODULE

This presentation introduces the Dynamic Address Translation (DAT) Facility, a major functional enhancement available for field installation on a purchased System/370 Model 155. With the DAT Facility installation, the Model 155 becomes a Model 155 II, capable of implementation of virtual storage up to 16 million bytes in size, and supported by new operating systems designed for use in a virtual storage environment.

This slide set was distributed to all DP branch offices, education centers, and SD&I centers at announcement time. No additional sets are available.

GV20-0386

165 II (165 WITH DAT) LIBRARY MODULE

This presentation introduces the Dynamic Address Translation (DAT) Facility, a major functional enhancement available for field installation on a purchased System/370 Model 165. With the DAT Facility installation, the Model 155 becomes a Model 165 II, capable of implementation of virtual storage up to 16 million bytes in size, and supported by new operating systems designed for use in a virtual storage environment.

This slide set was distributed to all DP branch offices, education centers, and SD&I centers at announcement time.

No additional sets are available.

GV20-0387

OS/VS1 DEMONSTRATION SLIDE SCRIPT

Describes and discusses the characteristics and advantages of Operating System/Virtual Storage 1, the virtual storage extension of OS/MFT. It includes notes to the presenter and pointers to help the presenter communicate effectively. Although it can be used with both a technical and nontechnical audience, this presentation is geared to an audience of data processing personnel with a working knowledge of the Operating System.

GV20-0388

VIRTUAL MACHINE FACILITY/370 (VM/370) DEMONSTRATION SLIDE MODULE

A demonstration of the characteristics and advantages of VM/370, the operating system that enables many remote terminal users to use a virtual storage System/370 and share its performance as if each of them were using a dedicated system. In addition to enabling each user to run a different operating system, VM/370 provides a conversational subsystem for interactive online computing. At time of announcement, this slide set was distributed to all DP branch offices, education centers and SD&I centers. No additional sets are available.

ZV20-0389

3330 DASD-INTERNAL STRATEGY

This slide set for IBM internal use only discusses the sales strategies that should be used to sell IBM DASDs in conjunction with the new attachment methods. This slide set was distributed to all DP branch offices, education centers and SD&I centers at announcement time. No additional sets are available.

GV20-3129

VIRTUAL STORAGE PRODUCT OVERVIEW FILMSTRIP

A LaBelle Courier filmstrip designed for customer executives who do not attend the virtual storage announcement in the branch office. The filmstrip capsules the virtual storage announcements, and outlines its concepts and customer advantages. This filmstrip was distributed at announcement time to all DP branch offices, education centers, and SD&I centers. No further copies are available.

GY21-0012

OS BSAM LOGIC FOR IBM 1419/1275

This publication describes the logic of the device-dependent basic sequential access method (BSAM) routines required to operate the IBM 1419 Magnetic Character Reader and the IBM 1275 Optical Character Reader under the MPT, MVT, and VS options of the operating system (OS).

This publication is intended for use by IBM customer engineers involved in program maintenance and by programmers needing information on the logic of 1419/1275 BSAM routines.

SY24-5155

OS/VS1 SUPERVISOR LOGIC

Persons interested in determining sources of errors within or making changes to the internal logic of the VS1 (virtual storage option 1) supervisor should read this manual. Readers must be familiar with programming techniques and the operating principles of VS1.

This manual describes the purpose and function of the VS1 supervisor and its relationship to the control program. It:

1. Describes the relationship of the supervisor to the other parts of the control program and the general characteristics of the supervisor.
2. Provides a functional overview of interrupt handling, resources of the supervisor, and exiting and dispatching.
3. Provides detailed information on the routines of the supervisor. It includes a synopsis of the routine's procedure with appropriate coding labels that provide a means of entry into the listing.
4. Provides a list of supervisor modules, with appropriate manual references. It also lists all of the labels used in this manual. It is designed to act as a bridge between this manual and the listing. Messages issued by the supervisor are also listed.
5. Contains the formats of control blocks and work areas used by the supervisor, and it describes the fields within each section. Control blocks and data areas common to more than one system component are not described in this manual.
6. Contains information useful in determining the source of an error within the supervisor.
7. Describes the method of operation and the organization of Program Fetch.
8. Describes time slicing, extended precision floating point decimal simulator, system management facility, shared DASD, and generalized trace facility. Appendix C describes additional debugging aids.

SY24-5156

OS/VS I/O SUPERVISOR LOGIC

This publication, when used with the program listing, enables you to understand the internal operation of the I/O supervisor and to make changes to it when necessary.

This publication does not replace the program listings; it supplements them and makes the information in them more accessible.

This publication contains seven sections:

Section 1: Introduction informs you of the I/O supervisor's services and overall operation.

Section 2: Method of Operation contains HIPO (Hierarchy plus Input-Process-Output) diagrams that describe the operation of the I/O supervisor. The diagrams are high level and are designed to guide you to a particular area of the program listing.

Section 3: Program Organization contains a functional organization chart for each of the three main functions of the I/O supervisor, flowcharts of new routines, and routines that are particularly complex.

Section 4: Directories provides cross-reference lists. A routine directory, module directory, and data area directory are included.

Section 5: Data Areas contains descriptions

of the interrelationship and content of data areas and control blocks that are used primarily by the I/O supervisor.

Section 6: Diagnostic Aids contains information to help you interpret the program listing, and diagnose program failures.

Section 7: Appendixes supplements both this manual and the program listing. Descriptions of SVC routines and optional features, error recording information, device-dependent error recovery routines, and a list of abbreviations are included.

SY24-5159

OS/VS CHECKPOINT/RESTART LOGIC

This publication describes the functions of the OS/VS (virtual storage) checkpoint and restart routines. It is divided into six sections:

- Introduction briefly describes the purpose and advantages of using the checkpoint and restart routines.
- Method of Operation shows the major functions of checkpoint and restart.
- Program Organization shows the flow of control between the modules.
- Directory serves as a cross-reference to aid in locating the figure in the manual in which a routine is described.
- Data Areas shows the various data areas used or built by the checkpoint and restart routines.
- Diagnostic Aids lists the messages and return codes generated by the checkpoint and restart routines.

SY24-5160

OS/VS1 IPL AND NIP LOGIC

This publication is intended to acquaint the system programmer and those programmers responsible for maintaining the system with the services performed by the Initial Program Loader and the Nucleus Initialization Program.

It explains the logic of the Initial Program Loader and the Nucleus Initialization Program. The IPL program prepares the System/370 machine system for operation and loads the control program nucleus. NIP initializes the system functions, storage, tables, data sets, and work areas for the operating system.

The first section, the Introduction, gives a brief overview of the Initial Program Loader (IPL) program and the Nucleus Initialization Program (NIP). The second section, Method of Operation, contains a description of the IPL and NIP operations. The diagrams can be used to quickly locate logical sections of the program and, together with the section Diagnostic Aids, can help to quickly isolate possible problem areas. The diagrams in the section, Method of Operation, show the relationship of the data areas used by IPL and NIP and graphically present the data flow within the program. The third section, Program Organization, contains flowcharts of some of the program logic and a synopsis of the IPL and NIP routines. The fourth section, Directory, gives a cross reference table to aid in locating the section of the manual in which a routine is described and flowcharted. A cross-reference list of messages is also included. The fifth section, Data Areas, contains maps and detailed descriptions of the control blocks and data areas used by IPL and NIP. The sixth section,

Diagnostic Aids, lists and explains the various wait state codes that may occur during IPL or NIP execution.

ZY25-2443

3145 EXTENDED CONTROL QUIZ 1

This item is intended for use by FE personnel enrolled in and/or administering an FE Education training course. Descriptions of all FE Education training programs and the procedures for enrollment may be found in the Field Managers' Education Planning Guide, order number ZZ25-2596. Every FE branch office has a copy of the Education Planning Guide. IBMers outside of the FE Division having only an occasional need for training course information should not order the Field Managers' Education Planning Guide, but instead should contact FE management at the nearest branch office or FE education center.

ZY25-2444

3145 EXTENDED CONTROL QUIZ 2

This item is intended for use by FE personnel enrolled in and/or administering an FE Education training course. Descriptions of all FE Education training programs and the procedures for enrollment may be found in the Field Managers' Education Planning Guide, order number ZZ25-2596. Every FE branch office has a copy of the Education Planning Guide. IBMers outside of the FE Division having only an occasional need for training course information should not order the Field Managers' Education Planning Guide, but instead should contact FE management at the nearest branch office or FE education center.

ZY25-2450

3145 PROCESSING UNIT EXTENDED CONTROL SUPPORT

This item is intended for use by FE personnel enrolled in and/or administering an FE Education training course. Descriptions of all FE Education training programs and the procedures for enrollment may be found in the Field Managers' Education Planning Guide, order number ZZ25-2596. Every FE branch office has a copy of the Education Planning Guide. IBMers outside of the FE Division having only an occasional need for training course information should not order the Field Managers' Education Planning Guide, but instead should contact FE management at the nearest branch office or FE education center.

SY27-7239

OS/VS RECOVERY MANAGEMENT SUPPORT LOGIC

This publication describes the operation and design of recovery management support programs that are part of OS/VS (virtual storage):

- Machine-Check Handler (MCH)
- Channel-Check Handler (CCH)
- Dynamic Device Reconfiguration (DDR)

These programs are designed to keep the system operational in the event of a processor, storage, channel, or device failure. (An additional recovery management support program, Alternate Path Retry, is described in the OS/VS I/O Supervisor PLM.)

This publication is divided into three parts: MCH, CCH, and DDR. Each part is independent of the others and may be used as a separate manual, although the parts share a table of contents and an index.

SY27-7240

OS/VS GRAPHICS ACCESS METHOD LOGIC

Describes the internal logic of the Graphics Access Method (GAM) for the IBM 2250 Display Unit, Models 1 and 3, and the IBM 2260 Display Station (Local Attachment). Areas of the program that perform specific functions are identified and related to the program listings.

GAM consists of input/output and control routines that are part of the graphic programming services for the 2250 display unit and the 2260 display station. The GAM routines perform three major functions:

- Graphic data management (including buffer management)
- Input/output control
- Attention handling (both basic and express)

This program logic manual is directed to the IBM customer engineer, who maintains the program, and to the system programmer, who may wish to alter the program design. It should be used in conjunction with, and as a guide to, the appropriate program listings. Program logic information is not necessary for program operation and use.

SY27-7241

OS/VS GRAPHICS PROBLEM ORIENTED ROUTINES LOGIC

Describes the internal logic of the problem oriented routines (PORs) for the IBM 2250 Display Unit, Models 1 and 3. Areas of the program that perform specific functions are identified and related to the program listings.

PORs, which are part of the graphic programming services for the 2250 display unit, are generalized routines that generate graphic orders for displaying various images and alphanumeric information on the 2250 display unit. Each POR is described in detail to show its internal structure and logic.

This program logic manual is directed to the IBM customer engineer, who maintains the program, and to the system programmer, who may wish to alter the program design. It should be used in conjunction with, and as a guide to, the appropriate program listings. Program logic information is not necessary for program operation and use.

SY27-7242

OS/VS GRAPHIC SUBROUTINE PACKAGE (GSP) FOR FORTRAN IV, COBOL, AND PL/I LOGIC MANUAL

This manual describes the internal logic of the graphic subroutine package (GSP), a program that enables a FORTRAN, COBOL, or PL/I programmer to write graphic programs for the IBM 2250 Display Unit under the control of OS/VS. GSP may also be used in an assembler language program.

This program logic manual is directed to the IBM customer engineer, who maintains the program, and to the system programmer, who may wish to alter the program design. It should be used in conjunction with, and as a guide to, the appropriate program listings. Program logic information is not necessary for program operation and use.

SY27-7246

OS/VS BTAM LOGIC

This publication describes the internal logic of the Basic Telecommunications Access Method (BTAM). It is intended for use by persons involved in program maintenance and by system programmers who are altering the program design. Program logic information is not necessary for the use and operation of the program; therefore, distribution

of this publication is limited to those with maintenance and alteration requirements.

SY28-0605

OS/VS1 SYSTEM DATA AREAS

This publication contains reference information about the contents and format of system control blocks. Most of the control blocks in this publication are used by more than one component of the OS/VS1 control program. The block descriptions are ordered alphabetically by acronym. When a block has different access method versions, they are arranged under the block name in this order: SAM, ISAM, DAM, TAM, GAM, TCAM.

A pointer diagram shows the addressing relationships between the major control blocks in the system.

Note: For compatibility with the actual control blocks, certain fields describing non-supported functions or devices appear in this publication. This cannot be construed as a statement of IBM's intent to support such features or devices now or in the future.

SY28-0635

OS/VS SERVICE AIDS LOGIC - PROGRAM NUMBERS 5741-SC-

11,
5741-SC1-16

This publication describes the functions and internal logic of the nine service aid programs provided for use in servicing OS/VS. The nine service aid programs are: Generalized Trace Facility, EMATPFL, HMASZAP, HWBLIST, HMDPRDMT, HMDSDMP, IFCDDP0, IFCEREP0, INCJOB0.

This publication is intended for the IBM programming systems representative who is involved in maintaining service aid programs. This publication should be used in conjunction with OS/VS Service Aids, GC28-0633, which tells how to use the service aid programs.

SY28-0637

OS/VS OLTEP LOGIC

This seven-section program logic manual describes the internal logic of the Online Test Executive Program, a program that handles the testing of input/output devices under the control of VS1. The manual is directed to the IBM program systems representative who is responsible for program maintenance.

Section 1 is the introduction.

Section 2 illustrates the major functions of OLTEP.

Section 3 describes the organization of OLTEP. The section contains a diagram which illustrates the organization of the OLTEP modules and a chart which describes the overall flow of control within OLTEP. Module description charts offer detailed information about each of the OLTEP modules.

Section 4 contains directories to the OLTEP and SVC 59 modules. The OLTEP module directory lists routine, module, and CSECT names. It also provides a brief description of each module's function. The SVC 59 directory describes the functions performed by each SVC 59 load module. It also lists the calling codes used by OLTEP routines to request specific SVC 59 functions. Both directories contain cross references to operation diagrams.

Section 5 describes the format, origin, and use of the key data areas in OLTEP.

Section 6 describes the switches used by the OLTEP modules. Information includes when, why,

and by which routine(s) each switch is set.

Section 7 contains the appendices. Appendix A provides a general description of OLTEP SVC 59 and its associated I05-OLTEP appendage module. Appendix B provides a glossary of acronyms.

For information about how to run OLTEP and for a general understanding of the program, read OS/VS OLTEP, GC28-0636.

SY33-8041

OS/VS ASSEMBLER LOGIC - PROGRAM NUMBER 5741-SC1-03

This program logic manual is written for customer engineers and programmers maintaining the OS/VS assembler. The manual describes the structure, logic and operation of the diagrams highlight the inputs, processing, and outputs of the assembler functions. The diagrams are accompanied by text describing the functions in more detail and cross-references to the program elements that perform the functions. Detailed charts show how the assembler phases use main storage and the flow of control and data between the assembler phases. The manual also contains layouts of data areas, information designed to be helpful in debugging, information about error message origin, macro and copy code usage, meta text flags, internal operation codes, entry points and EXTRN symbols, record formats, and the internal character set.

Prerequisite Publications:

OS/VS and DOS/VS Assembler Language, Order Number GC33-4010
IBM System/370 Principles of Operation, Order Number GA22-7000
IBM System/360 Principles of Operation, Order Number GA22-6821
OS/VS Assembler Programmer's Guide, Order Number GC33-4021

SY35-0005

OS/VS UTILITIES LOGIC

This publication describes the internal logic of the utility programs provided for OS/VS. It contains flowcharts of the programs, figures showing the formats of the major tables and records, and an appendix that lists the modules of the utility programs.

The manual is intended for persons involved in program maintenance, and system programmers who are altering the program design. Program logic information is not necessary for the use and operation of the program.

ZZ20-2349

INTRODUCTION TO SYSTEM PERFORMANCE EVALUATION
VIRTUAL STORAGE SYSTEMS

This manual treats the subject of system performance evaluation in a conceptual manner. The intent is to generate an awareness of the factors that affect total performance in a virtual storage environment.

This publication does not include statistical comparisons and is not intended to be a detailed predictive tool. Rather, its purpose is to identify, clarify, and relate factors that may affect performance upon the introduction of virtual storage.

Included are sections describing performance characteristics of DOS/VS, OS/VS1, OS/VS2, and VM/370.

The reader needs no prior knowledge of performance evaluation, but should be familiar with basic data processing principles and virtual storage concepts.

ZZ20-2362

ADVANCED FUNCTION MARKETING GUIDE

This manual presents approaches for effectively communicating the value of Advanced Function to the customer. It does not present a detailed description of the new hardware and software, but provides pointers to the appropriate documents.

ZZ20-2363

OS/VS1 PERFORMANCE EVALUATION

This publication provides a representative range of comparative data between OS/MFT, OS/MFT HASP, and OS/VS1 run in varied environments with selected jobstreams. It provides salesmen and system engineers with a conceptual understanding of the factors that affect total performance. Topics discussed include: introduction, detail jobstream description, performance comparisons, component performance, and performance considerations. Three appendices are included: SYSGEN options for performance comparison runs, PROCLIB entries for performance comparisons, and PARMLIB entries for performance comparisons. Prerequisite Publication:

Introduction to System Performance Evaluation-Virtual Storage Systems, ZZ20-2349.

ZZ20-2365

VALUE OF VIRTUAL STORAGE MARKETING GUIDE

This guide is designed to aid the marketing representative in analyzing his customer's installation for virtual storage and virtual machine potential. Questions and examples are used throughout to direct the guide user's attention to areas of the customer's business in which value could be measured.

ZZ20-2407

ADVANCED FUNCTION MARKETING EDUCATION GUIDE

This education guide is designed to assist in teaching the Advanced Function Announcement to the branch office marketing personnel.

The contents of this teaching outline are derived mainly from the marketing approaches and support programs underlining the announcement. The instructor should study in detail the Advanced Function Marketing Guide (AFMG), which is the primary reference document for this guide.

Product tutorials - both overview and technical detail can be found in the Advanced Function Branch Office Education Guide (BOEG) that is available to each branch office for IBM pre-announcement education.

This education guide and the associated reference documents are for IBM Internal Use Only. Under no circumstances should this material be given to customers or prospects; all information contained within is subject to change.

DP Product Marketing - Large Systems
Department 708, DPDEQ

NOTE: This guide was prepared for pre-announcement class use. Additional copies are not available at MDC.

ZZ20-2408

RAILROAD INDUSTRY MARKETING GUIDE

The Railroad Industry Marketing Guide structures common marketing approaches for the Railroad Industry relative to the System/370 Advanced Function announcement and other recent announcements.

The Guide defines, in a generalized fashion, the existing state of the art and outlines an action plan

for advancing your customer into total system solutions.

ZZ20-2409

MOTOR FREIGHT INDUSTRY MARKETING GUIDE

The Motor Freight Industry Marketing Guide structures common marketing approaches for the Motor Freight Marketing Representatives relative to the System/370 Advanced Function announcements and the recent announcement of the Fast Information Retrieval for Surface Transportation (FIRST) programming package.

The guide defines the current environment of the industry and outlines a cost-justification method to be used in preparing a professional proposal for on-line applications.

ZZ20-2420

COMMUNICATIONS ORIENTED PRODUCTION INFORMATION AND CONTROL SYSTEM (COPICS) MARKETING GUIDE

COPICS is a series of concepts that outline an approach to manufacturing systems. The concepts deal with problems common to most companies, from a forecast of customer orders, through development of the master production schedule, to production and shipment of the product.

This marketing guide is sectionalized for easy reference and is designed to help the IBM sales force develop account plans and strategies for marketing the COPICS concepts. The sections are:

- Use of Guide
- Marketing Approach
- PICS/COPICS Relationship
- IBM Support: Hardware, Software, Marketing Aids
- Marketing Approach: Account Profiles, Inventory Guide, Functional Guide
- COPICS Application References

G520-2570

VIRTUAL STORAGE FOR STATE AND LOCAL GOVERNMENT - FLYER

This is an industry-oriented sales flyer highlighting the role of System/370 Advanced Function for the State and Local Government industry. It is suitable for use in proposals.

G520-2572

VIRTUAL STORAGE FOR STATE AND LOCAL GOVERNMENT PROGRAM PRODUCTS - FLYER

This is an industry-oriented sales flyer highlighting the role of System/370 Advanced Function as it relates to program products in the State and Local Government industry. It is suitable for use in proposals.

G520-2574

VIRTUAL STORAGE FOR MANUFACTURING INDUSTRY OS USERS FLYER

This is an industry-oriented sales flyer highlighting the role of System/370 Advanced Function for the Manufacturing (Financial, Mktg., Administrative Applications for OS User) industry. It is suitable for use in proposals.

G520-2575

VIRTUAL STORAGE FOR MANUFACTURING INDUSTRY DOS USERS FLYER

This is an industry-oriented sales flyer highlighting the role of System/370 Advanced Function for the Manufacturing (Financial, Marketing, Administrative Applications for DOS User) industry. It is suitable for use in proposals.

G520-2576

VIRTUAL STORAGE FOR MANUFACTURING INDUSTRY PLANT AUTOMATION - FLYER

This is an industry-oriented sales flyer highlighting the role of System/370 Advanced Function for the Manufacturing (Plant Automation) industry. It is suitable for use in proposals.

G520-2577

VIRTUAL STORAGE FOR MANUFACTURING INDUSTRY - COPICS SMALL USER FLYER

This is an industry-oriented sales flyer highlighting the role of System/370 Advanced Function for the Manufacturing (COPICS for Small User) industry. It is suitable for use in proposals.

G520-2578

VIRTUAL STORAGE FOR MANUFACTURING INDUSTRY - COPICS FOR LARGE, INTERMEDIATE USER - FLYER

This is an industry-oriented sales flyer highlighting the role of System/370 Advanced Function for the Manufacturing (COPICS for large/intermediate User) industry. It is suitable for use in proposals.

G520-2579

MANUFACTURING INDUSTRY - VIRTUAL STORAGE IN ENGINEERING SMALL USER - FLYER

This is an industry-oriented sales flyer highlighting the role of System/370 Advanced Function for the Manufacturing (Engineering for Small User) industry. It is suitable for use in proposals.

G520-2580

MANUFACTURING INDUSTRY - VIRTUAL STORAGE FOR ENGINEERING - INTERMEDIATE AND LARGER USER - FLYER

This is an industry-oriented sales flyer highlighting the role of System/370 Advanced Function for the Manufacturing (Engineering for Intermediate/Large User) industry. It is suitable for use in proposals.

G520-2611

VIRTUAL STORAGE AND VIRTUAL MACHINES - BROCHURE

A 10 page, four-color brochure that describes to executives the concepts and attendant benefits of virtual storage and virtual machines.

G520-2613

OS/VS1 AND OS/VS2 - BROCHURE

A 10 page brochure that describes the highlights and benefits of two System/370 operating systems that implement the virtual storage concept.

OS/VS1 is an extension of OS/MPT, and OS/VS2 is an enhancement of OS/MVT.

G520-2614

VIRTUAL MACHINE FACILITY/370 VM/370 - BROCHURE

Describes the characteristics and advantages of the System/370 operating system that enables many remote terminal users to use virtual storage System/370 as if each of them were using a dedicated computer. In addition to allowing each user to run independently, VM/370 has a conversational subsystem that facilitates interactive computing.

G520-2617

SYSTEM/370 MODEL 145 - BROCHURE

Illustrated with photographs, this comprehensive promotional piece describes the System/370 Model 145 Advanced Function, including CPU, real storage, operating systems, virtual storage, performance, channels, I/O, teleprocessing, emulation, RAS, and RCS.

G520-2634

SYSTEM/370 MODEL 158 FACTS FOLDER

This facts folder describes the System/370 Model 158. Topics discussed include processing unit highlights, monolithic main and buffer storage, virtual storage, attachment of I/O devices, the devices themselves, and programming systems support. Reflecting the system's design, the brochure emphasizes reliability, availability, and serviceability.

This publication will be updated periodically to reflect system changes; however, the authoritative sources of system information are the Systems Library publications for the Model 158, for its associated components, and for its programming support. Consult your IBM representative for availability dates of various programming system functions and hardware components.

ZZ20-2422-0

Special Bibliography of Publications supporting IBM System/370 Advanced Function Printed in U.S.A. ZZ20-2422-0

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