IBM EPL

REPLACEMENT PAGE

December 31st, 1970

EPL SUPPLEMENT to CATALOG of PROGRAMS

for IBM 360 Systems

This supplement to the Catalog contains a complete listing of all programs Type III and IV (national or international) contributed to the European Program Library for the IBM 360 Systems.

It obsoletes the previous edition of this Supplement.

This Supplement contains the following sections :

1 - Introduction and instructions on how to use the Supplement and order the programs.

2 - A list of programs contributed since the previous edition (if applicable).

3 - A list of corrections and revisions since the previous edition (if applicable).

4 - A sequential list of all programs contained.

5 - Abstracts of all programs contained.

6 - A list of deletions since the previous edition (if applicable).

INTRODUCTION

To assist you further in using this Supplement, the abstracts are listed by file number with no reference to the type of program. The program classification code is that of the SRL Catalog of Programs.

TYPE OF PROGRAMS

Type III

IBM contributed programs are contributed voluntarily by IBM employees to aid the programming and system community.

This library has been closed by March 25th, 1970.

Type IV

Customer contributed programs are valuable aids to the programming and systems community supplied by members of customer organizations and individual users of IBM Data Processing Systems.

IBM serves solely as the distribution agent for Type III and Type IV programs.

This library has been closed by December 31st 1969.

No new entries are accepted.

HOW TO ORDER PROGRAMS

The only method by which an EPL Member can order program material from EPL is by filling in and handing to his IBM Representative an EPL Program Order Form stating which items he wishes to receive.

STANDARDS FOR PROGRAM CONTRIBUTIONS TO EPL

1. National Type III and Type IV (N)

   EPL accepted only contribution of programs supported with documentation written in a language other than English and concerning local or specific situation problems.

2. International Type III - (I)

   EPL accepted only contribution of programs supported with documentation written in English and of general interest.

3. Both national and international Type III meet with 3 basic requirements :

   - The material submitted must conform to the Standards and Procedures for IBM Contributed Programs (Ref. : 220-1922-0) ;
   - All Type III submissions must be approved by WTHQ in New York ;
   - Prior to distributing a Type III Program, EPL sends a copy of it to its author and waits for his approval for release.

Programs which have not yet been approved by WTHQ have "NA" in front of the program number in the sequential list of programs.

Programs which have not yet been approved by their respective author are considered as in process. They will be marked "IP" in the sequential list of programs.

Programs might be pending for both WTHQ and author's approval. In this case, they are marked "IP".

You will be informed in time of the changes of all programs status.

SEQUENTIAL LIST OF PROGRAMS

	System File No		Title
	360D-00.0.701	I	GMBSC 2780/360 Transmission Utility
	360D-00.1.701	I	OSCLIP / Change Create Label Identification Program under OS/360
	360D-00.4.701	I	LSERV - DOS Label Cylinder Service Program
IP	360D-00.4.703	I	Supershuffle - PDS Compression Utility Program
IP	360D-00.4.704	I	LISTRL
	360D-00.4.705	I	DOS Disk Mapping and Allocation Program
	360D-00.4.706	I	Orbit - Simulation of 1440 CS - Utilities on System 360
	360D-00.5.701	I	SUTILITY - S/360 OS VTOC List and Scratch Utility
	360D-00.5.702	I	Condense
IP	360D-00.6.701	I	Display Active Tasks and Job Queues
IP	360D-01.0.701	I	DOS Accounting Package (ACCPAC)
	360D-01.1.701	I	DOS Multiple Supervisor Program
	360D-01.6.701	N	Utility Program to create of extent ISFMS File - under DOS
	360D-01.6.702	N	RECUP - Register Conversion Utility Program for IS, SD or Tape-files, 360 or 1401
	360D-01.6.703	I	IDAM - Indexed Direct Access Method
	360D-02.0.701	N	SIDABA 3
	360D-02.5.701	I	Hasp II Remote Job Entry Line Statistics Package
	360D-03.0.701	I	PL/1 Syntax Checker for OS/360
	360D-03.0.702	I	IBM/360 Process Communication Multi-Programming Supervisor (PCMS)
	360D-03.0.703	I	System Accounting Routine - IEFACTRT S/360
IP	360D-03.0.713	I	Electoral Registration Package
	360D-03.1.701	I	360 Card - Accelerator
	360D-03.2.701	I	44 PS Algol Compiler
	360D-03.2.702	I	3980 User Program Compiler V2 - Standard (OS 360)
	360D-03.2.703	I	3980 User Program Compiler V2 - Standard (DOS 360)
	360D-03.2.704	I	3980 User Program Compiler V1 - ASCII (DOS 360)
	360D-03.3.701	I	S/360 OS Algol Compiler Improvements
IP	360D-03.4.701	I	Data Management on Direct Access Devices in Real-Time Systems
	360D-03.4.702	I	Queue Management in a Control Program for a Real-Time System
	360D-03.4.703	I	ICL 1900 Tape Macro's
	360D-03.4.704	I	OS Basic Additional Teleprocessing Support
	360D-03.4.705	I	DOS Basic Additional Teleprocessing Support
	360D-03.4.706	I	DOS Priority Output Writer Execution Processors and Reader System
	360D-03.4.707	N	I/O Module - Macros for DOS Assembler Cobol and PL/1
	360D-03.4.709	I	DISAM - Macro
	360D-03.4.710	I	Simultaneous Unit-record Operations in a Multi-Programming Environment.
	360D-03.6.701	I	STEDEC - Sterling to Decimal Program Translator
	360D-03.6.704	I	Symbolic Library Processor DOS/360 Self-Relocating Utility

	360D-03.7.702	I	Big Ben 3
	360D-03.7.703	I	An OS Programming System for Local 2260's Based on Graphic Access Method
	360D-03.8.701	I	System/360 Sterling Processing Routines
	360D-03.8.702	I	P.A.Y.E. (Monthly and Weekly) for Decimal Sterling for System 360
	360D-03.8.703	I	System 360 Weekly and Monthly Sterling Paye and GGP Routines
	360D-04.0.701	I	ERRU
IP	360D-04.0.702	I	DIAGNOS
IP	360D-04.0.703	I	CORE
	360D-04.1.701	I	External Interrupt Fast Core Dump to Disk Auto Re-IPL and Dump Formatting System Quickdump
	360D-04.3.701	N	JESS
	360D-04.4.701	I	DOS Module Tester
	360D-04.4.702	I	TESTRAHM
	360D-04.4.703	I	BTAM Simulator (DOS)
	360D-05.0.701	I	STERL
	360D-05.0.702	I	Machine Utilisation and Statistical Information Collection System
	360D-05.1.701	I	GENA - OS (German Extended Network Access Method)
	360D-05.1.702	I	GENA - DOS (German Extended Network Access Method)
	360D-05.1.703	I	Multiple Job Initiation Monitor Program
	360D-05-1.704	I	On-Line Diagnostics System
	360D-05.2.701	I	Control Program for Real-time Multi-tasking
	360D-05.2.702	I	Dynamic Storage Management Services for DOS / 360
IP	360D-05.2.704	I	A Real-Time Control Program for the IBM 3968-001 Communication Controller
IP	360D-05.2.705	I	Priority Output Writers, Execution Processors and Input Readers - South African Version
IP	360D-06.0.701	I	Analys Statistical Analysis of Newspaper Sales Information by Salespoint
	360D-06.1.701	I	Exits to DOS Disk and Tape SORT/MERGE for 1401 Tape Labels and Swedish Collating Sequence
	360D-06.3.702	I	Generalized Inquiry Package for Small System User (GIPASS)
IP	360D-06.3.703	I	DOS Control Program for Real-Time Multi-tasking (DREAM)
IP	360D-06.3.704	N	Spanish Line Control Program
	360D-06.5.701	N	360 French Sums in Letters Translate Program
	360D-06.5.702	N	Program to Convert Bull Cards to RCA or IBM Card Files
	360D-06.5.703	N	RCA 382 to S/360 Tape Conversion
	360D-06.5.704	N	ENCOD / DECOD
	360D-06.5.705	I	Tape Translate Program for ICL 1900
	360D-06.6.701	I	Alphameric Compaction and Explosion Macros
	360D-06.6.702	N	Printing of CIPCODE-digits (DPLZH) with the Table-Search-Method in the Size of 6 or 8 Lines per Inch for General Use Printing on S/360 DOS
	360D-06.6.704	I	ASTRAL - Alphabetical Strings Transformation Language
	360D-06.7.701	N	SAGESSE
	360D-06.7.702	I	Program System for Optimal Storing of Big Files on Direct Access Storage Devices U D B

	360D-06.7.703	I	SPECOL - Special Customer Oriented Language OS
	360D-06.7.705	N	ISF Information Retrieval
	360D-06.7.707	I	KWIC SEARCH - Boolean Search of Bibliographic Files
	360D-06.7.708	I	CODO - DOCO Fast Conversion Between Emulation 1311 Files and True DOS Format for System 360 Models 25, 30 and 40
IP	360D-06.7.710	I	Computer Analysis of Names and Addresses (CAN)
	360D-06.7.711	I	SPECOL - Special Customer Oriented Language DOS
NA	360D-06.7.712	N	Medical Documentation System
	360D-08.0.701	I	1627 Plotter Subroutines for 360/DOS
IP	360D-08.6.701	I	IBM 1627 Plotter Support Package for OS/360
IP	360D-08.7.701	I	DOS MPS Chained Printer Output Macro Instruction
	360D-08.7.702	I	DOS Cobol Assembler Language Print Subroutines (SPRINT)
	360D-08.7.703	I	The Printer Multiprogramming System (PMPS)
IP	360D-10.0.701	N	MACIS (Method for Analyzing Communication and Information Structures)
	360D-11.2.701	I	1287 Document Mode Testing AID DOS/TOS
IP	360D-11.2.702	I	1410-1311 - Emulation for 360/50
	360D-12.0.701	I	COBOL Abbreviation Conversion and Source Modul Maintenance Program (COCO Program)
	360D-12.1.701	I	ICL 1900 to DOS/360 Tape Conversion Program
	360D-12.1.702	I	Conversion Program for GE-400 Tapes
	360D-12.1.703	I	Conversion Program for Journal Tapes
	360D-12.2.701	I	ICL 1900 Cobol to DOS/360 Cobol Conversion Aid Programs
	360D-13.1.701	I	COUNT A/360 Market Research Tabulation Programs V2
	360D-13.1.702	I	INTEREST : Integrated Retrieval and Statistics Program for IBM System/360
	360D-13.1.703	I	STAF / DOS
	360D-15.0.701	N	A Heuristic Program for Corrugator Cutting Stock Problem
	360D-15.0.702	I	IBM S/360 Forecasting and Decision Rules Program
	360D-15.2.701	N	Linear Programming Code
	360D-15.2.702	I	Fortran Transportation Code (V2)
	360D-15.4.701	N	PCS 360 French Report Processor (V2)
	360D-15.4.702	N	PCS 360 Exception Report Processor
IP	360D-15.5.701	N	Management Game Topic 1
	360D-15.6.701	I	DCF - Discounted Cash Flow
	360D-16.0.701	N	Calculation of the Optimum Alloy Additives for Alloy Steel Melts
	360D-16.2.701	N	Frameworks A
	360D-16.2.702	N	Continuous Beams A
	360D-16.2.703	N	Continuous Beams B
	360D-16.2.704	N	Evaluation of Influence Lines
	360F-16.2.705	N	Plane Truss
	360D-16.2.706	N	Reinforced Concrete Slabs in Apartment Houses due to DIN 1045
	360D-16.2.707	N	Cross Section Values 1
	360D-16.2.708	N	Shear Stress in thin Skinned Cross Sections
	360D-16.2.709	N	General Analysis of Hyperstatic Structures by the Force Method
	360D-16.2.710	N	Pile Works 1

360D-16.2.711	N	Pile Works 2	
360D-16.2.712	N	Data Handling Programs (V2)	
360D-16.2.713	N	Minor Point Calculation Orthogonal (V2)	
360D-16.2.714	N	Minor Point Calculation Polar (V2)	
360D-16.2.715	N	Setting-out Data (V2)	
360D-16.2.716	N	Similarity Transformation Helmert (V2)	
360D-16.2.717	N	Calculation of Lengths or Straight Line and Arcs checking the Calculated Values (V2)	
360D-16.2.718	N	Calculation of Intersection (V2)	
360D-16.2.719	N	Calculation of Tangents (V2)	
360D-16.2.720	N	Calculation of Traverses and Nets of Traverses (V2)	
360D-16.2.721	N	Area Calculation (V2)	
360D-16.2.722	N	Evaluation of Electronically Measured Distances (V2)	
360D-16.2.723	N	Geodetic Net Adjustment (V2)	
360D-16.2.724	N	Sample Load Data for Program System Geodesy (V2)	
360D-16.2.725	N	Area Subdivision	
360D-16.2.726	N	Ground Control Point Computation	
360D-16.2.727	N	Elevation Network Adjustment	
360D-16.2.728	N	Transformation I	
360D-16.2.729	N	Transformation II	
360D-16.2.730	N	Sample Problem Data for Program System Geodesy (2nd Stage)	
360D-16.2.731	N	Geodetic Network Adjustment (Large Version) with Sample Problem Data	
360D-16.2.732	N	Processing of Data Determined by means of the Zeiss PSK Stereocomparator with Sample Problem Data	
360D-16.2.733	N	General Subroutines	
360D-16.2.734	N	Horizontal Alignment	
360D-16.2.735	N	Horizontal Alignment of Interchanges	
360D-16.2.736	N	Setting-out Data	
360D-16.2.737	N	Two Centerlines	
360D-16.2.738	N	Terrestrial Terrain Profile Survey	
360D-16.2.739	N	Photogrammetric Constants	
360D-16.2.740	N	Photogrammetric Evaluation	
360D-16.2.741	N	Vertical Alignment	
360D-16.2.742	N	Gradeline Plotting Points	
360D-16.2.743	N	Elevation of Highway Surface	
360D-16.2.744	N	Cut and Fill	
360D-16.2.745	N	Field of Sight	
360D-16.1.746	N	Lane Widening in Curves	
360D-16.2.747	N	Transverse Grades and Rampings	
360D-16.2.748	N	Sample Problem Data for Program System Highway Design	
360D-16.2.749	N	Continuous Beam of Posttensioned Concrete with Sample Problem Data	
360D-16.2.750	I	Bills of Quantities (suite) (V2)	
360D-16.2.751	N	Correction for 360D-16.2.733 to 748	
360D-16.2.752	I	CEP GEOPS Geodetic Program System	
NA 360D-16.2.753	N	Digital Terrain Evaluation	
NA 360D-16.2.754	N	Range of Sight	

	360D-16.2.755	I	CEP-STRAPP - Structural Analysis Program Package
	360D-16.2.756	I	CEP-HIDES - Highway Design System
	360D-16.3.701	N	Typisation of Tubular Apparatus
	360D-16.3.702	N	Optimal Design of Heat Exchangers (OS)
	360D-16.3.703	N	Optimal Design of Heat Exchangers (DOS)
NA	360D-16.3.705	N	Computer Calculation for Multicomponent Vapor-Liquid Equilibria
IP	360D-16.3.706	N	Computation of the Coefficients for the Extended BWR Equation of State from few P-V-T Data
IP	360D-16.3.707	N	Computation of Thermodynamic Properties of Saturated Pure Fluids by the Extended Benedict-Webb-Rubbin Equation of State
IP	360D-16.3.708	N	Computer Calculation of Packed Absorption Tower
NA	360D-16.3.709	N	Computation of the Binary Activity Coefficients for the Margules-equation and the Equilibrium Curve for Binary Systems
IP	360D-16.3.710	N	Determination of the Coefficients of the Extended Benedict-Webb-Rubin Equation of State
IP	360D-16.4.701	N	360 Electric Power System Load Flow and Loss Minimization Program
IP	360D-16.4.702	N	Electric Power System Induced Voltage Calculations
IP	360D-16.4.703	N	360 Electric Power System Short Circuit Calculation
IP	360D-16.4.704	N	360 Electric Power System Unit Commitment
IP	360D-16.4.705	N	360 Electric Power System Line Data Calculations
IP	360D-16.4.706	N	360 Electric Power System Load Flow and Loss Minimization Program with Stored Inverse Matrix
IP	360D-16.5.701	I	Automatic Programming of Lathes (Autopol S/360 DOS) (V2)
IP	360D-16.8.701	N	Idefix
IP	360D-17.1.701	I	1627 Plotter Subroutines for PS 44 and DOS
IP	360D-17.1.702	N	Infrared Spectra Identification System
IP	360D-17.1.703	I	Focus
	360D-19.3.701	N	Subroutine to Compute Income Tax Deduction for Sweden (BOS)
	360D-19.3.702	N	Subroutine to Compute Income Taxe Deduction for Sweden (OS, TOS and DOS)
	360D-19.3.703	N	Subroutine to Compute Occasional Income Tax Deductions
NA	360D-19.4.701	N	Capital Investment Analysis under Uncertain Expectations
	360D-19.5.701	N	Mabila
IP	360D-19.7.701	N	Deposit Accounting
	360D-21.0.701	N	Payroll Tax Calculation for S/360 Models 25 and above (PXVERO)
	360D-21.0.702	N	Payroll Tax Calculation for S/360 Models 25 and Above (CXVERO)
	360D-21.0.703	N	Payroll Tax Calculation for S/360 Models 25 and Above (TXVERO)
	360D-21.0.704	N	Dutch Income-tax Routine White Table
	360D-21.0.705	N	Dutch Income-tax Routine Blue Table
	360D-21.1.701	N	Belgian Payroll Income-tax Subroutine 360
IP	360D-21.1.702	N	Tabelltrekk

	360D-23.0.701	N	TOPRIS - Textile Order Processing within Requirements Determination Inventory Control and Scheduling
	360D-23.0.702	N	Modular System for Computation of Requirements (MOSCOR)
	360D-23.0.704	N	Modular Inventory Control System (MINCOS)
IP	360D-23.0.707	N	QCS (Quality, Cost and Schedule Index Statistics)
	360D-23.1.701	I	Capacity Loading and Scheduling System (CLASS) DOS Version
	360D-23.1.702	I	Capacity Loading and Scheduling System (CLASS) OS Version
	360D-23.2.701	I	Program for Order Location by Audio-Response (POLAR)
	360D-23.4.701	I	IBM System/360 Shipbuilding Package Including Hull Fairing and Shell Development
	360D-23.4.702	I	Autopol /OS - Automatic Programming of Lathes
	360D-23.4.703	I	Autopol /DOS - Automatic Programming of Lathes
	360D-23.4.704	I	IBM System/360 Geometric Description Processor ACUTE for Shipbuilding
	360D-25.0.702	I	Stock Counting Option for Retail Impact /OS
IP	360D-25.2.701	N	MASIS - Material Control and Information System
	360D-29.0.701	I	Basic Routines for Enquiries and Data
	360D-29.3.701	I	International Programmed Airline Reservations System
	360D-29.3.702	I	Numeric Check in and Weight and Balance
	360D-29.4.701	N	Hot Metal Composition for Linecasters (German Hyphenation) with IBM 360/30
IP	360D-29.4.702	I	360 Dutch Hyphenation Program

LIST OF CORRECTIONS AND REVISIONS

IP	360D-16.5.701	N	Automatic Programming of Lathes - AUTOPOL V2

LIST OF DELETIONS

	360D-05.2.703	I	1978 Remote Job Entry under DOS (RJEDOS)
	360D-06.3.701	I	BTAM 1050 - A System for Data Transmission and Remote Job Entry
	360D-06.6.703	I	1287 Format Control Word Checking Program
	360D-24.2.701	I	Overlay Analyser (OVLYANAL)
	360D-30.0.701	I	MOPPS - N/C 360 Modularized Post Processor Support for Autospot
	360D-30.0.702	I	S/360 Scheduling Management and Allocating Resource Technique (S/360 SMART)
	360D-30.0.703	I	PERLE - Personalized Letters for Direct Mail Advertising on 360 Model 25 and Higher
IP	360D-40.1.701	I	Hexcal

LIST OF NEWLY CONTRIBUTED PROGRAMS

All programs are available, except programs marked NA or IP

	System File No		Title
	360D-00.0.701	I	GMBSC 2780/360 Transmission Utility
	360D-00.1.701	I	OSCLIP / Change Create Label Identification Program under OS/360
IP	360D-00.4.703	I	Supershuffle - PDS Compression Utility Program
IP	360D-00.4.704	I	LISTRL
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	360D-00.5.702	I	Condense
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IP	360D-01.0.701	I	DOS Accounting Package (ACCPAC)
	360D-01.1.701	I	DOS Multiple Supervisor Program
	360D-01.6.702	N	RECUP - Register Conversion Utility Program for IS, SD or Tape-files, 360 or 1401
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	360D-02.0.701	N	SIDABA 3
	360D-02.5.701	I	Hasp II Remote Job Entry Line Statistics Package
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	360D-08.7.702	I	DOS Cobol Assembler Language Print Subroutines (SPRINT)
	360D-08.7.703	I	The Printer Multiprogramming System (PMPS)

IP	360D-10.0.701	N	MACIS (Method for Analyzing Communication and Information Structures)
IP	360D-11.2.702	I	1410-1311 - Emulation for 360/50
	360D-12.0.701	I	COBOL Abbreviation Conversion and Source Modul Maintenance Program (COCO Program)
	360D-12.1.701	I	ICL 1900 to DOS/360 Tape Conversion Program
	360D-12.1.702	I	Conversion Program for GE-400 Tapes
	360D-12.1.703	I	Conversion Program for Journal Tapes
	360D-12.2.701	I	ICL 1900 Cobol to DOS/360 Cobol Conversion Aid Programs
	360D-13.1.701	I	COUNT A/360 Market Research Tabulation Programs
	360D-13.1.702	I	INTEREST : Integrated Retrieval and Statistics Program for IBM System/360
	360D-13.1.703	I	STAF / DOS
	360D-15.0.702	I	IBM S/360 Forecasting and Decision Rules Program
	360D-15.2.702	I	Fortran Transportation Code (V2)
	360D-15.4.702	N	PCS 360 Exception Report Processor
IP	360D-15.5.701	N	Management Game Topic 1
	360D-15.6.701	I	DCF - Discounted Cash Flow
	360D-16.0.701	N	Calculation of the Optimum Alloy Additives for Alloy Steel Melts
	360D-16.2.750	I	Bills of Quantities (suite) (V2)
	360D-16.2.751	N	Correction for 360D-16.2.733 to 748
	360D-16.2.752	I	CEP GEOPS Geodetic Program System
NA	360D-16.2.753	N	Digital Terrain Evaluation
NA	360D-16.2.754	N	Range of Sight
	360D-16.2.755	I	CEP-STRAPP - Structural Analysis Program Package
	360D-16.2.756	I	CEP-HIDES - Highway Design System
	360D-16.3.701	N	Typisation of Tubular Apparatus
	360D-16.3.702	N	Optimal Design of Heat Exchangers (OS)
	360D-16.3.703	N	Optimal Design of Heat Exchangers (DOS)
NA	360D-16.3.705	N	Computer Calculation for Multicomponent Vapor-Liquid Equilibria
IP	360D-16.3.706	N	Computation of the Coefficients for the Extended BWR Equation of State from few P-V-T Data
IP	360D-16.3.707	N	Computation of Thermodynamic Properties of Saturated Pure Fluids by the Extended Benedict-Webb-Rubbin Equation of State
IP	360D-16.3.708	N	Computer Calculation of Packed Absorption Tower
NA	360D-16.3.709	N	Computation of the Binary Activity Coefficients for the Margules-equation and the Equilibrium Curve for Binary Systems
IP	360D-16.3.710	N	Determination of the Coefficients of the Extended Benedict-Webb-Rubin Equation of State
IP	360D-16.4.701	N	360 Electric Power System Load Flow and Loss Minimization Program
IP	360D-16.4.702	N	Electric Power System Induced Voltage Calculations
IP	360D-16.4.703	N	360 Electric Power System Short Circuit Calculation
IP	360D-16.4.704	N	360 Electric Power System Unit Commitment
IP	360D-16.4.705	N	360 Electric Power System Line Data Calculations
IP	360D-16.4.706	N	360 Electric Power System Load Flow and Loss Minimization Program with Stored Inverse Matrix

IP	360D-16.8.701	N	Idefix
IP	360D-17.1.701	I	1627 Plotter Subroutines for PS 44 and DOS
IP	360D-17.1.702	N	Infrared Spectra Identification System
IP	360D-17.1.703	I	Focus
	360D-19.3.701	N	Subroutine to Compute Income Tax Deduction for Sweden (BOS)
	360D-19.3.702	N	Subroutine to Compute Income Taxe Deduction for Sweden (OS, TOS and DOS)
	360D-19.3.703	N	Subroutine to Compute Occasional Income Tax Deductions
NA	360D-19.4.701	N	Capital Investment Analysis under Uncertain Expectations
IP	360D-19.7.701	N	Deposit Accounting
	360D-21.0.701	N	Payroll Tax Calculation for S/360 Models 25 and above (PXVERO)
	360D-21.0.702	N	Payroll Tax Calculation for S/360 Models 25 and Above (CXVERO)
	360D-21.0.703	N	Payroll Tax Calculation for S/360 Models 25 and Above (TXVERO)
	360D-21.0.704	N	Dutch Income-tax Routine White Table
	360D-21.0.705	N	Dutch Income-tax Routine Blue Table
	360D-21.1.701	N	Belgian Payroll Income-tax Subroutine 360
IP	360D-21.1.702	N	Tabelltrekk
	360D-23.0.701	N	TOPRIS - Textile Order Processing within Requirements Determination Inventory Control and Scheduling
	360D-23.0.702	N	Modular System for Computation of Requirements (MOSCOR)
	360D-23.0.704	N	Modular Inventory Control System (MINCOS)
IP	360D-23.0.707	N	QCS (Quality, Cost and Schedule Index Statistics)
	360D-23.1.701	I	Capacity Loading and Scheduling System (CLASS) DOS Version
	360D-23.1.702	I	Capacity Loading and Scheduling System (CLASS) OS Version
	360D-23.2.701	I	Program for Order Location by Audio-Response (POLAR)
	360D-23.4.701	I	IBM System/360 Shipbuilding Package Including Hull Fairing and Shell Development
	360D-23.4.702	I	Autopol /OS - Automatic Programming of Lathes
	360D-23.4.703	I	Autopol /DOS - Automatic Programming of Lathes
	360D-23.4.704	I	IBM System/360 Geometric Description Processor ACUTE for Shipbuilding
	360D-25.0.702	I	Stock Counting Option for Retail Impact /OS
IP	360D-25.2.701	N	MASIS - Material Control and Information System
	360D-29.0.701	I	Basic Routines for Enquiries and Data
	360D-29.3.701	I	International Programmed Airline Reservations System
	360D-29.3.702	I	Numeric Check in and Weight and Balance
	360D-29.4.701	N	Hot Metal Composition for Linecasters (German Hyphenation) with IBM 360/30
IP	360D-29.4.702	I	360 Dutch Hyphenation Program
	360D-30.0.701	I	MOPPS - N/C 360 Modularized Post Processor Support for Autospot
	360D-30.0.702	I	S/360 Scheduling Management and Allocating Resource Technique (S/360 SMART)
	360D-30.0.703	I	PERLE - Personalized Letters for Direct Mail Advertising on 360 Model 25 and Higher
IP	360D-40.1.701	I	Hexcal

ABSTRACTS OF AVAILABLE PROGRAMS

360D-00.0.701-GMBSC 2780/360 TRANSMISSION UTILITY

AUTHOR : H.G. DE BRETT
IBM UK LTD
LONDON SOUTH MANUFACTURING
1. KATHERINE STREET
CROYDON, SURREY (ENGLAND)

ABSTRACT : GMBSC controls single line, point to point, transmission between a /360 (Model 25+), equipped with at least one 2400 tape drive, and a 2780 terminal. Transmission is in one direction only during a run :
a) Output - From 360 tape to 2780 printer or punch.
b) Input - From 2780 reader to 360 tape.
Direction and tape labelling are specified by the operator at the beginning of a run. The program supports the Horizontal Tab., 144 print positions and Multiple Record features, Changes necessary for other 2780 configurations are fully documented.

Machine required : 360 MLS, 1 X 2400, 1 X 2780
Source language : Assembler
Operating system is DOS.

Program material : Write-up in English
one distribution tape reel 7 or 9 tr., 800 or 1600 BPI

360D-00.1.701-OSCLIP / CHANGE CREATE LABEL IDENTIFICATION PROGRAM UNDER OS/360

AUTHOR : SHINTARO KOBAYASHI
EDUCATION CENTER
IBM JAPAN LTD
33-1, CHIDORI, 2 CHOME, OHTA-KU
TOKYO 145 (JAPAN)

ABSTRACT : The purpose of OSCLIP program is to provide the OS/360 user with a utility program that performs most useful functions of the BPS stand-alone CLIP program. This program works under OS/360 (PCP, MFT, MVT) without the necessity of providing OS JCL, and will save much idle machine time. This program is coded in Assembler language using EXCP for I/O operation, and the program size is approximately 2K bytes.
This utility program can be used to :
- Change the volume serial number of an initialized direct access volume.
- Create an OS standard volume label set with a user-specified serial number on a 2400 magnetic tape.
- Initialize a 2400 magnetic tape to non-label.

Machine required : Refer to OS/360

Program material : Write-up in English
Card deck

360D-00.4.701-LSERV-DOS LABEL CYLINDER SERVICE PROGRAM

DIRECT INQUIRIES ALAIN PRIMAULT
TO : IBM SWITZERLAND
DREIKOENIGSTRASSE 24
8002 ZUERICH
SWITZERLAND

ABSTRACT : LSERV displays or punches the label cylinder of a 2311 or 2314 DOS residence. The users can select the area (standard labels, partition labels, user's label or all) to be printed or punched. Additionally, LSERV converts the old label format to the new one, source language : assembler. Minimum configuration : DOS minimum configuration.

Machine required : The same as DOS

Program material : Documentation in English
One magnetic tape. 7tr or 9tr.

360D-00.4.703-SUPERSHUFFLE - PDS COMPRESSION UTILITY PROGRAM

AUTHOR : W.N.J. TINDALL
GOVERNMENT SYSTEMS CENTRE
IBM UK LIMITED
40 BASINGHALL ST.
LONDON E.C.2. (ENGLAND)

ABSTRACT : Supershuffle is a PDS reorganisation utility program. It achieves the compression in the space which the PDS already occupies and in the minimum possible time, automatically releasing any extents that are no longer used. The speed is such that an average size SYS1.LINKLIB can be reorganized in about 2 minutes. The only limitations on the program are that it cannot compress Track Overflow data sets, nor the active SYS1.SVCLIB. Its great advantages are that it reduces maintenance overhead and increases system availability. The program will run on any machine configuration capable of supporting OS/360. Core storage requirements depend both on the particular PDS and on the DASD that contains it. The algorithm is :
Size : 14K + 4W + (N/3)K ; where K : 1024 bytes, W : track width, in bytes, of DASD, N : No of PDS directory blocks used.
All direct access devices are supported. The program is written in assembler language and has been tested on 2311, 2314 and 2321. OS/360 rel. 13-17.

Program material : Write-up in English
Card deck.

360D-00.4.704-LISTRL
AUTHOR : F. AMSLER
IBM WT
P.O. BOX 20.19
DHAHRAN
ARABIA
ABSTRACT : This program provides you with a table listing of the I/O Modules catalogued in the System and the Private Relocatable Library. Per Module Type, the parameters in the phase-name are decoded and represented in the corresponding table. 2311 and 2314 Libraries are supported.
Machine required : The program may be run under any DOS configuration. It is written in Assembler.
Program material : Write-up in English
Card deck.

360D-00.4.705-DOS DISK MAPPING AND ALLOCATION PROGRAM
AUTHOR : T.S. PINDARD
IBM UK LIMITED
101 WIGMORE STREET
LONDON W.1 (ENGLAND)
ABSTRACT : This program reads the output of the LISTVTOC utility and prepares a series of charts showing the allocated and unallocated areas of a 2311 or 2314 disk. Each file is identified and EXTENT information for unallocated areas is given. Output is to a 1403, and apart from the disk to be examined, a 40 track work area on a disk is required. The program requires a 24K store partition and assumes that the LISTVTOC utility is available. The program is presented as a source language deck in D-level PL/1.
Machine required : 360/25.
Program material : Write-up in English
Card deck.

360D-00.4.706-ORBIT - SIMULATION of 1440 CS-UTILITIES ON SYSTEM 360
AUTHOR : R.W. BROOKS
IBM UK LIMITED
CHURCHILL HOUSE, CHURCHILL WAY
CARDIFF (UNITED KINGDOM)
ABSTRACT : The program can create and maintain an indexed sequential file on system 360 with records or keys of records input from cards, magnetic tape or sequential disk. Records can be loaded and added provided no record exists with that key. Records can also be deleted and optionally tagged in which case deleted records are copied to a sequential file before deletion. Programming language is PL/1 (F) and the program has been tested on a Model 40 running under OS (PCP).
Machine required : as for OS (PCP)
Program Material : Write-up in English
Card deck.

360D-00.5.701-SUTILITY-S/360 OS VTOC LIST AND SCRATCH UTILITY
DIRECT INQUIRIES G.C. HIMMELMAN
TO : IBM BRANCH 14
1445 WEST GEORGIA STREET
VANCOUVER 5, B.C. (CANADA)
ABSTRACT : SUTILITY is basically an OS/360 direct access super scratch type of program which has a variety of data set scratching capabilities. Data set protection capabilities are provided at several levels including set names, volume serials, and high level index names. A 'TEST' facility is available which allows evaluation of the result of a scratch run without altering any DA volumes. The program does not require a DD card for each DA volume-using one DD card, all on line DA volumes are accessed. The program also has an improved VTOC list capability and may be used for this purpose alone. The program has been tested on Release 16 and 17 PCP, MFT and MVT with devices 2311, 2314, and 2301.
Machine required : Same as OS/360
Program material : Write-up in English
One distribution tape reel.

360D-00.5.702-CONDENSE
AUTHOR : WERNER KUZENKO
IBM DEUTSCHLAND B.O. MONTAN
4000 DUESSELDORF
BERLINER ALLEE 52 (GERMANY)
ABSTRACT : This program compresses partitioned data sets except data sets named SYS1.LINKLIB and SYS1.SVCLIB. The devices the data sets reside on, must be 2311 or 2314. Minimum core space is about 50K bytes, excluding buffers. Up to 128 buffers will be used. The number of buffers depends on the region space available for use. After having condensed a data set, BUFNO, BUFL, and unused core space will be printed on SYSPRINT, so you can optimize core utilization and execution time. The program is written in Assembler Language, using the EXCP-level. CONDENSE can be used in all versions of OS/360.
Program material : Write-up in English
DTR 7tr or 9tr, 800 or 1600 BPI

360D-00.6.701-DISPLAY ACTIVE TASKS AND JOB QUEUES
AUTHOR : ROGER A. PRIOR
IBM (U.K.) LTD
40 BASSINGHALL STREET
LONDON EC2 (ENGLAND)
ABSTRACT : The program which can be used as a demonstration program allows the user to display on a 2260 Local attachment the active task in and size of each partition, or the ranked contents at job name level of all system job queues. The programming language used is Assembler using Graphics Access Method and the program will run in a minimum partition. It has been assembled and tested using OS release 18 MFT on a S/360 model 40 with a 2260 model 3.
Program material : Write-up in English
Card deck

360D-01.0.701-DOS ACCOUNTING PACKAGE (ACCPAC)

AUTHOR : MORTEN BOMMEN
IBM A.S.
DRONNING MAUDS GATE 10
OSLO 1 (NORWAY)

ABSTRACT : DOS ACCOUNTING PACKAGE is a set of programs to gather statistics about jobs processed by the system. The following information will be saved in an account-file on disk for each job completed in any batch job partition : Job name, cancel code if Job was cancelled, date, time of day for job completion, total time this job occupied the partition, CPU time required for execution, partition where program was executed, size of partition, size of program loaded into core, UPSY bytes, Col. 4-19 from /& card, I/O units assigned to program at end of job time, or used by the job, and number of I/O requests issued them. The package requires some modification to the supervisor and inserts one additional phase for DOS job Control. Programs to Open, Reopen and List the account-file are included in the package. All programs are self-relocating.

Program material : Write-up in English
DTR 7tr or 9tr, 800 or 1600 BPI

360D-01.1.701-DOS MULTIPLE SUPERVISOR PROGRAM

AUTHOR : A.G. GLADWELL
IBM (U.K.) LTD
17 ADDISCOMBE ROAD
CROYDON CR9 6HS (ENGLAND)

ABSTRACT : The Multiple Supervisor Program permits DOS users to hold up to 9 supervisors on one Systems Pack. In conjunction with 2 transients also supplied it loads Z/A/IPL2 and allows the operator to replace the standard supervisor (named Z/A/SUP1) with a subordinate supervisor (Z/A/SUP2-9). Control is then passed to the Z/A/IPL2 program as if the load button has just been pressed. The user must re-issue IPL commands to the new loaded supervisor. The program is written in BAL and conforms to basic DOS requirements provided user has 24K core and a console typewriter.

Machine required : DOS 24K

Program material : Write-up in English
Card deck.

360D-01.6.701-UTILITY PROGRAM TO CREATE OR EXTENT ISFMS FILE (UNDER DOS)

AUTHOR : G. VUILLEMIN
IBM FRANCE
EDUCATION COMMERCIALE CPO
40 RUE DUSSOUBS
75 - PARIS 2E (FRANCE)

ABSTRACT : This program reads a sequential file and creates an ISFMS file on 2311 or 2321. The input file can be on cards, tape or disk 2311, with fixed-length records (truncated blocks are allowed). Program reads initialization cards on SYSIPT. These cards and messages are printed on SYSLST.

Machine required : Refer to DOS.

Program material : Write-up in French language,
Card decks.

360D-01.6.702-RECUP - REGISTER CONVERSION UTILITY PROGRAM FOR IS, SD OR TAPE-FILES, 360 OR 1401

AUTHOR : MARGARETHA JOSEFSSON
IBM SVENSKA AB
BOX 23006
S-104 35 STOCKHOLM (SWEDEN)

ABSTRACT : RECUP is a selfrelocating utility program intended to help in conversion of files from :
- one medium to another (Tape - 2311 - 2314 - 2321)
- one organization to another (SD - IS)
- one system to another (1401 - 360)

RECUP can be used for reorganization and backup of ISAM-files. The program supports tagging and padding. Reblocking is allowed as well as lengthening or shortening of records. Exits are provided for user insertions, deletion or listing of records. Statistics on the number of records are collected. Control Cards for execution are sort-like and read and optionally listed with DTFDI. Buffer allocation is dynamic.
Although the program description is mainly in Swedish, keywords and messages in English make the program useful also outside Sweden.

Machine required : as for standard DOS
Source language : Assembler.

Program material : Write-up
DTR 7tr or 9tr, 800 or 1600 BPI

360D-01.6.703-IDAM - INDEXED DIRECT ACCESS METHOD

AUTHOR : KURT HENRIKSEN
IBM A.S.
VED VESTERPORT 6
COPENHAGEN V (DENMARK)

ABSTRACT : IDAM is designed to make it easy to a PL/1 - or ASSEMBLER - user to retrieve and update variable length records in small or large files on 2321 or 2314. The most significant advantages in using IDAM are :
- easy to use (by simple CALL's)
- the philosophy will tolerate all kinds of break down
- facilities for restart after break down
- more than one search-criterion (index) to the same master-file
- automatic reorganization of index-files at CLOSE-time (may be suppressed by user)
- reentrant coding, which permit user to access more than one file at the same time.

IDAM will run under DOS/360 and will occupy about 10-15 K without user defined I/O-areas and DTF's.

Machine required : 2314 for index-files and 2314 or 2321 for master-file.
Source language : 360 Assembler language using standard DOS LIOCS (DAMOD & DTFDA)

Program material : Write-up in English
Tape 9 tr, 800 or 1600 BPI

360D-02.0.701-SIDABA 3

AUTHOR : B. PLETSCHACHER
IBM DEUTSCHLAND
APPLICATION DEVELOPMENT CENTER
7000 STUTTGART
SCHWABSTRASSE 43 (GERMANY)

ABSTRACT : SIDABA 3 is a simulation program for the calculation of access times to data sets which are stored on DASD IBM 2311 or 2314. The logical access to these data sets are achieved by indexed, structured and chained system data sets composed in a specific model. The program is coded in GPSS and runs under OS 360.

Machine required : /360-40, 1 X 2540, 1 X 1041, 1 X 2311
Required core memory : 100K.

Program material : Write-up in German
Card deck

360D-02.5.701-HASP II REMOTE JOB ENTRY LINE STATISTICS PACKAGE

AUTHOR : D. MORRISON
IBM U.K. LTD
126 WASHWAY ROAD
SALE, CHESCHIRE (ENGLAND)

ABSTRACT : The HASP II RJE line Statistics Package is intended as a supplement to HASP Version 2 (Program 360D-05.1.014) It provides the ability to accumulate relevant performance statistics for each RJE line defined in the user HASP system. Statistics provided include total number of transmissions, number of error free transmissions, number of error transmissions by type e.g. number of timeouts, number of data checks, number of block sequence errors, etc... The package consists of two parts :
a) Amendments to HASP suitable for incorporation in HASPGEN,
b) Assembler F program to print out the statistics.

Machine required : Package is written in Assembler F and runs on any OS configuration that can support HASP.
The print program runs in approximately 3K.

Program Material : Write-up in English
Card Deck

360D-03.0.701-PL/1 SYNTAX CHECKER FOR OS/360

AUTHOR : M. PELTIER
IBM SCIENTIFIC CENTER
BOULEVARD DE LA CHANTOURNE
38 - LA TRONCHE (FRANCE)

ABSTRACT : This program checks the syntaxical correctness of PL/1 programs, issuing diagnostics when syntax errors are found. The PL/1 (F) compiler may then be invoked dynamically from within the same job step either because no errors were found or at user request. Since the Syntax Checker is considerably faster than the PL/1 (F) compiler, it is economically interesting to use it in this way while debugging a PL/1 program. The syntax used is based upon the PL/1 Reference Manual (Form C28-8201). This program together with the methods used were developed in collaboration with the University of Grenoble, France.

Program Material : Write-up in English
Magnetic tape 7tr or 9tr, 800 or 1600 BPI

360D-03.0.702-IBM/360 PROCESS COMMUNICATION MULTIPROGRAMMING SUPERVISOR (PCMS)

AUTHOR : H.F. SCHUERFELD
DP COMPLEX SYSTEMS 837
IBM GERMANY
P.O. BOX 266
D - 7032 SINDELFINGEN-WUERTT (GERMANY)

ABSTRACT : IBM/360-PCMS is a disk operating system, PCMS is an alternative to the regular DOS supervisor. In addition to the functions available with DOS, PCMS incorporates functions required for real-time operations such as production-control and process-control. PCMS provides a variable number of tasks, up to 14 partitions, dynamic core allocation, dynamic priority setting, etc... PCMS is based on DOS Version 2 Release 11. PCMS supports the same range of non-line devices as DOS at the appropriate level. Line-devices supported by PCMS are IBM-1130, IBM-1070.

Machine required : A minimum of 32 K bytes of main storage is required.
Source language for all modifications and additions is Assembler.

Program material : Write-up in English.
9tr or 7tr tape (800 BPI, Data Conversion Feature required).
Source material on tape will be distributed on specific request.

360D-03.0.703-SYSTEM ACCOUNTING ROUTINE-IEFACTRT, S/360

DIRECT INQUIRIES TO : J.H. JONES
IBM UNITED KINGDOM LABS. LTD
HURSLEY PARK, WINCHESTER
HAMPSHIRE
ENGLAND

ABSTRACT : The routine interfaces with the OS Job Scheduler routines to write records into SYST. ACCT dataset. Records are issued at start and end of each job and contain : Jobname, Programmer name, Work Order N° and Job Accounting Information, date and time of writing the record, region size used, operating system type, machine identity and, for MVT only, CPU time and I/O time. Work Order N° validation is incorporated, and jobs with invalid numbers are failed. The routine permits accurate and repeatable billing of jobs by Work Order N° in MVT, MFT and PCP systems. The routine will interface with MVT, MFT2 and PCP. A type 1 SVC (provided) must be in the Nucleus. To implement I/O timing in MVT an update to the Sysgen Macro IEAQNU must be made before Stage II Sysgen. The routines add 1910 bytes to the Scheduler and 504 bytes to the Nucleus. The routines are written in Assembler Language.

Machine required : 360 Model 40 and above

Program material : Write-up in English
One DTR 9tr or 7tr.

360D-03.0.713-ELECTORAL REGISTRATION PACKAGE

AUTHOR : P.J. GOUGH
TECHNICAL INFORMATION CENTRE
IBM U.K. LTD
17 ADDISCOMBE ROAD
CROYDON, SURREY (ENGLAND)

ABSTRACT : The Electoral Register suite of Programs are written in Assembler Language for four S/360 Systems : 1) BOS 2 Disk / 2 Tape. 2) BOS all Disk. 3) DOS 2 Disk / 2 Tape. 4) DOS all Disk (minimum 3) Core Storage - BOS 16K Min. For DOS minimum requirement is 24K. Also required is a CARD READER, 1 X 132 PRINT POSITION PRINTER AND CONSOLE TYPEWRITER.
The suite of programs will provide for : 1) Initially setting up a master file. 2) CANVASS REGISTER. 3) PRINTING OF 'A' LIST. 4) PRINTING OF 'B' LIST. 5) Notification form for jurors. 6) PRINTING of 'C' LIST suitable for copying. 7) PRINTING of Yearly Register. 8) Listing of ELECTOR STATISTICS. 9) POLL CARDS. 10)Facility to insert large number of postal codes on existing file.

Program material : Write-up in English
DTR 9tr, 800 or 1600 BPI

360D-03.1.701-360 CARD-ACCELERATOR

DIRECT INQUIRIES TO : HERBERT STOECKEL
IBM GERMANY, 7032 SINDELFINGEN
P.O. BOX 66, DP-SYSTEMBERATUNG
DOS/TOS, DEPT. 429
GERMANY

ABSTRACT : This program is a fast assembler for 360 card systems with min. 16K, 1403, 2540. The main advantages are :
1. NO intermediate cards are punched
2. Assembly is very fast
Phase I of the Card-Accelerator builds a label table (max. 819 labels for 16K), flags erroneous statements and prints a prelist. Phase II flags non-defined labels and base-registers, punches the object deck and prints a postlist.

Machine required : 360 Model 25 and up with min 16K

Program material : Write-up in English
Card deck.

360D-03.2.701-44 PS ALGOL-COMPILER

DIRECT INQUIRIES TO : A. FITZKE
ADC STUTTGART - IBM GERMANY
SCHWABSTRASSE 43
7000 STUTTGART
GERMANY

ABSTRACT : 44 PS ALGOL Compiler is fully compatible with OS ALGOL and is component of 44 PS. Minimum configuration : 64 K core storage, floating point feature. Compiler is resident on internal 2315.

Machine required : 64 K

Program material : Documentation in English
One DTR. 7tr or 9 tr.

360D-03.2.702-3980 USER PROGRAM COMPILER V2 - STANDARD (OS 360)

AUTHOR : P.N. HAYWOOD
IBM UNITED KINGDOM LIMITED
LONDON SYSTEMS CENTRE
101 WIGMORE STREET
LONDON W.1 (ENGLAND)

ABSTRACT : The customer program for the IBM 3980 Bank Teleprocessing System is written in a symbolic programming language. The 3980 compiler converts this language into a user program machine code, in the form of 1130 DC statements, which is suitable for a teleprocessing system with a medium line speed in standard 1050 BCD line code.
The compiler, which is written in system/360 OS assembler language will occupy approximately 16K bytes of core storage and must be executed under control of the full Operating System.

Program Material : Write-up in English
DTR 7tr or 9tr (800 or 1600 BPI)

360D-03.2.703-3980 USER PROGRAM COMPILER V2 - STANDARD (DOS 360)

AUTHOR : P.N. HAYWOOD
IBM UNITED KINGDOM LIMITED
LONDON SYSTEMS CENTRE
101 WIGMORE STREET
LONDON W.1 (ENGLAND)

ABSTRACT : The customer program for the IBM 3980 Bank Teleprocessing system is written in a symbolic programming language. The 3980 compiler converts this language into a user program machine code, in the form of 1130 DC statements, which is suitable for a teleprocessing system with a medium line speed in standard 1050 line code.
The compiler, which is written in System/360 DOS assembler language will occupy approximately 16K bytes of core storage and must be executed under control of the full disk Operating System.

Program material : Write-up in English
DTR 7tr or 9tr (800 or 1600 BPI)

360D-03.2.704-3980 USER PROGRAM CONPILER V1 ASCII (DOS 360)

AUTHOR : P.N. HAYWOOD
IBM UNITED KINGDOM LIMITED
LONDON SYSTEMS CENTRE
101 WIGMORE STREET
LONDON W.1 (ENGLAND)

ABSTRACT : The customer program for the IBM 3980 Bank Teleprocessing system is written in a symbolic programming language. The 3980 compiler converts this language into a user program machine code, in the form of 1130 DC statements, which is suitable for a teleprocessing system with a medium line speed in ASCII line code.
The compiler, which is written in system/360 DOS assembler language, will occupy approximately 16K bytes of core storage and must be executed under control of the full Disk Operating System.

Program material : Write-up in English
DTR 7tr or 9tr (800/1600 BPI)

360D-03.3.701-S/360 OS ALGOL COMPILER IMPROVEMENTS
AUTHOR : STEN LINDBERG
IBM NORDIC LABORATORY
VESSLEVAEGEN 3, BOX 962
S-181 09 LIDINGO 9 (SWEDEN)
ABSTRACT : The improvements consist of code changes to the OS/360 ALGOL Compiler providing :
1. Extended FOR-loop and subscript optimization
2. Improved execution time data storage handling
3. A warning message for special characters in an END comment
4. Compiler Statistics
The modifications have been done to release 18 of ALGOL, but can be applied to earlier releases of the compiler
Machine Required : Same as for OS/ALGOL
Source language : Assembler
Program material : Write-up in English
Magnetic tape 7tr or 9tr (800 or 1600 BPI)

360D-03.4.701-DATA MANAGEMENT ON DIRECT ACCESS DEVICES IN REAL-TIME SYSTEMS
AUTHOR : J.P. WINDAL, F. VEREECKEN, P. PAINDAVEINE
IBM BELGIUM S.A.
67, RUE ROYALE
1000 - BRUXELLES (BELGIUM)
ABSTRACT : This data management, based on existing LIOCS DAM (Direct Access Method), consists of two different access methods for DASD a direct access method and a random access method. Topics are : very good response time, elimination of reorganization of data sets, facility of coding, inclusion of checkpointing-restarting facilities which are a requirement in real-time applications. Records may be blocked, data sets may be replaced without any program changing. An utility program provides functions as copying, dumping, loading, clearing of data sets. The method supports 2311 and 2314 DASD.
Machine required : M2030/32K 2311 or 2314
Source language : Assembler
Program material : Write-up in English
DTR 9tr, 800 or 1600 BPI

360D-03.4.702-QUEUE MANAGEMENT IN A CONTROL PROGRAM FOR A REAL-TIME SYSTEM
AUTHOR : J.P. WINDAL
IBM BELGIUM S.A.
67, RUE ROYALE
1000 - BRUXELLES (BELGIUM)
ABSTRACT : The queue management system in a DOS BTAM environment provides a set of macro's for handling queues of teleprocessing messages and to allow I/O operations over telecommunication lines asynchronously with processing programs execution. These queues are kept in case storage, and their organization is automatically done by macro's.
Machine required : M2030/32K
Source language : Assembler
Program material : Write-up in English
DTR 7tr or 9tr, 800 or 1600 BPI.

360D-03.4.703- ICL 1900 TAPE MACRO'S
AUTHOR : P.J. GOUGH
TECHNICAL INFORMATION CENTRE
17 ADDISCOMBE ROAD
CROYDON, SURREY (ENGLAND)
ABSTRACT : These macro's were developed to enable 1900 users to input data via the IBM 1287. They enable tapes capable of being read by an ICL 1900 to be produced on a S/360.
Machine required : The program is in the form of MACRO's and can be run on any System/360 operating under DOS with 7-track tape-unit.
The routines require approximately 1,000 bytes of core.
Program material : Write-up in English
DTR 7tr, 800 or 1600 BPI.

360D-03.4.704-OS BASIC ADDITIONAL TELEPROCESSING SUPPORT
AUTHOR : B.O. COOKSON
IBM U.K. LTD
FIELD SYSTEM CENTRE
17 ADDISCOMBE ROAD
CROYDON, SURREY (ENGLAND)
ABSTRACT : OS BATS is a group of Assembler Language Modules, running under any OS/360 configuration which supports BTAM. Its main functions are :
1) It acts as an interface between the user and BTAM both in starting line operations, and in interrupt analysis and recovery.
2) It provides a TP Supervisor and a number of other routines for controlling the system, including queuing, TP control terminal, and buffered terminal facilities as well as diagnostics, statistics and testing aids.
Terminals supported encompass a wide variety of start-stop and binary synchronous devices as well as local 2260.
Machine required : Core size about 20K + BTAM
Program material : Write-up in English
Tape 7tr or 9tr (800/1600 BPI)

360D-03.4.705-DOS BASIC ADDITIONAL TELEPROCESSING SUPPORT
AUTHOR : B.O. COOKSON
IBM U.K. LTD
FIELD SYSTEM CENTRE
17 ADDISCOMBE ROAD
CROYDON, SURREY (ENGLAND)
ABSTRACT : DOS BATS is a group of Assembler Language Modules, running under any DOS/360 configuration which supports BTAM. Its main functions are :
1) It acts as an interface between the user and BTAM both in starting line operations, and in interrupt analysis and recovery.
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Terminal supported encompass a wide variety of start-stop and binary synchronous devices as well as local 2260.
Program material : Write-up in English
Magnetic tape 7tr or 9tr (800/1600 BPI)

360D-03.4.706-DOS PRIORITY OUTPUT WRITER EXECUTION PROCESSORS AND READER SYSTEM

AUTHOR : V.C. McGAVIN
IBM U.K. LTD
17 ADDISCOMBE ROAD
CROYDON, SURREY (ENGLAND)

ABSTRACT : This spool control program traps SYSIN/SYSLST/SYPCH input and output, when unit ie card devices, and uses DASD or TAPE as intermediate storage. Up to 26 peripheral units can be handled and maximum overlap is obtained to give improved system throughput. Based on a program already in the library, additional facilities have been added by UK FSC. Such a outostart on printer/punch, combined writers for two partitions, writer restart procedures, channel 9 and 12, etc...

Program material : Write-up in English
DTR 7tr, 9tr (800/1600 BPI)

360D-03.4.707-I/O MODULE-MACROS FOR DOS ASSEMBLER, COBOL AND PL/1

AUTHOR : L. DOMNANICH
BO ZH F+D IBM
DREIKONIGSTRASSE 24
ZURICH (SWITZERLAND)

ABSTRACT : Module-Macros allow generation of I/O Modules which support the following devices : card-reader, card-punch, magnetic tape, printer, DASD sequential, DASD index-sequential. Complete error-testing is included in every module.

Source language : 360 Assembler.

Program material : Write-up in German
DTR 7tr, 9tr (800/1600 BPI)

360D-03.4.709-DISAM-MACRO

AUTHOR : J. VAINIKAINEN
IBM FINLAND
FREDRIKINKATU 51-53 B
HELSINKI 10 (FINLAND)

ABSTRACT : The programs generated by this Assembler-language macro-instruction will provide the user with the capability to handle large direct organized master files on IBM 2321 Data Cell. The following functions are available, retrieve (random by key or sequentially) update, add and deleate. References to the master file records will utilize index-sequentially organized auxiliary file on 2311 or 2314 DASD. The auxiliary file records contain the relative block addresses of the master file records and may optionally contain additional (e.g. record status) information provided by user. The master file consists of variable length logical records with maximum of 2048 bytes. Each record may have up to 255 continuation records (i.e. extensions to the logical records) with length of 832 bytes. It should be noted that the record lengths, although "fixed" in the original implementation, may be modified with minimum effort. The largest module (UPDATE) generated requires 13K main storage in excess to the storage required by BDAM, BISAM and BSAM. All programs have been tested under OS/360 release 17/18.

Program material : Write-up in English
DTR 9tr, 1600 BPI

360D-03.4.710-SIMULTANEOUS UNIT-RECORD OPERATIONS IN A MULTI-PROGRAMMING ENVIRONMENT

AUTHOR : JORGEN FERMEFORS
IBM SVENSKA AB
P.O. BOX 23006
S-104 35 STOCKHOLM 23 (SWEDEN)

ABSTRACT : The SUMP package contains routines for :
- Creation of jobstream (SYSIN-file) on disk or tape. (4K-program)
- Reading of data cards device independently into the program from either a card reader, tape or disk.
- Writing of all print lines directly on a printer or in blocked format on tape, and simulation of carriage tape for end of page test. Output from more than one job can be put on the same tape intermixed with job control information (SYSLST).
- Printing of the output tape, with restart possibilities, accounting and forms adjustment routines (6K-program).

All programs are written in DOS Assembler language.

Machine required : 360 with DOS and MPS option, 2540/2501, 1403/1443 and tape

Program material : Write-up in English
DTR 7tr, 9tr (800/1600 BPI)

360D-03.6.701-STEDEC - STERLING OT DECIMAL PROGRAM TRANSLATOR

AUTHOR : COLIN JOHNSON
IBM U.K. LTD
40 BASINGHALL STREET
LONDON EC2 (ENGLAND)

ABSTRACT : STEDEC is a program that converts specially written Assembler programs to handle the new British Decimal Currency (Łp) rather that the old Sterling (Łsd). This obviates the need for maintaining two versions of a program before converting to decimal. It accepts as input a source program with Łsd instructions flagged *S and Łp instructions written as comments and flagged *D. It punches out 1-9 new decks with *S instructions removed and *D comments replaced by instructions. STEDEC runs under DOS but can modify programs written for any operating system. It requires less than 5K of core and one disk drive (2311). It is written in Assembler for the 2540 card reader/punch and the 1403 printer. It is easy to amend, however, for the 1442 or to handle programs written in PL/1, COBOL and RPG rather than Assembler.

Program material : Write-up in English
Card deck

360D-03.6.704-SYMBOLIC LIBRARY PROCESSOR DOS/360 SELF-RELOCATING UTILITY

AUTHOR : N. DAVID WHITFORD
216 IMPERIAL DRIVE
HARROW, MIDDX (ENGLAND)

ABSTRACT : Self-relocating program (runs in any DOS partition) to create and update source-code tape libraries for Assembler, PL/1, COBOL, Test Data, etc. - in fact any data held in cols 1-72 of card-image. Source-code effectively held like DOS System Library, but on tape. Members (e.g. programs) identified by 3 or 4 character name (cols 72-74/75 of card-image) and 2-digit version (held in a directory). Functions include Add, Delete and Update members/Add, Delete Replace and Alter individual statements in members/Copy member with new version or name/ Selectively Copy library/Selectively Merge library/List and Punch members/Deblock members for subsequent process with or without variable JCL envelope/List directory.
Performs all functions in one pass (including editing) by dumping update decks to work disk (can use Assembler/Linkage Editor work file) while referencing in-core directory. Directory maintained at front of library tape.
Programming Systems : Written in Assembler. Self-relocating, uses device-independant U/R DTF's.
Machine required : As for DOS, plus 3 tape-drives (2 can be used but then need extra pass to deblock). Minimum machine size is 64K
Program material : Write-up in English
Magnetic tape 9tr (800/1600 BPI)

360D-03.7.702-BIG BEN 3

AUTHOR : P.J. GOUGH
TECHNICAL INFORMATION CNETRE
IBM U.K. LTD
17 ADDISCOMBE ROAD
CROYDON, SURREY (ENGLAND)

ABSTRACT : BIG BEN 3 is a timer program, supplied in the form of a macro, which measures CPU utilisation of DOS jobs. The macro must be tailored to suit the supervisor in use at each individual installation.
Machine required : 360 with DOS
Program material : Write-up in English
Card deck

360D-03.7.703-AN OS PROGRAMMING SYSTEM FOR LOCAL 2260'S BASED ON GRAPHIC ACCESS METHOD

AUTHOR : R.M. DUNN
INSURANCE BRANCH
IBM U.K. LTD
40 BASINGHALL STREET
LONDON EC2 (ENGLAND)

ABSTRACT : This macro system based on Graphic Access Method provides an easy method for programming local 2260's running under OS. When reading from a terminal one macro without parameters replaces the instructions required in GAM to issue the read, test return codes and wait for completion. For a write operation, one card replaces the GAM instructions to write a message, reposition the 2260 cursor, and wait for an attention interrupt. A checking macro tests fields read in for validity. If an invalid field is detected the operator is automatically asked to change the field in error, and the corrected field is read in. By means of additional macros, all the required control blocks for the terminals can be generated with a single instruction and the terminal system can be opened and initialised with two cards. The coding is in Assembler Language.
Machine required : Local 2260's attached to a system 360 computer
Program material : Write-up in English
Card deck

360D-03.8.701-SYSTEM/360 STERLING PROCESSING ROUTINES

AUTHOR : P.J. GOUGH
TECHNICAL INFORMATION CENTRE
IBM U.K. LTD
17 ADDISCOMBE ROAD
CROYDON, SURREY (ENGLAND)

ABSTRACT : These routines are supplied as a card-deck containing Basic Assembler statements. You can include them with a source program, and thus assemble an object program which incorporates the routines. Alternatively, you can assemble them with other object programs by means of the Linkage Editor. The decimal instruction set is required by the routines. Between 400 and 600 bytes of main storage are occupied, depending on the selection of routines used. A linkage to a routine requires 18 bytes in most cases.
Program material : Write-up in English
Card deck

360D-03.8.702-P.A.Y.E. (MONTHLY AND WEEKLY) FOR DECIMAL STERLING FOR SYSTEM 360

AUTHOR : J.L. HUTCHISON
INSTALLATION CENTRE
IBM U.K. LTD
101 WIGMORE STREET
LONDON W1 (ENGLAND)

ABSTRACT : These subroutines, written in basic Assembler language, calculate the P.A.Y.E. tax deductions and governemnt graduated pension deductions for both monthly and weekly paid employees in decimal sterling. The routines will interface with main line programs written in B.A.L.
Machine required : 360/25 16K
Program material : Write-up in English
Card deck

360D-03.8.703-SYSTEM/360 WEEKLY AND MONTHLY STERLING PAYE AND GGP ROUTINES

AUTHOR : P.J. GOUGH
TECHNICAL INFORMATION CENTRE
IBM U.K. LTD
17 ADDISCOMBE ROAD
CROYDON, SURREY (ENGLAND)

ABSTRACT : The two routines (weekly and monthly) are programmed in Basic Assembler Language to run on System 360 Model 25 and upwards. The weekly routine handles incomes which, after Free Pay deduction, do not exceed £4005 per year. The monthly routine handles gross taxable incomes up to £45,000 per year.
Note : These Routines are programmed for Sterling.
Machine required : S/360 configuration
Program material : Write-up in English
Card deck.

360D-04.0.701-ERRU

AUTHOR : DIETER M. KNOBLOCH
BREITWIESENSTRASSE 22
7000 - STUTTGART-MOEHRINGEN (GERMANY)

ABSTRACT : The ERRU-Routine is designed for testing PL/1 Programs. It allows a continuation of program execution at the position where on error interruption for which no specific ON-condition exists has occured and thus allows the programmer to get more results out of one test run. ERRU is called in an ON-Unit with one argument, i.e. a label variable. It assigns to this label variable the address of the machine instruction following the point of interruption. With a GOTA-Statement the user then may continue program execution at the point of interruption. ERRU is written in /360 ASSEMBLER language. The routine occupies 228 bytes of main storage.
Machine Required : same as /360 OS.
Program material : Write-up in English
Card deck.

360D-04.0.702-DIAGNOS

AUTHOR : KLAUS D. PUHL
BREITWIESENSTRASSE 22
7000 - STUTTGART-MOEHRINGEN (GERMANY)

ABSTRACT : The DIAGNOS-routine is designed to assist the programmer in testing and debugging his programs written in PL/1. When called, DIAGNOS points all helpful informations about the status of the program, i.e. error status and/or status of all files open at calling time.
DIAGNOS may be called at any point within a PL/1-program via CALL. Arguments are not necessary. The diagnostic will be printed on the standard output file SYSPRINT.
The DIAGNOS-routine is written in IBM/360 ASSEMBLER language and is coded in reentrant form. The DIAGNOS-Routine is made up of 3 control sections, two of which are dynamically loaded during program execution. The total core required is about 5.5K bytes.
Program material : Write-up in English
Card deck

360D-04.0.703-CORE

AUTHOR : KLAUS D. PUHL
BREITWIESENSTRASSE 22
7000 - STUTTGART-MOEHRINGEN (GERMANY)

ABSTRACT : The CORE-routine is a function which returns the amount of available core storage for the calling PL/1-Program. The CORE-routine may be called whereever a function may be used in a PL/1-program. Arguments are not necessary and must not be specified. The return value is a binary fixed integrer. The CORE-routine is written in Assembler language and is coded in reentrant form. The routine occupies 128 bytes of code and 112 bytes for a dynamic save area and working storage.
Machine required : Any /360 system on which the OS/360 and the PL/1 (F) compiler can be run and its generated programs. No further restrictions.
Program material : Write-up in English
Card deck

360D-04.1.701-EXTERNAL INTERRUPT FAST CORE DUMP TO DISK, AUTO RE-IPL, AND DUMP FORMATTING SYSTEM. QUICKDUMP

AUTHOR : M.J. OLDFIELD
IBM INFORMATION SERVICES LTD
LANGSTONE ROAD
HAVANT, HAMPSHIRE (ENGLAND)

ABSTRACT : This system affords a method of taking high speed full system dumps and automatically reipling by pressing the external interrupt button. The whole of core is written to direct access storage (a 2314 in this version) by a resident routine to which control passes on an external interrupt. This routine then reipls the system. The dump can be printed at convenience by the formatting program. The major advantage of this system, especially relevant to a real-time environment, is the short interval which can be achieved between a system failure and a restart, while saving the dump for subsequent analysis. The system is written in Assembler for Release 17 of OS (MFT/PCP). In its present form a 2314 is needed for intermediate storage of the core dump, but this is modifiable.
Machine required : The system runs on any system 360 with OS. It requires a console device, card reader, line printer and a direct access device used as the system drive. The nucleus resident dump routine requires between 1 and 2K bytes depending on the version chosen and the program that formats the dumps needs a problem program area of 38K.
Program material : Write-up in English
DTR 7tr, 9tr (800/1600 BPI)

360D-04.3.701-JESS
AUTHOR : LARDY A.
IBM FRANCE
96, RUE DE REAUMUR
PARIS 2e (FRANCE)
ABSTRACT : This program is performed under control of the 360 OS. It provides for the testing of COBOL programs in the following sequence : Compile, generate sample files, execute. It generates the input sample files by using first the contents of the "Data Division" and second the control cards and the specification cards. Data are provided by control cards. It is possible to provide only the necessary information for the testing of a particular program. The other zones of the control cards will contain a filling character. Besides, it can be specified that some information have to be repeated or must progress either in different records (some of which may have to be created), or within the same record thereby reducing specifications writing.
Machine required : 360/40 OS 50K
Source Language : Assembler
Program material : Write-up in French
DTR 7tr, 9tr (800/1600 BPI)

360D-04.4.701-DOS MODULE TESTER
DIRECT INQUIRIES LINDA BURKITT
TO : INSURANCE BRANCH
40 BASINGHALL STREET
LONDON, E.C.2.
ENGLAND
ABSTRACT : One of the major problems with Modular Programming is the independent testing of subprograms before including them in the system. The DOS Module Tester simplifies this task. It includes the following features. Test data is constructed with free-format field definitions similar to Assembler DC statements and is accepted at execution time. Program checks are trapped to display diagnostic information and allow the test run to continue. For data exceptions the incorrect data can be replaced by a default value and the instruction retried. Selected sections of core may be displayed at the user's request. The test may be terminated if it exceeds a specified interval of time, and execution time for the module is displayed. The Module Tester is a suite of macros, giving considerable flexibility in the creation of test programs, and handles modules written in Assembler, COBOL and PL/1. Minimum system requirements : Any DOS system with decimal instruction set. Storage Requirements : 4K-6K
Source Language : Assembler.
Machine required : Same as DOS 4K-6K
Program material : Documentation in English

360D-04.4.702-TESTRAHM
AUTHOR : CAMILLO CEPPI
FSG ZURICH IBM - CH
DREIKOENIGSTRASSE 24
CH-5022 ZURICH (SWITZERLAND°
ABSTRACT : TESTRAHM tests single modules which are independently compiled and link-edited. Function are :
1. One to nine linkage areas with total length of 4,000 bytes
2. Any number of fields in linkage area
3. Input data is converted in appropriate internal code
4. Expected results are compared with current results after test
5. Listing indicates areas before and after testing, expected results and bytes in error
6. Any number of modules can be tested in one run
7. Languages usable : ASS., Cobol, Fortran, PL/1 only without doperectors
Machine required : 360 Model 25 up, OS needs 1 sequ. Input and 1 Sequ. Output Device, DOS needs 1 Card reader and 1 Printer
Storage required : 24 to 26 K above Supervisor.
Source Languages : Cobol and Assembler (and PL/1-DOS)
Program material : Write-up in English
DTR 7tr, 9tr (800/1600 BPI)

360D04.4.703-BTAM SIMULATOR (DOS)
AUTHOR : BAILY JACQUES
DP/FSG
IBM BELGIUM S.A.
67 RUE ROYALE
BRUXELLES (BELGIUM)
ABSTRACT : The first purpose of the BTAM simulator is to give the facility of testing a control program (using start-stop and 2260L terminals) without the terminals the second one is to appraise the throughput of the system. The BTMOD module is replaced by the simulator program the messages are read and written on a disk file. This program is written in assembler and takes 6,200 bytes for 10 simulated lines. It runs on a 360 with 32K, card reader, printer, 2311, and with timer. The data management used is described in a type III program (360D-03.4.701) when the control program is assembled with the new macros it has not to be changed to run with the simulator or with the BTAM module. The BTAM buffer management is not simulated.
Program material : Write-up in English
DTR 7tr, 9tr (800/1600 BPI).

360D-05.0.701-STERL

AUTHOR : P.J. GOUGH
TIC
IBM U.K. LTD
17 ADDISCOMBE ROAD
CROYDON, SURREY (ENGLAND)

ABSTRACT : Sterling Emulation is achieved by substituting predefined invalid operation codes for instruction in the 1401 Program which could refer to sterling fields. These are then trapped by the CS/40 error routines which gather the A and B fields into 360 core for processing. The program is in the form of MACRO's.

Machine required : A 360/40 with Hardware feature 4460

Storage required : A 16K 6 tape 1401 has been emulated in a partition size of 46K (Supervisor size : 12K)

Program material : Write-up in English
DTR 9tr, 800 or 1600 BPI

360D-05.0.702-MACHINE UTILISATION AND STATISTICAL INFORMATION COLLECTION SYSTEM

AUTHOR : FIELD SYSTEMS CENTRE
17 ADDISCOMBE ROAD
CROYDON, SURREY (ENGLAND)

ABSTRACT : The Machine Utilisation and Statistical Information Collection System (MUSIC) was developed to enable an installation using the Multiprogramming with a Fixed number of Tasks (MFT2) version of OS/360 to collect and record information concerning the system and the jobs running in the system.
It enables programmers to optimise their jobs and limit the execution time of a job step at the same time recording the information for later analysis by systems staff. This information can then be used to determine the optimum partition sizes and job classes to be assigned in the installations, as well as providing a basis on which users can be charged for the resources used. The system consists essentially of two separate parts which operate independently. The first part is the data collection routines which are part of the resident nucleurs and the initiator/terminator. The second part is the transient type IV SVC routine to enable the user to record the data in a data set allocated on a 2311 or 2314 direct access device.

Program material : Write-up in English
DTR 7tr, 9tr, 800/1600 BPI

360D-05.1.701-GENA-OS (GERMAN EXTENDED NETWORK ACCESSMETHOD)

AUTHOR : WERNER KOENIG
IBM GERMANY
DEPT 487 - DP-TELE-PROCESSING SYSTEMS ENG.
POSTBOX 266
7032 - SINDELFINGEN (GERMANY)

ABSTRACT : GENA-OS is a TP control program system. It provides a set of macros. These macros are used to :
1. generate a TP control program
2. establish linkage between this control program and user-written message control and message processing programs
3. access from user-written routines to message queues which are managed by GENA.
GENA is based on OS-BTAM (an OS GAM, as far as 2260 local is concerned). The GENA concept makes it easy to divide TP applications into message control programs and message processing programs. GENA supports : 1030, 1050, 1060, 1070, 2260 local and remote, 2740, 2780, WTT-type. In addition to the BTAM requirements a minimum of 4K core storage is required for GENA. That does not include space for buffers and user-written routines. The GENA macros can be used with Assembler language only.

Program material : Write-up in English
Magnetic tape 7tr, 9tr, 800/1600 BPI

360D-05.1.702-GENA-DOS (GERMAN EXTENDED NETWORK ACCESSMETHOD)

AUTHOR : WERNER KOENIG
IBM GERMANY
DEPT 487 - DP-TELE-PROCESSING SYSTEMS ENG.
POSTBOX 266
7032 - SINDELFINGEN (GERMANY)

ABSTRACT : GENA-DOS is a TP control program system. It provides a set of macros. These macros are used to :
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3. access from user-written routines to message queues which are managed by GENA.
GENA is based on DOS-BTAM. The GENA concept makes it easy to divide TP applications into message control programs and message processing programs. GENA supports : 1030, 1050, 1060, 1070, 2260 local and remote, 2740, 2780, WTT type. In addition to the BTAM requirements a minimum of 4K core storage is required for GENA. That does not include space for buffers and user-written routines. The GENA macros can be used with Assembler language only.

Program material : Write-up in English
DTR 7tr, 9tr, 800/1600 BPI

360D-05.1.703-MULTIPLE JOB INITIATION MONITOR PROGRAM
AUTHOR : FIELD SYSTEMS CENTRE
17 ADDISCOMBE ROAD
CROYDON, SURREY (ENGLAND)
ABSTRACT : The Multiple Job Initiation Program allows the concurrent execution of up to eight logically independent programs in a single partition of a DOS multiprogramming system. Each such program must itself be capable of being executed as a subtask in multitasking environment. Commands to load, execute terminate, suspend or resume a job are entered via the console of the system 360. The program is distributed in the form of a macro instruction ('MULTIJIM') and depending on the options chosen the storage required will be between 2K and 4K. Execution of the program requires that the supervision program be generated to support both multiprogramming and multitasking operations. ('MPS = YES' and 'AP = YES') must both be specified.
Source language : Assembler language
Machine required : a 1052 Console Typewritter, other configuration requirements depend on the programs to be executed under monitor control.
Program material : Write-up in English
Tape 9tr, 800 or 1600 BPI

360D-05.1.704-ON-LINE DIAGNOSTICS SYSTEM
AUTHOR : CONNOR McKNIGHT
F.S.C.
IBM U.K. LTD
17 ADDISCOMBE ROAD
CROYDON CR9 6HS, SURREY (ENGLAND)
ABSTRACT : The on-line diagnostics system is designed to enable CE (FE)-type diagnostics to independently test terminals which are concurrently being employed by application programs. This means that the customer is only deprived of the use of the test terminal and any terminals which may be invoked as control terminals. The system can also collect and analyse information on line behaviour for CE (FE) analysis. The system is applicable to S/360 Model 40H and above operating under OS in a large tele-processing environment. Diagnostic routines are currently available for 2740 and 2741. The monitor which controls the system operates in about 40K. All routines are written in Assembler language.
Program material : Write-up in English
DTR 7tr or 9tr, 800/1600 BPI.

360D-05.2.701-CONTROL PROGRAM FOR REALTIME MULTI-TASKING
AUTHOR : C.E. BARENSTEDT
IBM SVENSKA AB
AKTIEBOLAG
P.O. BOX 23006
104 35 STOCKHOLM (SWEDEN)
ABSTRACT : Controm program being developed by IBM Sweden for large realtime systems. Utilizing OS MVT it runs on any S/360 with 384K of core or more. It is specifically designed to take andantage of a multiprocessor environment and to support a network with IBM 3967-2/3 as frontend and concentrator. However, it is equally suitable in uniprocessors and with standard communication equipment and standard TP access methods. Written in Assembler.
Program Material : Write-up in English
DTR 9tr, 800 or 1600 BPI

360D-05.2.702-DYNAMIC STORAGE MANAGEMENT SERVICES FOR DISK OPERATING SYSTEM/360.
DIRECT INQUIRIES TO : J.D. O'SHEA
IBM IRELAND LIMITED
28 FITZWILLIAM PLACE
DUBLIN 2
IRELAND
ABSTRACT : Implementation of GETMAIN, FREEMAIN, GETPOLL, FREEPOOL, GETBUF and FREEBUF Operating System/360 Assembler Language macro-instructions under DOS Permits dynamic allocation and freeing of workspace, Save-areas etc. by job-steps or tasks, thereby assisting the programmer to write re-entrant programs. These facilities operate under any DOS configuration. The macros themselves are re-entrant and self-relocating. The Storage Management macros utilize a specially written logical transient phase, $$BCORE, which provides the necessary supervisory support for the new services.
Machine required : same as DOS
Program material : Documentation in English.

360D-05.2.704-A REAL TIME CONTROL PROGRAM FOR THE IBM 3968-001 COMMUNICATION CONTROLLER

DIRECT INQUIRIES TO : LARS PERSSON
IBM SVENSKA AB
SVEAVAGEN 149
STOCKHOLM
SWEDEN

ABSTRACT : This set of programs provides the user with a stand alone real time control program for the IBM 3968-001 Communication Controller. The control program is suited to work in conjuction with the line procedure programs and user written application programs. Disk is not supported. The control program and the application programs can be loaded from a card reader or a magnetic tape unit. A tape generator program writes a tape in core image format, that contains the control program and a tape maintenance program. When the tape is loaded, the control program is activated by commands from the card reader or the operator console. Application programs are loaded and executed according to these commands.
Programming systems : Programs are written in Assembler language. Application programs must be written in Assembler language. To assemble the programs the OS/360 or DOS/360 Assembler can be used.
Machine required : IBM 3968-001 Communication Controller with 32K or more of core storage standard instruction set and special instructions.
Program material : Write-up in English.

360D-05.2.705-PRIORITY OUTPUT WRITERS, EXECUTION PROCESSOR AND INPUT READERS - SOUTH AFRICAN VERSION

AUTHOR : D.N. LOCK
FIELD SYSTEM CENTRE
IBM SA PTY LTD
P.O. BOX 1419
JOHANNESBURG (SOUTH AFRICA)

ABSTRACT : Major modification to Type III Program 360D-05.2.006 incorporating accounting, separate buffer sizes for reader/writer code and data, printer and punch jump forward and backspace features, multiple reports within a job, multireel tape support with label checking, punch restart, combined writers and readers, support for both skipping to and sensing channels 9 and 12, 1442 support, autostart on 3 devices and automatic buffer allocation, improved in i/o error recovery, delete command, other additional command facilities including bg/f2 priority switching, numerous minor additional features and bug corrections.
Program material : Write-up in English
DTR 7tr, 9tr (800/1600 BPI)

360D-06.0.701-ANALYS STATISTICAL ANALYSIS OF NEWSPAPER SALES INFORMATION BY SALESPOINT

AUTHOR : W. WINTER
IBM - IPPIC
LEUSCHNERSTRASSE 9A
STUTTGART (GERMANY)

ABSTRACT : The ANALYS program package gives data in statistical form for a newspaper salespoint (daily newspaper or periodical). The collected sales data in a period, e.g. two months, is the input. The form of the sales data is prescribed by the more extensive documentation. The output is a list by each salespoint of such facts as quantity of normal delivered copies, quantity of returned copies, risk of missing sales, etc. This program is written entirely in System/360 Assembler Language and runs under the control of the Disk-Operating-System III.
Machine required : a System/360 Model 25, 32K ; on tape drive, a card read/punch 2540, a printer 1403 and one disk drive for the DOS System.
Program material : Write-up in English
DTR 7tr, 9tr (800/1600BPI)

360D-06.1.701-EXITS TO DOS DISK AND TAPE SORT/MERGE FOR 1401 TAPE LABELS AND SWEDISH COLLATING SEQUENCE

AUTHOR : MARGARETHA JOSEFSSON
IBM SVENSKA AB
BOX 23006
S-104 35 STOCKHOLM (SWEDEN)

ABSTRACT : Three sets of selfrelocating exitroutines are included in this package to facilitate use of the DOS SORT/MERGE program 360N-SM-483 :
- for sort of 1401 tapes with 80 pos standard labels.
- for sort of 360 files in Swedish collating sequence.
- for merge of 360 files in Swedish collating sequence.
The first set checks and creates 1401 standard labels and optionally supports Swedish collating sequence of the file. Multifile and multireel 1401 sort is supported as well as mixing of 1401 and 360 tapes. Reblocking is made possible through deletion and insertion of padding. Blockcount checking/writing is optional. Control cards for the exits are read and optionally listed with DTFDI.
Machine required : As for standard DOS
Source language : DOS Assembler
Program material : Write-up in English
DTR 7tr, 9tr (800/1600)

360D-06.3.702-GENERALIZED INQUIRY PACKAGE FOR SMALL SYSTEM USER GIPASS

AUTHOR : DATA COMMUNICATIONS MSC
IBM BELGIUM
AVENUE LOUISE 149
1050 - BRUXELLES (BELGIUM)

ABSTRACT : Purpose of this program is to inquire ISAM files stored on 2311's via the systems console and from remote 1050's or 2740's. The package usually occupies a DOS foreground partition of 16K (including TP control). Following main functions are provided, out of which an inquiry can be built up. (1) Random retrieval. (2) Sequential search between key limits. (3) Search on any record field, using references files. (4) Print selection based on logical comparison. (5) Output editing. The system handles max 9999 question types related to 25 ISAM files. Terminals on different lines are serviced in parallel (multithread capability through roll-in roll-out concept). No TP know-how or additional coding is required to implement or use the package. System generation (incl. BTAM based TP control) is initialized by 4 very easy to use Macros. Introduction of additional files is easy. New question types may be included without interrupting TP operation. The source language is assembler.

Program material : Write-up in English
Magnetic tape 9tr (800/1600 BPI)

360D-06.3.703-DOS CONTROL PROGRAM FOR REAL-TIME MULTITASKING (DREAM)

AUTHOR : BENGT HOLMGREN
IBM SVENSKA AB
STUDENTGATAN 4
MALMOE (SWEDEN)

ABSTRACT : A control program for tele-processing, using the DOS system with multitasking support. Terminals supported are 2260 local and remote, and the 2740. The program can run on any IBM-S360-M25 and up having the interval timer and storage protection feature. Minimum storage requirement is 18K. The control program is written in assembler, using BTAM. The user can write application-programs in cobol or assembler. Full support for direct-access and indexed-sequential files. A DOS Supervisor containing BTAM, AP and AB is required.

Program material : Write-up in English
Magnetic tape 7tr, 9tr (800 or 1600 BPI)

360D-06.3.704-SPANISH LINE CONTROL PROGRAM

AUTHOR : RAY BERK
IBM SPAIN
CASTELLANA, 4
DEPT 0621
MADRID 1 (SPAIN)

ABSTRACT : This program consists of a set of macros that form an interface between standard BTAM and a user written program. Terminals supported 1060, 1050, 2260, 2740, 2780, 2970-5, 1130, 2020 and 3965 with 2970, 2980 and 2740. The main features of the program are : operates under DOS and OS, core queing with disk overflow. TP console, IO trace and multiple users tasks.

Storage required : from 6K/BTAM and upwards.
Source language : Assembler
Program material : Documentation in Spanish
Basic MRM : Tape 7tr, 9tr (800 or 1600 BPI)
Optional MRM : Tape 7tr, 9tr (800 or 1600 BPI)

360D-06.5.701 FRENCH SUMS IN LETTERS TRANSLATE PROGRAM

AUTHOR : A. FROMAGET
TECHNICO-COMMERCIAL
IBM FRANCE
DEVELOPPEMENT ET PROMOTION/APPLICATION
94,96 RUE REAUMUR
75-PARIS 2E (FRANCE)

ABSTRACT : This generalized sub-program changes a sum in francs given in the form of a number into a working-written out in full in French language except for centimes. Words are not divided at the end of lines.

Machine required : 360 all models except model 20.
All systems assembler language except basic assembler of BPS.
1500 bytes-decimal instructions.
Program material : Write-up in French language,
card deck.

360D-06.5.702-TO CONVERT BULL CARDS TO RCA OR IBM CARD FILES

AUTHOR : F. BEAUNEZ
IBM FRANCE
PROMOTIONS PRODUITS ET SYSTEMES
94.96 RUE REAUMUR
75 - PARIS 2E (FRANCE)

ABSTRACT : This is a program written in the assembler language operating under DOS control, to punch Bull card files into either RCA code or IBM code card files, according to instructions contained in a parameter card.

Machine required : 360 all models except model 20.
Program material : Write-up in French language,
Card deck or one 9TR or one 7TR (data conversion feature required) DTR.

360D-06.5.703-RCA 382 TO SYSTEM / 360 TAPE CONVERSION

AUTHOR : F. BEAUNEZ
IBM FRANCE
PROMOTIONS PRODUITS ET SYSTEMES
94.96 RUE REAUMUR
75 - PARIS 2E (FRANCE)

ABSTRACT : 1st part : A stand alone 32K-2-tape drive assembler system / 360 program to convert RCA 382 tapes for input to RCA 301 Simulator / Emulator. Simulator is 360D-11.1.009.
2nd part : A stand alone 32K-2-tape drive assembler system / 360 program to convert RCA 382 tapes for input to system/360.
Input to both programs is RCA 382 tape which is wound on an IBM tape reel. A control card will switch the program on the first part or the second part.

Machine required : 360/32K, 2 tape units (one with 7TR feature), card reader, a printer keyboard, System DOS.

Program material : Write-up in French language,
Card deck or one 9TR or one 7TR (Data conversion feature required) DTR.

360D-06.5.704-ENCOD/DECOD

AUTHOR : DR. M. FAVRE
IBM - CH
AESCHENGRABEN 9
BASEL (SWITZERLAND)

ABSTRACT : The two macros ENCOD and DECOD give you the possibility to compress data in a way you spare 33 % room in relation to ZONED DECIMAL representation. The method consists in considering groups of 3 characters as digits of a number system with the base 4CD. As $4\emptyset^3 = 64\emptyset\emptyset\emptyset$ 2^{16}-1 you can store 3 characters out of a record of 4Ø in a halfword. The normal collating sequence EBCDIC is not influenced. MACROS are in Assembler

Program material : Write-up in German
Card deck

360D-06.5.705-TAPE TRANSLATE PROGRAM FOR ICL 1900

AUTHOR : A.D. WALMSLEY
IBM U.K. LTD
216 IMPERIAL DRIVE
NORTH HARROW, MIDDLESEX (ENGLAND)

ABSTRACT : This program accepts ICL 7 track tapes and converts them to IBM format.

Machine required : 360 big enough for OS plus one seven track tape drive

Source language : OS PL/1 (F) and Assembler

Program material : Write-up in English
Card deck

360D-06.6.701-ALPHAMERIC COMPACTION AND EXPLOSION MACROS

AUTHOR : YAN S. MILLER
IBM CANADA LTD
5 PLACE VILLE MARIE
MONTREAL 113, QUE. (CANADA)

ABSTRACT : The "Alphameric Compaction and Explosion Macros" are designed to improve the efficiency of file utilization and data transfer by reducing EBCDIC alphabetic, zoned numeric and up to 28 special characters ot a 6 bit character. By programmer option, the first character may be reserved for field length to provide for variable-length fields. Potential applications for these macros include name and address records and descriptive data files.

Machine required : The macros are written in DOS Assembler Language and require a maximum of 150 bytes and 196 bytes respectively

Program material : Documentation in English
Card deck

360D-06.6.702-PRINTING OF CIPCODE-DIGITS (DPLZH) WITH THE TABLE-SEARCH METHOD IN THE SIZE OF 6 OR 8 LINES PER INCH FOR GENERAL USE. PRINTING ON S/360 DOS

AUTHOR : HANNS JOERG HAMMELS
MARBACHWEG 266
6000 - FRANKFURT/MAIN (GERMANY)

ABSTRACT : The program "Printing of CIPCODE-DIGITS" is an assembler-standard program for CIPCODE-PRINTING avoiding duplicate programming. The program must be assembled with a disk or tape system and requires between 850 and 2300 bytes. The program was tested with a system/360-40 DOS Rel. 20 and is release independent. The package consists of a macro (DPLZH) and contains the conjunction commands for RPG-programs. The macro must be stored in the macro library before using by assembler - or cobol - or RPG - programs. For more exact explanation see the user information.

Program material : Documentation in German
Card deck.

360D-06.6.704-ASTRAL - ALPHABETICAL STRINGS TRANSFORMATION LANGUAGE

AUTHOR : P. ADANT
IBM DISTRICT 1
TOUR DU MIDI 8
1060 BRUXELLES (BELGIUM)

ABSTRACT : ASTRAL is a set of assembler routines defining a language for transformation of alphabetical strings. The purpose of this language is to search in alphabetical strings, determined combination of characters. In the search argument, dummy figures may be specified as vowels, consonants, or any character group with respect or not, of the beginning or the end of the string. When a combination is found in a string, this combination can be suppressed or replaced by another combination of characters or a branch to another search can take place. This language has been implemented to transform names in a sound-alike way for the creation and the retrival of a phonetic file. Linkage registers must be modified for use in another language that Assembler TOS/DOS.

Core requirement : 5 to 2K bytes

Program material : Documentation in English
Card deck

360D-06.7.701-SAGESSE
AUTHOR : F. GUEDENEY
APPLICATION DEVELOPMENT DEPARTMENT
94.96 RUE REAUMUR
75 - PARIS 2E (FRANCE)
ABSTRACT : SAGESSE is a system to manage nonnumerical data in an information center, assumes :
-storage on disk unit 2311, the updating and the printing, alphabetical listing and synonyms dictionary, of a vocabulary up to 20,000 key-words. 5 programs LEX 1 to LEX 5.
-storage on disk unit 2311 the automatic coding and the updating of an inverted items file up to 800,000 items. 3 programs DOC 1 to DOC 3.
-the process of profiles for selective dissemination and of retrospective searches for information retrieval.
Machine required : 360 model 2030E, 2 X 2311, 2540, 1443 or 1403
Program material : Basic : Write-up in French language,
Object decks.
Optional : source decks.

360D-06.7.702-PROGRAM SYSTEM FOR OPTIMAL STORING OF BIG FILES ON DIRECT ACCESS STORAGE DEVICES (UDB)
AUTHOR : APPL. DEV. GOV. AND SERVICES
STEPHAN LOCHNERSTRASSE 2
D 532 BAD-GODESBERG (GERMANY)
ABSTRACT : An indexed-random DASD access-method for Assembler using file and record description tables, defining structure of file resp. record. The records produced by compression of data are of variable length external storage capacity is eventually used up to a degree of 95 %. There is hardly need for file-reorganization. Possible functions are load, add, read, write, get, put, delete. Load need no sorted record keys. All records are blocked even in overflow area. There is a two level full index. Records with equal keys are possible, but only serially accessable. Main purpose is intensively using space on DASD and quick retrieval of data 20K core.
Program material : Write-up in English
DTR 7tr or 9tr, 800/1600 BPI

360D-06.7.703-SPECOL - SPECIAL CUSTOMER ORIENTED LANGUAGE OS
AUTHOR : S.A. HOFFMAN
GOVERNMENT SYSTEMS CENTRE
IBM U.K. LTD
40 BASINGHALL STREET
LONDON EC2 (ENGLAND)
ABSTRACT : SPECOL is a query language designed for non-programmers, which operates on sequential and indexed sequential files under OS. SPECOL works on a compile and go basis, compiling the question and executing the search in one jobstep. The minimum machine size is 64K under OS. The user describes the file to be searched in a small section of the compiler. The compiler is coded in Assembler Language. Sequential files may consists of multiple line records giving a basic hierarchical structure. The language used for enquiries is an English like enquiry language very easy to learn and use.
Program material : Write-up in English
DTR 7tr, 9tr (800/1600 BPI)

360D-06.7.705-ISF INFORMATION RETRIEVAL
AUTHOR : MAINCENT
IBM FRANCE
94 RUE REAUMUR
75 - PARIS 2 (FRANCE)
ABSTRACT : The ISF Information Retrieval program searches, from a 2260 Display Unit, for Indexed Sequential file (ISF) records, The search argument can be composed of from 1 to 5 fields containing alphameric data. Results from the found record(s) can be displayed and/or used as a basis for additional processing (i.e., user-written programs). The program operates under the control of the System/360 Disk Operating System (DOS) ; program routines are written in Assembler. It runs on a System/360 Model 25 or higher model, with decimal feature instructions and requires 1 work disk besides the one(s) used by DOS, as well as at least one local 2260/2848 with line addressing.
Program material : Documentation in French
Card deck or DTR 7tr or 9tr (800 or 1600 BPI)

360D-06.7.707-KWIC SEARCH - BOOLEAN SEARCH OF BIBLIOGRAPHIC FILES
AUTHOR : P.L. WHITE
IBM U.K. LTD
ST. ANN'S HOUSE, PARSONAGE GREEN
WILMSLOW, CHESHIRE (ENGLAND)
ABSTRACT : KWIC SEARCH is intended as a supplement to KWIC/360 (Program 360D-06.7.014). It provides the ability to search the Bibliographic File maintained by that program, or alternative any file of card images punched in the standard KWIC format described in Form No E20-8091. AND, OR, AND NOT logic is provided. Search criteria may be authors' names, assigned descriptors, words included in titles and abstracts, or any other data supplied as part of the original input. Output is either lists of document reference number or complete bibliographic information. The program is intended to give a limited facility for searching and the production of specialised bibliographies. Program is in PL/1 (F) and uses two Assembler languages subroutines.
Machine required : Runs under any version of OS, needing a partition or region of approximately 60K depending on blocking factors.
Program material : Write-up in English
card deck.

360D-06.7.708-CODO-DOCO FAST CONVERSION BETWEEN EMULATION 1311 FILES AND TRUE DOS FORMAT, FOR SYSTEM 360 MODELS 25, 30 AND 40
AUTHOR : JOHN J. DODDS
1 KATHARINE STREET
CROYDON CR9 1LQ (ENGLAND)
ABSTRACT ; These programs provide a very fast method of converting 1400 series, 1311 sector mode files, used on a S/360 2311 under emulation, to or from true S/360 DOS format, for sorting or other S/360 mode use. As supplied the programs will access most normal fixed record length files, and the programs are designed to be easily modified as needed for other sector mode layouts. The emulator files may be written under control of hardware emulation, or under DOS emulation using COS or CS, on S/360 Models 25/30/40. The programs are provided in source deck form, written in DOS Assembler language.
Machine required : Any machine what will support DOS, with 2311s
Program material : Write-up in English
Card deck

360D-06.7.710-COMPUTER ANALYSIS OF NAMES AND ADDRESSES (CAN)

AUTHOR : KURT HERRMANN
IBM - IPPIC
POSTFACH 266
7032 - SINDELFINGEN (GERMANY)

ABSTRACT : Computer Analysis of Names and Addresses (CAN)is an analytical computer program which attempts to identify the meaning of name and address elements in undefined and unedited personal names and addresses. CAN can be used to analyze undefined and unedited name and address files for name and address coding and retrieval applications. Typical applications include name and address file maintenance, file matching, and file conversion. CAN can also be used to analyze undefined and unedited name and address files for printing personalized computer letters. CAN works with word tables and word pattern tables to identify name and address elements. Example tables for France, Germany, Italy, and the United Kingdom are supplied with the program. Actual program performance is a function of the name and address file condition and the size of word tables and word pattern tables.

Machine required : Same as DOS

Program material : Documentation in English
DTR 7tr or 9tr (800 or 1600 BPI)

360D-06.7.711-SPECOL - SPECIAL CUSTOMER ORIENTED LANGUAGE DOS

AUTHOR : MRS S.A. HOFFMAN
GOVERNMENT SYSTEMS CENTRE
IBM U.K. LTD
40 BASINGHALL STREET
LONDON EC2 (ENGLAND)

ABSTRACT : SPECOL is a query language designed for non-programmers, which operates on sequential and indexed sequential files under DOS. SPECOL works on a compile and go basis, compiling the question and executing the search in one jobstep. The minimum machine size is 32K under DOS. The user describes the file to be searched in a small section of the compiler. The compiler is coded in Assembler language. Sequential files may consist of multiple line records giving a basic hierarchical structure. The language used for enquiries is an English like enquiry language very easy to learn and use.

Program material : Write-up in English
DTR 7tr or 9tr (800 or 1600 BPI)

360D-06.7.712-MEDICAL DOCUMENTATION SYSTEM

AUTHOR : MRS HELGA JUNG
IBM
STEPHAN-LOCHNER-STRASSE 2
5300 BONN-BAD GEDESBERG (GERMANY)

ABSTRACT : The Medical Documentation Program can be used in a hospital for data acquisition, data handling, data-evaluation and data printing. Data acquisition is done by IBM 1231, cards are used for defining and decoding of 123 X-sheet-informations. Further medical information can be added of eliminated to/from patient history. Patient data are printed in cleartext including doctors - errors - messages from tape.

Machine required : Up from /360 Model 25, decimalarithmetic, 1 X 2311, 4 X 2400, 1052, 1231, cardreader and printer. Programs for reading with 1231 and printing reports are running in foreground using 10K corestorage.

Program material : Documentation in German
DTR 7tr or 9tr (800 or 1600 BPI)

360D.08.0.701-1627-PLOTTER SUBROUTINES FOR 360/DOS

DIRECT INQUIRIES U. FUCHS
TO : DP SYSTEM-SUPPORT
IBM GERMANY, 7032 SINDELFINGEN
P.O. BOX 66, DEPT. 429 (GERMANY)

ABSTRACT : Subroutines for using the 1627 Plotter from user main programs written in Fortran or PL/I. The subroutines do scaling, plotting and annotation. They convert the computed information into plotter commands and store them on magnetic tape, a selfrelocatable program is provided, it is designed to do the actual plotting from tape in a multiprogramming environment. It uses less than 2K of main storage. The 1627 Plotter has to be attached to the 360 via 2701 having the RPQ 880701, 1627 Plotter adapter there must be at least one magnetic tape unit. The operating system used is DOS. All routines are written in assembler language.

Machine required : Same as DOS

Program material : Write-up in English
One magnetic tape 7tr or 9tr.

360D-08.6.701-IBM 1627 PLOTTER SUPPORT PACKAGE FOR OS/360

AUTHOR : MICHAEL FAIX
IBM GERMANY, LAB.
SCHOENAICHER STRASSE 220
703 BOEBLINGEN (GERMANY)

ABSTRACT : The IBM 1627, Model 1 and 2 support package enables the user to pass 1627 plotter command via the 2701 control unit and a special plotter adapter (RPQ) on to the 1627. the System/360 to which the 1627 is attached to must be run under the control of the operating System/360. This support package does not provide any routines for the creation of plotter commands. The support package is written in the Assembler language.

Program material : Documentation in English
DTR 7tr, 9tr, 800/1600 BPI

360D-08.7.701-DOS MPS CHAINED PRINTER OUTPUT MACRO INSTRUCTION

AUTHOR : FIELD SYSTEMS CENTRE
IBM U.K. LTD
17 ADDISCOMBE ROAD
CROYDON, SURREY (ENGLAND)

ABSTRACT : CHPRINT is an Assembler language macro-instruction which may be used to direct output to a 1403 or 1443 line printer. A command-chaining technique is used to improve printer performance while reducing the processing overhead required to handle the device. CHPRINT belongs to the family of MPS Utility Macros and is fully compatible with the Type I members of the family ; the generated code is self-relocating and may be executed in both foreground and background partitions.

Machine required : Storage requirements depend on user-supplied parameters ; machine requirements are one 1403 or 1443 line printer for output and 1052 console typewriter for error messages.

Program material : Documentation in English
Card deck

360D-08.7.702-DOS COBOL ASSEMBLER LANGUAGE PRINT SUBROUTINE (SPRINT)

AUTHOR : J.M. SHIELD
BANKING DISTRICT
IBM U.K. LTD
40 BASINGHALL STREET
LONDON EC2 (ENGLAND)

ABSTRACT : The SPRINT PRINTER MODULE is written in ASSEMBLER LANGUAGE which is designed to speed up the printing of output produced by a COBOL program. The method used is to translate each ASA control character into the equivalent space or skip after printing and applied to the previous text line. Hence only one EXCP call is issued for each print line. This improves printer performance and allows printing to be fully overlapped with processing.

Storage required : dependent on the parameters specified by the users.

Machine required : The machine configuration must include one 1403 or 1443 line printer to accept output from the module.

Program material : Documentation in English
Card deck

360D-08.7.703-THE PRINTER MULTIPROGRAMMING SYSTEM (PMPS)

AUTHOR : FIELD SYSTEMS CENTRE
17 ADDISCOMBE ROAD
CROYDON, SURREY (ENGLAND)

ABSTRACT : The Printer Multiprogramming System is a tape-based spooling system written by the U.K. Field Systems Centre It allows the output from the Job Control Program (consisting of unblocked Records 133 bytes in length) to be merged with output from user application programs (blocking factor and line length specified by the user) on a single output tape mounted on a tape device assigned to SYSLIST. The program can be executed in a foreground partition of size 4K and is distributed on 9track 800BPI tape. The system is written in the Assembler Macro Language.

Machine required : The machine configuration must include two magnetic tape units, one 1403 or 1443 line printer, and one 1052 console typewriter.

Program material : Documentation in English
Tape 9tr, 800 or 1600 BPI

360D-10.0.701-MACIS (METHOD FOR ANALYZING COMMUNICATION AND INFORMATION STRUCTURES)

AUTHOR : UWE R. DRESSLER
APPLICATION DEVELOPMENT CENTER GERMANY
SCHWABSTRASSE 43
7000 - STUTTGART (GERMANY)

ABSTRACT : The program MACIS is used for inventory and documentation of the communication and information structures of an enterprise. A prerequisite to the use of this program is a detailed analysis of the current organization of the company. The program is coded in PL/1 and runs under OS.

Program material : Documentation in German
Card deck

360D-11.2.701-1287 DOCUMENT MODE TESTING AID DOS/TOS

DIRECT INQUIRIES TO : A. PALMER
IBM UNITED KINGDOM LTD
5 QUEENS AVENUE BRISTOL 8
ENGLAND

ABSTRACT : A program to allow the testing of programs using the IBM 1287 Optical Reader by simulating the 1287 on a card reader. The testing aid, which consists of a series of Assembler language macros to replace the IBM DOS/TOS 1287 ones, will be of use in installations with System/360 in use and the 1287 on order. The aid works by interpreting the CCWS and Format Words in the program and reading data from cards. Most 1287 error conditions can also be simulated but time dependence cannot. The source language is DOS Assembler and machine requirements are as for DOS except that a card reader and 1052 console are mandatory.

Machine required : Same as DOS 360

Program material : Write-up in English
Card deck.

360D-11.2.702-1410-1311 EMULATION FOR 360/50

AUTHOR : A.D. WALMSLEY
IBM U.K. LTD
216 IMPERIAL DRIVE
NORTH HARROW, MIDDLESEX (ENGLAND)

ABSTRACT : Program interfaces with emulator program 360C-EU-726 to provide support for 1311 emulation instead of 1301.

Machine required : 360/50 with 1410 emulation feature : 4478 and 2311 disk drives.

Program material : Documentation in English
Card deck

360D-12.0.701-COBOL ABBREVIATION CONVERSION AND SOURCE MODUL MAINTENANCE PROGRAM (COCO PROGRAM)

AUTHOR : FRITZ-KARL HERMENING
IBM DEUTSCHLAND
BREITWIESENSTRASSE 22,
7000 - STUTTGART-VAIHINGEN (GERMANY)

ABSTRACT : The COCO program converts standard abbreviations to reserved words, user abbreviation to programmer words or complete statements, inserts sequence numbers and/or identification characters and performs all functions necessary to maintain COBOL source moduls. The program is release independent and applicable for COBOL E, COBOL F and OSUSA Standard COBOL. The COCO program is written in Assembler-Language.

Machine required : Same as for OS/360

Program material : Write-up in English
DTR 9tr, 800 or 1600 BPI

360D-12.1.701-ICL 1900 TO DOS/360 TAPE CONVERSION PROGRAM

AUTHOR : H. CASHDAN
IBM U.K. LTD
INSURANCE BRANCH
40 BASINGHALL STREET
LONDON EC2 (ENGLAND)

ABSTRACT : This program is designed to convert ICL tapes to DOS 360 format. Variable or fixed length blocks of up to 5,000 characters are supported, character only records may be converted without any modification to the program. For files containing binary information, binary subroutines are provided and the user must construct a simple mainline routine to use these binary subroutines. All ICL label records are read and ignored. 360 labels are built according to DOS job control specifications. Multiple reel files and multiple file reels are both catered for. The program reads input on a seven track tape unit and writes output onto a nine track unit.

Machine required : A minimum DOS system with the above tape units, a card reader and a printer is required. The program is release independent.

Program material : Write-up in English
DTR 7tr, 9tr, 800 or 1600 BPI

360D-12.1.702-CONVERSION PROGRAM FOR GE-400 TAPES

AUTHOR : DR. HERBERT KRATZER
IBM FINLAND
MANNERHEIMINTIE 8
HELSINKI 10 (FINLAND)

ABSTRACT : Two Utility Programs for conversion of 9-track GE-400 series tapes to 9-track IBM/360-tapes are provided. One is for conversion to IBM-format and the other for conversion from IBM to GE format. The programs need no external information and convert character coded tapes (no binary, no floating point, no IBM packed decimal). IBM tape labels are checked and written and a limited amount of GE tape label checking is done and a standard label written. The programs are written in DOS assembler and will accept on a 32 K machine block-lengths of up to 4800 bytes.

Program material : Documentation in English
Card deck

360D-12.1.703-CONVERSION PROGRAM FOR JOURNALTAPES

AUTHOR : HEIKKI HILTUNEN
OY IBM AB
MANNERHEIMINTIE 8
HELSINKI 10 (FINLAND)

ABSTRACT : This program is designed to convert data to Gamma 30 codes. Data is supposed to be spooled to magnetic tape from 1285 journal tape. It writes data to magnetic tape on a reel that fits to the tape unit of Gamma 30. It also calculates records and writes some special records. The program is easily modified to be used without spool.

Machine required : DOS configuration with two tape units.

Storage required : Program uses 5460 bytes of core

Source language : DOS assembler

Program material : Write-up in English
Card deck

360D-12.2.701-ICL 1900 COBOL TO DOS/360 COBOL CONVERSION AID PROGRAMS

AUTHOR : H. CASHDAN
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INSURANCE BRANCH
40 BASINGHALL STREET
LONDON EC2 (ENGLAND)

ABSTRACT : The programs are designed to aid in converting from an original ICL Cobol card source deck to a source deck for compilation by the DOS Cobol compiler. The basic functions performed by the programs are 1. to translate the ICL cards into IBM card code. 2. replace selected (by the user) words in the Cobol source deck and so eliminate many syntactical discrepancies between the two Cobols and 3. to correct certain Cobol clauses to valid IBM DOS format. The programs may be run on any DOS system with a card reader, a card punch or two magnetic tape units, and a printer. The initial input to the program must be 80 column cards but all intermediate and final output may be on tape. The programs are released independent.

Machine required : Minimum core storage 16K

Program material : Write-up in English
DTR 7tr, 9tr (800/1600 BPI)

360D-13.1.701-COUNT, A/360 MARKET RESEARCH TABULATION PROGRAM

AUTHOR : H.G. HARTNAGEL
IBM DEUTSCHLAND, DP-VTB-IPPIC
LEUSCHNERSTR. 9A
7000 - STUTTGART (GERMANY)

ABSTRACT : COUNT is a program package which facilitates all type of cross-tabulation work and has its main application in the field of Market and Opinion Research. Contents and format of tables which are to be produced from the data material are specified in a problem oriented language. Due to the compile-and-go method used with COUNT, the package consists of a language interpreter and an executer with three main functions being data cleaning, table construction, and table printout. Data input can be either column binary or BCD, the card reader used as standard input medium may be replaced by magnetic tape or disk. The Count-Package is written in Assembler language and runs under control of the /360 Disk Operating System.

Machine required : At least a /360 Model 25 with 32K, card reader, printer, and 2 disk-units 2311.

Program material : Write-up in English
Card deck

360D-13.1.702-INTEREST, INTEGRATED RETRIEVAL AND STATISTICS PROGRAM FOR IBM SYSTEM/360

AUTHOR : LARS EDBLAD
IBM
BOX 23006
104 35 STOCKHOLM 23 (SWEDEN)

ABSTRACT : INTEREST is a general program, which makes it possible to search data files on specific parameters or on Boolean combinations of parameters. The parameters or other data may be transformed. The results may be produced as lists of cases satisfying the retrieval conditions, or as statistics on the selected cases with flexible editing. The main statistical modules produce matrices (tables), output for histograms, analyses of variance, analyses of covariance, correlation analyses, regression analyses, discriminant analyses, factor analyses.

Machine required : 256K, 2 X 2311, 2540, 1403
Program language : OS, Fortran IV and some parts Assembler.
Program material : Documentation in Swedish
Card deck

360D-13.1.703-STAF/DOS

AUTHOR : G. SAVARY
A.D.C. IBM FRANCE
94-96 RUE DE REAUMUR
75 - PARIS 2e (FRANCE)

ABSTRACT : STAF/DOS is a Program which selects data from cards, disk and/or tape files and processes these data to produce various types of statistical output in the form of Tabular Reports and Graphic Reports (Histograms, Scatter Diagrams, Curves, Maps). STAF/DOS is cross-industry oriented. It is geared primarly towards economic and commercial statistics. It can also be used to report on opinion polls and various other statistical applications.

Machine required : 360/30 and up, 64K memory, floating point feature one card reader, 1403 or 1443 printer, one 2311 (or 2314) disk in addition to DOS requirements. Maximum of 52K of main storage for the program itself.
Source language : F. Fortran (DOS), some routines are written in Assembler
System required : DOS Release 21
Program material : Documentation in English
Magnetic tape 7tr, 800 BPI, or
DTR 9tr, 800/1600 BPI, or
Disk 2311

360-15.0.701-A HEURISTIC PROGRAM FOR CORRUGATOR CUTTING STOCK PROBLEM

AUTHOR : G. AILLAUD
IBM FRANCE
SERVICE DEVELOPPEMENT SCIENTIFIQUE
96, RUE REAUMUR
75 - PARIS 2E (FRANCE)

ABSTRACT : 360 Version OS and DOS Z 24K for the program
Given in Fortran,
Output in French, input output in metric system
Problem how to "marry" several given orders (rectangles) in different roll widths, mimizing the total cost : trim, number of settings, average roll widths,... under several practical constraints.

Machine required :
Program material : Write-up in French language,
card decks

360D-15.0.702-IBM S/360 FORECASTING AND DECISION RULES PROGRAM

AUTHOR : A.P. MILNE
CITY COMMERCIAL
40 BASINGHALL STREET
LONDON EC2 (ENGLAND)

ABSTRACT : The IBM S/360 Forecasting and Decision Rules Program uses advanced adaptive forecasting techniques and probability theory to forecast sales in retail environments, based on at least two years' sales history. The program was designed for a retail inventory control system, and it contains a section on decision rules so that order-up-to-levels and safety stock can be provided, according to user-supplied levels of service. The program has also been used successfully for sales forecasting at departmental level for financial planning. Use of the program requires considerable care in providing usable input data.

Machine Required : It has been run extensively under DOS on a 128K System 360/40 and this is the minimum configuration, although a 64K version is being prepared.
Source Language : Fortran
Program material : Write-up in English
DTR 9tr, 800 or 1600 BPI

360D-15.2.701-LINEAR PROGRAMMING CODE

AUTHORS : E. MORLET, S.E. ADVISORY
R. VAN ELEGEM, S.E. ASSOCIATE
IBM BELGIUM, S.A.
67, RUE ROYALE
BRUXELLES (BELGIUM)

ABSTRACT : This Linear Programming Code is able to run on a 360/30 or on a greater model having the floating point feature and using the DOS programming support. The minimum required storage capacity is 32 K and allows the optimization of IP problems up to 230 rows (the number of columns is practically unlimited). With greater storage capacities, it allows to compute problems including up to 4.096 rows. This program resumes the following procedures of MPS. (O.S./360 mathematical programming system No EPL 360A-CO-14X).

Machine required : 360 model 30/32 K.
Program material : Write-up in French language
Card deck.

360D-15.2.702-FORTRAN TRANSPORTATION CODE - VERSION 2

AUTHOR : BASIL C. KAHAN
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IBM U.K. LTD
101 WIGMORE STREET
LONDON W1 (ENGLAND)

ABSTRACT : This new version of FORTRAN TRANSPORTATION CODE retains the optimising routines of the original program 360D-15.2.010 to solve the classical transportation problem, but provides several additional new capabilities. The new features include :
1. Resetting routines to allow the user to submit a previous checkpoint as initial basis for the current run with variations in availabilities, requirements, unit transportation costs and problem size,
2. Automatic selection of core-resident costs, when space permits,
3. Name checking to avoid processing an invalid checkpoint tape,
4. An option to print potentials associated with valid routes when optimisation completes,
5. A quasi-dynamic allocation of array space which simplifies the adjustment of dimensions.
To implement these improvements it has been necessary to make minor modification to the files. Appropriate changes have been made to the file writing program.

Program material : Write-up in English
DTR 7tr, 9tr (800 or 1600 BPI)

360D-15.4.701-PCS 360 FRENCH REPORT PROCESSOR

AUTHORS : R. LOISEAU - C. LEPOUREAU
IBM FRANCE
SCE DEVELOPT ET PROMOTION DES APPLICATIONS
94, RUE REAUMUR
75 - PARIS 2E (FRANCE)

ABSTRACT : The purpose of this program is to provide French-speaking IBM customers with a set of modifications with which the project control system 360 (360A-CP-06X, Version II Modification Level I) is able to produce French-written input data and output reports. The restrictions of the PCS 360 French Report Processor are those of PCS 360 V2 M1.
The program is written in Fortran IV and operates under DOS.

Machine required : IBM 360/32K - two diskpacks - card read - punch and printer.

Program material : Write-up in French language
Card deck or one 9 tr tape.

360D-15.4.702-PCS 360 EXCEPTION REPORT PROCESSOR

AUTHOR : C. LEPOUREAU
IBM FRANCE
94, RUE REAUMUR
75 - PARIS 2E (FRANCE)

ABSTRACT : The purpose of this program is to provide French-speaking IBM customers with a set of four new exception reports written in Franch. The program restrictions are those of PCS 360. It is written in Fortran IV under DOS.

Machine required : Same minimal configuration as for PCS 360.

Program material : Write-up in French
Card deck
Optional material available in card form

360D-15.5.701-MANAGEMENT GAME TOPIC 1

AUTHOR : IBM GERMANY
DP BASIC RESEARCH
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D-7032 - SINDELFINGEN (W. GERMANY)

ABSTRACT : The Management Game TOPIC 1 is meant to exercise primarily the processes of planning and decision making within a economic environment. Four firms compete with one another in the production and marketing of the same product. This product is sold on five, independent markets. Thereby, not only the firm's own marketing policy, but also the behaviour of its competitors as well as the general economic situation influence the incoming orders. Short, middle, and long-term loans constitute the means for financing such undertakings. Within one three-month period each firm has to come up with approximately 26 decisions. Detailed results of such decisions are printed in the respective firm reports. After altogether four periods the balance sheets as well as the profit and loss accounts are publicised for all four firms. Any type of report can be printed in either English or German. By means of appropriate text input cards, they can also be printed in languages other than English or German.

Source language : OS-Fortran IV

Machine required : There are two versions of the program on the distribution tape allowing either to use it as stand-alone or to integrate it into an existing OS version.
-Stand-alone-program - The program requires a 64K core model /360 including Scientific Instruction set, one disk drive 2311, one printer 1403/1443, and one card reader 2540/1442.
-Integration into OS - the program may work under PCP, MFT, or MVT, with disk drives 2311 or 2314. 60K or core and the Scientific Instruction are required.

Program material : Documentation in German
Magentic tape 7tr, 9tr, 800 BPI or 1600 BPI

360D-15.6.701-DCF - DISCOUNTED CASH FLOW

AUTHOR : R.R. WALLER
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LONDON EC2 (ENGLAND)

ABSTRACT : This program is written in Fortran and will run under any suitable Operating System. The program will calculate the rate of interest which will be obtained over the period of a project. This rate is then used to show the discounted cost of the expense and discounted value of the income. The totals of the discounted expense and income are equal at the end of the period when this rate of interest is applied. As an option, a rate of interest may be specified and in this case, will be used to evaluate the profit (or loss) over the period of the period of the project and to show the breakeven year. The program can be used to evaluate a number of projects or alternative systems approaches on the same project. Its true worth is in this comparison. In actual life the rate of interest will be affected by Tax, Allowances, Inflation, etc. These could be written into the program if desired.

Program material : Write-up in English
Card deck.

360D-16.0.701-CALCULATION OF THE OPTIMUM ALLOY-ADDITIVES FOR ALLOY STEEL MELTS

AUTHOR : DR PETER BAUMGARTEN
IBM DEUTSCHLAND GMBH
BAHNHOFSPLATS 5-7
463 - BOCHUM (GERMANY)

ABSTRACT : The actual values of melt arrived at by analysis and the required values, form the basis for the calculation of the additives that must be added to the melt. When employing a conventional method (slide rule) the final amount (in weight) must be estimated and for safety reasons one tends to increase rather than to reduce this amount. The program submitted guarantees an exact calculation of the final amount. If varying Mn-, Cr-, and Si-alloys are determined previously an optimum calculation of additives is given. The program allows the fixing of any standard additives (with regard to amount and composition) and allows the steelworker to determine the values to be arrived at for the requirements analysis, the melting loss of the alloys and the actual weight. If necessary, a thinning-down operation can be initiated, in which the scrap used as the thinning agent may be of any workable composition. Which elements are activated by the calculation of thinning scrap can be previously determined. The program is written in Basic-Fortran and requires a minimum of 32K storage capacity

Program material : Write-up in German
Card deck

360D-16.2.701-FRAMEWORKS A

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)

ABSTRACT : The program determines the bending moments, shear forces and axial forces for statically indeterminate orthogonal plane frames. A number of loading conditions for the same frame can be combined to calculate the extremal values of the internal forces. The structure is limited to any configuration of up to 120 horizontal or vertical members. Members are not necessarily to be prismatic nor it is necessary that they are continuous at both ends.
The program is written in Fortran and operates under DOS.

Machine required : 360 model 2030E 32K, 2311 disk storage drive, input card, output printer.

Program material : Write-up in German,
Card deck.

360D-16.2.702-CONTINUOUS BEAMS A

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)

ABSTRACT : The program computes the bending moments and shear forces for continuous beams under stationary load. Up to 22 loading conditions are considered and combined due to users specification, to calculate the extremal values of moments and sheares.
The structure is limited up to 10 spans. Only prismatic spans are considered.
The program is written in Fortran and operates under DOS.

Machine required : 360 model 2030E 32K, 2311 disk storage drive, input card, output printer.

Program material : Write-up in German,
Card deck.

360D-16.2.703-CONTINUOUS BEAMS B

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)

ABSTRACT : The program determines for a continuous beam the deformations, bending moments and shear forces under stationary load as well as influence lines for sections and internal forces specified by the user.
The program uses for computation the reduction method.
The structure is limited to any configuration of up to 10 supports. For structures with more than 10 supports the algorithem do not guarantee sufficient numerical accuracy.
The program is written in Fortran and operates under DOS.

Machine required : 360 model 2030E 32K, 2311 disk storage drive, input card, output printer.

Program material : Write-up in German,
Card deck.

360D-16.2.704-EVALUATION OF INFLUENCE LINES

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)

ABSTRACT : The program determines the maximum and minimum values of internal forces, resulting of load trains, specified by the user. Influence lines of the structure are supposed to be defined with their coordinates. The results calculated by the program CONTINUOUS BEAMS B 360D-16.2.703 are intended for use as input for this program.
Up to 9 different load trains acting at the same time are taken into account and the resulting actions combined due to users specification. Any sequence of concentrated and uniform loads is permitted.
The program is written in Fortran and operates under DOS.

Machine required : 360 model 2030E 32K, 2311 disk storage drive, input card, output printer.

Program material : Write-up in German,
Card deck.

360D-16.2.705-PLANE TRUSS

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)

ABSTRACT : The program calculates the member forces and joint deflections of determinate and indeterminate pinjointed plane trusses. The structure is defined by joint coordinates and crossections of the members and limited to any configuration of up to 40 joints.
The program is written in Fortran and operates under DOS.

Machine required : 360 model 2030E 32K, 2311 disk storage drive, input card, output printer.

Program material : Write-up in German,
Card deck.

360D-16.2.706-REINFORCED CONCRETE SLABS IN APARTMENTHOUSES DUE TO DIN 1045

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)

ABSTRACT : The program determines moments and reinforcement for concrete slabs. Working with simplified formulas and the standards of DIN 1045, the program is intended for use in building construction only.
Only uniform loads are considered.
The program is written in Fortran and operates under DOS.

Machine required : 360 model 2030E 32K, 2311 disk storage drive, input card, output printer.

Program material : Write-up in German,
Card deck.

360D-16.2.707-CROSS SECTION VALUES 1

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)

ABSTRACT : The program calculates cross sectional areas, statical moments, centrifugal moments, moments of inertia and centers of gravity for cross sections of reinforced concrete beams. The cross section is described by the coordinates of its contour points. Reinforcement areas are taken into account multiplied with a factor N. Furtheron the program calculates the stresses resulting from predifined moments and axial forces.
The program is written in Fortran and operates under DOS.

Machine required : 360 model 2030E 32K, 2311 disk storage drive, input card, output printer.

Program material : Write-up in German,
Card deck.

360D-16.2.708-SHEAR STRESS IN THIN SKINNED CROSS SECTIONS

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)

ABSTRACT : The program determines the shear stresses in thin-walled prismatic beams under bending strain and torsion strain. Closed and open cross sections are allowed. The program computes the cross section values, area, statical moments, center of gravity, moments of inertia, centrifugal moments, etc... Shear stresses are determines using the formulas by BREDT and DE SAINT VENANT. The program is written in Fortran and operates under DOS.

Machine required : 360 model 2030E 32K, 2311 disk storage drive, input card, output printer.

Program material : Write-up in German,
Card deck.

360D-16.2.709-GENERAL ANALYSIS OF HYPERSTATIC STRUCTURES BY THE FORCE METHOD

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)

ABSTRACT : The program performs the analysis of statically indeterminate structures composed of prismatic slender members for arbitrary chosen loads. The structure may extend in two or three dimensions, and at any joint the members may be pinned or rigidly connected. Up to 10 loading cases are combined by the program to compute the extremal values of internal forces.
The program is written in Fortran and operates under DOS.

Machine required : 360 model 2030E 32K, 2311 disk storage drive, input card, output printer.

Program material : Write-up in German,
Card deck.

360D-16.2.710-PILE WORKS 1
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)
ABSTRACT : The program determines the axial pile load for each pile in a pile foundation. Piles are considered to be pinned at the foundation plate and at soil. The foundation plate is assumed to be rigid.
The program is written in Fortran and operates under DOS.
Machine required : 360 model 2030E 32K, 2311 disk storage drive, input card, output printer.
Program material : Write-up in German,
Card deck.

360D-16.2.711-PILE WORKS II
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)
ABSTRACT : The program determines the pile reactions for each pile in a pile foundation. At the soil and the foundation plate piles may be pinned or rigidly connected. Only prismatic piles are considered. The foundation plate is assumed to be rigid.
The program is written in Fortran and operates under DOS.
Machine required : 360 model 2030E 32K, 2311 disk storage drive, input card, output printer.
Program material : Write-up in German,
Card deck.

360D-16.2.712-DATA HANDLING PROGRAMS
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)
ABSTRACT : The programs making up the program-system geodesy are using a joint point data table (PDT) stored on an external disk storage. This data-handling programs are necessary prerequisite for use of any other program in the program-system, and contain the following procedures. Cleaning of area required for PDT. Storing changing and clearing of point data. Printing and punching of point data. Averaging of multiple-calculated points. Furtheron this program deck includes a number of subroutines required by certain programs of the program-system.
The program is written in Fortran and operates under DOS.
Machine required : 360 model 2030E 2 X 2311 disk storage drive, input card, output card and printer.
Program material : Write-up in German,
Card deck.

360D-16.2.713-MINOR POINT CALCULATION ORTHOGONAL
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)
ABSTRACT : A minor point is a point calculated from data generated by the use of previously known points. This program determines the coordinates of new points (minor points). Required input data are the offset distances with reference to predefined base lines. The determined coordinates of new points are printed or stored on disk storage in a point data table (PDT).
To operate this program the data-handling-programs (360D-16.2.712) are required. The program is written in Fortran and operates under DOS.
Machine required : 360 model 2030E, 2 X 2311 disk storage drive, input card, output card and printer.
Program material : Write-up in German,
Card deck.

360D-16.2.714-MINOR POINT CALCULATION POLAR
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)
ABSTRACT : A minor point is a point calculated from data generated by the use of previously known points. This program determines the coordinates of new points (minor points). Required input data are the measured angles and distances with respect to a predefined origin and reference point. The determined coordinates are printed or stored on disk storage in a point data table (PDT).
To operate this program the data-handling-programs (360D-16.2.712) are required. The program is written in Fortran and operates under DOS.
Machine required : 360 model 2030E, 2 X 2311 disk storage drive, input card, output card and printer.
Program material : Write-up in German,
Card deck.

360D-16.2.715-SETTING-OUT DATA
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)
ABSTRACT : The program calculates any required setting-out data from previously computed information. Necessary information for this program consists of point coordinates, stored on disk storage in a point data table (PDT), and base lines defined by coordinates of origin and end point. The output listing is in a form which is suitable for field use.
To operate this program the data-handling-programs (360D-16.2.712) are required. The program is written in Fortran and operates under DOS.
Machine required : 360 model 2030E, 2 X 2311 disk storage drive, input card, output card and printer.
Program material : Write-up in German,
Card deck.

360D-16.2.716-SIMILARITY-TRANSFORMATION (HELMERT)

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)

ABSTRACT : The program performs the transformation of point coordinates from one coordinate system into another. At least for two points the coordinates has to be defined in both systems. In case that more than two points are defined in both coordinate systems the transformation constants are calculated using the least square method for adjustment. Point coordinates in the new system are supposed to be stored in a point data table (PDT) on disk storage
To operate this program the data-handling-programs (360D-16.2.712) are required. The program is written in Fortran and operates under DOS.

Machine required : 360 model 2030E, 2 X 2311 disk storage drive, input card, output card and printer.

Program material : Write-up in German,
Card deck.

360D-16.2.717-CALCULATION OF LENGTHS OF STRAIGHT LINES AND ARCS CHECKING THE CALCULATED VALUES

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)

ABSTRACT : The program calculates the distance between known points. Point coordinates are supposed to be stored in a point data table (PDT) on disk storage. Distances are calculated either on a straight line or, given a radius, along the arc of a circle.
To operate this program the data-handling-programs (360D-16.2.712) are required. The program is written in Fortran and operates under DOS.

Machine required : 360 model 2030E, 2 X 2311 disk storage drive, input card, output card and printer.

Program material : Write-up in German,
Card deck.

360D-16.2.718-CALCULATION OF INTERSECTION

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)

ABSTRACT : The program determines the coordinates of intersection between straight lines and circles, including the following functions : intersection straight line-straight line, intersection straight line-circle, intersection circle-circle. Parallels as well as perpendiculars to a defined straight line can be used for computation.
To operate this program the data-handling-programs (360D-16.2.712) are required. The program is written in Fortran and operates under DOS.

Machine required : 360 model 2030E, 2 X 2311 disk storage drive, input card, output card and printer.

Program material : Write-up in German,
Card deck.

360D-16.2.719-CALCULATION OF TANGENTS

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)

ABSTRACT : The program determines the tangent on one circle as well as the joint tangent of two circles. The coordinates of the tangent points on the circle are the result of this calculation.
To operate this program the data-handling-programs (360D-16.2.712) are required. The program is written in Fortran and operates under DOS.

Machine required : 360 model 2030E, 2 X 2311 disk storage drive, input card, output card and printer.

Program material : Write-up in German,
Card deck.

360D-16.2.720-CALCULATION OF TRAVERSES AND NETS OF TRAVERSES

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)

ABSTRACT : The program computes the coordinates of traverse points from the coordinates of known points and measurement data of traverse or of a whole net of traverses. Distances can be measured indirectly, coordinates and azimuths for origin and final point of traverses can be given in every practical combination.
To operate this program the data-handling-programs (360D-16.2.712) are required. The program is written in Fortran and operates under DOS.

Machine required : 360 model 2030E, 2 X 2311 disk storage drive, input card, output card and printer.

Program material : Write-up in German,
Card deck.

360D-16.2.721-AREA CALCULATION

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)

ABSTRACT : The program calculates the size of areas defined by the coordinates of contour points. The contour line between two points can be defined by straight lines or circular curves. Point coordinates are supposed to be stored in a point data table (PDT) on a disk storage.
To operate this program the data-handling-programs (360D-16.2.712) are required. The program is written in Fortran and operates under DOS.

Machine required : 360 model 2030E, 2 X 2311 disk storage drive, input card, output card and printer.

Program material : Write-up in German,
Card deck.

360D-16.2.722-EVALUATION OF ELECTRONICALLY MEASURED DISTANCES
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)
ABSTRACT : The program converts distances measured electronically to the mean sea level and calculates the equivalent distances with respect to a desired geodetic reference ellipsoid. The result can be used as input data for the program GEODETIC NET ADJUSTMENT (360-16.2.723).
To operate this program the data-handling-programs (360D-16.2.712) are required. The program is written in Fortran and operates under DOS.
Machine required : 360 model 2030E, 2 X 2311 disk storage drive, input card, output card and printer.
Program material : Write-up in German,
Card deck.

360D-16.2.723-GEODETIC NET ADJUSTMENT
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)
ABSTRACT : The program determines coordinates of new points from the measurements for a trigonometrical net. Input data are the coordinates of known points, stored in a point data table (PDT) on disk storage, and the direction or distance measurements for a trigonometrical single or multi-point determination. Furtheron the program converts direction and distance measurements into GAUSS-KRUEGER (or UTM) projection, using the ellipsoid of BESSEL, HAYFORD (international) or KRASSOWSKY.
To operate this program the data-handling-programs (360D-16.2.712) are required. The program is written in Fortran and operates under DOS.
Machine required : 360 model 2030E, 2 X 2311 disk storage drive, input card, output card and printer.
Program material : Write-up in German,
Card deck.

360D-16.2.724-SAMBLE LOAD DATA FOR PROGRAM SYSTEM GEODESY
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
STUTTGART (WEST GERMANY)
ABSTRACT : The card deck contains sample load data for the program 360D-16.2.712 thru 360D-16.2.723. Solution of sample problem requires sequential execution with respect to given sequence of data cards.
Machine required :
Program material : Write-up in German,
Card deck.

360D-16.2.725-PROGRAM SYSTEM GEODESY AREA SUBDIVISION
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
STUTTGART, SCHWABSTR. 43
WEST GERMANY
ABSTRACT : This program divides a computed total area of parcels defined by any boundary line into a number of lots parallel to one of the boundary lines for land consolidation or development of building lots.
To operate this program the Data-Handling-programs (360D-16.2.712) are required.
The program is written in FORTRAN and operates under DOS.
Machine required : 360 Mod. 2030E 2 x 2311 Disk Storage Drive, input card, output card and printer
Program material : Write-up in German
Card deck.

360D-16.2.726-PROGRAM SYSTEM GEODESY GROUND CONTROL POINT COMPUTATION
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
STUTTGART, SCHWABSTR. 43
WEST GERMANY
ABSTRACT : This program computes the horizontal coordinates and the elevation of ground control points for the photogrammetric evaluation of a model.
To operate this program the Data-Handling-programs (360D-16.2.712) are required.
The program is written in FORTRAN and operates under DOS.
Machine required : 360 Mod. 2030E 2 x 2311 Disk Storage Drive. input card, output card and printer
Program material : Write-up in German
Card deck.

360D-16.2.727-PROGRAM SYSTEM GEODESY ELEVATION NETWORK ADJUSTMENT
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
STUTTGART, SCHWABSTR. 43
WEST GERMANY
ABSTRACT : This program computes an elevation network above sea level from fixed points of a given elevation and from measured elevation angles or elevation differences. Adjustments are performed according to the method of last squares.
To operate this program the Data-Handling-programs (360D-16.2.712) are required.
The program is written in FORTRAN and operates under DOS.
Machine required : 360 Mod. 2030E 2 x 2311 Disk Storage Drive, input card, output card and printer.
Program material : Write-up in German
Card deck.

360D-16.2.728-PROGRAM SYSTEM GEODESY TRANSFORMATION I

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
STUTTGART, SCHWABSTR. 43
WEST GERMANY

ABSTRACT : This program transforms points whose coordinates are available in a Soldner system into the appropriate Gauss/Krüger system and vice versa.
To operate this program the Data-Handling-programs (360D-16.2.712) are required.
The program is written in FORTRAN and operates under DOS.
Machine required : 360 Mod. 2030E 2 x 2311 Disk Storage Drive, input card, output card and printer.
Program material : Write-up in German
Card deck.

360D-16.2.729-PROGRAM SYSTEM GEODESY TRANSFORMATION II

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
STUTTGART, SCHWABSTR. 43
WEST GERMANY

ABSTRACT : This program performs computation of Gauss/Krüger coordinates from geographical coordinates and vice versa, transformation of Gauss/Krüger coordinates into an adjacent system, computation of UTM coordinates from geographical coordinates and vice versa, and transformation of UTM coordinates into an adjacent UTM system.
This program is written in FORTRAN IV and operates under DOS.
Machine required : 360D Mod. 2030E 2 x 2311 Disk Storage Drive, input card, output card and printer.
Program material : Write-up in German
Card deck.

360D-16.2.730-SAMPLE PROBLEM DATA FOR PROGRAM SYSTEM GEODESY (2ND STAGE)

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
STUTTGART, SCHWABSTR. 43
WEST GERMANY

ABSTRACT : The card deck contains sample program data for the program 360D-16.2.725 through 360D-16.2.729. Solution of sample problem requires sequential execution with respect to the given sequence of data cards.
Machine required :
Program material : Card deck.

360D-16.2.731-PROGRAM SYSTEM GEODESY GEODETIC NETWORK ADJUSTMENT (LARGE VERSION)

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
STUTTGART, SCHWABSTR. 43
WEST GERMANY

ABSTRACT : The program determines coordinates of new points from the measurements for a trigonometrical net. Input data are the coordinates of known points, and the direction or distance measurements for a trigonometrical single or multi point determination. Furtheron the program converts direction and distance measurements into GAUSS-KRUGER or UTM projection, using the ellipsoid of Bessel, Hayford (international) or Krassowsky.
The program is written in FORTRAN and operates under DOS.
Machine required : 360D Mod. 2030F 2 x 2311 Disk Storage Drive, Input card, output card and printer.
Program material : Write-up in German
Card deck
Sample Problem Data (Solution of sample problem requires sequential execution with respect to the given sequence of data cards).

360D-16.2.732-PROGRAM SYSTEM GEODESY PROCESSING OF DATA DETERMINED BY MEANS OF THE ZEISS PSK STEREO COMPARATOR

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
STUTTGART, SCHWABSTR. 43
WEST GERMANY

ABSTRACT : The program serves for analytical formation of models from aerial photographs.
It is designed to handle data from the Precision Stereocomparator by Zeiss, Oberkochen, or similar equipment. Input values are two-dimensional instrument coordinates of the two component photos of a model.
The program consists of four stages :
Recovery of interior orientation, relative orientation, absolute orientation and transformation of image points.
The program is written in FORTRAN and operates under DOS.
Machine required : 360D Mod. 2030E 2 x 2311 Disk Storage Drive, Input card, output card and printer.
Program material : Write-up in German
Card deck
Sample Problem Data (Solution of sample problem requires sequential execution with respect to the given sequence of data cards).

360D-16.2.733-GENERAL SUBROUTINES
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
D - 7000 STUTTGART 1 (WEST GERMANY)
ABSTRACT : These subroutines are used in following programs : Horizontal Alignment. Horizontal Alignment of Interchanges. Setting-Out Data. Two Centerlines. Terrestrial Terrain Profile Survey. Photogrammetric Constants. Photogrammetric Evaluation. Vertical Alignment. Gradeline Plotting Points. Field of Sight. Lane Widening in Curves. Transverse Grades and Rampings. The Program is written in FORTRAN IV.
Machine required : IBM/360 Mod. 2030E, 2 Disk Storage Drive IBM 2311,Card input, card output, printer output.
Program required : The program operates under IBM/360 Disk Operating System (DOS)
Program material : Write-up in German
Card deck.

360D-16.2.734-HORIZONTAL ALIGNMENT
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1 (WEST GERMANY)
ABSTRACT : This program computes the location of the centerline in the horizontal plane determining the required transition curves between straight and circular elements.
The program is written in FORTRAN IV.
Machine required : IBM/360 Mod. 2030E, 2 Disk Storage Drive IBM 2311, Card Input, Card Output, Printer Output.
Program required : The program operates under IBM/360 Disk Operating System (DOS).
The "Sample Problem Data" (360D-16.2.748) contains the Linkage-Editor-Job for this program. To operate this program the General Subroutines (360D-16.2.733) are required.
Program material : Write-up in German
Card deck.

360D-16.2.735-HORIZONTAL ALIGNMENT OF INTERCHANGES
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1 (WEST GERMANY)
ABSTRACT : This program computes the interchanges (tangents or loops) and inserts them between two previously designed centerlines. The program is written in FORTRAN IV.
Machine required : IBM/360 Mod. 2030E, 2 Disk Storage Drive IBM 2311, Card Input, Card Output, Printer Output.
Program required : The program operates under IBM/360 Disk Operating System (DOS).
The "Sample Problem Data" (360D-16.2.748) contains the Linkage-Editor-Job for this program. To operate this program the General Subroutine (360D-16.2.733) are required.
Program material : Write-up in German
Card deck.

360D-16.2.736-SETTING-OUT DATA
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1
WEST GERMANY
ABSTRACT : This program computes any desired points on or besides the centerlines determined by the programs HORIZONTAL ALIGNMENT and HORIZONTAL ALIGNMENT OF INTERCHANGES. It also provides all data required for setting out according to the orthogonal/polar technique, the chord-angle technique or the rise-of-arc technique.
The program is written in FORTRAN IV.
Machine required : IBM/360 Mod. 2030E, 2 Disk Storage Drive IBM 2311, Card Input, Card Output, Printer Output.
Program required : The program operates under IBM/360 Disk Operating System (DOS).
The "Sample Problem Data" (360D-16.2.748) contains the Linkage-Editor-Job for this program.
To operate this program the General Subroutines (360D-16.2.733) are required.
Program material : Write-up in German
Card deck.

360D-16.2.737-TWO CENTERLINES
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1
WEST GERMANY
ABSTRACT : This program determines the perpendicular distance between two centerlines, the location of the nose of a separator island, the corresponding cross-sections and the transformations of terrain profile data from one centerline to another.
The program is written in FORTRAN IV.
Machine required : IBM/360 Mod.2030E, 2 Disk Storage Drive IBM 2311, Card Input, Card Output, Printer Output.
Program required : The program operates under IBM/360 Disk Operating System (DOS).
The "Sample Problem Data" (360D-16.2.748) contains the Linkage-Editor-Job for this program.
To operate this program the General Subroutines (360D-16.2.733) are required.
Program material : Write-up in German
Card deck.

360D-16.2.738-TERRESTRIAL TERRAIN PROFILE SURVEY

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1
WEST GERMANY

ABSTRACT : This program calculates the terrain elevations of cross sections surveyed by tacheometry, geometrical levelling, or gradual measurement.
The program is written in FORTRAN IV.

Machine required : IBM/360 Mod.2030E, 2 Disk Storage Drive IBM 2311, Card input, Card output, Printer output.

Program required : The program operates under IBM/360 Disk Operating System (DOS).
The "Sample Problem Data" (360D-16.2.748) contains the Linkage-Editor-Job for this program.
To operate this program the General Subroutines (360D-16.2.733) are required.

Program material : Write-up in German
Card deck.

360D-16.2.739-PHOTOGRAMMETRIC CONSTANTS

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1
WEST GERMANY

ABSTRACT : This program determines the mathematical relationship between a photogrammetric stereo model system and the associated geodetic coordinate system by means of control points.
The program is written in FORTRAN IV.

Machine required : IBM/360 Mod.2030E, 2 Disk Storage Drive IBM 2311, card input, card output, printer output.

Program required : The program operates under IBM/360 Disk Operating System (DOS).
The "Sample Problem Data" (360D-16.2.748) contains the Linkage-Editor-Job for this program.
To operate this program the General Subroutines (360D-16.2.733) are required.

Program material : Write-up in German
Card deck.

360D-16.2.740-PHOTOGRAMMETRIC EVALUATION

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1
WEST GERMANY

ABSTRACT : This program transforms coordinates of a photo-grammetric stereo model into coordinates of a terrestrial coordinate system. Individual points or sequences of points describing terrain profiles can be transformed.
The program is written in FORTRAN IV.

Machine required : IBM/360 Mod. 2030E, 2 Disk Storage Drive IBM 2311, card input, card output, printer output.

Program required : The program operates under IBM/360 Disk Operating System (DOS).
The "Sample Problem Data" (360D-16.2.748) contains the Linkage-Editor-Job for this program.
To operate this program the General Subroutines (360D-16.2.733) are required.

Program material : Write-up in German
Card deck.

360D-16.2.741-VERTICAL ALIGNMENT

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1
WEST GERMANY

ABSTRACT : This program computes the location of the centerline in the vertical plane referred to as "the gradeline". It is defined by the points of intersection of the tangents and by the radii of summits and sags.
The program is written in FORTRAN IV.

Machine required : IBM/360 Mod.2030E, 2 Disk Storage Drive IBM 2311, card input, card output, printer output.

Program required : The program operates under IBM/360 Disk Operating System (DOS).
The "Sample Problem Data" (360D-16.2.748) contains the Linkage-Editor-Job for this program.
To operate this program the General Subroutines (360D-16.2.733) are required.

Program material : Write-up in German
Card deck.

360D-16.2.742-GRADELINE PLOTTING POINTS
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1
WEST GERMANY
ABSTRACT : This program calculates and prints the coordinates of a close sequence of points on the gradeline computed by the VERTICAL ALIGNMENT program. The output data can be used to prepare graphic drafts of the gradeline at the design stage.
The program is written in FORTRAN IV.
Machine required : IBM/360 Mod.2030E, 2 Disk Storage Drive IBM 2311, card input, card output, printer output.
Program required : The program operates under IBM/360 Disk Operating System (DOS).
The "Sample Problem Data" (360D-16.2.748) contains the Linkage-Editor-Job for this program.
To operate this program the General Subroutines (360D-16.2.733) are required.
Program material : Write-up in German
Card deck.

360D-16.2.743-ELEVATION OF HIGHWAY SURFACE
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
D-7000 SUTTTGART 1
WEST GERMANY
ABSTRACT : This program computes the absolute elevations, width and transverse grades of the individual highway components for a number of user-specified cross-sections along the center-line.
The program is written in FORTRAN IV.
Machine required : IBM/360 Mod.2030E, 2 Disk Storage Drive IBM 2311, card input, card output, printer output.
Program required : The program operates under IBM/360 Disk Operating System (DOS).
The "Sample Problem Data" (360D-16.2.748) contains the Linkage-Editor-Job for this program.
Program material : Write-up in German
Card deck.

360D-16.2.744-CUT AND FILL
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1
WEST GERMANY
ABSTRACT : This program determines the subgrade and slopes, and the volume of earth and rocks between the specified cross sections of a highway and computes the balances of earth, rock and topsoil.
The program is written in FORTRAN IV.
Machine required : IBM/360 Mod.2030E, 2 Disk Storage Drive IBM 2311, card input, card output, printer output.
Program required : The program operates under IBM/360 Disk Operating System (DOS).
The "Sample Problem Data" (360D-16.2.748) contains the Linkage-Editor-Job for this program.
Program material : Write-up in German
Card deck.

360D-15.2.745-FIELD OF SIGHT
AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1
WEST GERMANY
ABSTRACT : This program computes the limits of the lateral field of sight for each cross section over the entire highway segment based on a specific constant field of sight.
The program is written in FORTRAN IV.
Machine required : IBM/360 Mod.2030E, 2 Disk Storage Drive IBM 2311, card input, card output, printer output.
Program required : The program operates under IBM/360 Disk Operating System (DOS).
The "Sample Problem Data" (360D-16.2.748) contains the Linkage-Editor-Job for this program.
To operate this program the General Subroutines (360D-16.2.733) are required.
Program material : Write-up in German
Card deck.

360D-16.2.746-LANE WIDENING IN CURVES

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1
WEST GERMANY

ABSTRACT : This program computes the lane widening in curves of centerlines determined by the programs HORIZONTAL ALIGNMENT and HORIZONTAL ALIGNMENT of INTERCHANGES.
The program is written in FORTRAN IV.

Machine required : IBM/360 Mod.2030E, 2 Disk Storage Drive IBM 2311, card input, card output, printer output.

Program required : The program operates under IBM/360 Disk Operating System (DOS).
The "Sample Problem Data" (360D-16.2.748) contains the Linkage-Editor-Job for this program.
To operate this program the General Subroutines (360D-16.2.733) are required.

Program material : Write-up in German
Card deck.

360D-16.2.747-TRANSVERSE GRADES AND RAMPINGS

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1
WEST GERMANY

ABSTRACT : This program computes the transverse grades and rampings for centerlines determined by the program HORIZONTAL ALIGNMENT and HORIZONTAL ALIGNMENT OF INTERCHANGES.
The program is written in FORTRAN IV.

Machine required : IBM/360 Mod.2030E, 2 Disk Storage Drive IBM 2311, card input, card output, printer output.

Program required : The program operates under IBM/360 Disk Operating System (DOS).
The "Sample Problem Data" (360D-16.2.748) contains the Linkage-Editor-Job for this program.
To operate this program the General Subroutines (360D-16.2.733) are required.

Program material : Write-up in German
Card deck.

360D-16.2.748-SAMPLE PROBLEM DATA FOR PROGRAM SYSTEM HIGHWAY DESIGN

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1
WEST GERMANY

ABSTRACT : This card deck contains the Sample Program Data, the Linkage-Editor-Decks and the Clear-Disk-Jobs for the programs 360D-16.2.734 through 360D-16.2.747.
The program is written in FORTRAN IV

Machine required : IBM/360 Mod.2030E, 2 Disk Storage Drive IBM 2311, Card input, card output, printer output.

Program required : The program operates under IBM/360 Disk Operating System (DOS).

Program material : Write-up in German
Card deck.

360D-16.2.749-CONTINUOUS BEAM OF POST-TENSIONED CONCRETE WITH SAMPLE PROBLEM DATA

AUTHOR : DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
STUTTGART, SCHWABSTR. 43
WEST GERMANY

ABSTRACT : The program analyzes a continous beam of post-tensioned concrete according to the German Industry Standards DIN 4227. For specified sections and for several loading conditions, the program determines the stresses, the reinforcement required for cleavage strength and the safety against failure.
The program is written in FORTRAN and operates under DOS.

Machine required : 360 Mod. 2030F (64K), two 2311 Disk Storage Drives Input card, output printer.

Program material : Write-up in German
Card deck.

360D-16.2.750-BILLS OF QUANTITIES SUITE VERSION 2

AUTHOR : I. THOMPSON
IBM U.K. LTD
CALTHORPE HOUSE, HAGLEY ROAD
BIRMINGHAM 16 (ENGLAND)

ABSTRACT : The suite produces Bills of Quantity using libraries of descriptions held as ISFMS files and accessed by a 5 level coding system; The results of measurement of the job drawings ('taking off') are held in a disk file which can be sorted and used to produce Bills (priced if required) in many formats (i.e. elemental, operational or activity Bills) thus enabling the basic job information to be presented economically in the most suitable form for any purpose. A wide range of options and facilities is provided so that, although primarily designed as part of a management system for the construction and civil engineering industries, the suite is useful in any application where a priced list of components is required and particularly where several alternative presentations of the data are needed.

Machine required : Written in COBOL for 360/30 with 32K bytes, 2 X 2311, 1403, 2540 and runs under DOS. The distribution tape restores a working system to disk.

Program material : Documentation in English
Tape 9tr, 800 or 1600 BPI

360D-16.2.751-CORRECTIONS FOR 360D-16.2.733 TO 748

AUTHOR : D.N. GRZIMEK
DP-TECHNICAL APPLICATION DEPARTMENT
IBM GERMANY
SCHWABSTRASSE 43
D - 7000 STUTTGART 1 (GERMANY)

ABSTRACT : Corrections which are needed in the programs 360D-16.2.733 to 748 are united in the above-mentioned program number. The card-deck is composed of single FORTRAN-cards which have to be sorted in, suitable to their identification and sequencing. The write-up consists of a listing-up of the correction cards and possibly of some corrected pages of the program-description.

Program material : Documentation in German
Card deck.

360D-16.2.752-CEP-GEOPS - GEODETIC PROGRAM SYSTEM

AUTHOR : WALTER ECKEL
DP-ADC
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1 (GERMANY)

ABSTRACT : The geodetic program system (GEOPS) consists of six administrative and sixteen computation programs for the IBM System/360 and fifteen computation programs for the IBM 1130. Depending on the problem area, the programs can be divided into three groups as follows : 1. Administrative programs for the logging of input data, for the definition of input-output conditions, and other functions. 2. Computation programs for small area (cadastral and engineering) surveying, i.e. lower computations 3. Computation programs for large area (country) surveying, i.e. higher geodetic computations. The system is associated with a point data table stored externally on disk. The point data table is used for source fixed points or computed new points.
The program is written in FORTRAN IV.

Machine required : IBM/360 Mod.2030E, 2 Disk Storage Drive IBM 2311, Card Input, Card output, Printer Output.

Program material : Basic :
Write-up in English
Card deck or
2315 Diskcartridge
Optional :
DTR 7tr or 9tr, 800 or 1600 BPI

360D-16.2.753-DIGITAL TERRAIN EVALUATION

AUTHOR : DIETHELM BOPP
DP-ADC
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1 (GERMANY)

ABSTRACT : Terrain points randomly spread in an area of interest for a project of traffic design are evaluated. The program computes terrain profile data for profile lines perpendicular to a centerline. This terrain profile data is used for subsequent cross section determination and earth volume calculation by means of the cut-and-fill program.
The program is written in FORTRAN IV.

Machine required : IBM/360 Mod.2030 F, 2 disk storage drives IBM 2311, card input, card output, printer output.

Program material : Documentation in German
Card deck.

360D-16.2.754-RANGE OF SIGHT

AUTHOR : DIETHELM BOPP
DP-ADC
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1 (GERMANY)

ABSTRACT : This program enables to calculate the range of sight for a road in the state of design. The program analyzed whether there is any sight restriction caused by summits, slopes, retaining walls, or by terrain and determines the real range of sight for any position of a car-driver.
The program is written in FORTRAN IV.

Machine required : IBM /360 Mod.2030F, 2 disk storage drives IBM 2311, card input, card output, printer output.

Program material : Documentation in German
Card deck

360D-16.2.755-CEP-STRAPP - STRUCTURAL ANALYSIS PROGRAM PACKAGE

AUTHOR : WALTER ECKEL
DP-ADC
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1 (GERMANY)

ABSTRACT : The Structural Analysis Program Package (STRAPP) comprises 16 programs that can be used to solve structural engineering problems. The programs can be divided into three groups :
1. Programs used to compute the internal forces of specific structures (such as frames, continous beams, and pile groups)
2. Programs used to compute the properties of cross sections, especially of reinforced-concrete and of steel members.
3. Programs used for both to compute the internal forces and to design the members of specific structures.
The program is written in FORTRAN IV.

Machine required : IBM/360 ModK2030E, 2 Disk Storage Drive IBM 2311, Card Input, Card Output, Printer.

Program material : Write-up in English
Card deck or
Diskcartridge 2315

360D-16.2.756-CEP-HIDES - HIGHWAY DESIGN SYSTEM

AUTHOR : WALTER ECKEL
DP-ADC
IBM GERMANY
SCHWABSTRASSE 43
D-7000 STUTTGART 1 (GERMANY)

ABSTRACT : The Highway Design System (HIDES) consists of 12 programs for the solution of all numerical problems occurring in highway design. The activities covered by these programs are :
1. Horizontal alignment of centerlines and interchanges.
2. Vertical alignment.
3. Computation of setting-out data.
4. Evaluation of terrestrial or photogrammetric terrain profile surveys.
5. Computation of highway-surface elevations, and
6. Computation of cross-section areas and cut-and-fill.
The results produced by individual programs are used as input to other programs succeeding them in the course of the design work. The programs have direct access to common data areas on disk. The program is written in FORTRAN IV.

Machine required : IBM/360 Mod. 2030E, 2 disk storage drive IBM 2311, card input, card output, printer output.

Program material : Write-up in English
Card deck or
Diskcartridge 2315

360D-16.3-701-TYPISATION OF TUBULAR APPARATUS

AUTHOR : H. WENNING
DP VTB BASIC & PROCESS INDUSTRY
IBM GERMANY
GYMNASIUMSTR. 11
STUTTGART (W. GERMANY)

ABSTRACT : The program calculates the number of tubes and the exchange surface for the different tube passes for a given diameter. The program operates for the following apparatus : floating head, U-tube, pull-through, apparatus with a fixed tubesheet (also with compensation). The possible tube passes are : 1, 2, 4, 6, 8 and the tube pitches are 45°, 60°, 90°.
The program is written in BASIC FORTRAN IV and operates under IBM/360 DISK OPERATING SYSTEM (DOS)

Machine required : /360 Mod. 2030 64K Bytes.
No additional Disk Card Read Punch Printer.

Program material : Write-up in German
Card deck

360D-16.3.702-OPTIMAL DESIGN OF HEAT EXCHANGERS

AUTHOR : H. WENNING
DP VTB BASIC AND PROCESS INDUSTRY
IBM GERMANY
GYMNASIUMSTR. 11
STUTTGART (W. GERMANY)

ABSTRACT : The program calculates the optimal design of baffled tubular heat exchangers :
1. By changing technical variables the most favourable exchange surface can be found in several iterative steps by optimizing the pressure drop or velocity.
2. Minimization of the total costs (apparatus and running costs).
3. Recalculation of heat exchangers and
4. Calculation of fullcondensation (only shell side) are possible.
The program is written in BASIC FORTRAN IV and operates under IBM/360 OPERATING SYSTEM (OS).

Machine required : /360 Mod. 2040, 256K Bytes, REGION = 130K for the program, additional 1,5 Mill. Bytes on direct access device, Card reader, Printer.

Program material : Write-up in German
DTR 9tr, 800 or 1600 BPI

360D-16.3.703-OPTIMAL DESIGN OF HEAT EXCHANGERS

AUTHOR : H. WENNING
DP VTB BASIC AND PROCESS INDUSTRY
IBM GERMANY
GYMNASIUMSTR. 11
STUTTGART (W. GERMANY)

ABSTRACT : The program calculates the optimal design of baffled tubular heat exchangers :
1. Through change of technical variables the most favourable exchange surface can be found in several iterative steps by optimizing the pressure drop or velocity.
2. Minimization of the total costs (apparatus and running costs).
3. Recalculation of heat exchangers.
4. Calculation of full condensation (only shell side) are possible.
The program is written in BASIC FORTRAN IV and operates under IBM/360 DISK OPERATING SYSTEM (DOS)

Machine required : /360 Mod. 2030 64K Bytes, 3 X 2311 Disk, Card Reader, Printer.

Program material : Write-up in German
Card deck.

360D-16.3.705-COMPUTER CALCULATIONS FOR MULTICOMPONENT VAPOR-LIQUID EQUILIBRIA

AUTHOR : EDITH STEINLE
IBM GERMANY
SCHWABSTR. 43
7000 STUTTGART 1 (GERMANY)

ABSTRACT : Based on a generalized MARGULES-equation and by use of the NEWTON-method the vapor-liquid equilibria for real multicomponent systems can be computed. The program, written as a subroutine, can be used to calculate :
a) vapor composition and bubble temperature at a given liquid composition and a given total pressure.
b) vapor composition and total pressure at a given liquid composition and a given bubble temperature.
c) liquid composition and bubble temperature at a given vapor composition and a given total pressure.
d) liquid composition and total pressure at a given vapor composition and a given bubble temperature.
Program language : FORTRAN IV (E-level-subset).
The program is free of input/output statements.
Minimum core requirements : 8K.
Machine required : System 1130 Model 2B, 1442 Card Read Punch 1132 Printer or
System 360/25, Model D00, 2821, 2540 Card Read Punch, 1403 Printer.
Program material : Documentation in German
Card deck.

360D-16.3.706-COMPUTATION OF THE COEFFICIENTS FOR THE EXTENDED BWR EQUATION OF STATE FROM FEW P-V-T DATA

AUTHOR : DR. T.E. MORSY
IBM GERMANY
SCHWABSTRASSE 43
7000 STUTTGART 1 (GERMANY)

ABSTRACT : By the introduction of some empirical relations and the limination of the application range of the equation of state of about twice the critical pressure, the coefficients of the extended Benedict-Webb-Rubbin equation can be computed from few pressure-volume-temperature data. The equation is suitable for computation of thermodynamics properties and especially for saturation properties where the equality of both pressure and gfugacity on the vapor and liquid curves are required.
The program is written in FORTRAN IV (E-level-subset) for /360, 128K.
Machine required : /360 Mod. 40, 2540, 1403 and 2311 of 2402.
Storage required : About 61K
Mrogram material : Documentation in German
Card deck.

360D-16.3.707-COMPUTATION OF THERMODYNAMIC PROPERTIES OF SATURATED PURE FLUIDS BY THE EXTENDED BENEDICT-WEBB-RUBIN EQUATION OF STATE

AUTHOR : DR T.E. MORSY
IBM GERMANY
SCHWABSTR. 43
7000 STUTTGART 1 (GERMANY)

ABSTRACT : The thermodynamic properties of saturated density and volume, vapor pressure, enthalpy, entropy, fugacity and heat of vaporisation at different temperatures are computed with the aid of the extended Benedict, Webb-Rubin-equation of state (EBWR). The input data are : critical constants, molecular weight, and the 11 coefficients of the EBWR equation. The knowledge of the ideal heat capacity of the gas at least at two temperatures is also required. Furthermore, one can give arbitrary many experimental vapor pressure, saturated liquid density and heat capacity data in order to obtain closer results.
The program is written in FORTRAN IV (E-level-subset) for /360 System, 64K
Program material : Documentation in German
Card deck.

360D-16.3.708-COMPUTER CALCULATION OF PACKED ABSORPTION TOWER

AUTHOR : DR T.E. MORSY
IBM GERMANY
SCHWABSTR. 43
7000 STUTTGART 1 (GERMANY)

ABSTRACT : The program computes the absorption process of a gaseous mixture (max. 9 components) by a liquid in a packed tower. The computation gives either the height of the packing required to yield a given concentration for the key component or the concentration of all components for a given height of the packing. In order to accomplish this, one must give the diameter of the tower, the specific surface area of packing and the mass- and heat-transfer units for each component in the gaseous and liquid phase. The program solves four differential equations numerically by the Runge-Kutta-method. The real behaviour of the mixture can be considered by means of the activity coefficients in a generalized Margules-equation, otherwise ideal states are assumed. Counter-current or parallel-current flow is assumed.
The program is written in FORTRAN IV (E-level subset) for the System/360.
Machine required : Minimum core storage requirements are 32K.
Program material : Documentation in German
Card deck

360D-16.3.709-COMPUTATION OF THE BINARY ACTIVITY COEFFICIENTS FOR THE MARGULES-EQUATION AND THE EQUILIBRIUM CURVE FOR BINARY SYSTEMS

AUTHOR : DR T.E. MORSY
IBM GERMANY
GYMNASIUMSTR. 11
7 STUTTGART (GERMANY)

ABSTRACT : The constants for the binary MARGULES equation will be computed from given equilibria data. The effect of temperature on the liquid activity coefficients can be taken into account by means of two additional constants.
By the use of these constants, the equilibrium curves can be calculated for arbitrary given total pressures and compositions (in the liquid or in the vapor phase). The azeotropic data, if existing, can be estimated.
The program is written in FORTRAN IV (E-level-subset) for the system/360, 64K
Storage required : about 38K
Program material : Documentation in German
Card deck

360D-16.3.710-DETERMINATION OF THE COEFFICIENTS OF THE EXTENDED BENEDICT, WEBB AND RUBIN EQUATION OF STATE

AUTHOR : DR T.E. MORSY
IBM GERMANY
GYMNASIUMSTR. 11
7 STUTTGART 1 (GERMANY)

ABSTRACT : The BWR-Equation of State is extended by the introduction of three additional coefficients. The extended equation predicts the PVT-behaviour of pure fluids in a wide temperature and density range. It fits the critical point exactly and has the first two derivatives with respect to volume vanish at this point. The critical isochore and the vapor pressure curve have a common tangent at the critical point. Furthermore, the extended equation predicts the residual caloric properties more precisely than the original one.
The program is written in FORTRAN IV (E-level-Subset) for the System/360, 128K.
Storage required : about 66K
Program material : Documentation in German
Card deck

360D-16.4.701-/360 ELECTRIC POWER SYSTEM LOAD FLOW AND LOSS MINIMIZATION PROGRAM

AUTHOR : DIPL.-ING. KLAUS STECK
BERATUNG OFFENTLICHE INSTITUTIONEN
STEPHAN-LOCHNER-STRASSE 2
D 53 BONN-BAD GODESBERG (GERMANY)

ABSTRACT : This program solves the network equations of an electric power network and permits the reactive power at certain nodes to vary such that the losses in the network will be minimized. The program uses topological control and the factorisation method to ensure a rapid solution time and minimum storage requirements. The factorised matrix being held in core. The solution technique has excellent convergence characteristics. Implemented in FORTRAN IV, the program can handle 200 buses, 350 series elements, 50 transformers and 40 reactive control buses.
Machine required : /360-40, 128K, one disk, card read punch, printer.
Program material : Documentation in German
DTR 7tr, 9tr, 800 or 1600 BPI

360D-16.4.702-ELECTRIC POWER SYSTEM INDUCED VOLTAGE CALCULATIONS

AUTHOR : DIPL.-ING. KLAUS STECK
BERATUNG OFFENTLICHE INSTITUTIONEN
STEPHAN-LOCHNER-STRASSE 2
D 53 BONN-BAD GODESBERG (GERMANY)

ABSTRACT : This program calculates the induced voltage in telecommunication lines and cables during worst case short circuits in nearby power lines. The input data specifies the physical lay-out of the power and telecommunication lines and their electrical characteristics. The output includes the voltages induced in each section of the telecommunication lines and over the whole line as well as the fault current in the power line. The program saves considerable computation and gives improved accuracy over manual methods.
Machine required : /360-30, 32K, one disk, card read punch, printer.
Program is written in FORTRAN IV
Program material : Documentation in German
DTR 7tr, 9tr, 800 or 1600 BPI

360D-16.4.703-/360 ELECTRIC POWER SYSTEM SHORT CIRCUIT CALCULATION

AUTHOR : DIPL.-ING. KLAUS STECK
BERATUNG OFFENTLICHE INSTITUTIONEN
STEPHAN-LOCHNER-STRASSE 2
D 53 BONN-BAD GODESBERG (GERMANY)

ABSTRACT : The program uses the Z Bus Impedance Matrix Method to simulate the short circuit conditions in an electrical power system. The program can handle up to 100 buses, 320 series elements and 40 generators. Fault conditions studied are three phase fault, phase to phase fault, phase to phase to earth fault, and single phase to earth fault. Fault currents and MVA are calculated in lines connected to and adjacent to the faulted bus immediately and 50 msec. and 100 msec. and 250 msec.. After the fault. Switching operations may be specified during the fault.
Machine required : /360-30, 32K, one disk, card read punch, printer.
Program is written in FORTRAN IV.
Program material : Documentation in German
DTR 7tr, 9tr, 800 or 1600 BPI

360D-16.4.704-/360 ELECTRIC POWER SYSTEM UNIT COMMITMENT
AUTHOR : DIPL.-ING. KLAUS STECK
BERATUNG OFFENTLICHE INSTITUTIONEN
STEPHAN-LOCHNER-STRASSE 2
D 53 BONN-BAD GODESBERG (GERMANY)
ABSTRACT : This program minimizes the operating cost of a thermal power system. The operating cost is made up of running costs plus start up costs associated with cooling losses. Consideration is given to minimum start up and shut down times. The algorithm uses the method of dynamic programming and is implemented in FORTRAN IV.
Machine required : /360-30, 32K, one disk, card read punch, printer.
Program material : Documentation in German
DTR 7tr, 9tr, 800 or 1600 BPI

360D-16.4.705-/360 ELECTRIC POWER SYSTEM LINE DATA CALCULATIONS
AUTHOR : DIPL.-ING. KLAUS STECK
BERATUNG OFFENTLICHE INSTITUTIONEN
STEPHAN-LOCHNER-STRASSE 2
D 53 BONN-BAD GODESBERG (GERMANY)
ABSTRACT : Electric Power System Line Data Calculations provides two programs for determining the electrical characteristics of transmission lines from the mechanical and electrical data of the line. The first program will calculate the characteristic impedance, natural loading and charging power of a line in addition to the positive, negative and zero sequence impedance, the (self and mutual impedance). Line configuration of up to 16 conductors including earth wires can be handled. The second program calculates the positive sequence impedance, the characteristic impedance, the natural loading and the charging power for a single or double circuit line. Both programs are written in FORTRAN IV.
Machine required : /360-30, 32K, one disk, card read punch, printer.
Program material : Documentation in German
DTR 7tr, 9tr, 800 or 1600 BPI

360D-16.4.706-/360 ELECTRIC POWER SYSTEM LOAD FLOW AND LOSS MINIMIZATION PROGRAM WITH STORED INVERSE MATRIX
AUTHOR : DIPL.-ING. KLAUS STECK
BERATUNG OFFENTLICHE INSTITUTIONEN
STEPHAN-LOCHNER-STRASSE 2
D 53 BONN-BAD GODESBERG (GERMANY)
ABSTRACT : /360 Electric Power System Load Flow and Loss Minimization with stored inverse matrix provides two programs. The first solves the network equations by the usual matrix inversion method using topological control to reduce computation time, and storing the inverse matrix on disk. The second program permits the network losses to be minimized by varying the reactive powers at specified busbars. Implemented in FORTRAN IV the programs can handle up to 135 buses and 30 reactive control buses and have excellent convergence characteristics.
Machine required : /360-30, 32K, one disk, card read punch, printer
Program material : Documentation in German
DTR 7tr, 9tr, 800 or 1600 BPI

360D-16.5.701-AUTOMATIC PROGRAMMING OF LATHES (AUTOPOL S/360 DOS)
AUTHOR : MRS H. HENSEL
DP APPL. DEV. MGF. INDUSTRY
DEPT 843
IBM GERMANY
SCHWABSTRASSE 43
7 STUTTGART 1 (WEST GERMANY)
ABSTRACT : AUTOPOL consists of a program and a symbolic language to help the part programmer generate punched tapes as the controlling medium of lathes (2 dimensional continuous path). The part programmer only describes the blank and finished part from the blue print as the successive machining operations processing a piece. The program interprets the operating macros : Roughing, Finishing, Drilling, Grooving calculates all necessary coordinate value of tools motions for each cut and the appertaining spindle speed and feedrate.
Program is written in FORTRAN IV E - level subset.
Machine required : /360 CPU, minimum size 32K, Bytes (64K,128K) for 32K, the DOS must be smaller than 8000 bytes.
Program material : Write-up in German,
Two card decks,
One magnetic tape 7tr or 9tr.

360D-16.8.701-IDEFIX
AUTHOR : MAS
IBM FRANCE
116, AVENUE DE NEUILLY
92 - NEUILLY-SUR-SEINE (FRANCE)
ABSTRACT : The program IDEFIX has been developed to solve the problem of identification of continuous processes, such as cement and glass kilns, chemical reactors, distillation units, etc.
Written in FORTRAN OS, it can be run on a 360 256K.
It is intended to be a tool for the study of dynamic process around normal operating conditions. It assumes that the behaviour of the process can be described by linear equations. Using experimental data, the program computes the coefficients of the equations by a least square method. It gives various results to estimate the validity of the computed model ; it checks the stability, the sign of the coefficients, and the ability of the model to predict the evolution of the process. The program helps the user to improve the estimations of the time lags and of the structure of the model, and computes also the time constants and the step responses of the model.
The resulting model can be used for an operator's guide control, on to build and automatic control strategy for the studied process unit.
Program material : Documentation in French
DTR 7tr, 9tr, 800 or 1600 BPI

360D-17.1.701-1627 PLOTTER SUBROUTINES FOR PS 44 AND DOS

AUTHOR : G. MEURET
IBM
TOUR DU MIDI 8
1060 BRUXELLES (BELGIUM)

ABSTRACT : It concerns a set of subroutines, written in assembler language. They are used to control a plotter IBM 1627 or Calcomp, attached to a 2701 through a plotter X/Y Adapter RPQ 880701. These subroutines can be called by a Fortran-language program. The minimum configurations must be these required by PS 44 (64K for 360/44) and DOS (32K for others 360).
We provide the assembler routines for PS 44 and DOS. The main functions are the following :
Pint : moves the pen by linear interpolation from its present location to a new position.
Char : positions the pen for annotation and provides character size and angle information.

Core requirement : 20K
Program material : Write-up in English
Card deck

360D-17.1.702-INFRARED SPECTRA IDENTIFICATION SYSTEM

AUTHOR : INGRID WEHLING
IBM GERMANY DEPT 0464
GYMNASIUMSTR. 11
7000 STUTTGART (GERMANY)

ABSTRACT : This system allows identification of unknown IR-spectra with a catalogue of reference-spectra, which is on a disk (2314 or 2311). The evaluating program is a TP-program and is called by an IBM 1052 in the laboratory. Referring to the input-code (wavelength or wavenumber of the most intensive and critical absorption-bands and the tolerance for degree of accuracy), the output-list contains the index of the agreeing spectra with the denounced tolerances for a visual comparison on a corresponding catalogue.
Further possibilities : Addition, deletion or reactivation of spectra ; organization of the disk-file with a source-tape and arranging the spectra in groups for decreasing the search-times ; output-list : all spectrum-numbers/group ; output-list of all spectra with all parameters in ascending arrangement ; security of data : reorganization of disk-file.

Source language : Assembler
TP-program : Should be tailored by the customer together with all his TP-applications
Storage required : Initial file-organization (batch-progr., only once required) 108K ; message-handler (core-resident) 2K ; TP-application (always one of 5 programs in transient core) 4K ;
Machine required : /360-50, 1403, 2540, 1 X 2314 (0.2311), 2 X 2402 (0.2401), 1051, 1052.
Program material : Documentation in German
DTR 7tr, 9tr, 800 or 1600 BPI

360D-17.1.703-FOCUS

AUTHOR : MR P. PISTOR
IBM DEUTSCHLAND
WISS. ZENTRUM HEIDELBERG
TIERGARTENSTRASSE 15
69 HEIDELBERG (GERMANY)

ABSTRACT : In Optics, Geophysics, Nuclear Medicine, and other fields special twodimensional distributions cannot be measured directly, but they are given as convolutions with impulse functions (elementary signals). Often these measurements are disturbed additional noise. Filters can be designed using the wiener criterion which suppress the noise and transform the elementary signal to such a shape that the filtered image becomes better interpretable (image enhancement).
The program FOCUS is written to compute 25 by 25 filters for non-negative elementary signals under OS with storage requirement of 256K.

Input data are : - elementary signal
- desired shape of the transformed signal
- information about the noise

Output data are: - filter coefficients
- normalized sums of squared errors
- convolutions of the filter and the elementary signal with/without the presence of noise.

All twodimensional distributions involved can be represented by
- lists,
- twodimensional plots,
- cross sections.

Program material : Documentation in English
DTR 7tr, 9tr, 800 or 1600 BPI

360D-19.3.701-SUBROUTINE TO COMPUTE INCOME TAX DEDUCTION FOR SWEDEN

AUTHOR : K.W. AHLGREN
IBM SWEDEN
BOX 23006
S-104 35 STOCKHOLM (SWEDEN)

ABSTRACT : Subroutine to compute the weekly, bi-weekly or monthly income tax deductions when the corresponding income of a Swedish citizen is known. It is also requested to know the amount of tax to local authorities expressed as a percentage.
Swedish number is tax program number 15.

Operating system required : BOS
Program material : Write-up in Swedish
Card deck

360D-19.3.702-SUBROUTINE TO COMPUTE INCOME TAX DEDUCTION FOR SWEDEN
AUTHOR : K.W. AHLGREN
IBM SWEDEN
BOX 23006
S-104 35 STOCKHOLM (SWEDEN)
ABSTRACT : Subroutine to compute the weekly, bi-weekly or monthly income tax deductions when the corresponding income of a Swedish citizen is known. It is also requested to know the amount of tax to local authorities expressed as a percentage.
Swedish number is tax program number 85.
Operating system required : OS, TOS or DOS
Program material : Write-up in Swedish
Card deck

360D-19.3.703-SUBROUTINE TO COMPUTE OCCASIONAL INCOME TAX DEDUCTION
AUTHOR : K.W. AHLGREN
IBM SWEDEN
BOX 23006
S-104 35 STOCKHOLM (SWEDEN)
ABSTRACT : Subroutine to compute the occasional income tax deductions when the occasional income is known for a Swedish citizen.
Swedish number is program number 184.
Operating system required : OS, TOS or DOS
Program material : Write-up in Swedish
Card deck

360D-19.4.701-CAPITAL INVESTMENT ANALYSIS UNDER UNCERTAIN EXPECTATIONS
AUTHOR : DR ALFRED M. MIRANI
IBM DEUTSCHLAND GMBH
BAHNHOFSPLATZ 5-7
463 BOCHUM (GERMANY)
ABSTRACT : The profitability of capital investment is evaluated using the present-value-method or the discounted-cash-flow-method. These methods are based on the confrontation of receipts and expenditures during the life span of the investment object. The uncertainty is taken into account by using empirical (continuous or discrete) probability distributions for the receipts, expenditures and the life span instead of single values Because receipts and expenditures can come from various sources the probability distributions for these values may be specified as the sum of up to five individual distributions. The probability distribution for the result which is obtained by Monte-Carlo-Techniques, is analysed for the expected value, the deviation from mean, the minimum economical life span and other values important for decision making.
The program is written in Basic-FORTRAN (E-level-Subset) and requires a minimum of 56K core locations in an IBM/360 and one disk-unit.
Program material : Documentation in German
Card deck

360D-19.5.701-MASCHINELLE BILANZANALYSE (MABILA)
AUTHOR : DR P.R. ABELE
IBM GERMANY
FINANCE INDUSTRY APPLICATION DEVELOPMENT
WILHEM LEUSCHNER STRASSE 32
6 FRANKFURT /M 16 (WEST GERMANY)
ABSTRACT : The program package MABILA consists of a serie of programs which provide the professional balance sheet analysis of financial analyst with tools to get detailed reports helping him in investigating the statements. MABILA can be used as well for the purpose of internal balance sheet analysis, i.e. the analysis of the company's own statements as for the purpose of external balance sheet analysis.
In this case, the balance sheets of other companies are analyzed to investigate their solvency status, to receive objectives to review their financial status, etc...
Programming languages : Assembler and Fortran
Machine required : System IBM/360 model 25, 32K core storage, IBM 2311, 2 M.T. units, card reader, console, printer...
Program material : Write-up in German,
Magnetic tape 9tr. ,
Card deck (sample).

360D-19.7.701-DEPOSIT ACCOUNTING
AUTHOR : MRS LIISA HAUTANEN
IBM FINLAND BP 20 (N/A)
MANNERHEIMINTIE 8
HELSINKI 10 (FINLAND)
ABSTRACT : DEPOSIT ACCOUNTING Program performs the following daily routines of check-, saving check-, and deposit accounts: updating, opening, and closing of accounts and counting of interests. Furthermore, it includes periodically the interest to the capital and writes statements of accounts.
The input includes all type of accounts which are assorted in account groups after different kinds of checking. After handling each type of account it gives daily a list including all accounts or only the handled ones and also different kind of summaries concerning the offices. The data files are on magnetic tapes, except the daily transaction data which is filed on the disk.
Machine required : S/360 Mod. 25 and up (32K of core for execution, card reader, printer, 1 disk unit (IBM 2311) 2 magnetic tape units.
Programming Systems : written in RPG and Assembler.
Program material : Documentation in Finish
DTR 7tr, 9tr, 800 or 1600 BPI

360D-21.0.701-PAYROLL TAX CALCULATION FOR S/360 MODELS 25 AND ABOVE (PXVERO)

AUTHOR : MATTI VANHALA
OY IBM AB
BOX 10265
HELSINKI 10 (FINLAND)

ABSTRACT : 1. Most customers in Finland need the Payroll Tax Calculation program.
2. This program can be linked as a subroutine to a Payroll program written in PL/1. The program can be used only during the year mentioned in the header (Release 1 : 1970).
3. The program meets the +/- 1 % accuracy requirements of the Finnish tax law.
4. The documentation is available in Finnish only as it is expected that only Finnish companies will use this program.
Machine required : S/360 Models 25 and above, all configurations.
Source language : Basic Assembler
Program material : Documentation in Finnish
Card deck.

360D-21.0.702-PAYROLL TAX CALCULATION FOR S/360 MODELS 25 AND ABOVE (CXVERO)

AUTHOR : MATTI VANHALA
OY IBM AB
BOX 10265
HELSINKI 10 (FINLAND)

ABSTRACT : 1. Most customers in Finland need the Payroll Tax Calculation program.
2. This program can be linked as a subroutine to a Payroll program written in Cobol. The program can be used only during the year mentioned in the header (Release 1 : 1970).
3. The program meets the +/- 1 % accuracy requirements of the Finnish Tax law.
4. The documentation is avaialble in Finnish only as it is expected that only Finnish companies will use this program.
Machine required : S/360 Models 25 and above, all configurations
Source language : Basic Assembler
Program material : Documentation in Finnish
Card deck

360D-21.0.703-PAYROLL TAX CALCULATION FOR S/360 MODELS 25 AND ABOVE (TXVERO)

AUTHOR : MATTI VANHALA
OY IBM AB
BOX 10265
HELSINKI 10 (FINLAND)

ABSTRACT : 1. Most customers in Finland need the Payroll Tax Calculation program.
2. This program can be linked as a subroutine to a payroll program written in assembler or RPG. The program can be used only during the year mentioned in the header (Release 1 : 1970).
3. The program meets the +/- 1 % accuracy requirement of the Finnish Tax law.
4. The documentation is available in Finnish only as it is expected that only Finnish companies will use the program.
Machine required : S/360 Models 25 and above, all configurations.
Source language : Basic Assembler
Program material : Documentation in Finnish
Card deck

360D-21.0.704-DUTCH INCOME-TAX ROUTINE WHITE TABLE

AUTHOR : B. VAN DER LELIE
IBM DP-INSTALLATION-CENTRE
JAMES WATTSTRAAT 79
AMSTERDAM (NETHERLANDS)

ABSTRACT : Subroutine in Assembler for Calculating Income-tax and AOW According to the White Table.
Program material : Write-up in Dutch
Card deck

360D-21.0.705-DUTCH INCOME-TAX ROUTINE BLUE TABLE

AUTHOR : B. VAN DER LELIE
IBM DP-INSTALLATION-CENTRE
JAMES WATTSTRAAT 79
AMSTERDAM (NETHERLANDS)

ABSTRACT : Subroutine in Assembler for Calculating Income-tax and AOW According to the Blue Table.
Program material : Write-up in Dutch
Card deck

360D-21.1.701-BELGIAN PAYROLL INCOME-TAX SUBROUTINE 360

AUTHOR : J.P. WINDAL
DP/FSG
IBM BELGIUM S.A.
RUE ROYALE 67
1000 BRUXELLES (BELGIUM)

ABSTRACT : This subroutine can be included in a payroll program to calculate the amount the employer has to deduct from employees' salary to conform with the laws on income-tax. The calculation is valid for wages up to 4 millions B.Frs per year whatever the length of the payperiod may be : week, fortnight, month, year.
This assembler subroutine needs neither special operating system, nor special feature. It takes about 900 bytes.
Machine required : any kind of model.
Program material : Documentation in French
Card deck

360D-23.0.701-TEXTILE ORDER PROCESSING WITHIN REQUIREMENTS DETERMINATION INVENTORY CONTROL AND SCHEDULING (TOPRIS)

AUTHOR : HEINZ BELZ
IBM GERMANY
DP VTB AE FI
SCHWABSTR. 43
7 STUTTGART 1 (GERMANY)

ABSTRACT : TOPRIS performs scheduling of customers'orders regarding to resources of finished garments, material, and capacity in accordance to determinate time periods. In addition TOPRIS serves an overview on the status of finished garments, material, and capacity. To meet these objectives, TOPRIS creates and maintains a special data base.

Machine required : S/360 Model 25, 32K bytes core storage, 3 disk drives 2311

Source language : Assembler

Program material : Documentation in German
DTR 7tr, 9tr, 800 or 1600 BPI

360D-23.0.702-MODULAR SYSTEM FOR COMPUTATION OF REQUIREMENTS (MOSCOR)

AUTHOR : GERHARD GOEBEL
IBM GERMANY
DP VTB AE FI
SCHWABSTR. 43
7 STUTTGART 1 (GERMANY)

ABSTRACT : MOSCOR performs a level-by-level explosion of a given production program to determine the required amount of components and raw material, additional features are included for netting against stock on hand and on order, for computation of economic order quantities, and for offsetting.
the needed data base -item master records and product structure records- must be organized by the S/360 Bill of Material Processor (360A-ME-06X).

Machine required : S/360 Model 25 or 30, disk drives 2311 or 2314 according to size of data base, 16K bytes (BOS) or 24K bytes (DOS) core storage.

Program material : Documentation in German
DTR 7tr, 9tr, 800 or 1600 BPI

360D-23.0.704-MODULAR INVENTORY CONTROL SYSTEM (MINCOS)

AUTHOR : GERHARD GOEBEL
IBM GERMANY
DP VTB AE FI
SCHWABSTR. 43
7 STUTTGART 1 (GERMANY)

ABSTRACT : MINCOS is a modular inventory control program package for manufacturing industry. It performs stock status updating, netting, proposal of economic order quantities, control of open orders, and forecast of stochastic demand and of scrap rates. The data base must be organized by S/360 Bill of Material Processor (BOMP, 360A-ME-06X). MINCOS creates and maintains an additional open order file. MINCOS is released as generalized source file, adaptation to customer's needs by customizing like in BOMP.

Machine required : S/360 Model 25 or 30, disk drives 2311 or 2314, according to size of data base, 24K bytes (BOS) or 32K bytes (DOS)

Source language : Assembler.

Program material : Documentation only in German
Tape 7tr, 9tr, 800 or 1600 BPI

360D-23.0.707-QCS (QUALITY, COST AND SCHEDULE INDEX STATISTICS)

AUTHOR : HEINS HUBNER
IBM GERMANY
SCHWABSTR. 43
7 STUTTGART 1 (GERMANY)

ABSTRACT : QCS is a program for statistics, which consists of two parts : QCS/1 and QCS/2.
QCS/1 keeps a check on the development of quality, cost of manufacture and schedule delay of finished products.
QCS/2 checks the development of quality, price and schedule delay (in context with delivery dates) of goods purchased.
On the basis of these criteria special indexes are calculated, which are considered for a sequence of different periods under review.
In the printout the results can be arranged in various lists by materials, workshops and scheduling clerks and by materials contractors and purchasing clerks.
Machine required : /360-25 16K
The source language is FORTRAN IV (E-Level-Subset)
The program can be executed under DOS and OS.

Program material : Documentation in German
Card deck

360D-23.1.701-CAPACITY LOADING AND SCHEDULING SYSTEM (CLASS) DOS VERSION

AUTHOR : OTMAR VALINA
IBM GERMANY
DP VTB AE FI
SCHWABSTR. 43
7 STUTTGART 1 (GERMANY)

ABSTRACT : CLASS is a stand-alone shop scheduling program using its own data base. The program schedules orders in the long term to infinite capacity and in the short term sequences operations to finite capacity. The program has been designed for use in manufacturing industries with many options to suit shop floor situations. CLASS may be considered for applications outside manufacturing situations.

Machine required : S/360 Model 25, disk drives 2311 or 2314, according to size of data base, 32K bytes.

Source language : Assembler/DOS

Program material : Documentation in English
Tape 9tr, 800 or 1600 BPI

360D-23.1.702-CAPACITY LOADING AND SCHEDULING SYSTEM (CLASS) OS VERSION

AUTHOR : OTMAR VALINA
IBM GERMANY
DP VTB AE FI
SCHWABSTR. 43
7 STUTTGART 1 (GERMANY)

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Machine required : S/360 Model 40, disk drives 2311 or 2314, according to size of data base, 128K bytes, will run under PCP, MFT2, MVT.

Source language : Assembler/OS

Program material : Documentation in English
Tape 9tr, 800 or 1600 BPI

360D-23.2.701-PROGRAM FOR ORDER LOCATION BY AUDIO RESPONSE (POLAR)

AUTHOR : D.I.A. DUNBAR
IBM U.K. LTD
5 QUEENS AVENUE
BRISTOL 8 (ENGLAND)

ABSTRACT : This program provides facilities for attendance recording and the updating of an enquiry from files used in a manufacturing order location application. Support is provided for both the IBM 7770 and 7772 Audio-Response Units, input being through touch-tone terminals and output through the Audio-response Unit. Several transactions are included, each of which is handled conversationally, only one input data item being required at each step; The first input of each transaction defines the sequence of the conversation; Further transactions and applications can be added by the user with a minimum of programming effort

Machine required : S/360 with disk and Audio-Response Unit.

Storage required : Approximately 45K for 4 input lines.

Source language : Assembler Language except for file-handling modules written in COBOL

Program material : Write-up in English
DTR 7tr, 9tr, 800/1600 BPI

360D-23.4.701-IBM SYSTEM/360 SHIPBUILDING PACKAGE INCLUDING HULL FAIRING AND SHELL DEVELOPMENT

AUTHOR : AKE JACOBSSON
VDC, FACK
402 70 GOTHENBURG (SWEDEN)

ABSTRACT : This package consists of two parts. Part one is a Hull Fairing program based upon the diretrix method especially adapted for shipbuilding purpose. The hull form produced by the program is stored in a direct access file and paper tapes are produced for the body plan and other hull curves for numerically controlled drawing machine. Part two is a program for development of hull plates. The program is based upon the angle-line method. Output are listing of dimensions for developed plate and paper tape for cutting in numeric control of flame cutter. Tapes are in ESSI-CODE.

Programming system : DOS/360

Machine required : 128K, 2 X 2311, 2540, 1403.

Program material : Documentation in English
Tape 9tr, 800 or 1600 BPI

360D-23.4.702-AUTOPOL/OS - AUTOMATIC PROGRAMMING OF LATHES

AUTHOR : DR I.D. NUSSEY
IBM U.K. LTD
62 HAGLEY ROAD
EDGBASTON, BIRMINGHAM 16 (ENGLAND)

ABSTRACT : AUTOPOL is a numerical control processor that facilitates part programming of lathes. The part programmer uses simple fixed format data sheets to define the blank and finished part profiles, tools, post processor commands and machining operations (e.g. Rough, Finish, Drill, Groove, Motion). Cuts and correct feeds ans speeds are computed automatically. Post processor writing is relatively easy.

Source language : FORTRAN IV

Machine required : 360/40 with 128K, two disks, printer, card reader, 1052. Tape output is desirable.

Program material : Write-up in English
DTR 9tr, 800 or 1600 BPI

360D-23.4.703-AUTOPOL/DOS - AUTOMATIC PROGRAMMING OF LATHES

AUTHOR : DR I.D. NUSSEY
IBM U.K. LTD
62 HAGLEY ROAD
EDGBASTON, BIRMINGHAM 16 (ENGLAND)

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Source language : FORTRAN IV

Machine required : 360/25 with 32K, two disks, printer, card reader, 1052.
Paper tape output is desirable and an optimum system is a 360/30 with 64K and 3 disk drives.

Program material : Documentation in English
DTR 9tr, 800 or 1600 BPI

360D-23.4.704-IBM SYSTEM/360 GEOMETRIC DESCRIPTION PROCESSOR ACUTE FOR SHIPBUILDING

AUTHOR : AKE JACOBSSON
VDC, FACK
402 70 GOTHENBURG (SWEDEN)

ABSTRACT : This program is a Geometric Description processor called ACUTE which is part of a shipbuilding package also containing Hull Fairing and Shell Development. The purpose of the package is to define the shape of a plane plate which is part of a ships internal structure and to store that image in the computer for further retrieval. The input language and the data handling is designed to meet the special needs for ship hull construction.

Program material : Documentation in English
DTR 7tr, 9tr, 800 or 1600 BPI

360D-25.0.702-STOCK COUNTING OPTION FOR RETAIL IMPACT/OS

AUTHOR : J. BONS
ADC IBM FRANCE
94-96 RUE REAUMUR
75 - PARIS 2E (FEANCE)

ABSTRACT : The Stock Counting Option enables the user of retail impact to feed the system with stock counts instead of direct point-of-sales transactions. The Stock Counting Option is composed of five modified staple system programs plus three additional ones. They are not intended for independent use and must be run in conjunction with unmodified staple systems programs.

Machine required : 360/40, decimal arithmetic, floating point arithmetic, 7920-1052-Adapter, 1052/7 printer keyboard, card read punch, printer with 132 characters QN2 or PN2 print chain, 2841 storage control, 2311 disk units (4 required), 2415 tape unit model 1. On any 131K machine the supervisor nucleus cannot exceed 22K.

Source language : PL/1 (OS), OS R.18; Some routines are written in Assembler.

Program material : Documentation in English
Tape 7tr, 9tr, 800 or 1600 BPI

360D-25.2.701-MASIS - MATERIAL CONTROL AND INFORMATION SYSTEM

AUTHOR : S. MOHRING-ANDERSEN
IBM A/S
VED VESTERPORT 6
DK 1646 COPENHAGEN V (DENMARK)

ABSTRACT : MASIS consists of BOMA, MADIS and KALK together forming an integrated-engineering, material-, and price control system. Files and input have fixed format, output may be designed by the user by means of parametercards.
BOMA maintains an item master and a product structure file using the System/360 Bill of Material Processor. 7 types of retrieval programs included in BOMA allow the user to maintain list format bills of material - and where-used files.
MADIS updates the inventory field on the item master, and order status (including customer-, production-, purchase orders, and reservations for the production orders) on a sequential status file. Transactions for this file may be prepunched from the system at the user's option. MADIS includes a complete requirements planning run breaking down requirements on components, performing period offset and gross to net calculations level by level. The gross to net calculation is done at order policies specified by the user, including calculation of safety stock and order quantity if wanted. All requirements are stored in the item master in time-buckets during the explosion procedure. MADIS writes out 16 different lists, including production orders, status lists and exception reports.
KALK performs updating of prices on the item master and calculates several price-consequences for all higher level items if so desired. The prices at all levels may consist of material costs, wages, standard costs, etc...

Programming systems : Assembler with BOMP macros and COBOL under DOS

Machine required : S/360 Model 30 64K, 2 X 2311, 2 tapes.

Program material : Documentation in Danish
Tape 7tr, 9tr, 800 or 1600 BPI

360D-29.0.701-BASIC ROUTINES FOR ENQUIRIES AND DATA

AUTHOR : P. NESBITT
FIELD SYSTEMS CENTRE
IBM U.K. LTD
CROYDON, SURREY (ENGLAND)

ABSTRACT : A set of assembly language macros and routines for writing programs for making enquiries on index sequential files from 1050 or 2740 terminals. A program making enquiries on up to 26 files from up to 4 lines will run in a 16K DOS partition.

Program material : Write-up in English
Tape 9tr, 800 or 1600 BPI

360D-29.3.701-INTERNATIONAL PROGRAMMED AIRLINE RESERVATIONS SYSTEM

AUTHOR : ROBERT COULTER
IBM U.K. LTD
216 IMPERIAL DRIVE
NORTH HARROW, LONDON (ENGLAND)

ABSTRACT ; International Programmed Airline Reservations System (IPARS) is a real-time software package intended for use in the Airline industry for the purpose of performing seat reservations functions.
The package consists of a unique real-time operation system, which supports conversational activities using the IBM 2915 Airline CRT terminal device, and includes associated real-time file support routines, test tools and seat reservation application programs.

Machine required : The minimum hardware configuration required to support the IPARS software package is twin IBM Sys 360 Mod 50 CPU's, at least 1 X 2314 disk unit and 6 tape units. The package itself consists of approx. 300,000 lines of code written in basic assembler. For system generation, testing of general stand-by support purposes the real-time package requires a DOS System to be available.

Program material : Write-up in English
DTR 7tr, 9tr, 800 or 1600 BPI

360D-29.3.702-NUMERIC CHECK IN AND WEIGHT AND BALANCE

AUTHOR : J. VAPAA
MANNERHEIMINTIE 8
HELSINKI 10 (FINLAND)

ABSTRACT : Passenger check in and aircraft weight and balance system for small to medium sized airlines using IBM 360 and 2260 displays with DOS, BTAM and Assembler language written programs. System includes both Control and Application programs and also a comprehensive set of test aids and utility programs. Features include parallel control of CPU processing with TP line procedures for IBM 2701 and remote IBM 2260 and 1053 and WTTY. Also Macros used in application programs to facilitate such functions as duplicate Disk File handling to ensure good back-up and recovery. Typical configuration duplexed for reliability having for On-line system 2030E, 2841, 2 X 2311, 2 X 2701, 4 X 3976, 2 X 2848, 2 X 1053, 1052, 2260's and several WTTY. For batch system 2030E, 2841, 2 X 2311, 2821, 1052, 1403, 2540, 2911, 3963, 2415. Configuration can range from Simplex 2025E upwards the system having a maximum of 144 X 2260. Total programming effort is approximately 10,000 bytes for control, 80,000 bytes for application, 10,000 bytes for test aids and 6,000 for Utilities.

Program material : Documentation in English
2 tapes 7tr, 9tr, 800 or 1600 BPI

360D-29.4.701-HOT METAL COMPOSITION FOR LINECASTERS (GERMAN HYPHENATION) WITH IBM /360-30

AUTHOR : J. HERKLE
IBM GERMANY
DP-DISTRIBUTION INDUSTRIES AD
SCHWABSTRASSE 43
7 STUTTGART (GERMANY)

ABSTRACT : This /360-30 Type Composition Program extends the speed and flexibility of digital computer into the composing rooms of the printing industries. Type compositors can use this program to provide significant time savings in transcribing textual material into a form required by linecasting machines for setting type. The program is developed especially for the requirements of the graphic industries into the European market.
The program is designed to allow computer acceptance of perforated papertape, containing the copy to appear in print and instructions pertaining to a desired printing format, from which a tape suitable for controlling the operations of a linecasting machine is produced and allocated to the proper point in the composing room. Additional to the input tape a further papertape can be read and worked into the original copy which contains the corrections of the input tape. The computer assumes the burden of all justification decisions, hyphenation decisions, and the insertions of proper linecasting machine control functions. The output tape contains the original copy, with the corrections discovered before any setting, in the form of properly justified lines arranged according to the stylistic and graphic requirements described by the user with the format instructions.
The program is limited to the control of linecasters with up to four magazines, each magazine with ninety channels. The linecasters must be equipped with the auto-centric feature.
The program operates with a precision of 1/1000 of millimeters, inches of the typographical measure cicero. The precision of the hyphenation exceeds 99,6 %/

Machine required : IBM/360-30 Mod. 2030E, card input, card output IBM 2540, Paper tape Reader : Facit PE 1000, Papertape Punch : Facit PE 1500, RPQ 3964-002 ; paper tape reader attachment RPQ 3964-001 ; paper tape punch attachment Disk IBM 2311, Printer IBM 1403.

Program required : The program operates under IBM/360 DOS

Source language : Assembler

Program material : Documentation in German
Card deck

360D-29.4.702-360 DUTCH HYPHENATION PROGRAM

AUTHOR : P.B. BOLLAND
IBM NEDERLAND N.V.
WEESPERPLEIN 4
AMSTERDAM (NETHERLANDS)

ABSTRACT : The 360 Dutch Hyphenation program is based on System/360 Text Processor Programs (360A-DP-08X). There is a provision for an exception-words dictionary.

Source language : Assembler

Machine required : 360 (64K), 2540, 1403, 1052, 2 X 2311.

Program material : Write-up in English
Card deck

360D-30.0.701-MOPPS - N/C 360 MODULARIZED POST PROCESSOR SUPPORT FOR AUTOSPOT

AUTHOR : K.K. HANFT
IBM GERMANY
DP APPL. DEV. MFG. IND.
7032 SINDELFINGEN (GERMANY)

ABSTRACT : The intermediate output of the AUTOSPOT/AD-APT processor (CLFILE) has to be converted to instructions that can be read by the machine tool controller. This is done by the post-processor. However, instead of writing for each specific machine tool a new postprocessor, the generalized postprocessor MOPPS is only to be adapted to a specific machine tool. For this purpose, such routines as the one for the tool changing or the time calculation have to be altered, whereas the control and the input routine remain unaltered. The extent of modification will depend on the machine tool in consideration.

Machine required : /360 Model 30, 64K of main storage, 1403 printer, 2540 card read punch, 2311 disk drive, floating point feature.

Source languages : FORTRAN IV E Subset under DOS, ASSEMBLER to provide overlay structure

Program material : Write-up in English
Tape 7tr, 9tr, 800/1600 BPI

360D-30.0.702-S/360 SCHEDULING MANAGEMENT AND ALLOCATING RESOURCE TECHNIQUE (S/360 SMART)

AUTHOR : OSAHIKO OHNO
IBM JAPAN LTD
APPLICATION DEVELOPMENT
33-1, 2 CHOME, CHIDORI, OHTA-KU
TOKYO (JAPAN)

ABSTRACT : This program is a demonstration program isolated from the SMART system which was originally developed by NHK (Japan Broadcasting Corporation). The function of SMART is to schedule the project and to allocate resource among multiple projects. On-line graphic system (IBM 2250 and 2260) is used to meet the dynamic change on the project schedule and to make the user's operation easy. The main characteristics are shown in the following :
1. The progress of project may be controlled by the Project Control Center.
2. At any time, under the control of on-line graphic system, the necessary information may be obtained.
3. This program adopts the concept of the work package to prescribe the various attributes (e.g. the part of the resources such as man-power and material facilities, the time estimation unit, etc...) attached to the activity.
Note : This is the stand-alone demonstration program which includes its own system program

Program material : Write-up in English
4 tapes 9tr, 1600 BPI

360D-30.0.703-PERLE - PERSONALIZED LETTERS FOR DIRECT MAIL ADVERTIZING ON /360 MODEL 25 AND HIGHER

AUTHOR : K. HELLWIG
IBM IPPIC
LEUSCHNERSTR. 9A
7 STUTTGART (GERMANY)

ABSTRACT : The PERLE program is an instrument for the direct mail advertizing business ; it is using the capability of 1403 printers to print upper and lower case characters. The input being addresses, a standard text, where space has been left for inserting personal data of the addressee, and text variations the output on the 1403 printer are personal letters. The program containing a Hyphenation routine can be used for any language -a chain/train with the corresponding national characters provided- and for any address material contained in punch cards having any fixed field layout. A routine for selecting object groups is included.
The program has been written in the Assembler language.

Machine required : /360 Model 25, 32K, 1403 Model 2 with UCS, card reader, card punch, 1 tape or disk

Program material : Documentation in English
DTR 9tr, 800 or 1600 BPI

360D-40.1.701-HEXCAL

AUTHOR : A. PRIMAULT
IBM - CH
DREIKONIGSTR. 20
CH-8022 ZURICH (SWITZERLAND)

ABSTRACT : HEXCAL is a selfrelocating program designed to help the operator or the programmer to make hexadecimal computation on Syslog. the four operations are supported. In addition, Hexcal has the advantage not to block the console, this avoiding that other partitions have to wait on Syslog.
The program is written in Assembler and uses the standard INLOG and OUTLOG Macros. In addition, it uses the Reloc Macro of Mr D. SANCHEZ from IBM Hamburg. HEXCAL needs about 1400 bytes, so it can run in a minimum partition

Program material : Documentation in English
Card deck

END.58