

830 - 1630

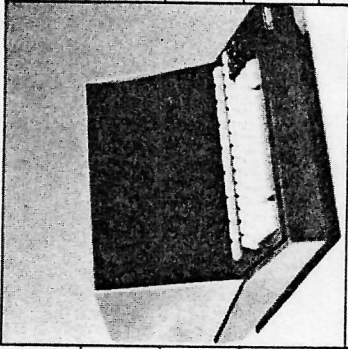
# Alfaskop Systems

## Introduction Course

# ALFASKOP HISTORY

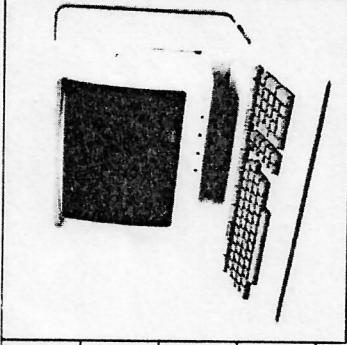
ALFASKOP 3100

1968



DUMB

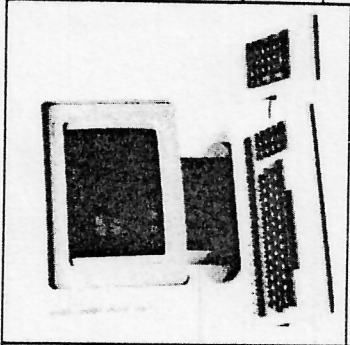
1973 ALFASKOP 3500



SMART

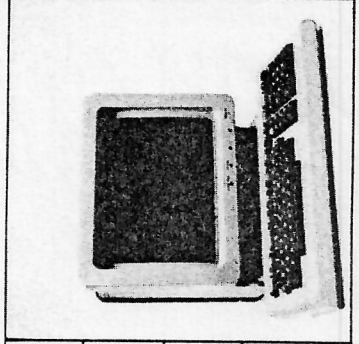
ALFASKOP S 41

1978



INTELLIGENT

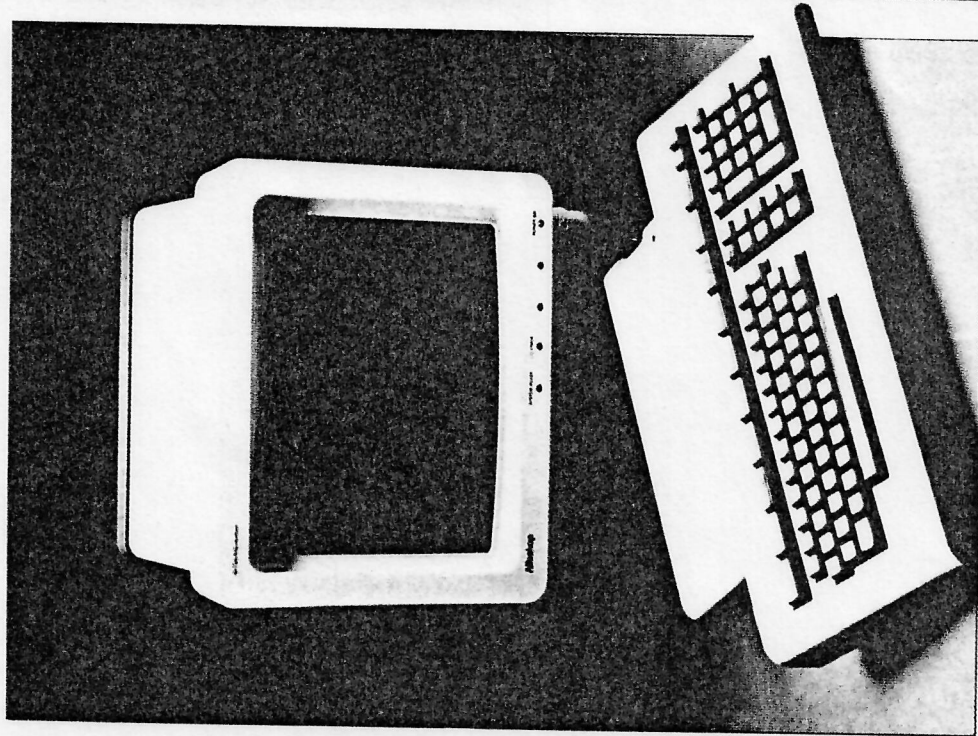
1980 ALFASKOP S 37



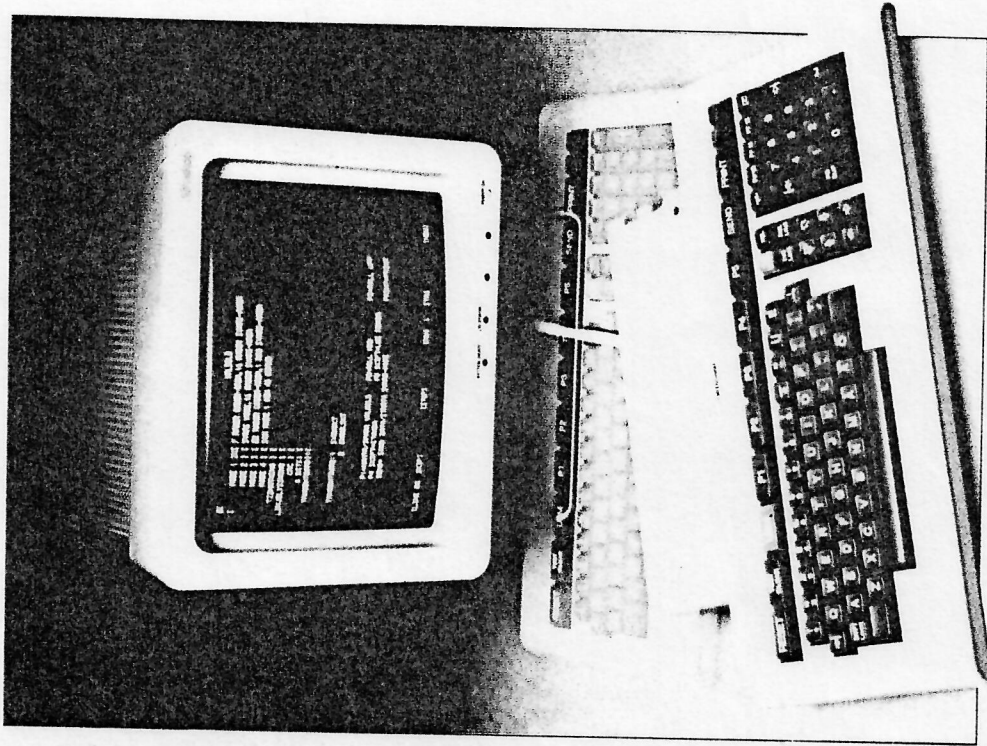
SMART



# ALFASKOP SYSTEM 37



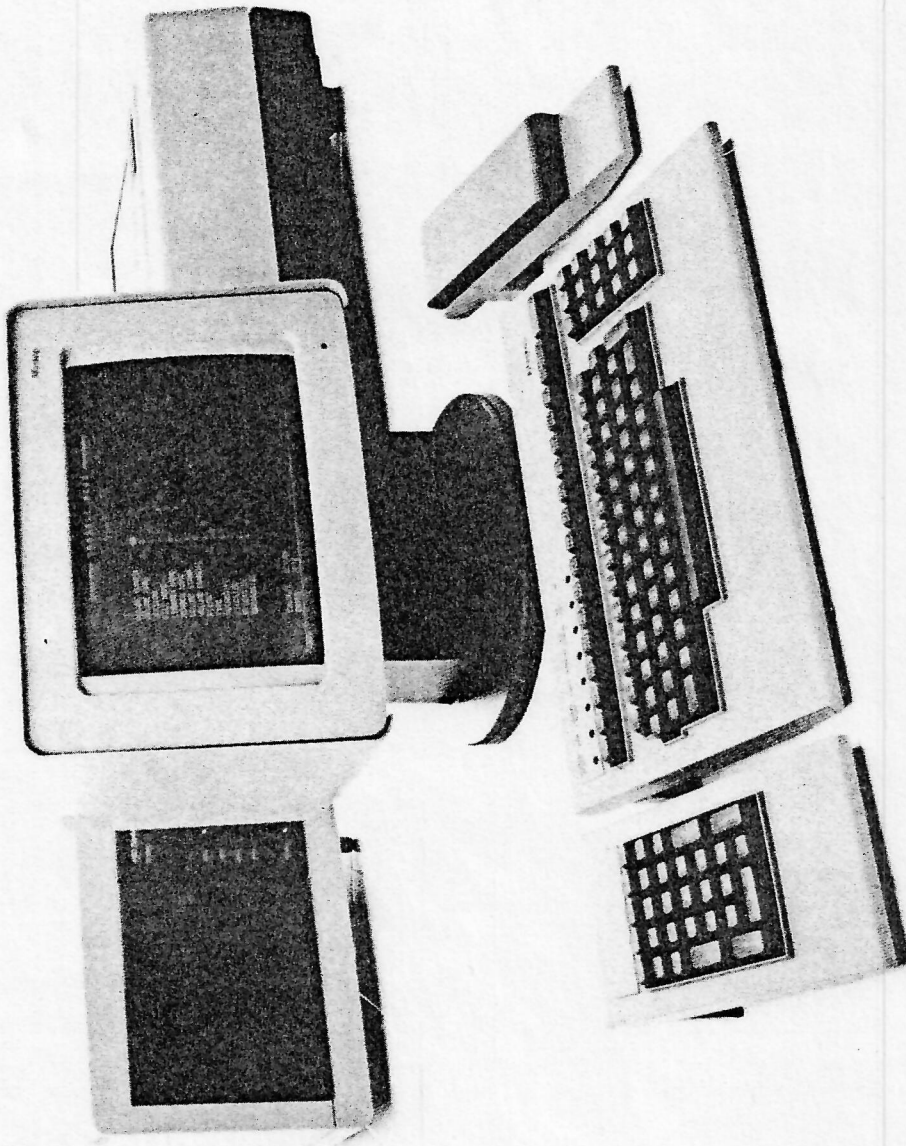
3500



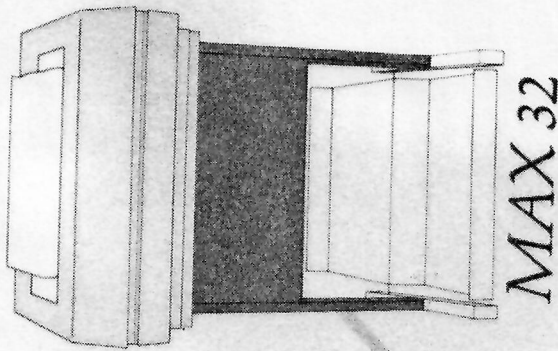
SYSTEM 37

40.000 VDU'S INSTALLED.  
IMPROVED DESIGN AND FUNCTION BASED ON EXPERIENCES.  
INCREASED RANGE OF PERIPHERALS.

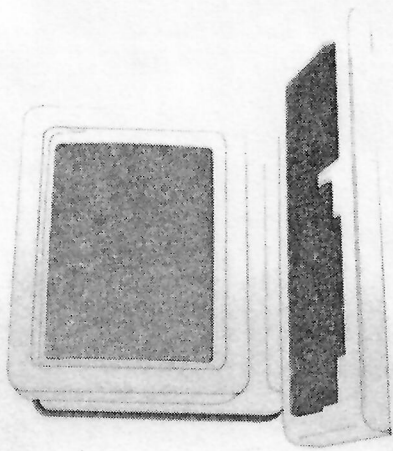
# ALFASKOP SYSTEM 41



# REMOTE CLUSTER VERSION



MAX 32



MAX 32

CU 7005

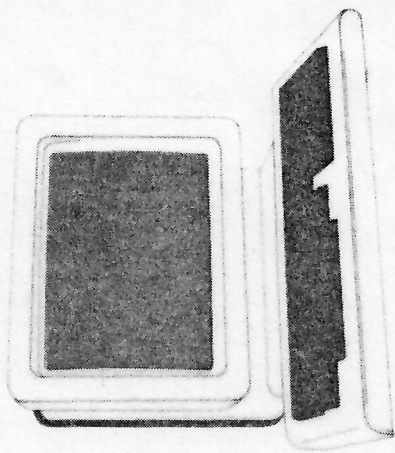
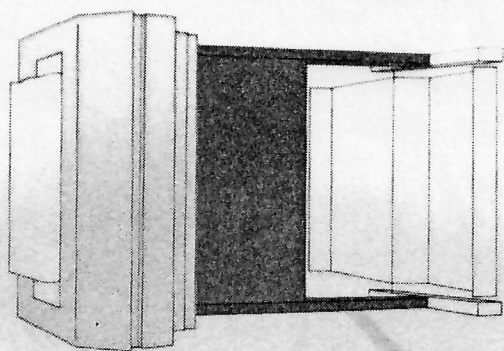
MODEM

MODEM

COMPUTER



# STAND-ALONE VERSION

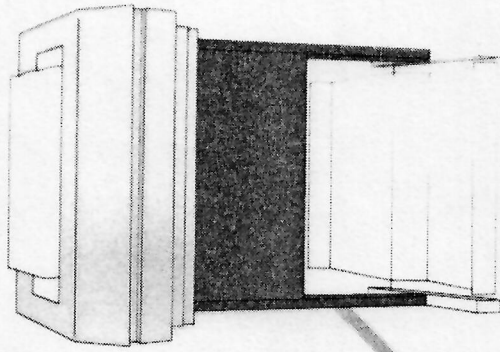


MODEM

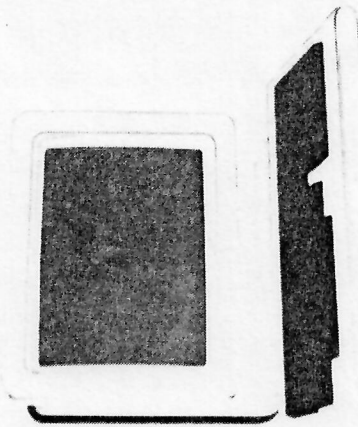
MODEM

COMPUTER

# LOCAL CLUSTER VERSION



MAX 26



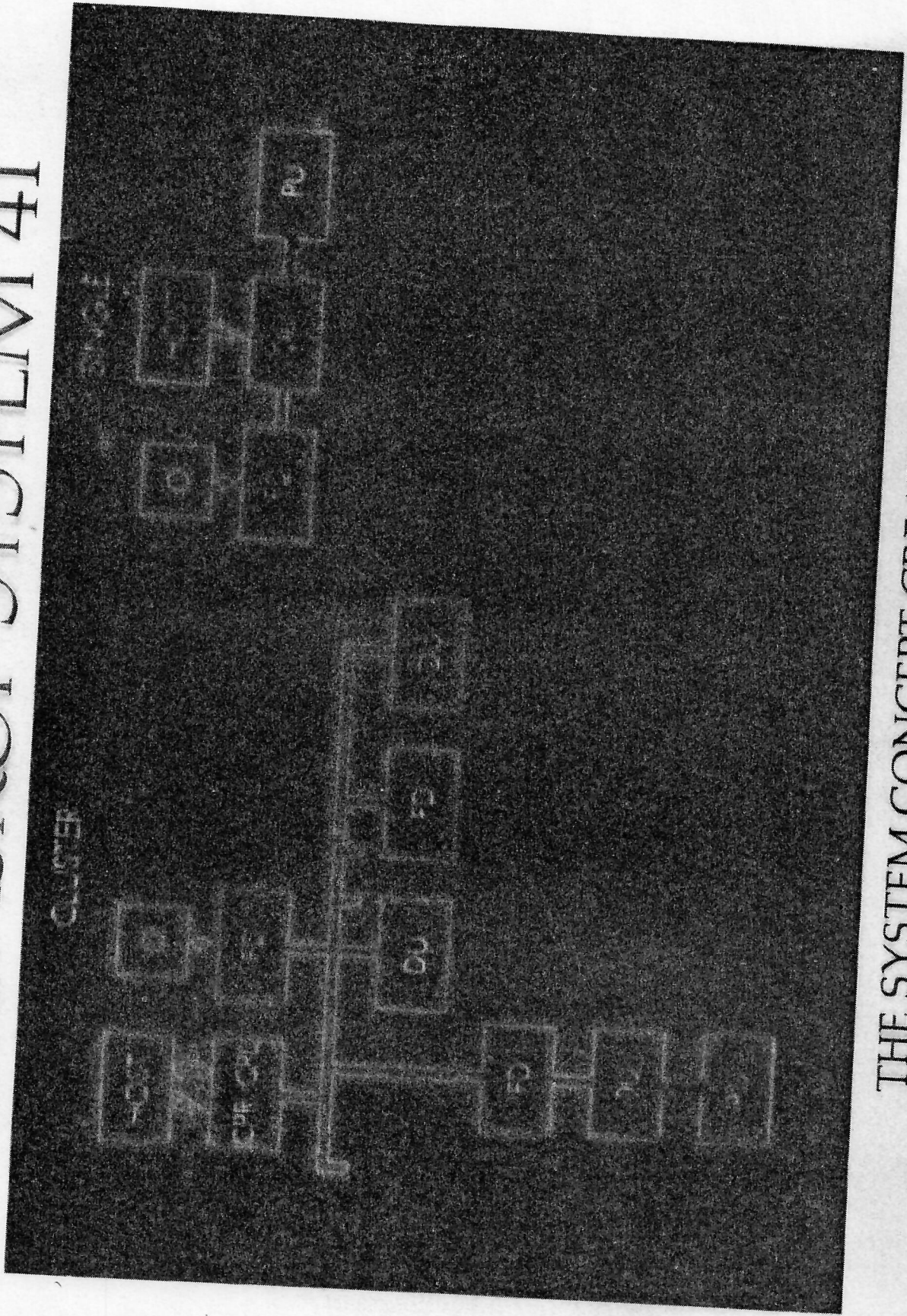
MAX 32

CU 7006

COMPUTER



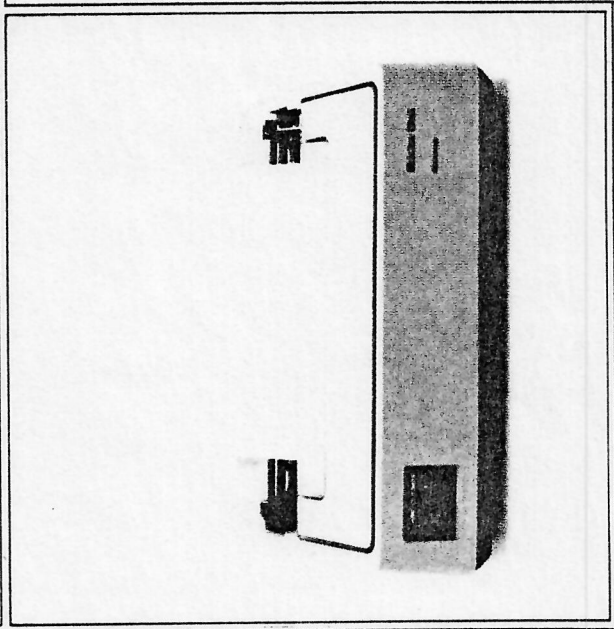
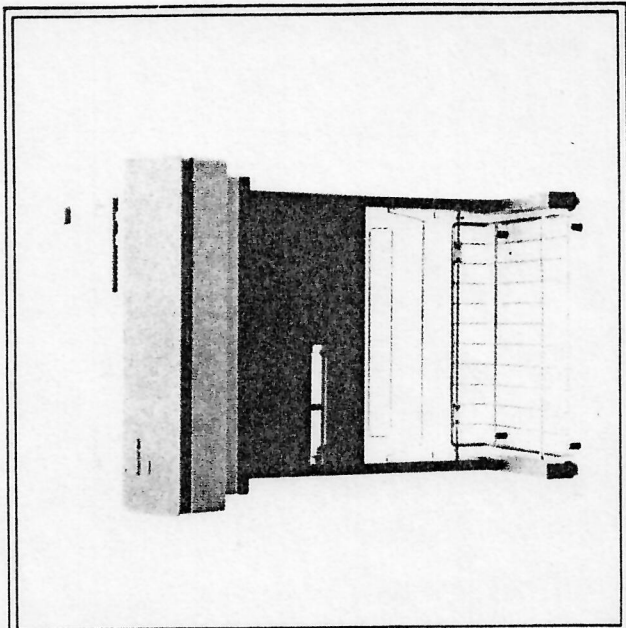
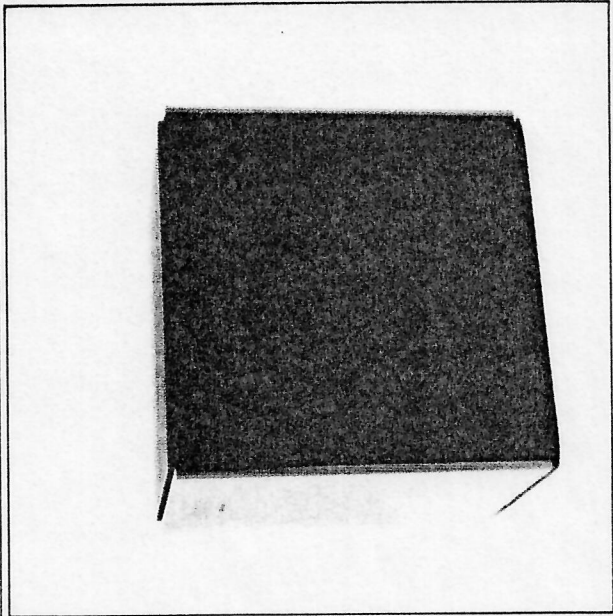
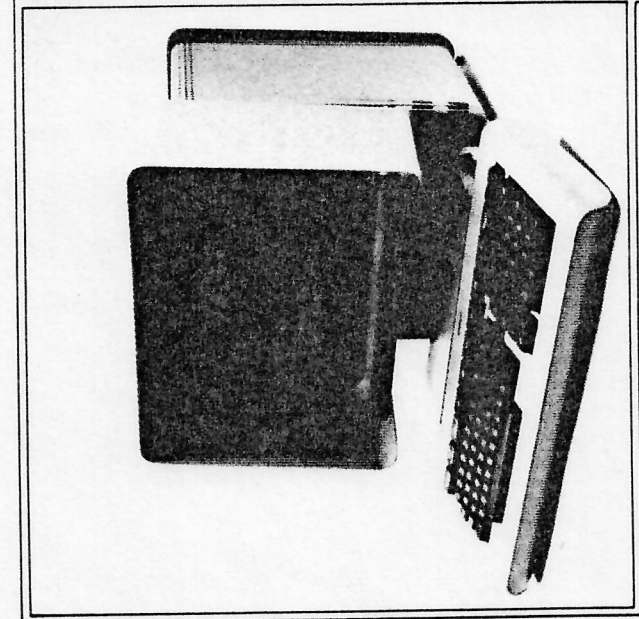
# ALFASKOP SYSTEM 41



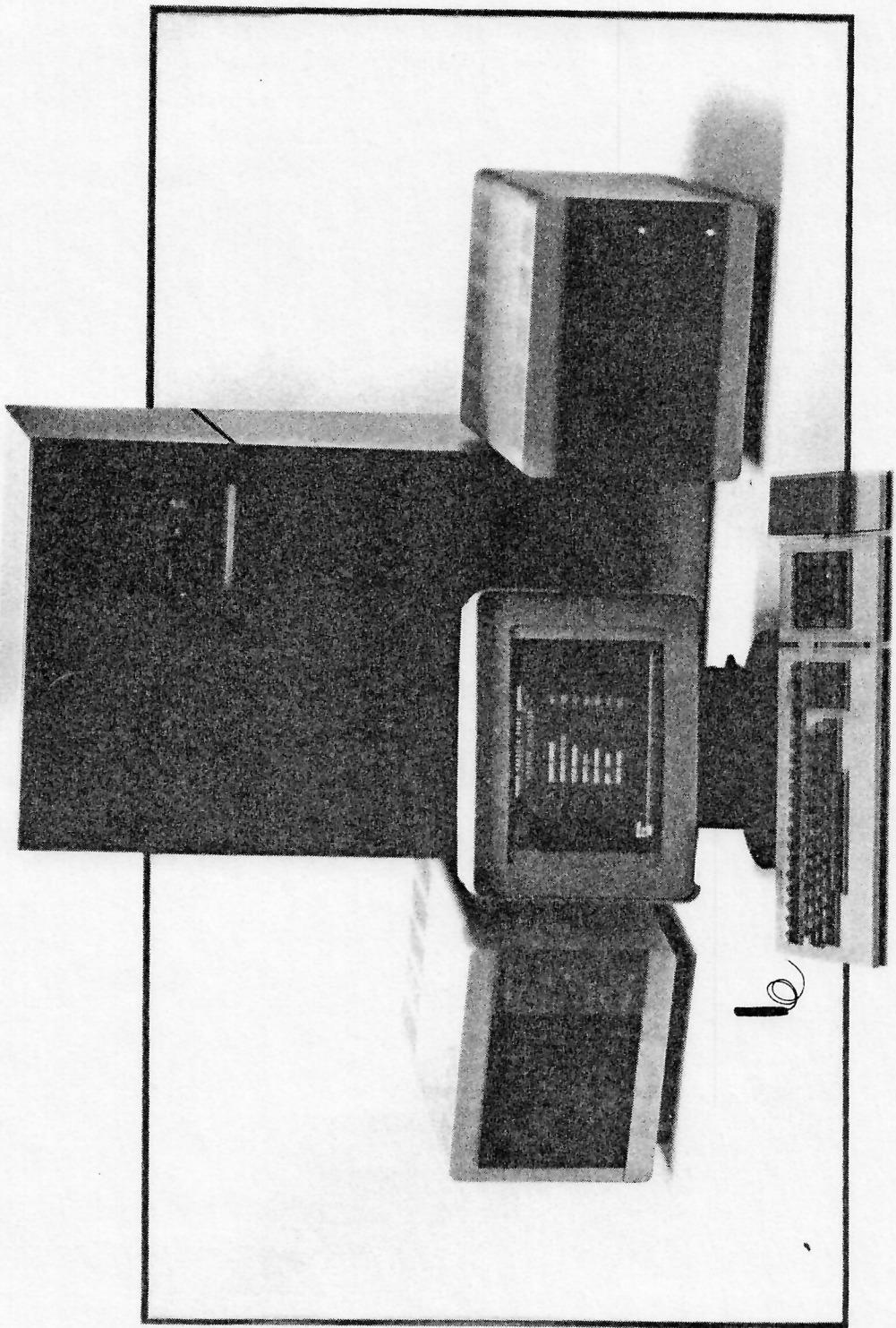
THE SYSTEM CONCEPT CREATES BASE  
FOR FLEXIBILITY = CLUSTER, SINGLE = REMOTE, LOCAL!



# SYSTEM UNITS

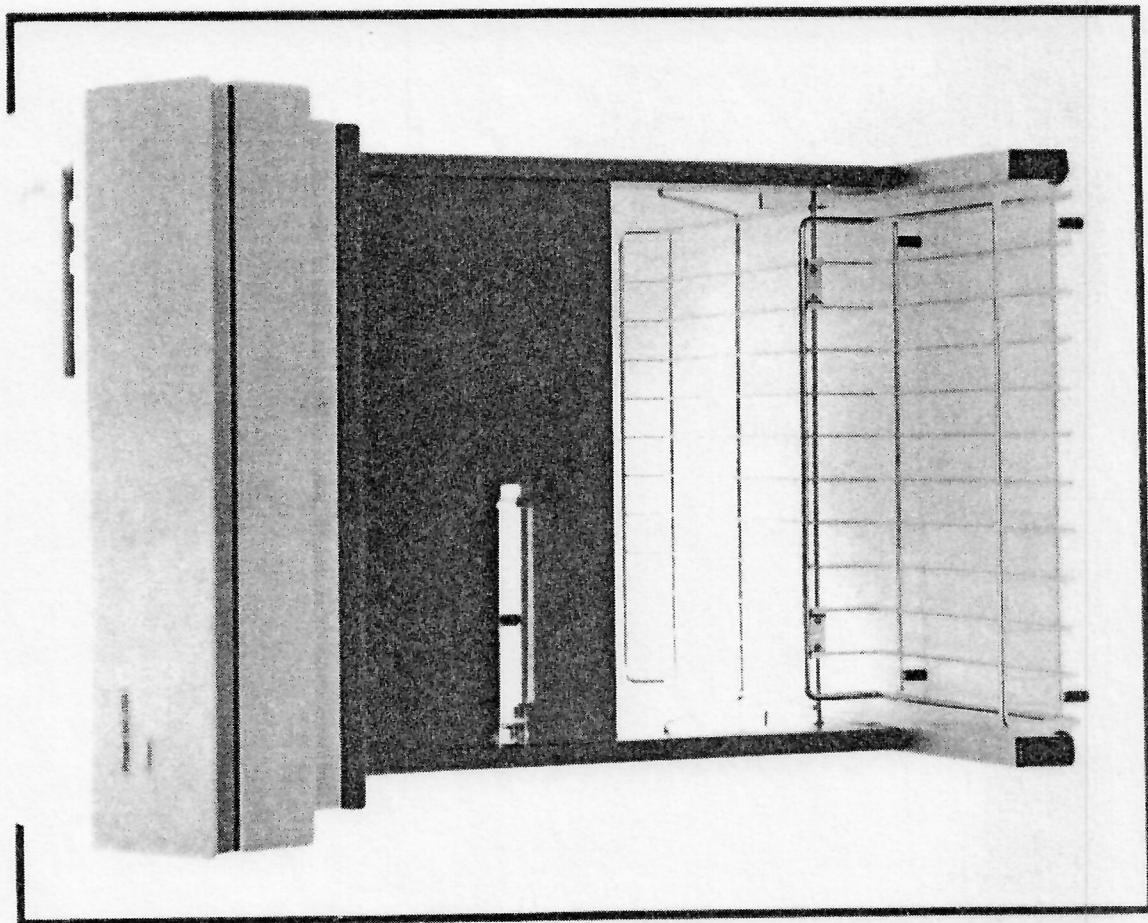


# ALFASKOP SYSTEM 41



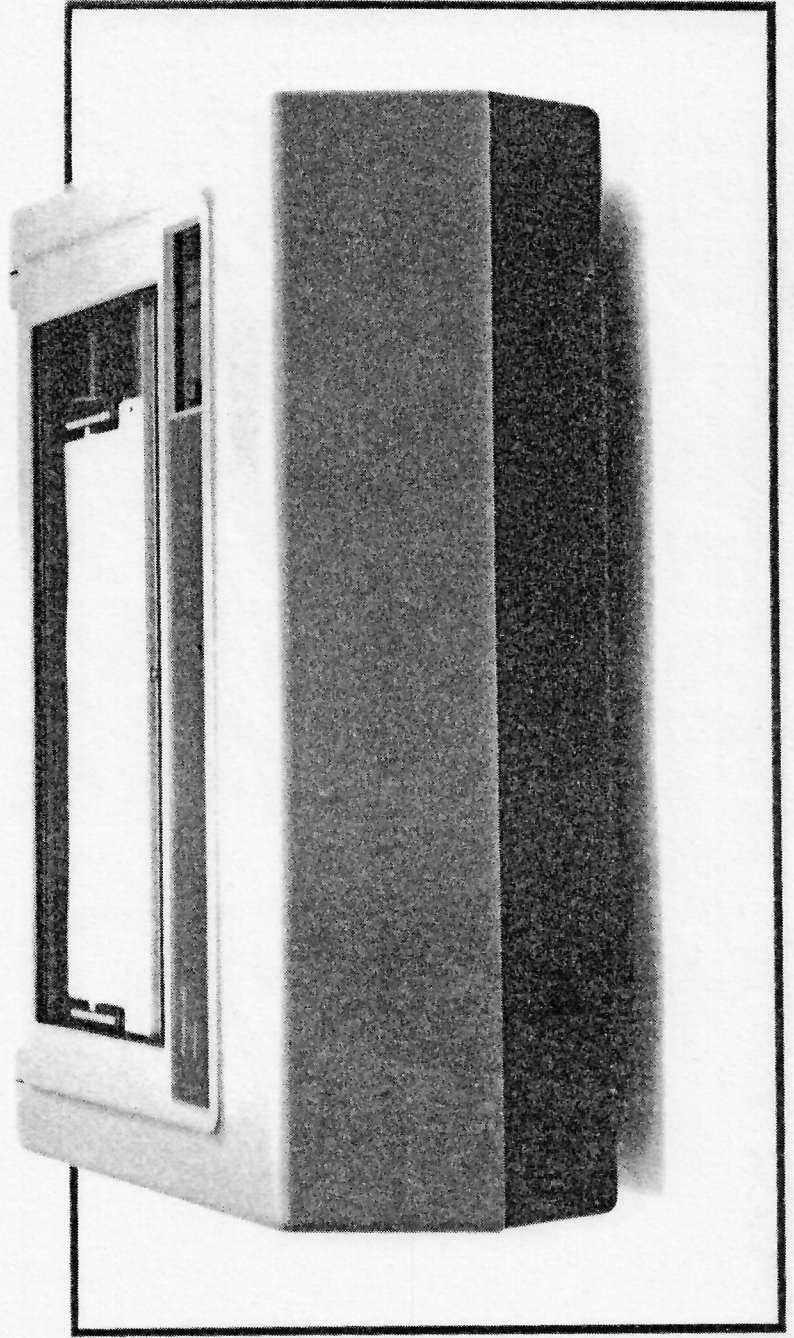
THE TERMINAL SYSTEM FOR THE 80's!

# PRINTERS





# PRINTERS



# PRINTERS



# THE SCREEN

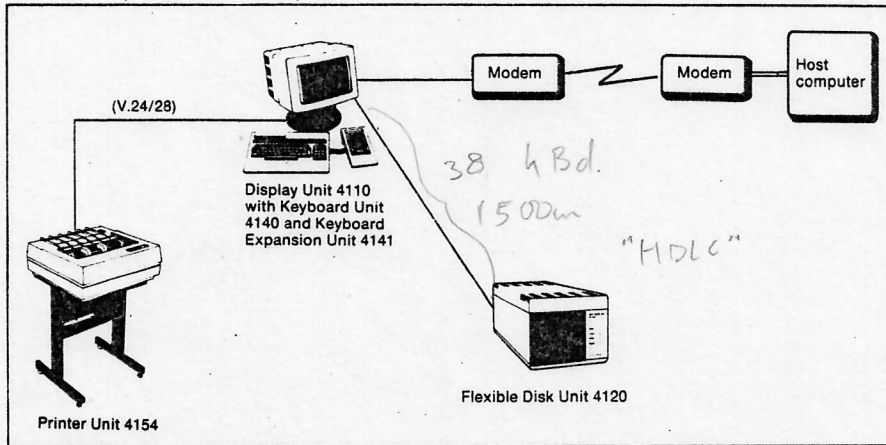
UPPER AND LOWER CASE  
MAX 1.920 CHARACTERS



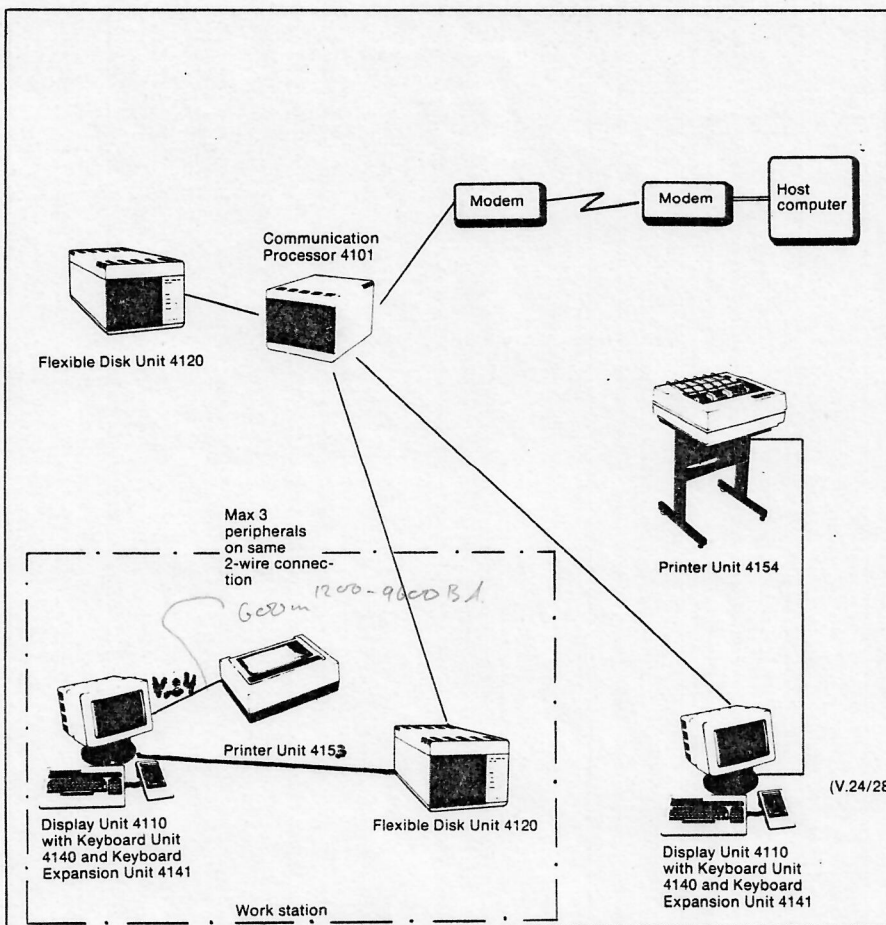
- NON-REFLECTING
- YELLOW TEXT/BROWN BACKGROUND
- ADJUSTABLE BRIGHTNESS
- KEY MESSAGES WITH HIGHER BRIGHTNESS
- NEW PHOSPHORUS ELIMINATES FLICKERING
- NEW CIRCUITRY PROVIDES ABSOLUTE FOCUS



# ALFASKOP SYSTEM 41

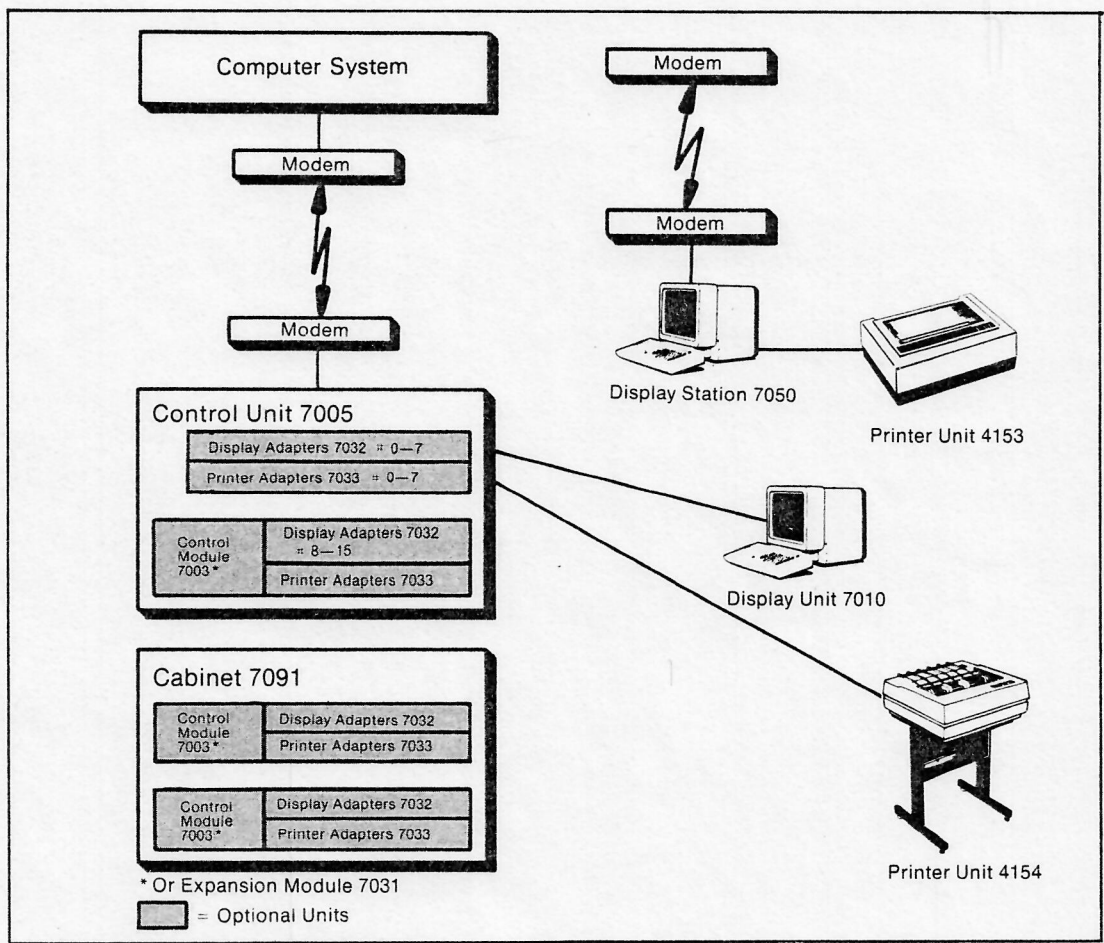


Example of single display-unit configuration with remote connection to host computer



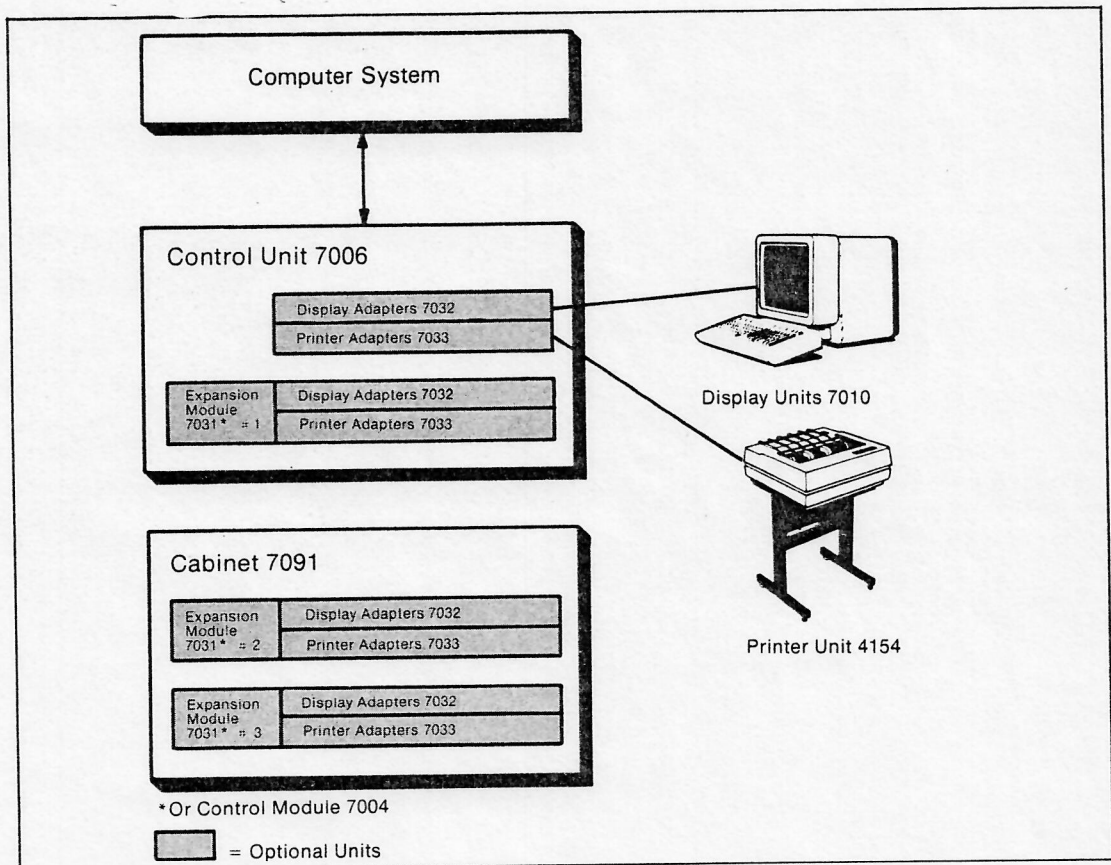
Cluster configuration connected to remote host computer

# ALFASKOP SYSTEM 37



*Alfaskop System 37, remote application*

# ALFASKOP SYSTEM 37

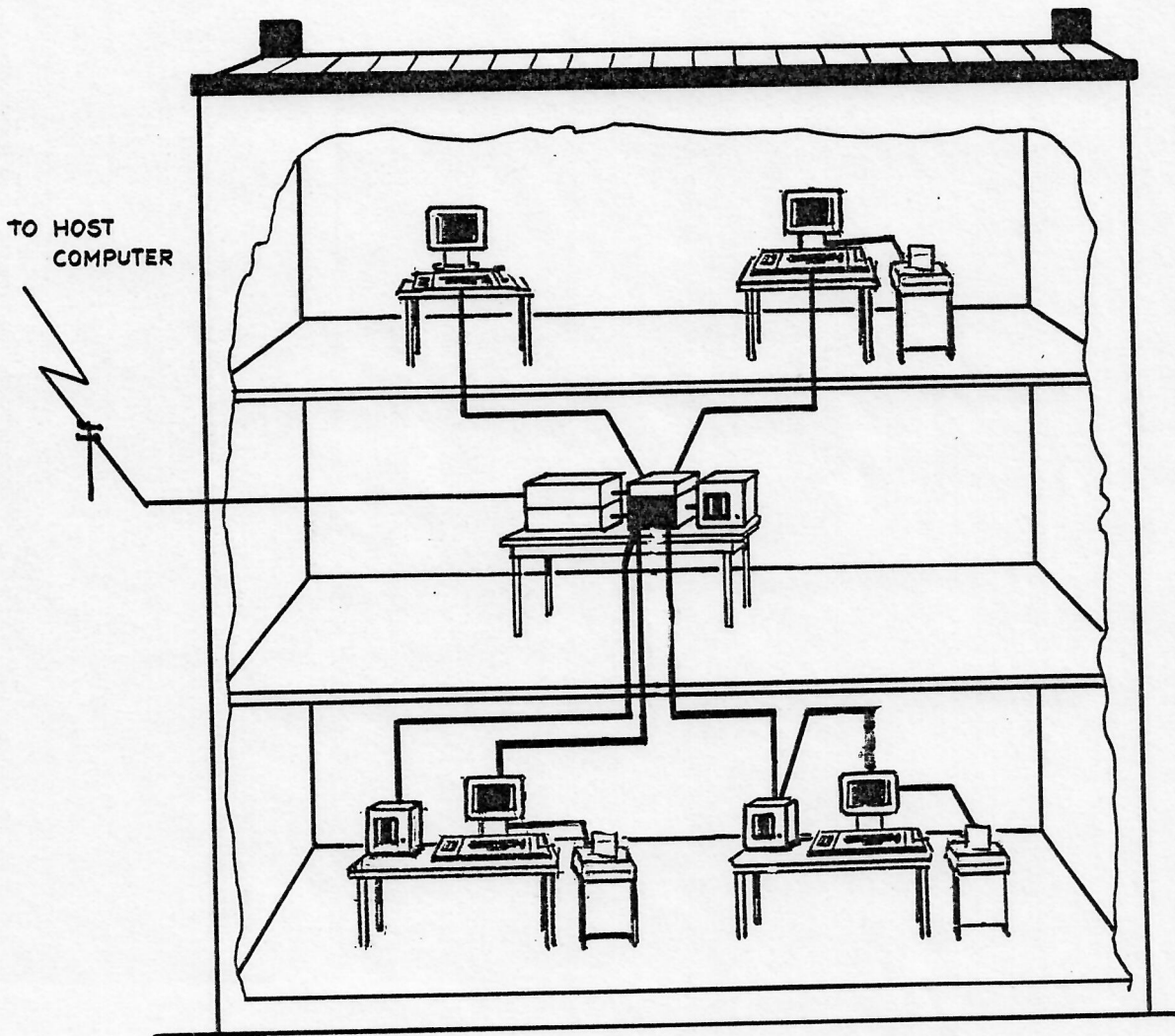


*Alfaskop System 37, local application*



## ALFASKOP SYSTEM 41

## REMOTE INSTALLATION



TWO-WIRE CABLE (1500M) OR COAX  
CABLE (600M)

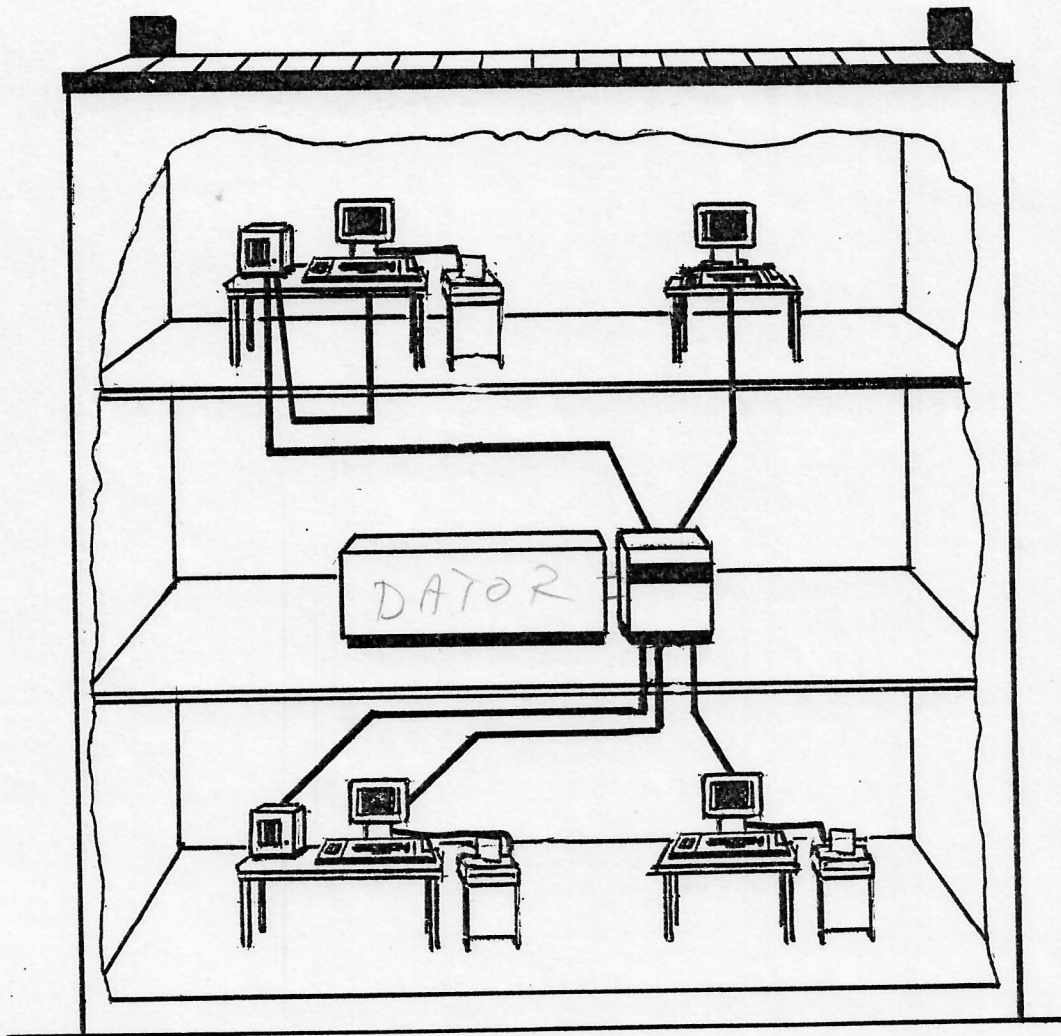
ENQUIRY AND/OR DATA REGISTRATION

LOCALLY STORED FORMS

LOCAL DATA CHECKOUT

## ALFASKOP SYSTEM 41

## LOCAL INSTALLATION



TWO-WIRE CABLE (1500M) OR COAX  
CABLE (600M)

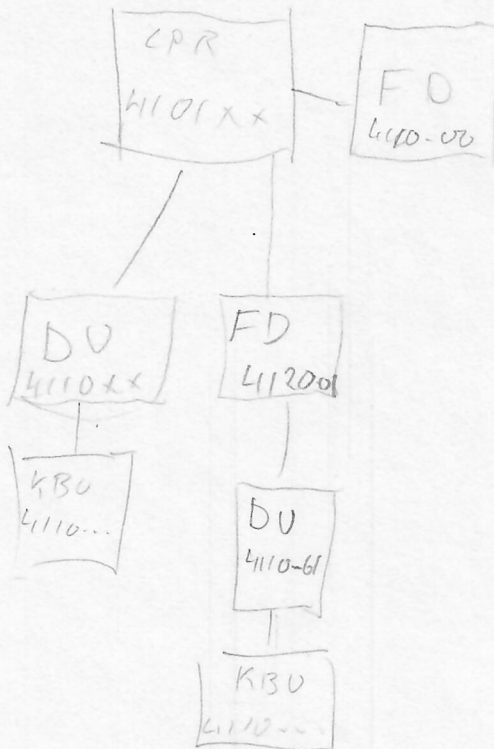
ENQUIRY AND/OR DATA REGISTRATION

Exercise

Draw a diagram of an Alfaskop System 41 configuration.

Let each system unit be represented by a box with the product number. Draw the appropriate lines to show the connections between units.

The system shall be a remote cluster with 7 display units, 4 printer units and 2 flexible disk units.



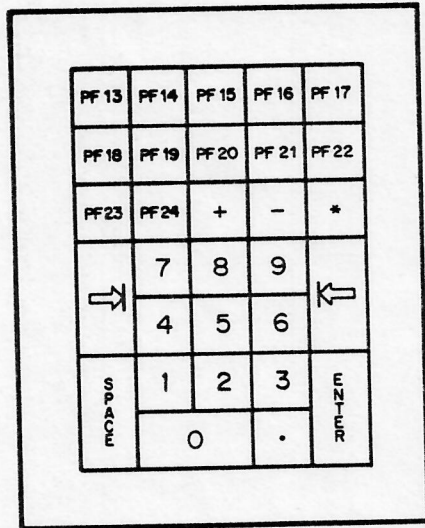
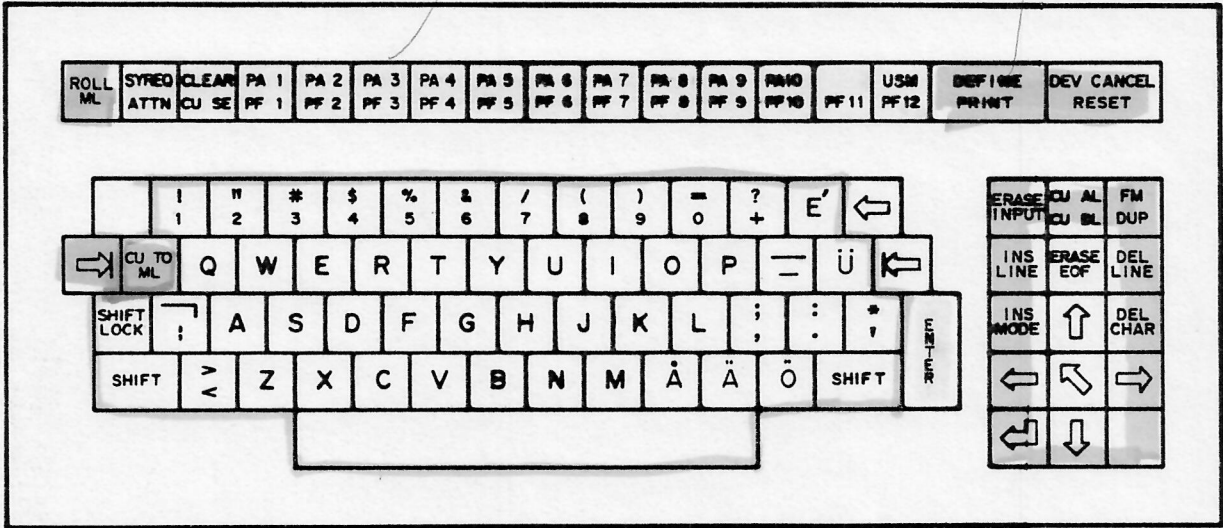


# ALFASKOP SYSTEM 41

## Keyboard Layout

*Emulierungsbande*

*lokale Emulierungsbande*

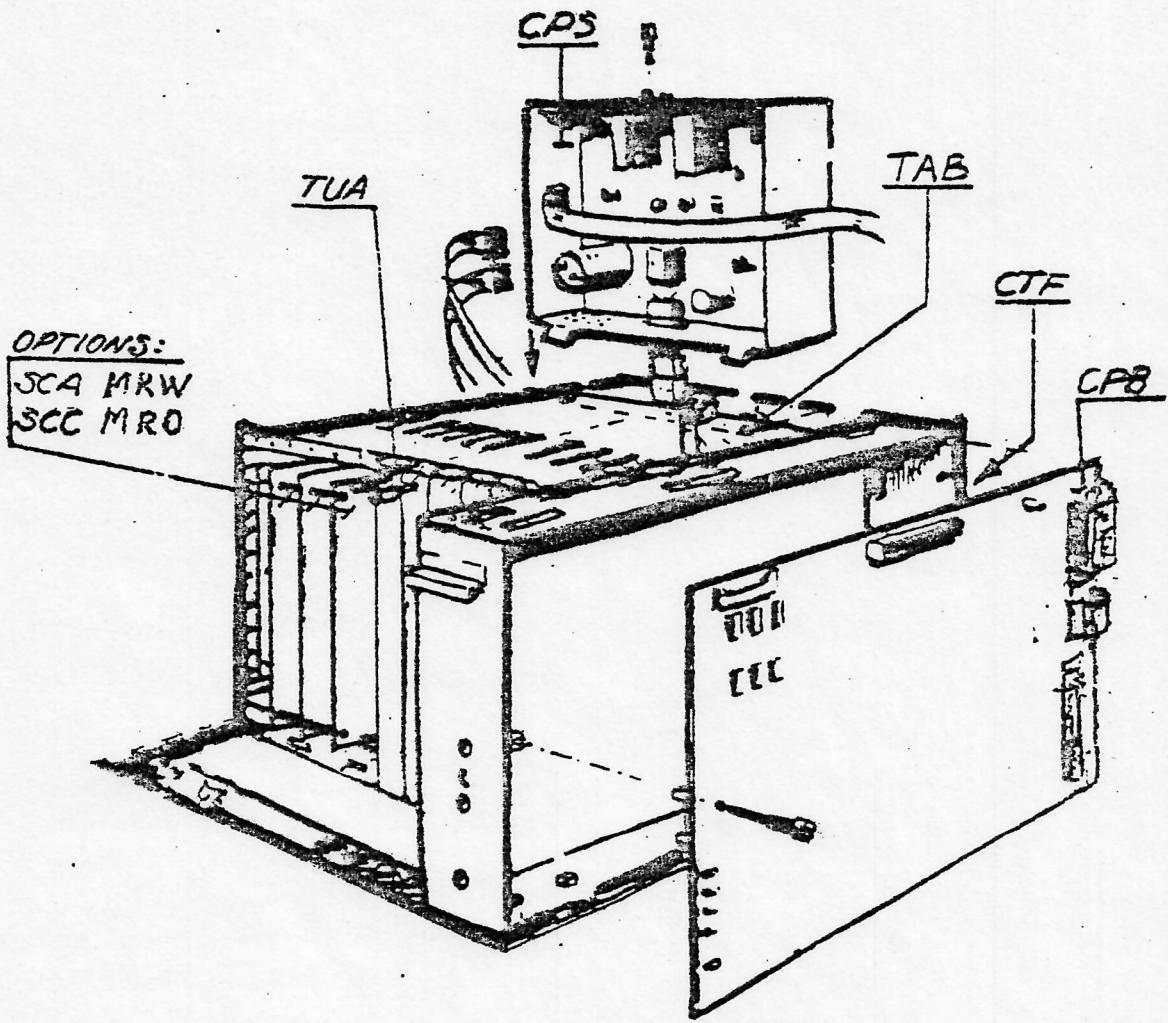


Typewriter Keyboard

Data Entry Keyboard

APL Keyboard

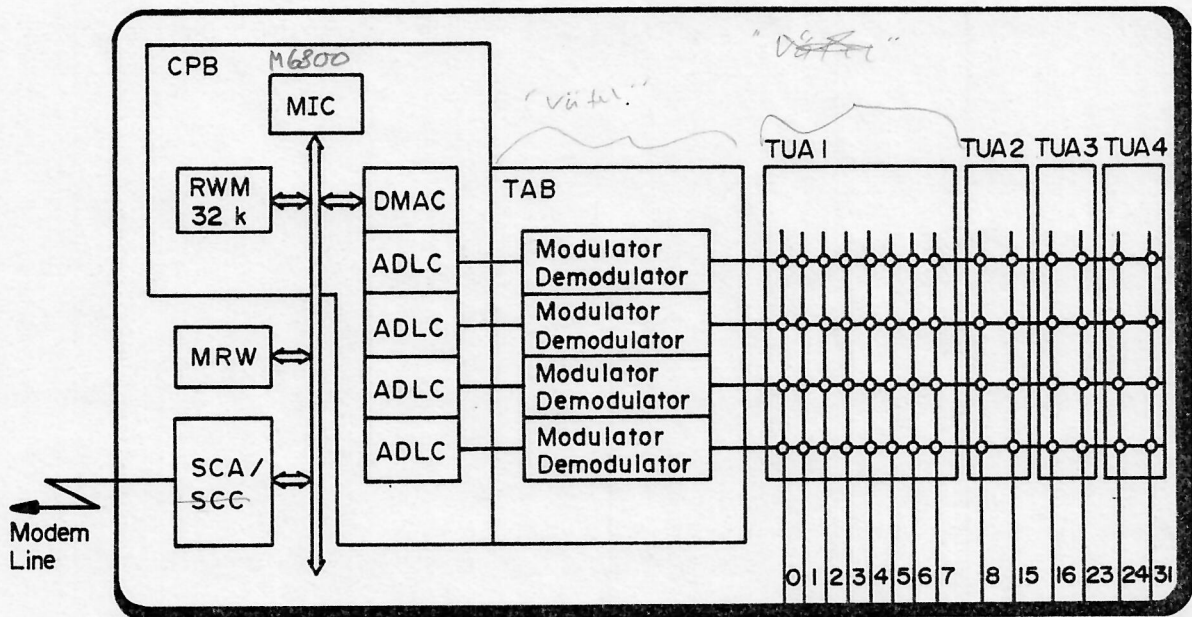
ALFASKOP SYSTEM 41



CPR 4101

# ALFASKOP SYSTEM 41

CPR  
Communication Processor Remote 4101



FD 4120

DU 4110

FD 4120

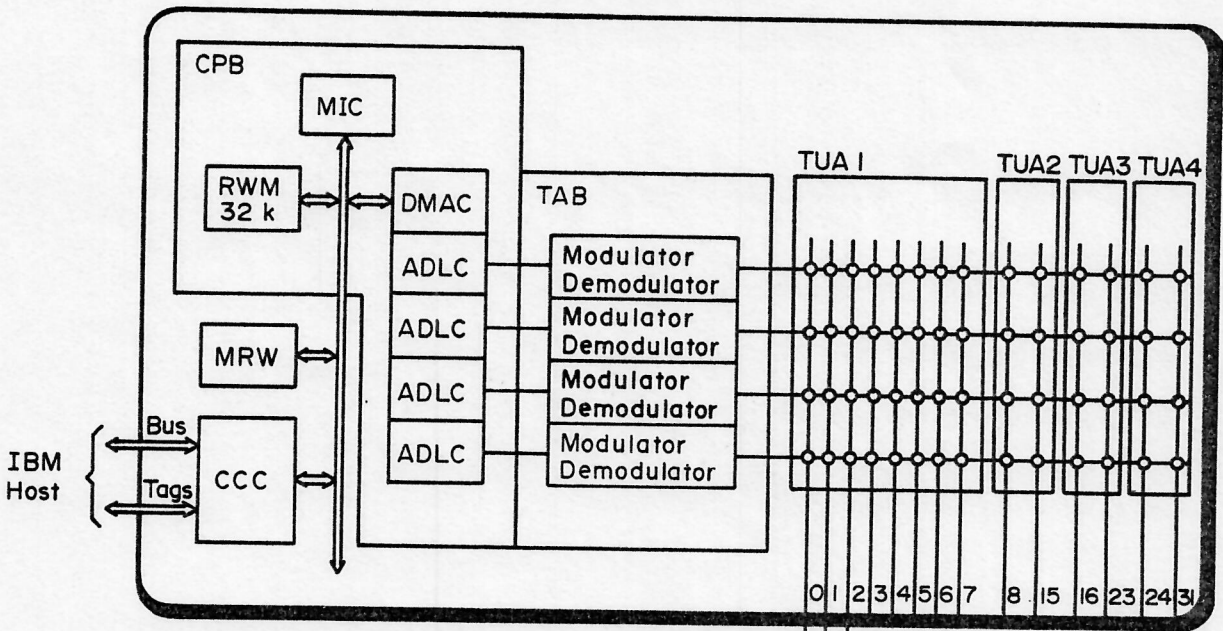
DU 4110

- ADLC = Advanced Data Link Controller
- SCA = Synchronous Communication Adapter
- SCC = Synchronous Communication Controller
- CPB = Communication Processor Board
- DMA = Direct Memory Access
- MIC = Micro Computer *M6800*
- MRW = Memory Read / Write
- TUA = Terminal Unit Adapter
- TAB = Terminal Adapter Board



# ALFASKOP SYSTEM 41

CPL  
Communication Processor Local 4102



FD 4120

DU 4110

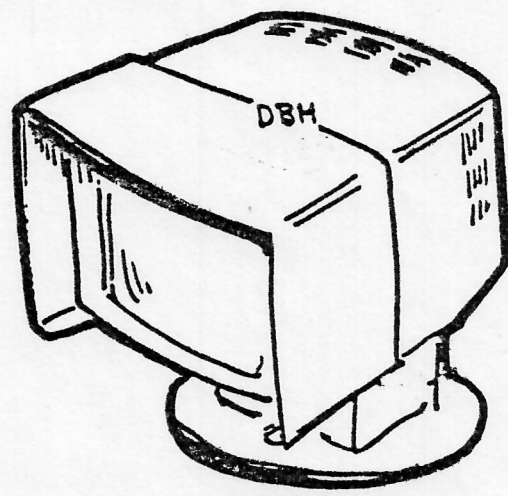
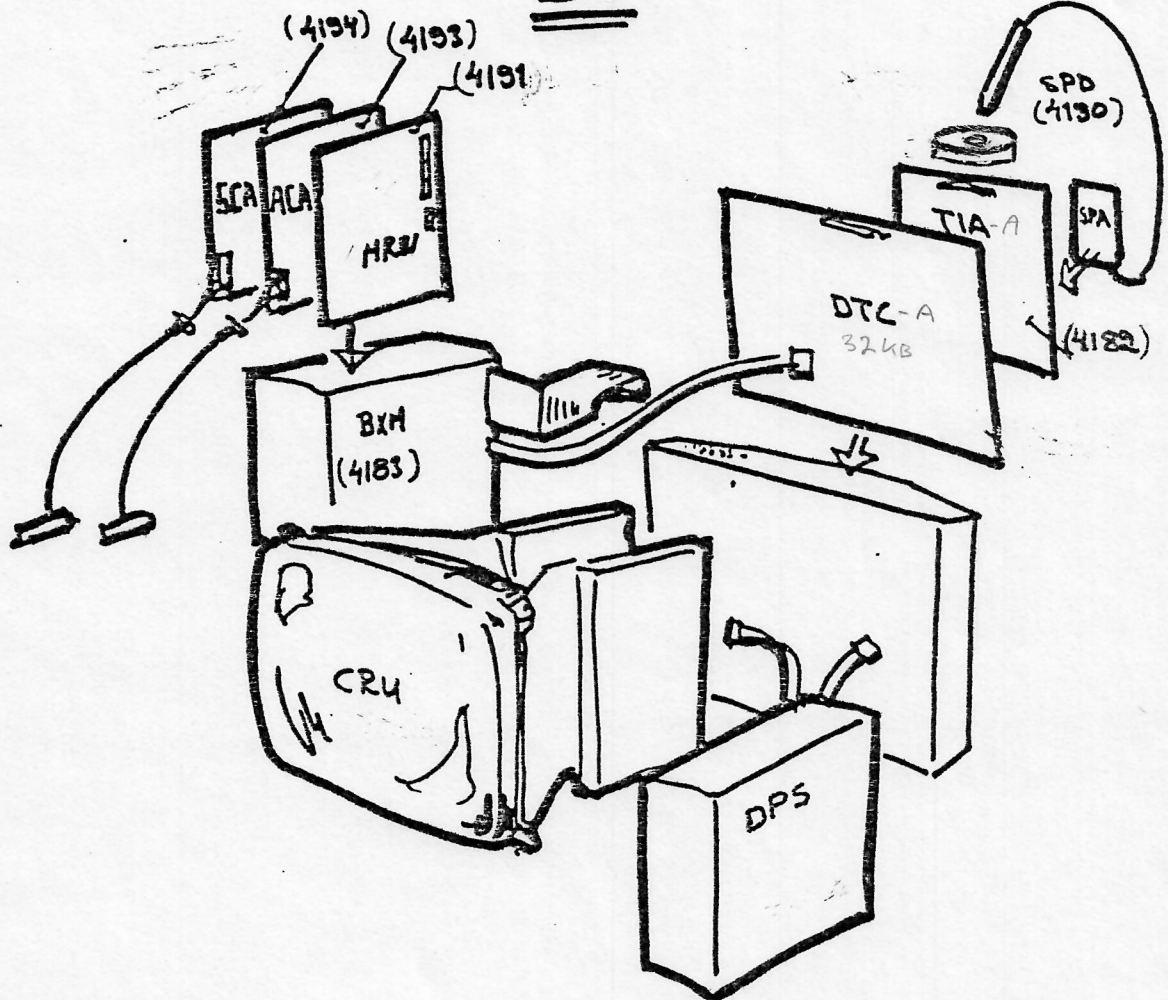
FD 4120

DU 4110

- ADLC = Advanced Data Link Controller
- CCC = Channel Communication Controller
- CPB = Communication Processor Board
- DMA = Direct Memory Access
- MIC = Micro Computer
- MRW = Memory Read/Write
- TUA = Terminal Unit Adapter
- TAB = Terminal Adapter Board

ALFASKOP SYSTEM 41

DU

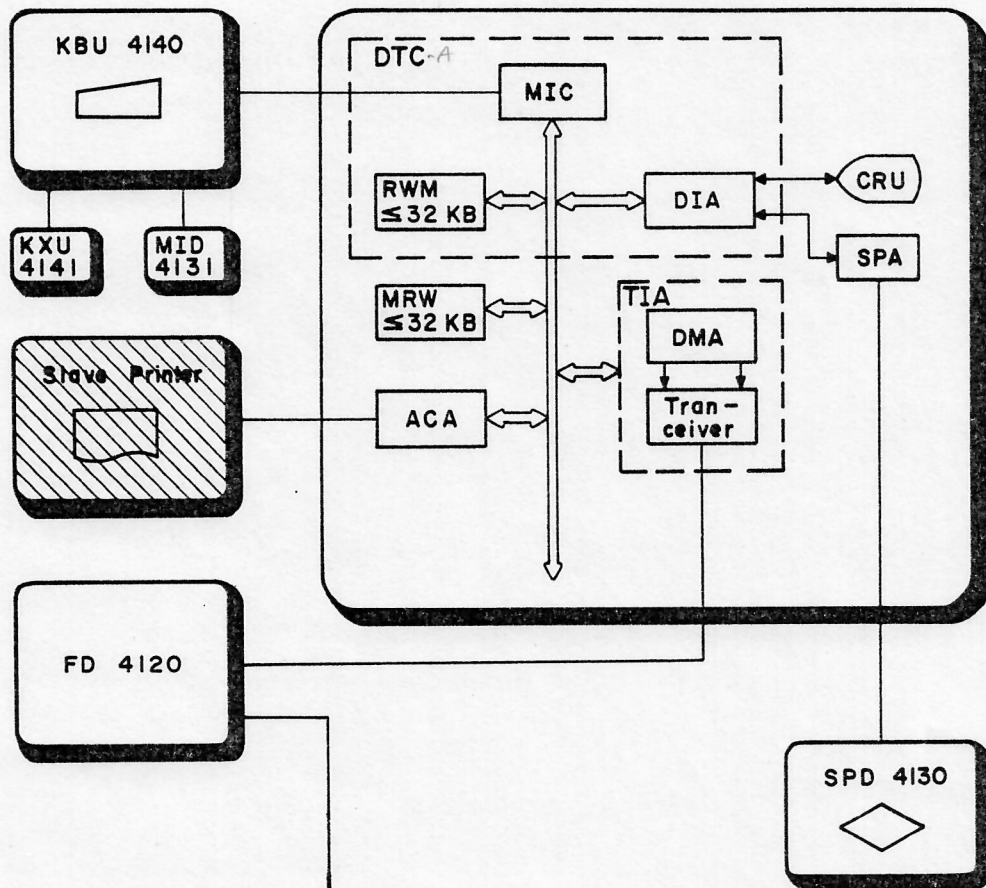


DU  
4110

# ALFASKOP SYSTEM 41

Functional Block Diagram

Cluster DU { Remote or Local }

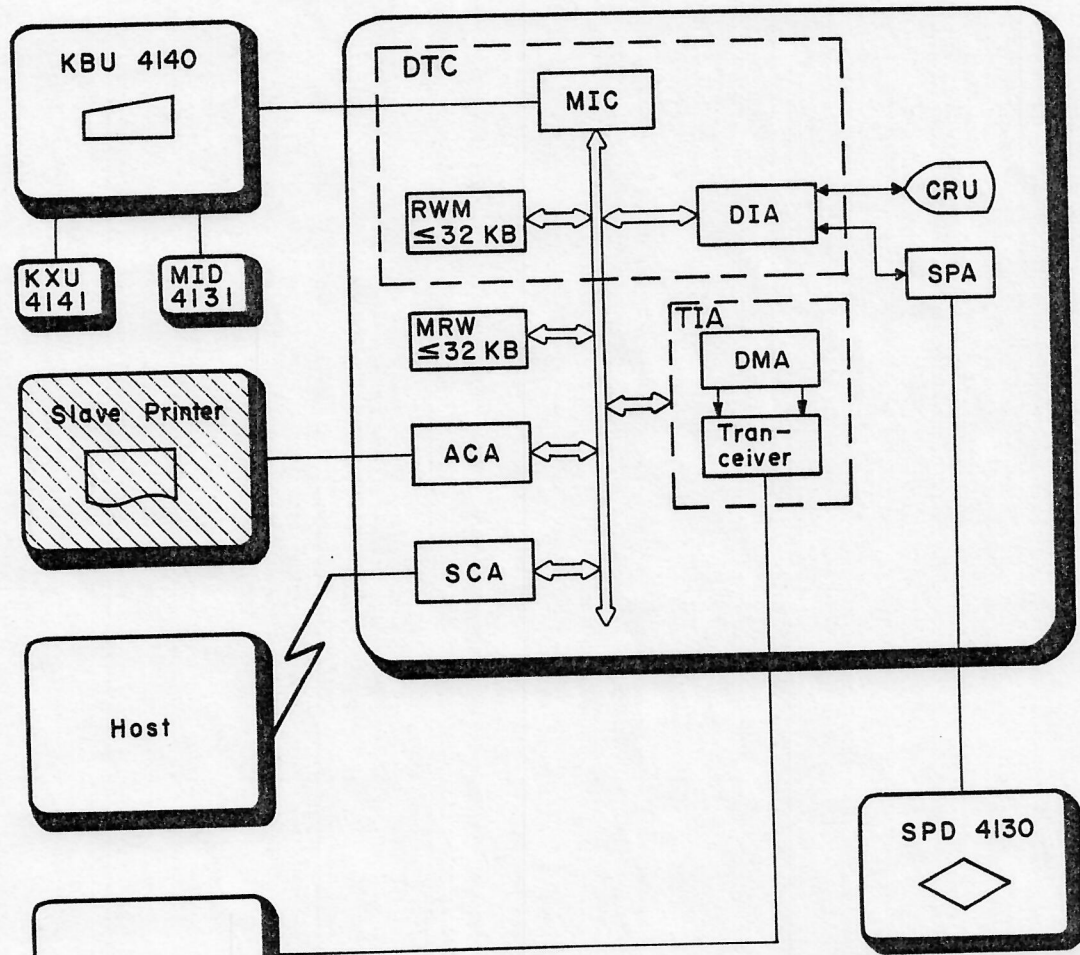


- ACA = Asynchronous Communication Adapter
- CRU = Cathode Ray Tube Unit
- DIA = Display Adaption
- DMA = Direct Memory Access
- DTC = Display Terminal Controller
- MIC = Micro Computer
- MRW = Memory Read / Write
- SPA = Selector Pen Adapter
- TIA = Two-wire Interface Adapter



# ALFASKOP SYSTEM 41

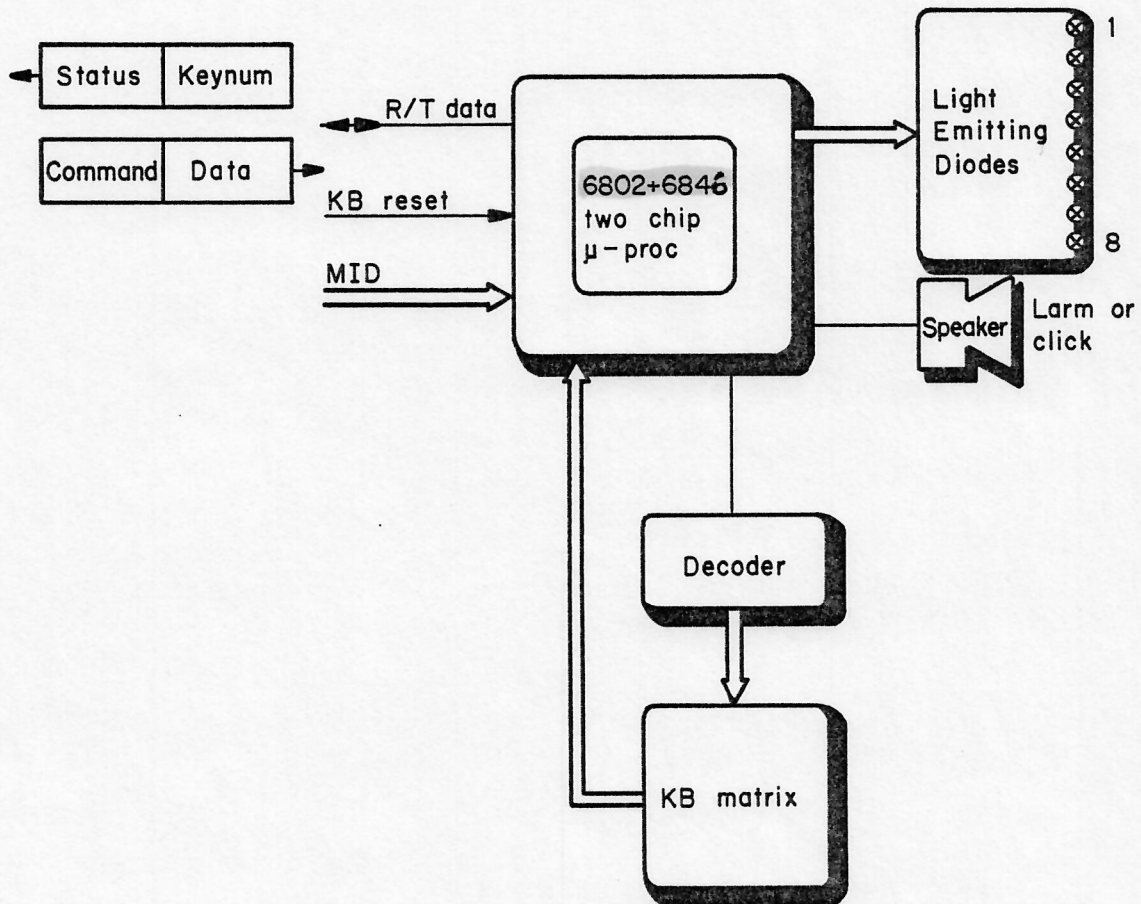
Functional Block Diagram  
Single DU



- ACA = Asynchronous Communication Adapter
- CRU = Cathode Ray Tube Unit
- DIA = Display Adaption
- DMA = Direct Memory Access
- DTC = Display Terminal Controller
- MIC = Micro Computer
- MRW = Memory Read / Write
- SCA = Synchronous Communication Adapter
- SPA = Selector Pen Adapter
- TIA = Two-wire Interface Adapter

# ALFASKOP SYSTEM 41

## Keyboard



Two chip  $\mu$ -proc = flexible keyboard

N-key roll-over-function

Hall-element-switches and  $\mu$ -proc give possibility to low-profile keyboard

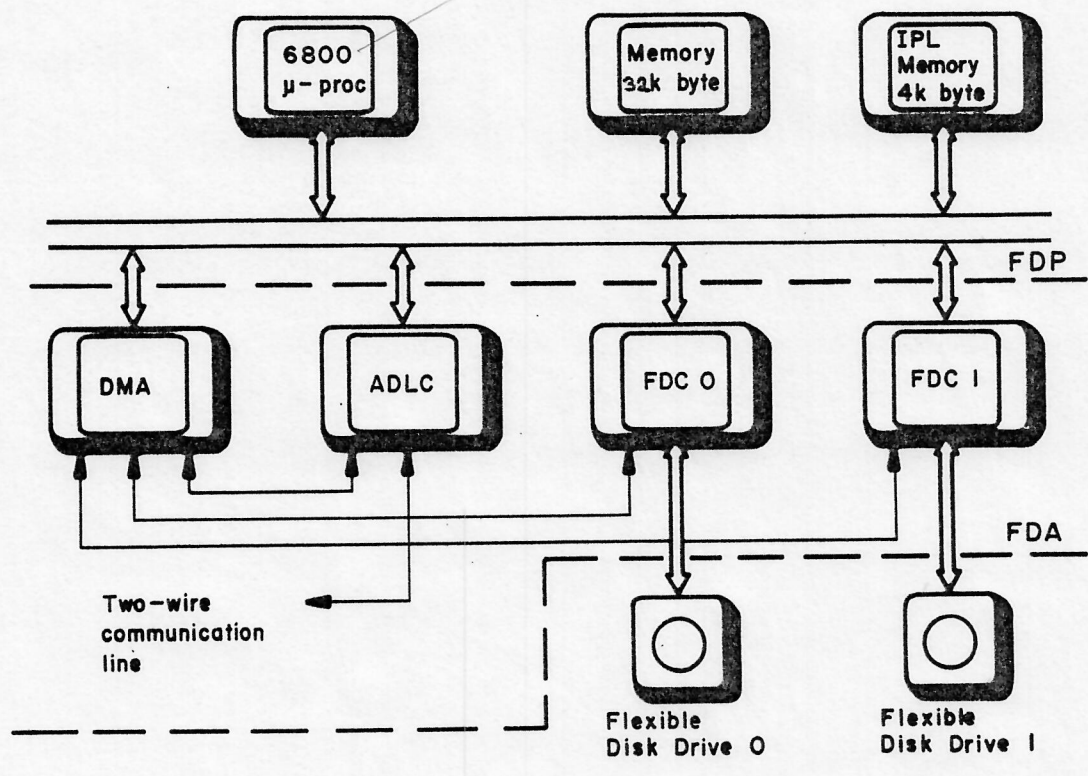
For lower power consumption power switching is used to the

Hall-element-switches

# ALFASKOP SYSTEM 41

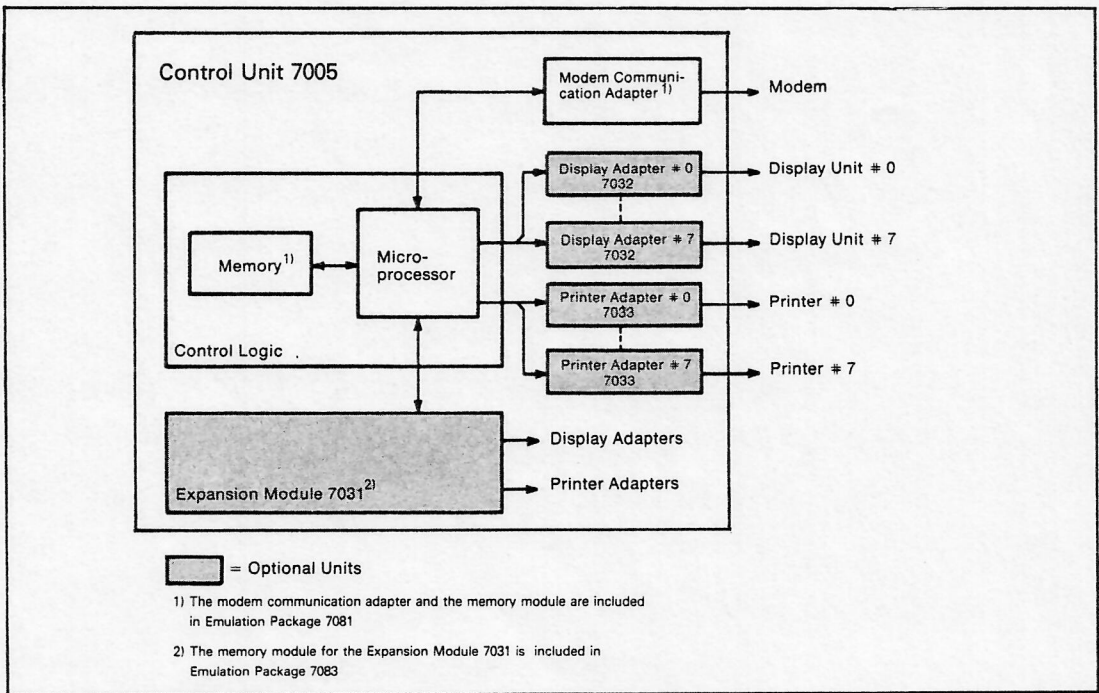
Main part of Flexible Disk Unit

*Blocks 1, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100*



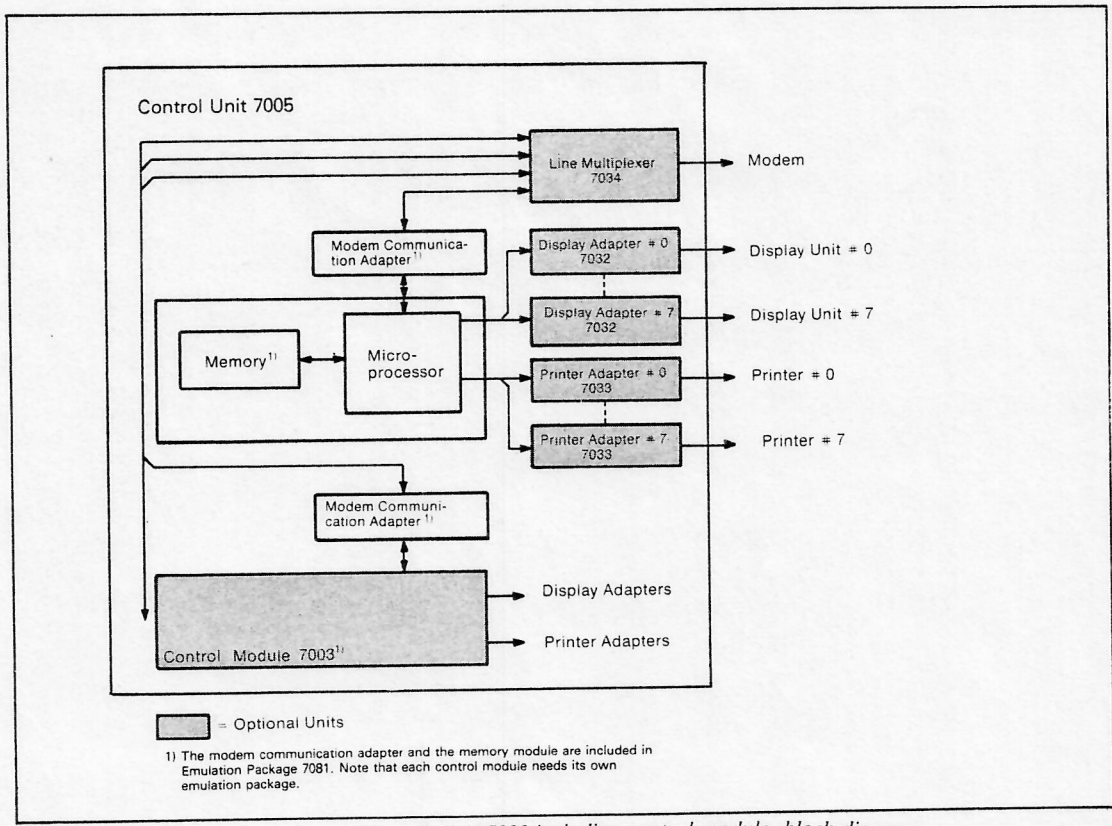


# ALFASKOP SYSTEM 37



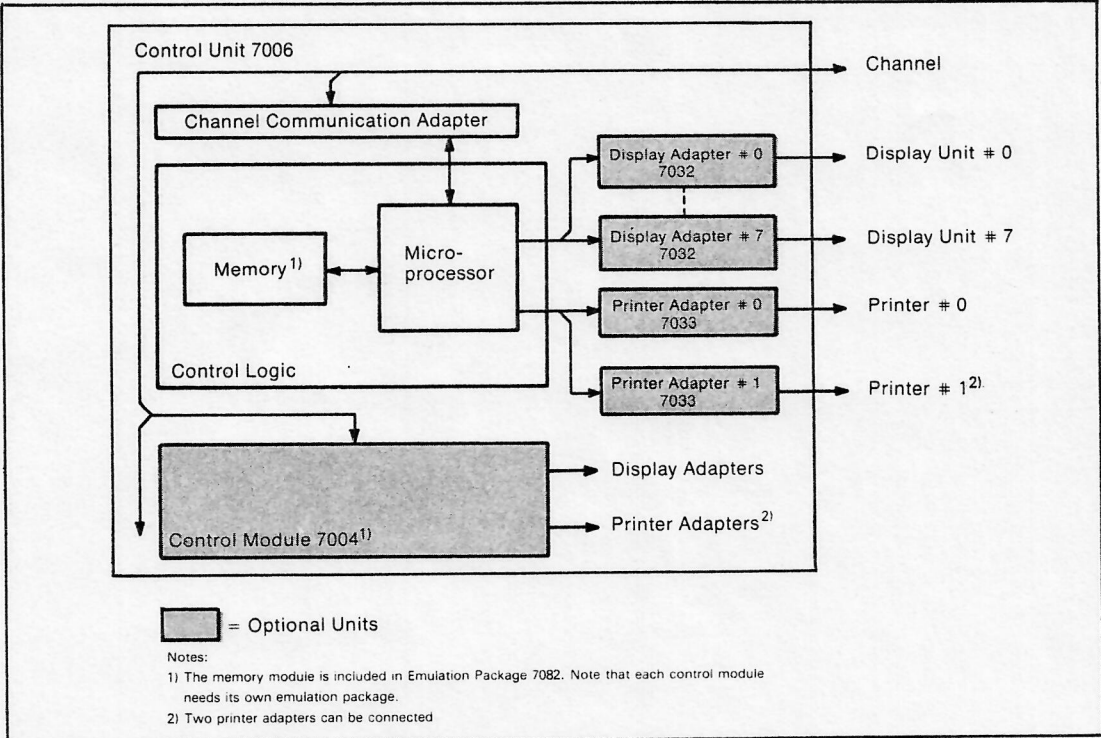
Control Unit 7005 including expansion module, block diagram

# ALFASKOP SYSTEM 37



Control Unit 7005 including control module, block diagram

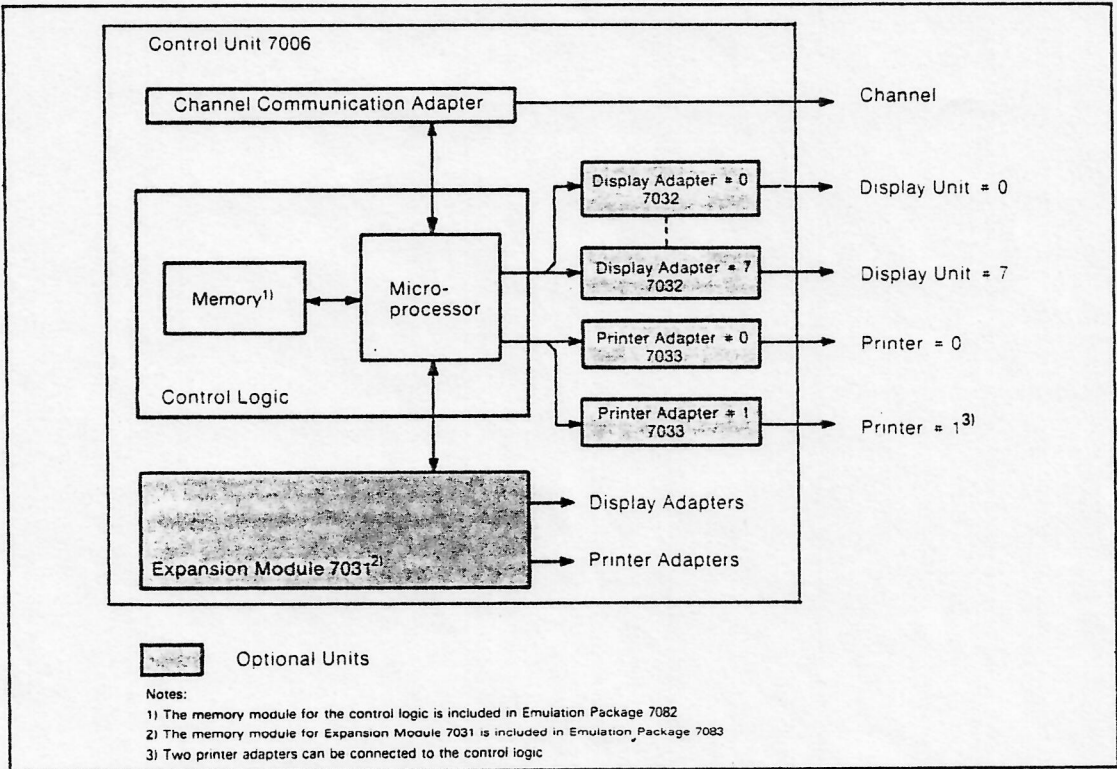
# ALFASKOP SYSTEM 37



Control Unit 7006 including control module, block diagram

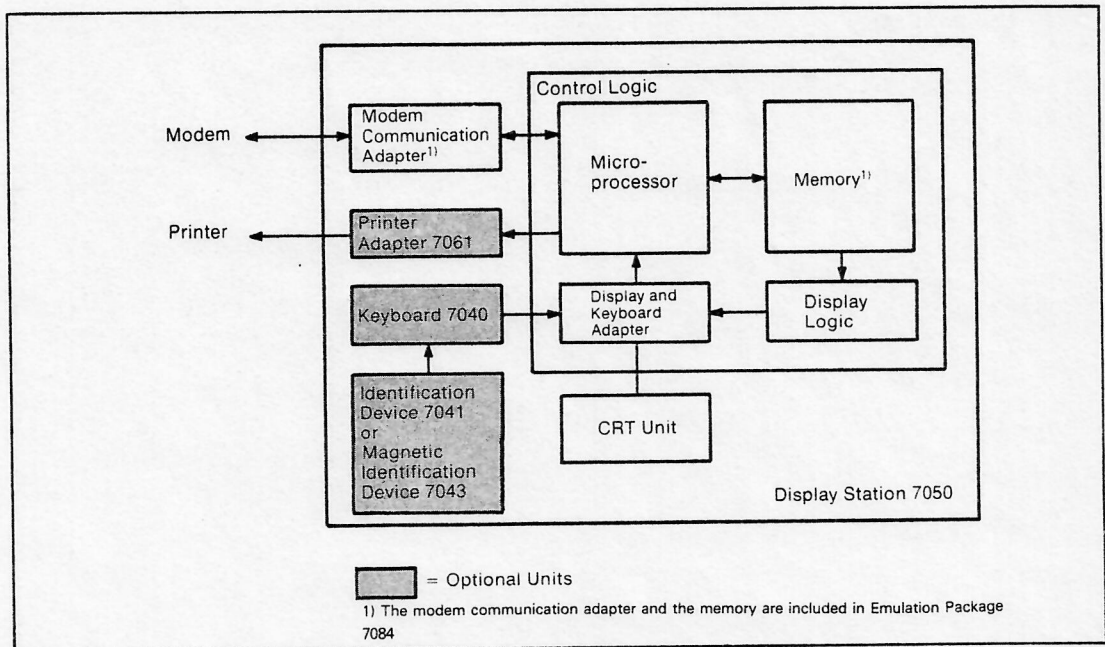


# ALFASKOP SYSTEM 37



Control Unit 7006 including expansion module, block diagram

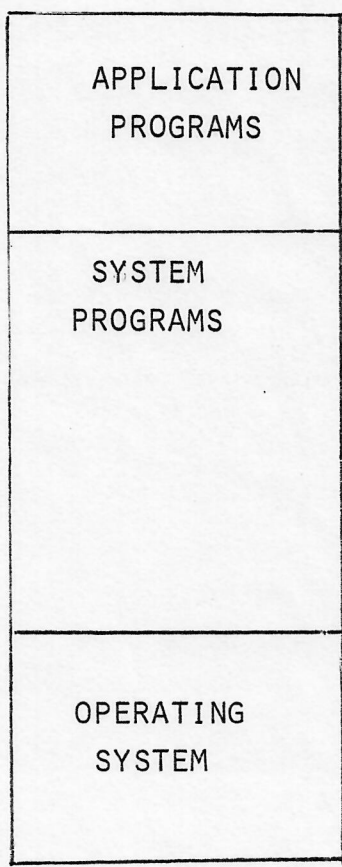
# ALFASKOP SYSTEM 37



Display Station 7050, block diagram

ALFASKOP SYSTEM 41

SOFTWARE



CUSTOMER'S FORMS, FORMGROUPS

- ALFAEDIT
- ALFABATCH
- ALFAFORM INTERPRETER
- ALFAFORM TRANSLATOR
- EMULATION
- CONSOLE MODE



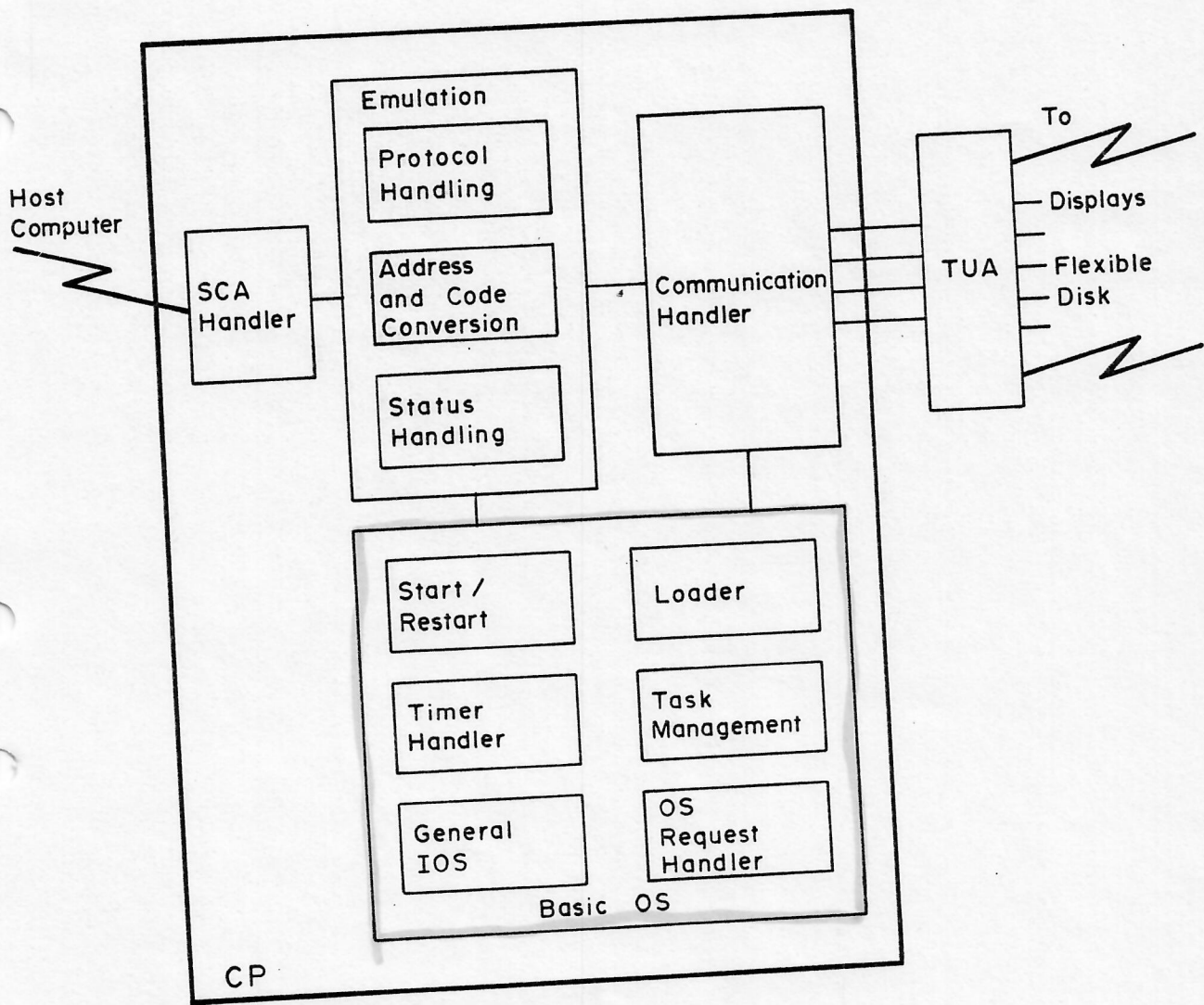
## ALFASKOP SYSTEM 41

### LOADING OF SOFTWARE IN ALFASKOP SYSTEM 41

- Loading from diskette
- IPL Initial Program Load
- LOGON form
- AUTO LOGON
- Load maps
- Password
- LOGOFF

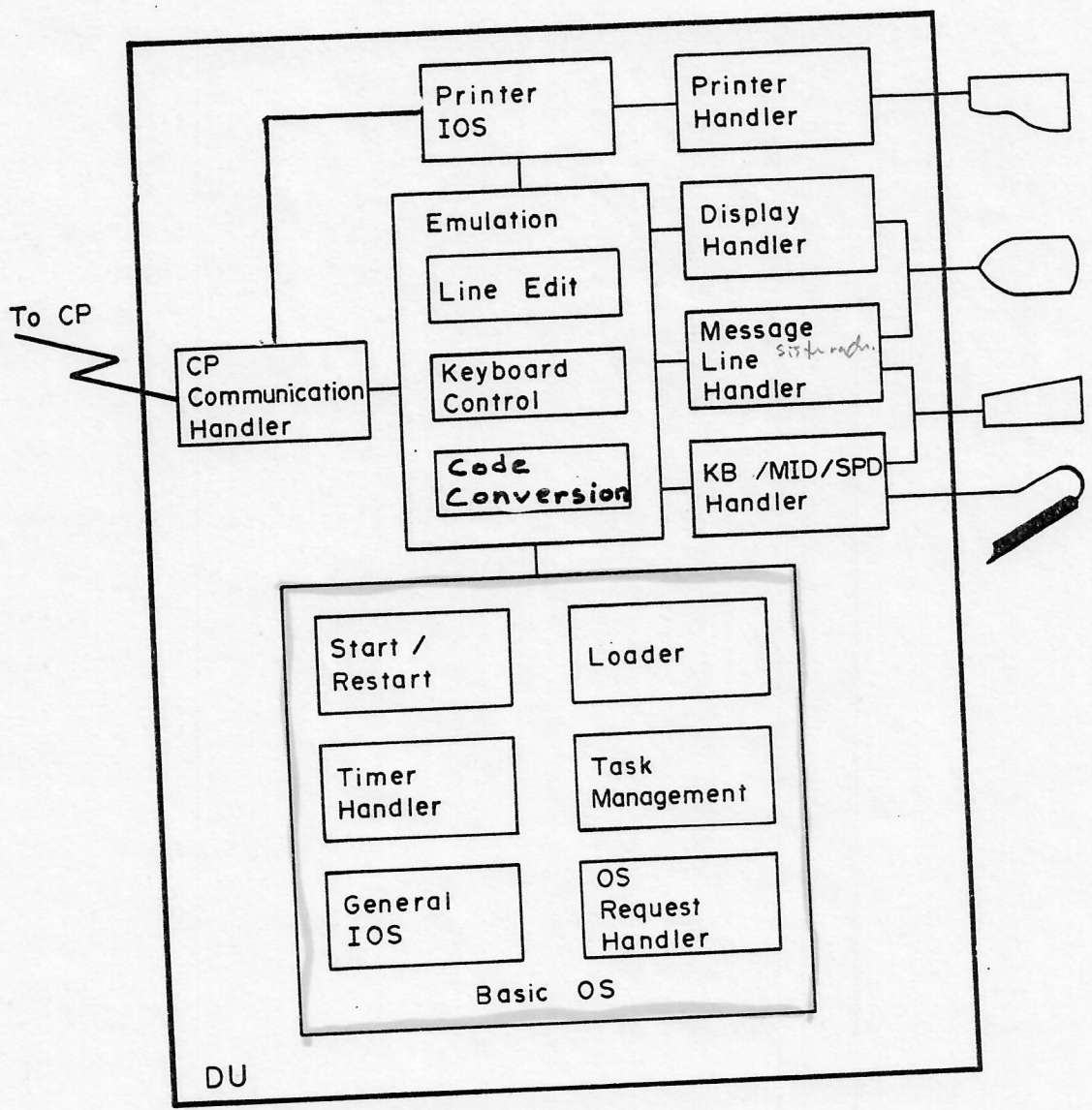


# ALFASKOP SYSTEM 41

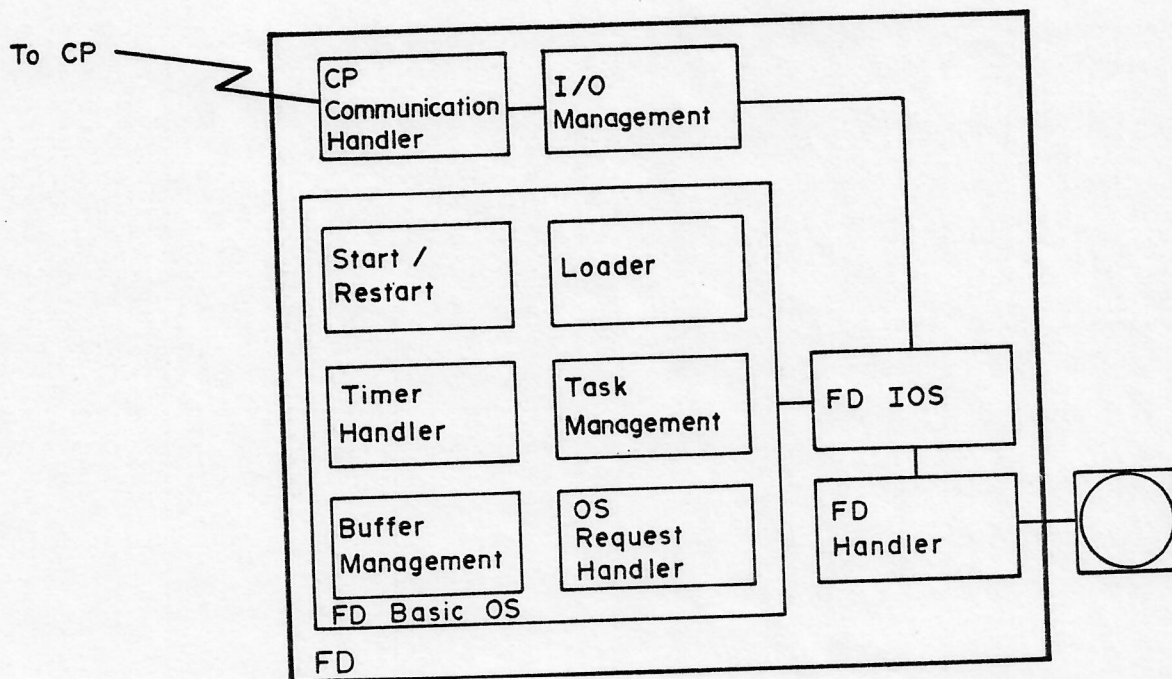




# ALFASKOP SYSTEM 41



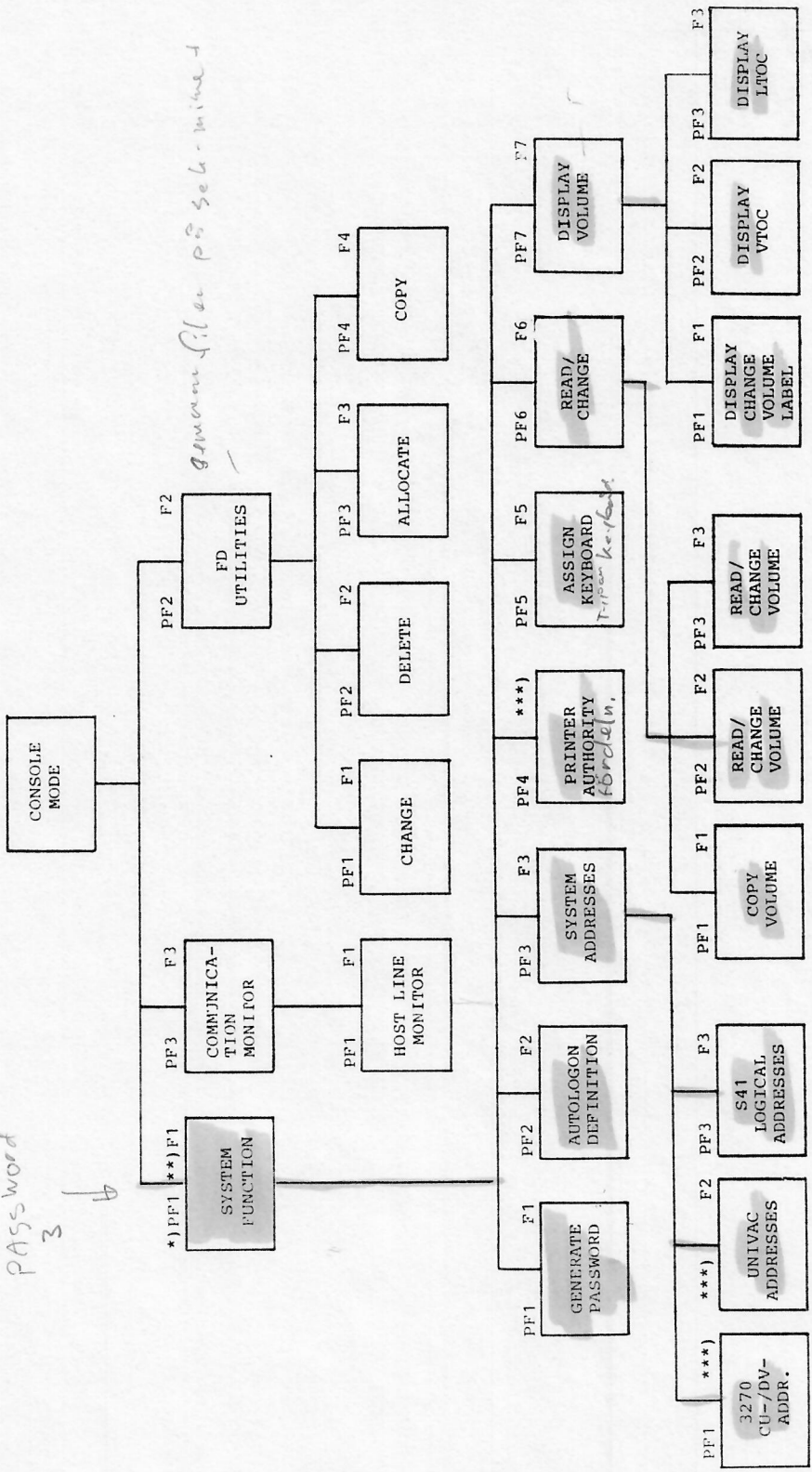
# ALFASKOP SYSTEM 41



# ALFASKOP SYSTEM 41

password  
3  
4

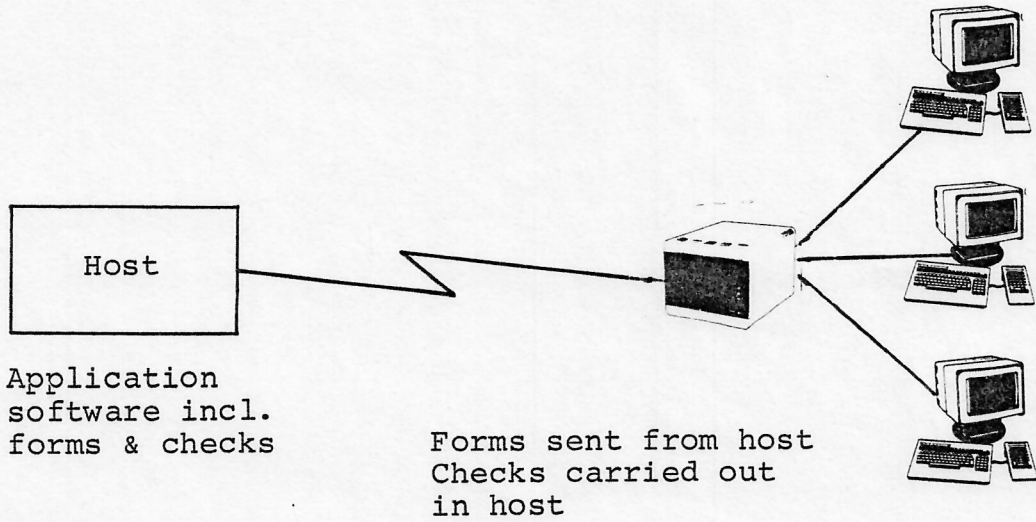
gemeinliche PS sel-minut



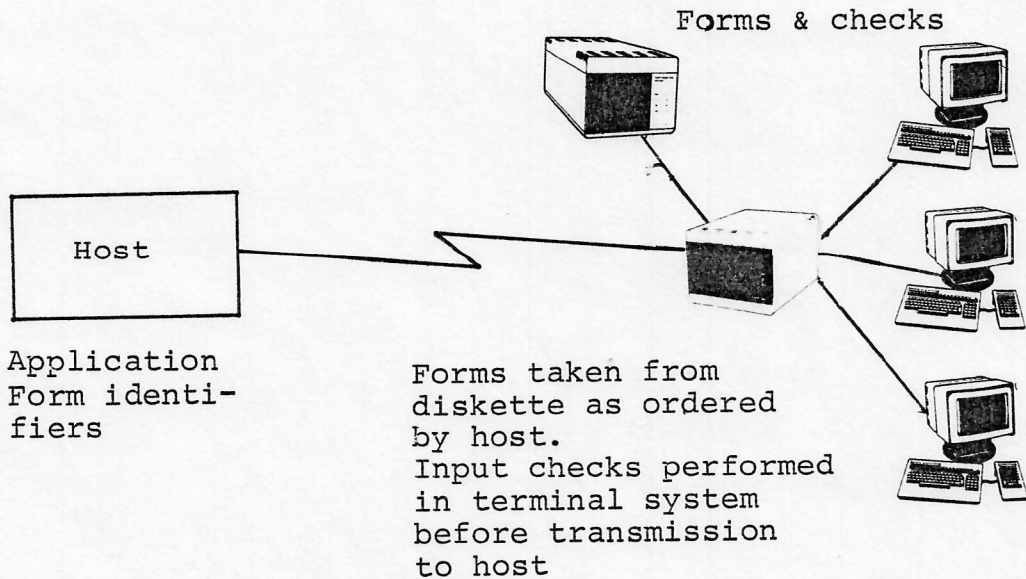


# ALFASKOP SYSTEM 41

## OLD FASHION



## ALFAFORM FASHION



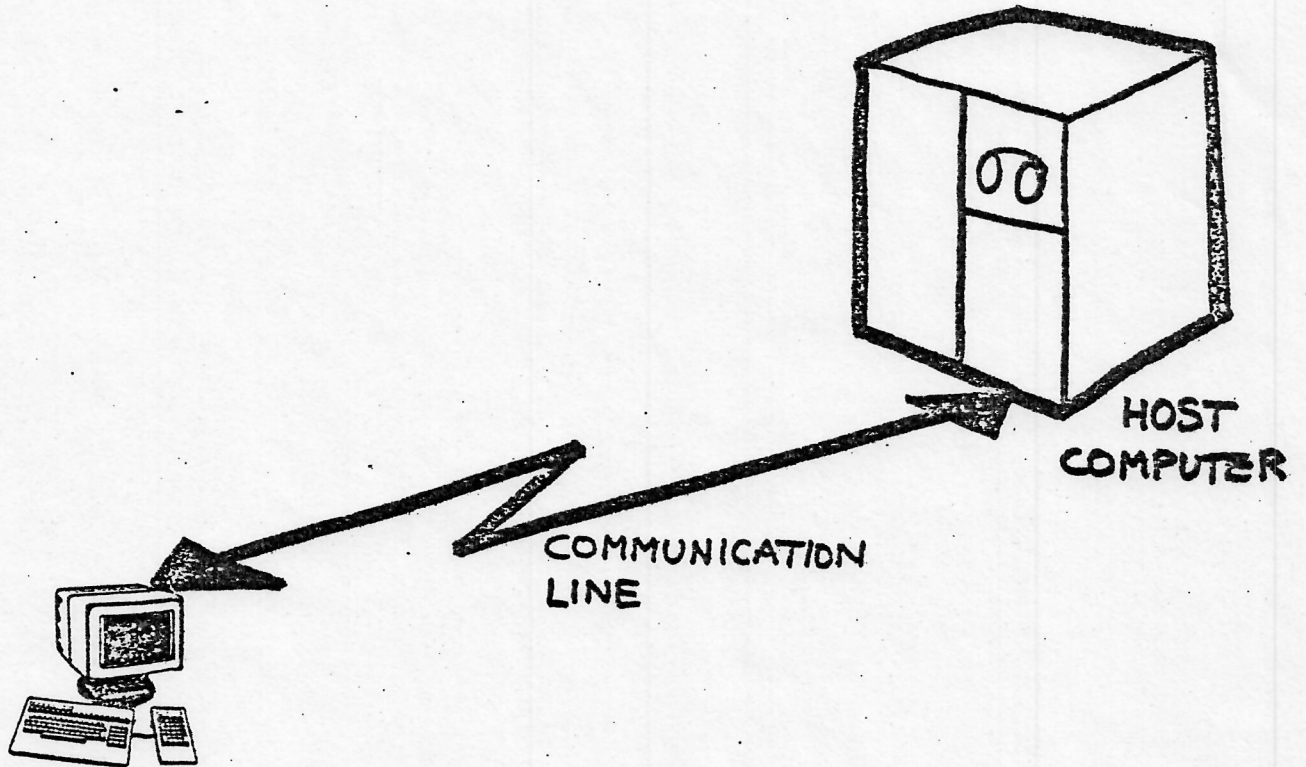
ALFAFORM IS A

SOFTWARE PACKAGE CONSISTING

OF:

- ALFAFORM TRANSLATOR
- ALFAFORM TEST INTERPRETER
- ALFAFORM INTERPRETER

# MAIN OBJECTIVE



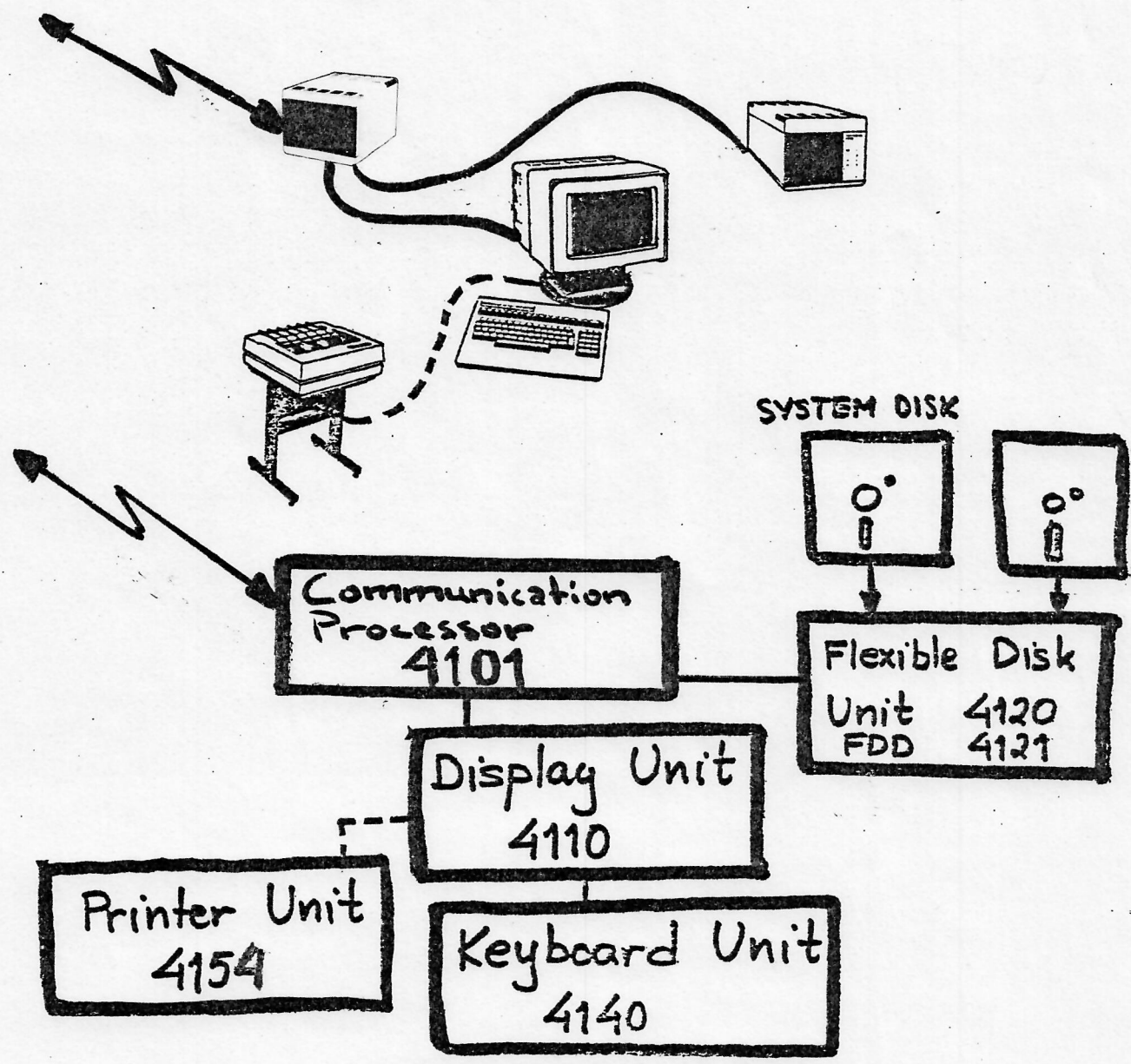
TO REDUCE COMMUNICATION  
LINE LOADS AND HOST COMPUTER  
LOADS BY DISTRIBUTING COMPUTING  
POWER TO THE TERMINALS



# MAIN FUNCTIONS

- CHECKING INPUT DATA AT THE TERMINAL
- PRESENTING GUIDING ERROR MESSAGES TO THE OPERATOR
- EDITING AND CONVERSION OF INPUT DATA BEFORE SENDING TO THE HOST COMPUTER
- EDITING AND CONVERSION OF MESSAGES RECEIVED FROM THE HOST COMPUTER

# CONFIGURATION



# ALFAEDIT.

## FAST, CONVENIENT, EASY TO USE.

Alfaedit can be used for the setting up, editing and print-out of local text and source code information.

The operator can thus sit at the terminal and create files and programs locally, without adding to the load on the host computer or communication line.

With the Alfabatch transmission program, files and programs can be transmitted to the host computer for central storage, compilation or testing, and then recalled for editing, correction and documentation.

Alfaedit is designed as a collection of editing functions, a selection of which is displayed at each step in the editing process.

Each selection is displayed at the bottom of the screen, together with the name of the function and the key which the user should press in order to execute it.

### ALFAEDIT INCLUDES THE FOLLOWING FEATURES

Local editing of source code and/or other texts.

Optional word wrap facility when editing texts.

Inserting and deleting characters or lines.  
Moving and duplicating one or more lines.

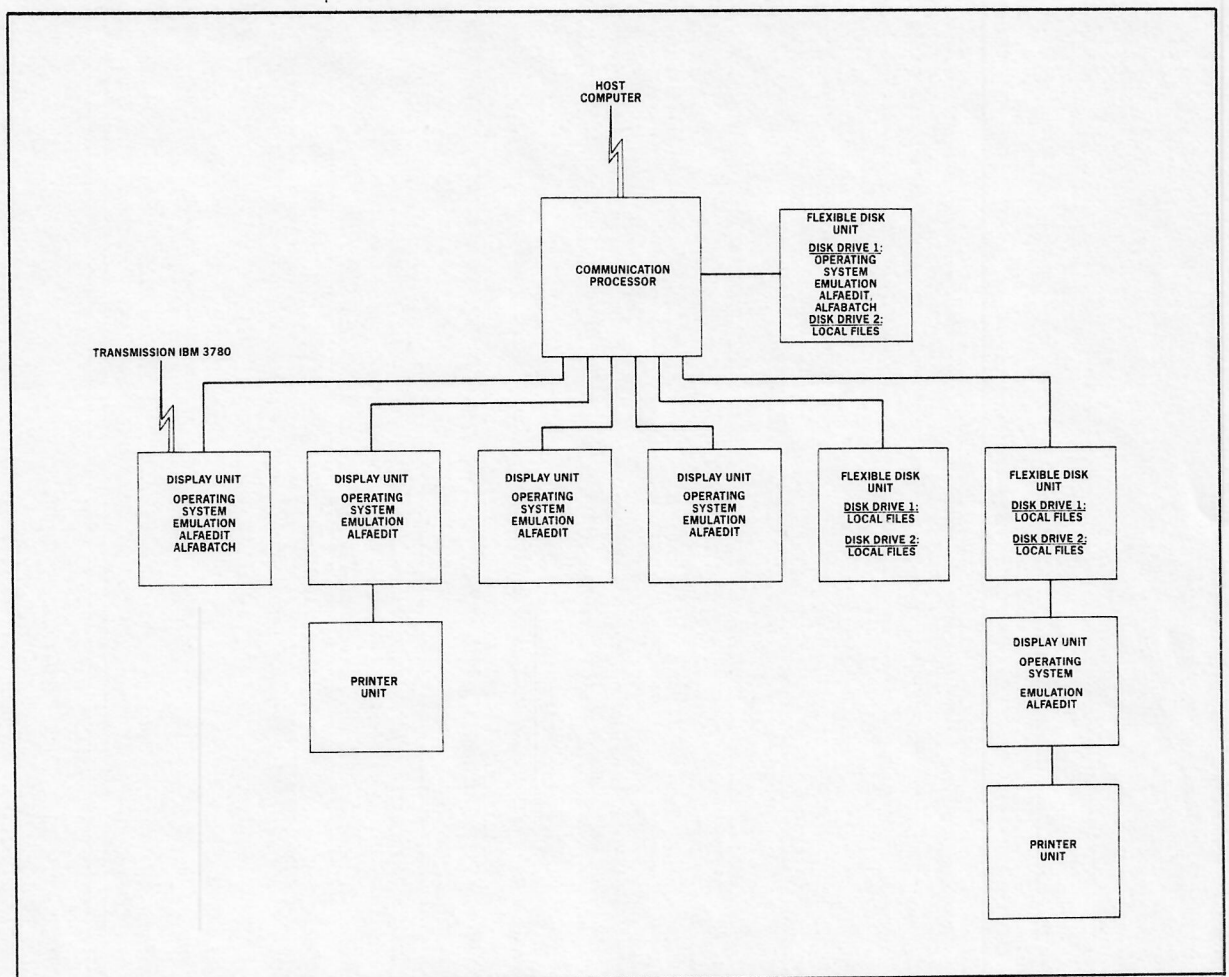
Forward and backwards scrolling of text.  
Dynamic search and change of character strings.

Tab and margin settings.

Utility functions for creating, deleting, or saving texts (files).

Local printing of texts (files).

Invocation of file transmission to and from the host computer via the Alfabatch program.





# DUAL HOST.

## COMMUNICATION WITH TWO HOST COMPUTERS FROM THE SAME TERMINAL.

Alfaskop Dual Host permits communication between Alfaskop System 41 and two host computers with different operating systems and communication routines.

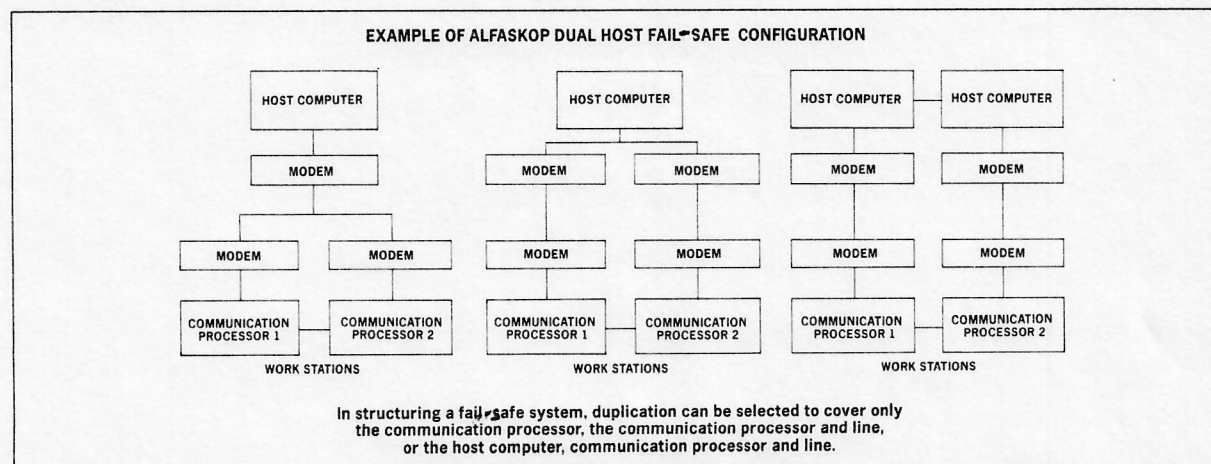
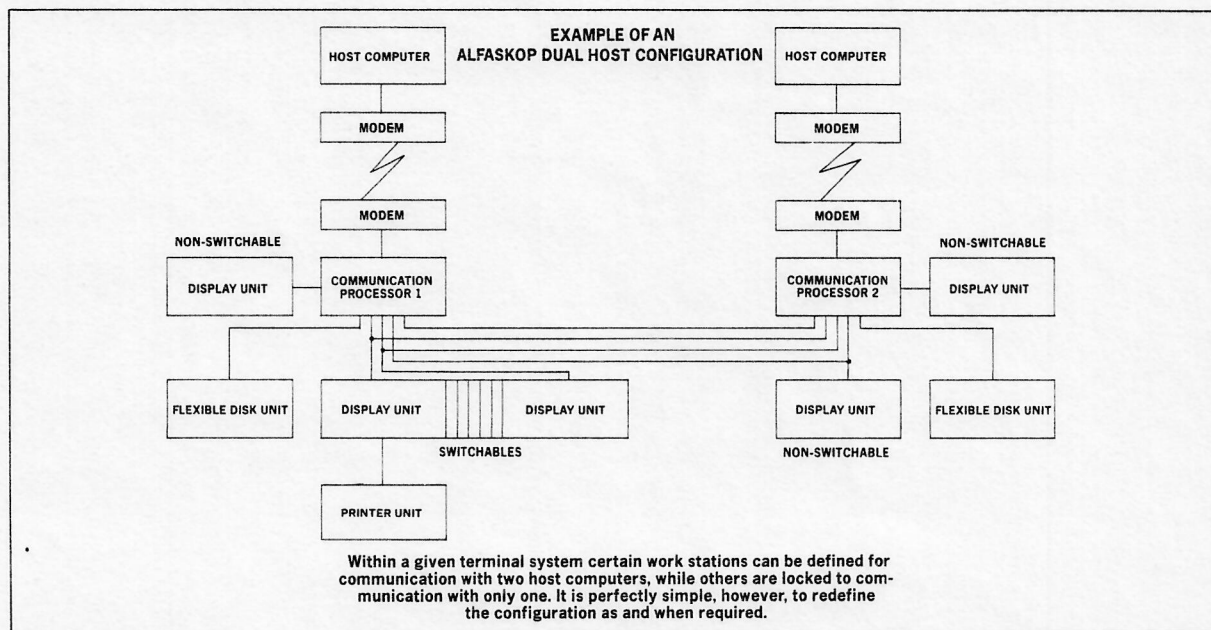
This means a saving to the user, in that only one terminal is required at the work station. For the operator it means a better working environment and faster learning.

In the great majority of cases the switch from one host computer to another is effected by a few simple commands from the keyboard. If the communication routines of the two computers are identical (for

example emulation IBM 3274/78 BSC), switching between the systems is effected by depressing a single key at the terminal.

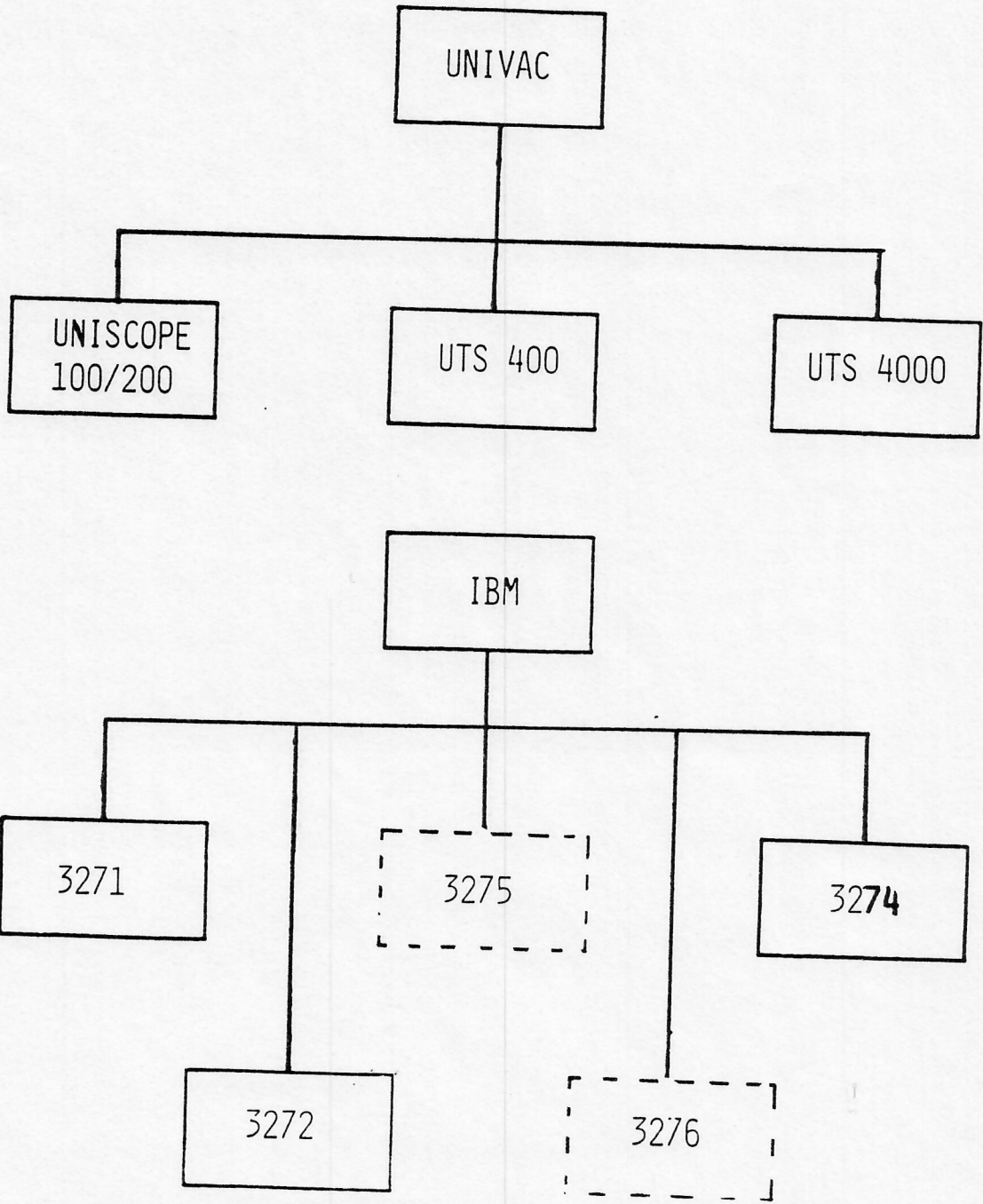
When the computers connected are of different types and have different communication protocols, for example IBM and Univac, the keyboard on the Dual Host terminals is provided with dual inscriptions on certain keys.

A message line at the bottom of the screen tells the operator to which computer the terminal is currently connected.



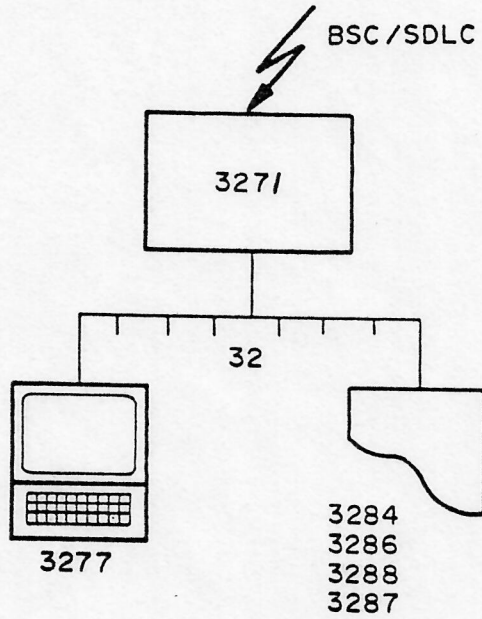
# ALFASKOP SYSTEMS

## ALFASKOP EMULATIONS

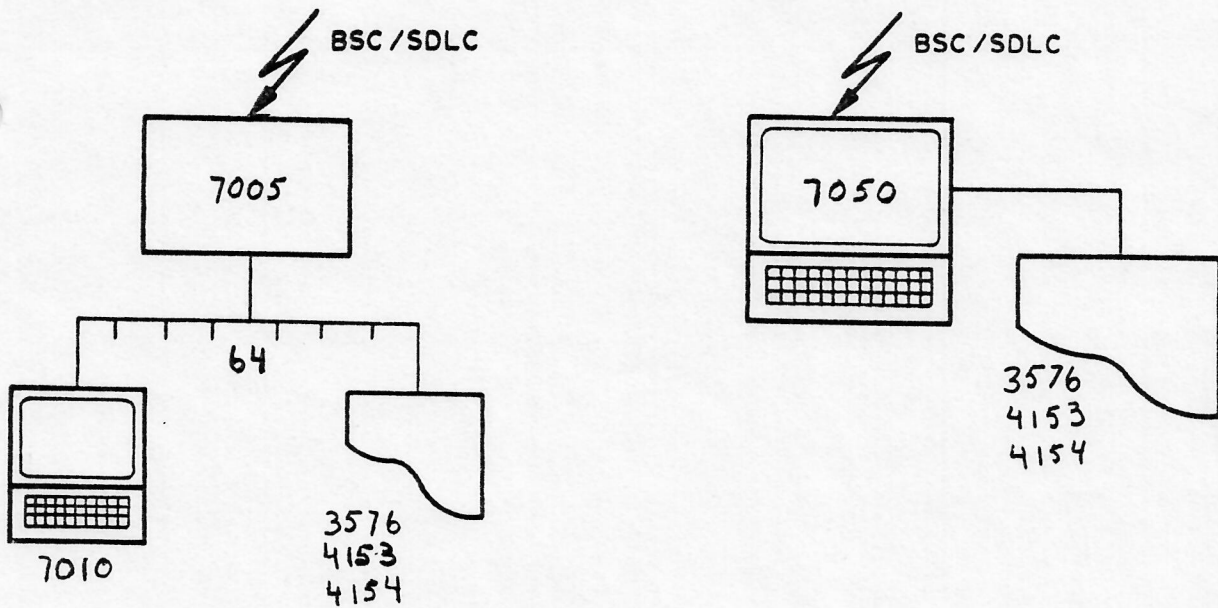


# ALFASKOP SYSTEM 37

IBM:



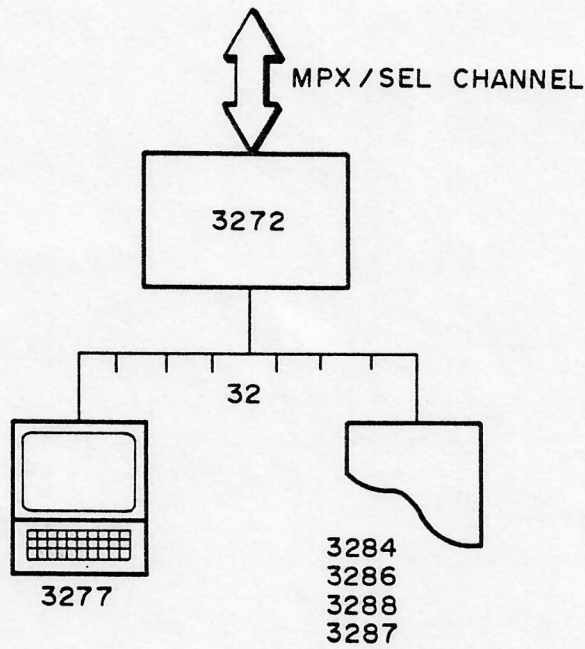
DATASAAB S37:



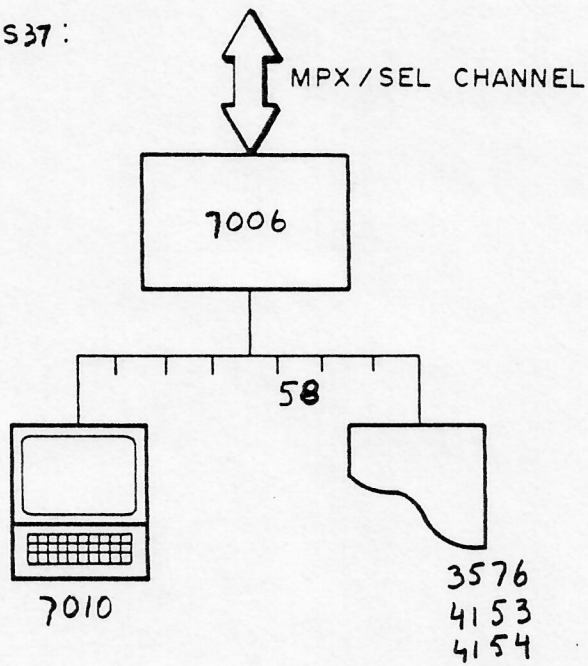


# ALFASKOP SYSTEM 37

IBM:



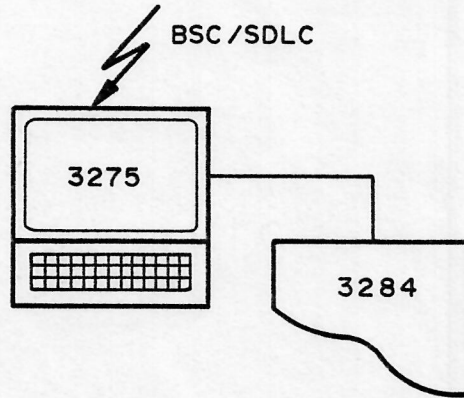
DATASAAB S37:



ALFASKOP SYSTEM 41

Pro to koll 3275

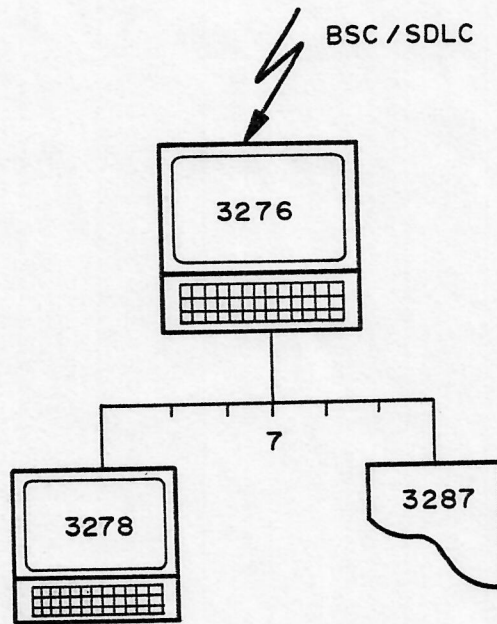
IBM:



DATASAAB S41: —

## ALFASKOP SYSTEM 41

IBM:



DATASAAB S41:

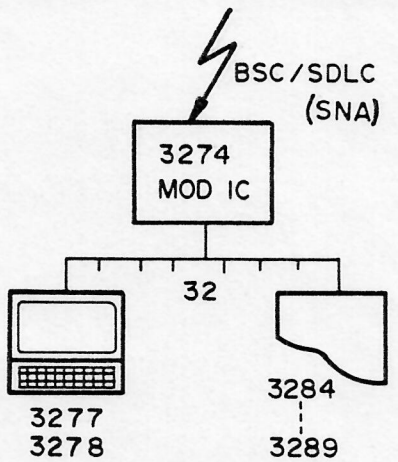
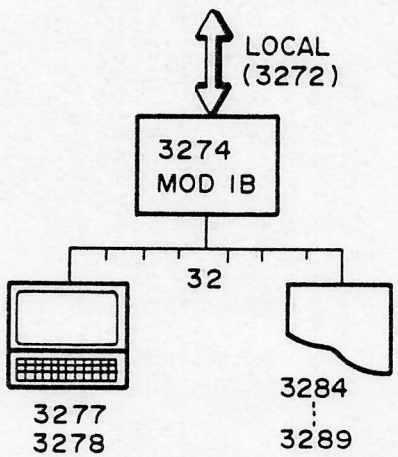
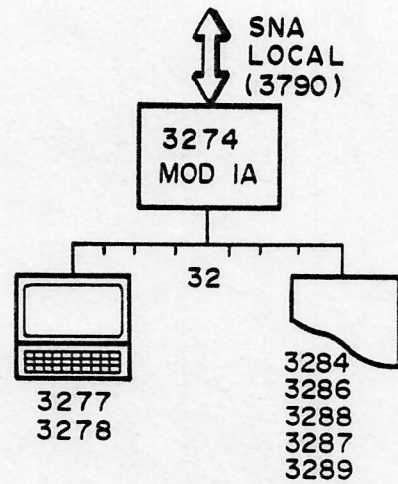
Does not emulate 3276.  
IBM-systems generated  
for 3276 can connect 4101  
with 3274-emulation.



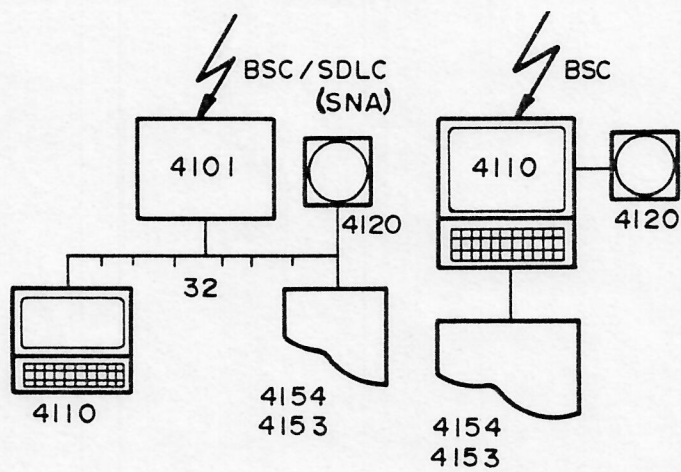
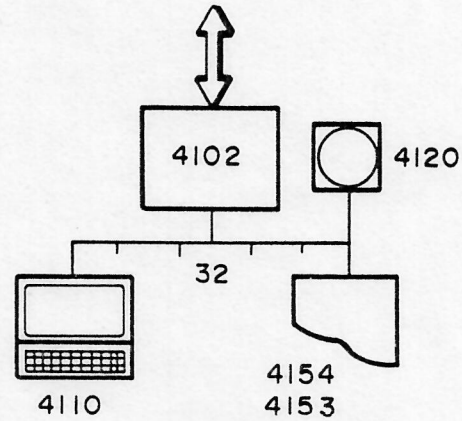
# ALFASKOP SYSTEM 41

IBM :

DATASAB S41 :



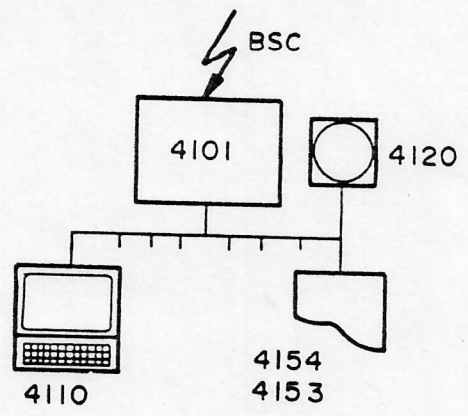
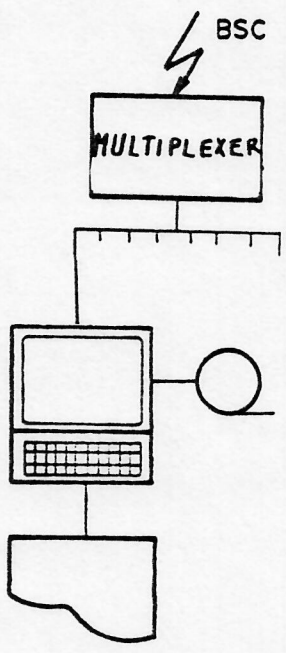
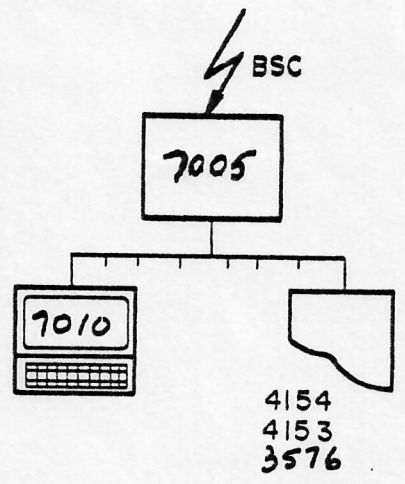
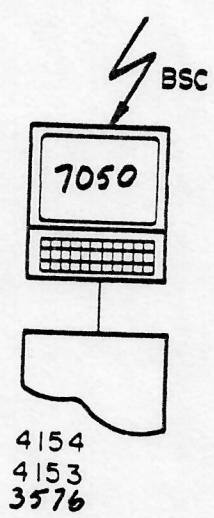
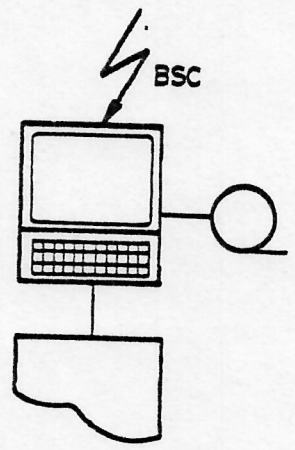
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# ALFASKOP SYSTEMS

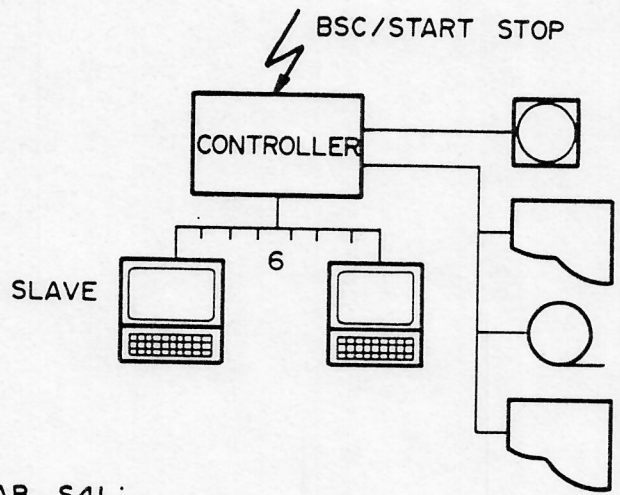
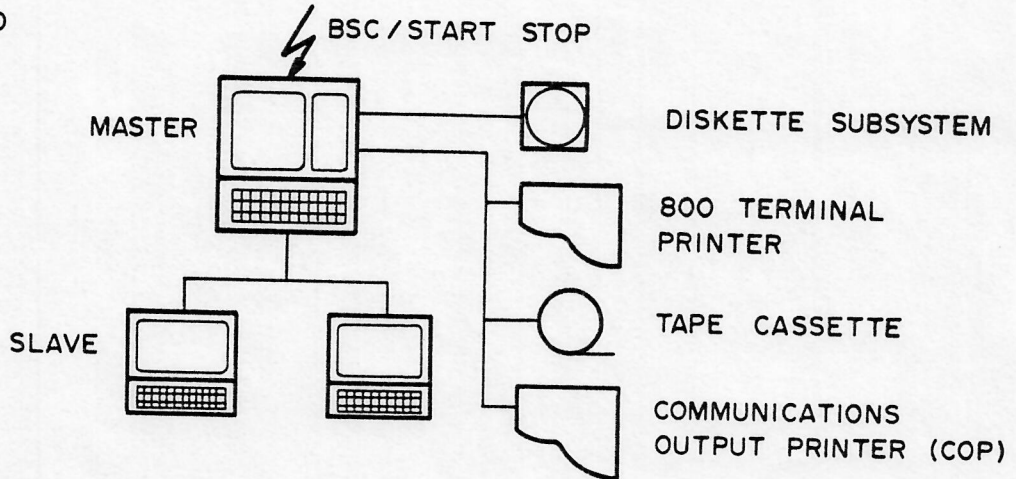
UNISCOPE 100/200:

ALFASKOP 337 and 541:

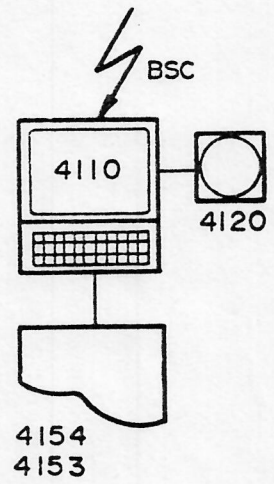
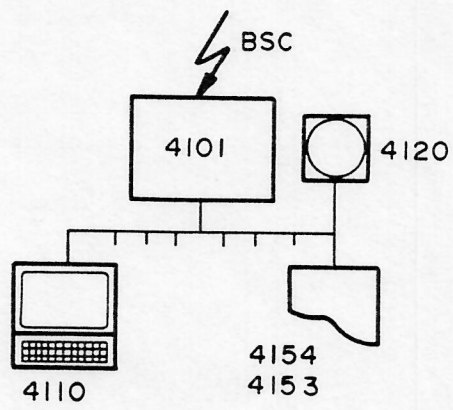


# ALFASKOP SYSTEM 41

UTS 400



DATASAAB S41 :

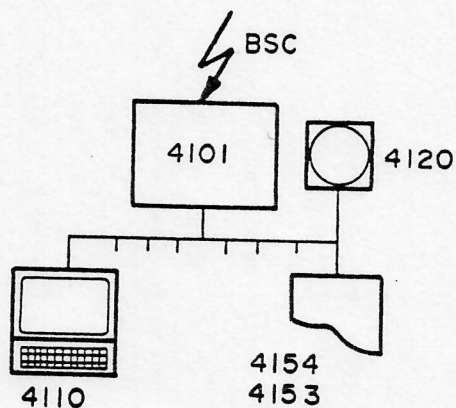
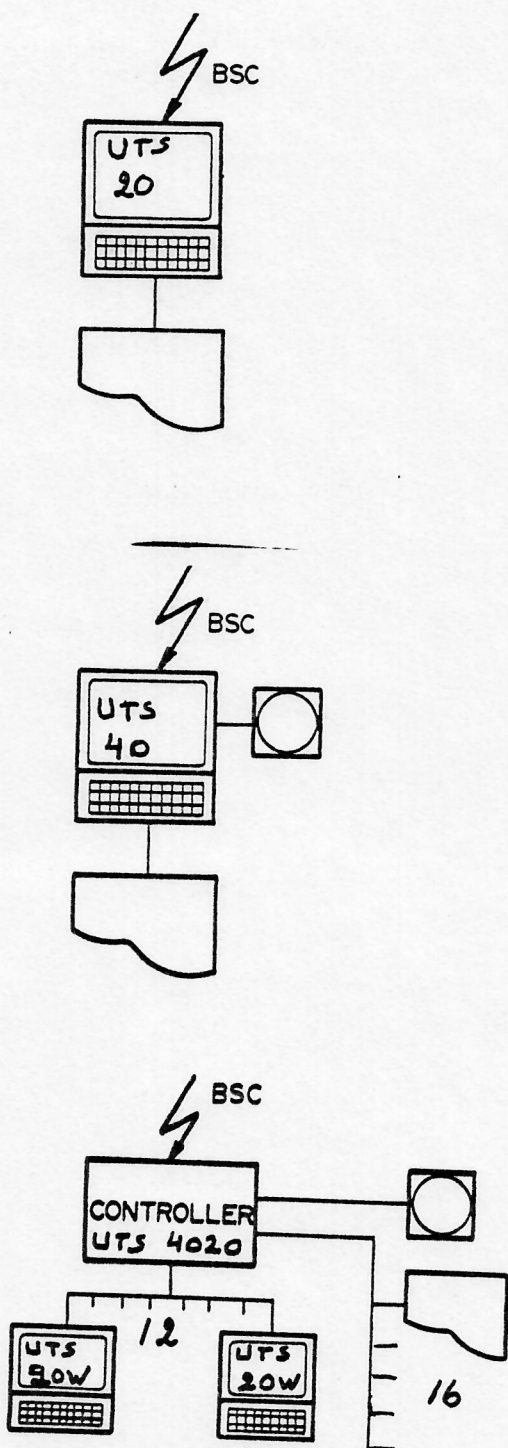




# ALFASKOP SYSTEM 41

UTS 4000:

ALFASKOP S41:



EXERCISE

Explain in a few words the meaning of the following words. State for each item in the list whether it belongs to S37 or S41.

- Expansion Module .....  
 ↳ programmer interface adapter se sid 18
- TIA .....  
 ↳ BUSANSÄTTNING
- BXM .....  
 EXPANSIONSBOK OCH KONTROLLKORT
- Remote .....  
 Kommunikation via telefon - den tekniska sid 41A
- DA .....  
 .....
- DTC-A .....  
 Display Terminal Controller sid 18 - 19  
 med mikroprocessor och minnet
- Auto logon .....  
 Laddning av startparametrar 31
- Test interpreter .....  
 .....
- USM .....  
 lampor och tangent (för meddelanden via  
 protokollet sid 13
- 6800 .....  
 motorola mikroprocessor M6800
- 3274 .....  
 IBM styrenhet (control unit)
- APL .....  
 Arithmetic Programming Language