

CONFIGURING NOTIS PERIPHERALS

These guidelines are to help libraries estimate the peripheral equipment they will need to operate an IBM-based NOTIS automated library system. (See attached diagrams.)

Terminals:

Telex 078 terminals are non-ALA character set terminals suitable for use at the circulation desk. We have found only one brand of barcode reader that works with them so far, i.e. Symbol Technologies. In order for them to communicate with the IBM mainframe computer, they must be connected through an IBM 3274 terminal controller. A color model is also available. NOTIS does run in color! Printers can be attached for screen prints only. To have a printer for circ slips requires a protocol converter.

Telex 476L terminals are ALA character set terminals suitable for OPAC, reference, circulation, and technical services use as needed. Laser scanners as well as light pens can be attached to them. In order for more than one of them to communicate with the computer, they must be chained through a Telex MCA 909 cluster controller. If you plan to have more than 1, you should buy the model to be used in a cluster. No color model is available.

IBM-pc microcomputers can be used as Notis terminals. For dial up access only, you need a pc modem and communications software, e.g., Hayes Smart modem and Smartcom II. If you want continuous access, the pc must have IBM 3278 emulation capability so that it can be connected through an IBM 3274 terminal controller. Prices given are for a monochrome IBM-pc; a color model works, too.

IBM 3178 terminals are like the Telex 078 model. They are "better" than the 078's in that the connectors used with them are standard. Several brands of barcode readers work with the 3178's. Unfortunately, printers cannot be attached directly to 3178's; they must be directly attached to a 3274 controller via a protocol converter.

Printers:

Telex 281B dot matrix printers can be used as slave printers to print screens from Telex terminals. They can also be configured on the system to print date due, receipt, and other slips by attachment to the Telex 476L or by direct hookup to a 3274 controller via a protocol converter. They are modified C. 1toh printers. Even though they require "milling" of the pin feeder to accommodate circ slips, this is the only printer NOTIS recommends for that purpose.

Epson FX85 dot matrix printers can be attached to IBM-pc microcomputers to function as slave printers.

IBM 3262-13 line printers are to be used as remote system printers to print notices, reports, action lists, etc. They print upper/lower case at a high speed of 325 lines per minute.

IBM 3268-2 line printers are to be used as remote system printers. They print at 340 cps, using dot matrix technology. They can be attached via a port on an IBM 3274 controller.

IBM 3287-C1 printer can be used as a remote system printer for low volume printing. It prints at 80 cps, dot matrix technology. It can be attached via a port on an IBM 3274 controller.

IBM 4245-12 line printers are larger, faster printers to be used as very high volume remote system printers. They print at 1,200 lpm and require a dedicated phone line attachment.

Note: None of the line printers have the ALA character set.

Interfaces:

Interlynx 3287 protocol converter is used to attach a Telex 281B printer directly to an IBM 3274 controller.

Black box X-25(24) switch to attach Telex 476L to OCLC terminal.

Scanners:

LS-6000 (Symbol Technology) laser scanners attach to the Telex and IBM terminals.

Intermec 9510 light pens can be used with the Telex 476L terminals. They have other models for IBM pc's and IBM 3178's.

Scanstar light pens can be used with the Telex 476L, IBM 3178, and IBM pc.

These barcode readers are still being evaluated.

Terminal Controllers:

IBM 3274 controllers can be configured with 16 or 32 ports. Only one terminal or separately addressable printer can be attached to a port. Our Computing Center recommends that we use the 16 port 3274 controllers for the best performance. They are to be used with the 078's, IBM 3178's, system printers, and printers attached via protocol converters.

Telex MCA909 cluster controllers must be used with Telex 476L terminals. A maximum of 16 terminals can be attached to this controller, but NOTIS users recommend starting with no more than 8 per controller. Note: a controller is needed for each building in which the specified terminals are located.

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Telephone Lines:

Each modem/multiplexor pair should be configured with one telephone line to the WSU Computing Center. It may be possible to use multi-drop lines to link several buildings on one phone line eventually, but for purposes of estimating costs, multi-drop lines are not recommended.

3002 line is an unconditioned telephone line used for distances greater than 1 mile from the Computing Center. It typically runs at a speed of 4800 baud.

3002 line with D1 conditioning is needed for running at a speed of 16.8K baud. It is recommended that the U of D Main Library and the Oakland U Kresge Library use this type of line to reduce the number of phone lines needed.

Local line is needed for distances of 1 mile or less from the CSC. Hospitals in the Medical Center should estimate costs for a 3002 line, even though it may be possible to use a local line.

Clarkston/Rochester 3002 lines are more expensive because of the distance.

Modems/multiplexors:

Diagrams with recommended modem/multiplexor configurations were previously distributed. These were done by Codex.

2620 modem is for 3002 line with single or dual channels. A TDM is added for 2 channels.

2680 modem/multiplexors need 3002 lines with D1 conditioning running at 16.8K baud. They can handle up to 6 channels.

2123 Local Distribution Services Unit is for local lines of limited distance. They can support speeds up to 19.2K baud, however, they support only one channel, i.e., one controller, for each line.

NOTIS PERIPHERALS PRICE LIST

<u>Item</u>	<u>Purchase Price</u>
TERMINALS	
IBM-pc, w/3278 emulation (mono)	\$3,000
IBM-pc 3278 emulation only	799
Telex 078 (non-ALA) with printer port	1,295
Telex 079 (color) with printer port	1,537
Telex 476L (ALA)	
standalone	2,524
in a cluster	2,594
IBM 3178-C20 (non ALA)	930
IBM 3179 (color)	1,836
PRINTERS	
Telex 281B (terminal printer)	630
Epson FX85	699
IBM 3262-13 (line printer) upper/lower case, 325 lpm	10,720
IBM 3268-2	6,375
IBM 3287-C1 (80 cps) remote system printer	4,429
IBM 4245-12 (line printer) 1,200 lpm	25,620
SCANNERS	
LS-6000 (laser)	1,752
Intermec 9510 (pen)	679
Scanstar (pen)	795
TERMINAL CONTROLLERS	
IBM 3274 (16 port)	7,122
Telex MCA909	350

INTERFACES

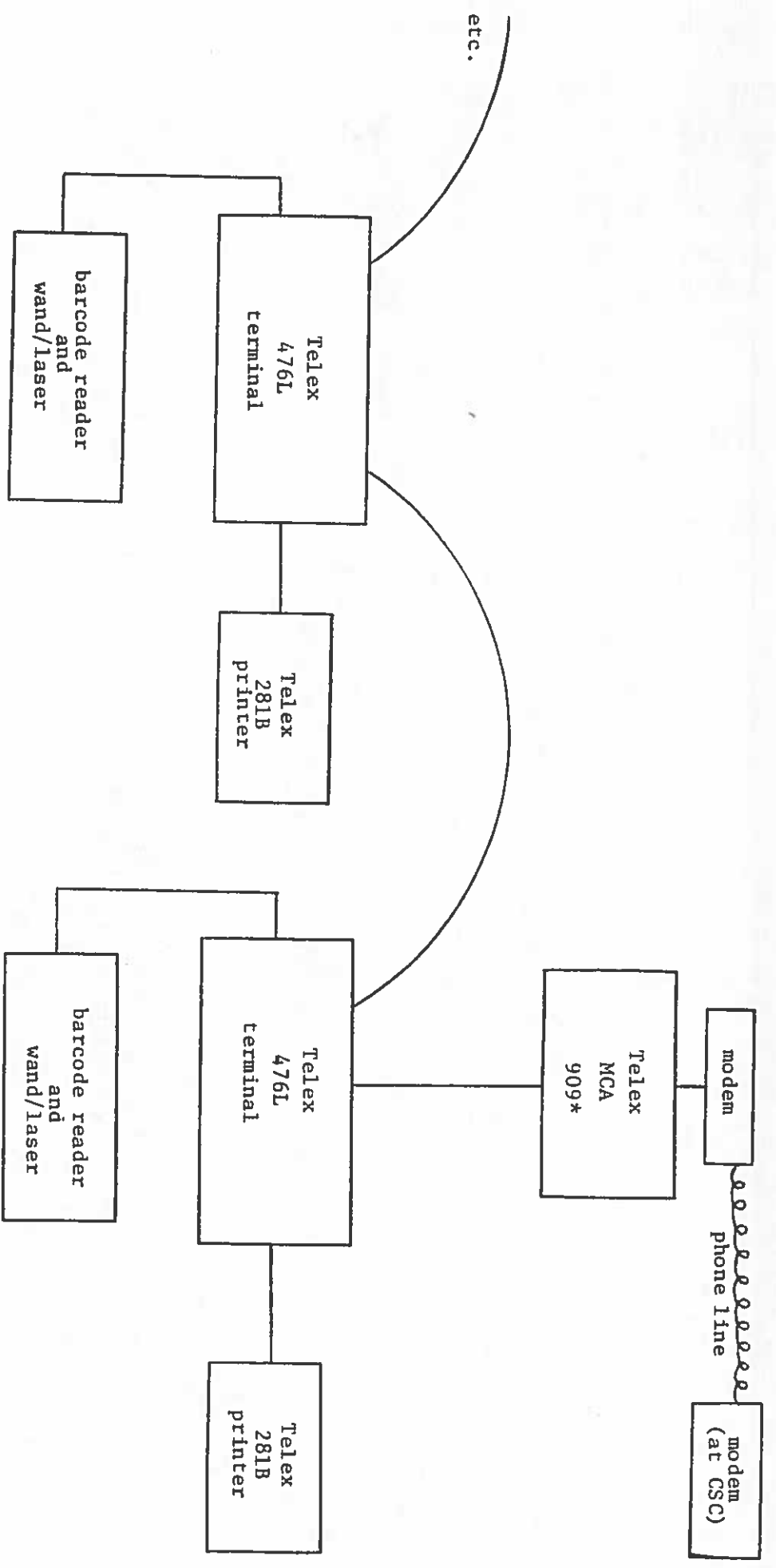
Interlynx 3287	\$1,650
Black box X-25(24)	155

MODEMS/MULTIPLEXORS*

Codex 2620	1,980
Codex 2620 with TDM	2,400
Codex 2680	9,300
Codex 2123	750

*Note: 2 modems are required per telephone lines;
See Codex quotations for detailed pricing.

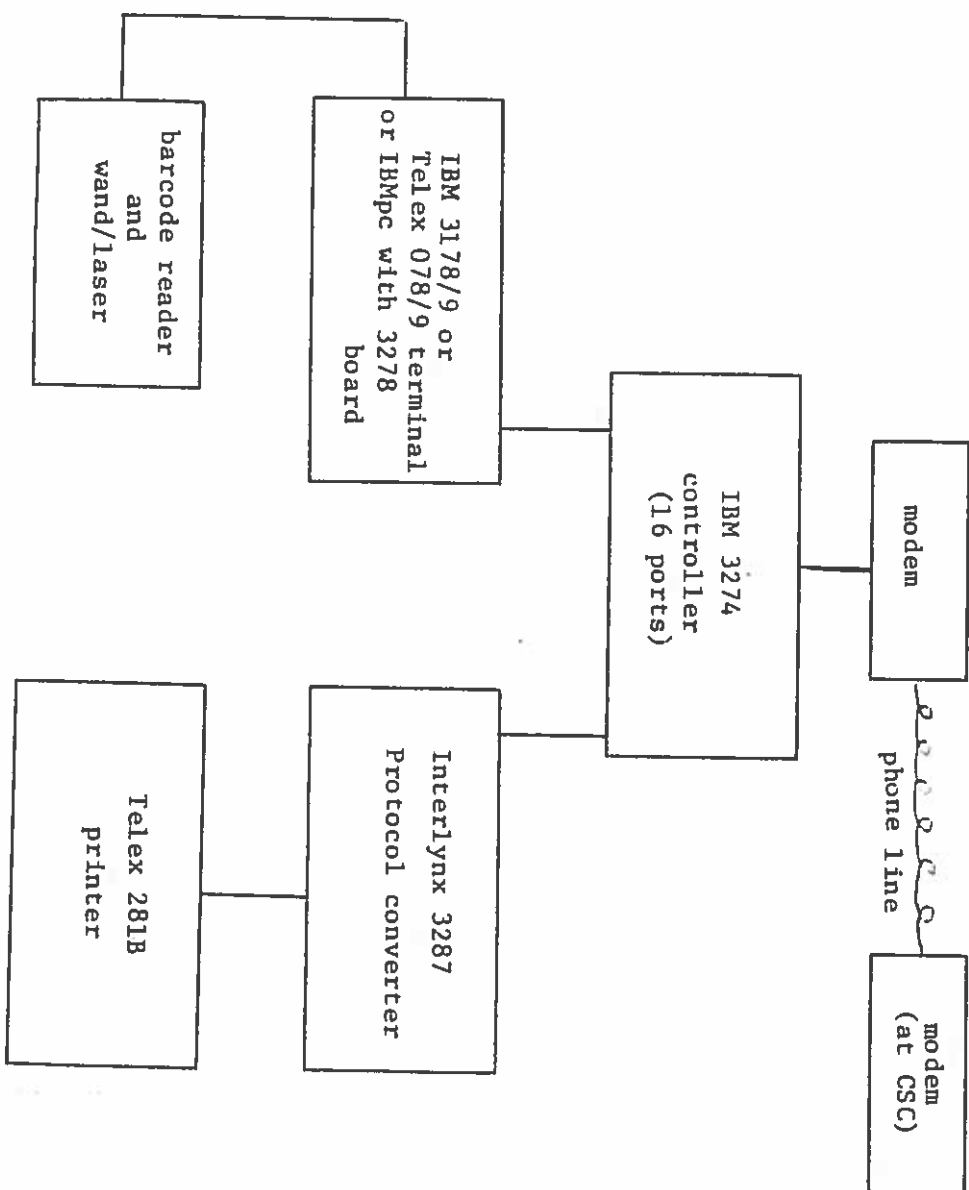
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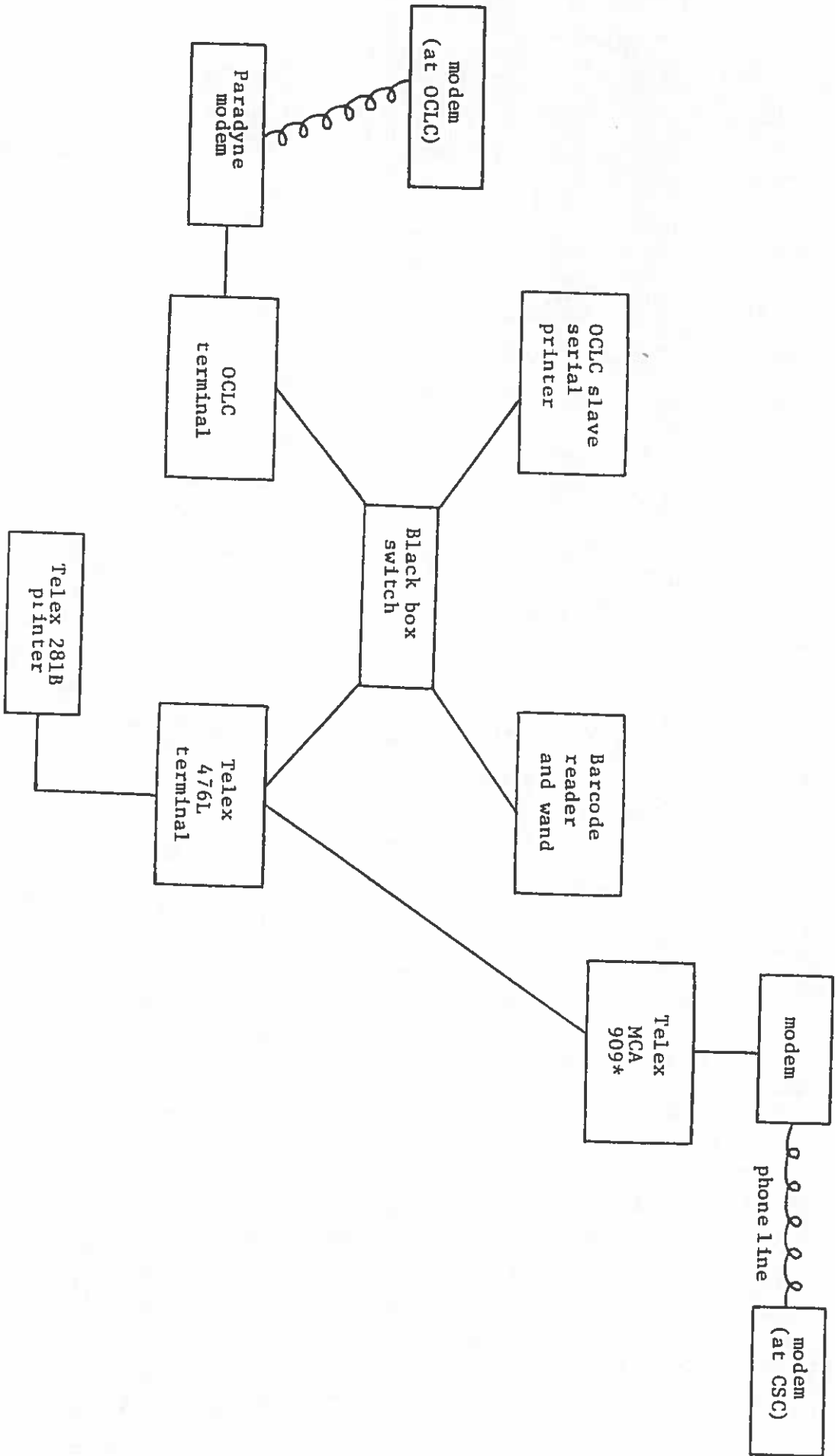
*can chain 8-476L's within same building

L. Buge
3/7/86

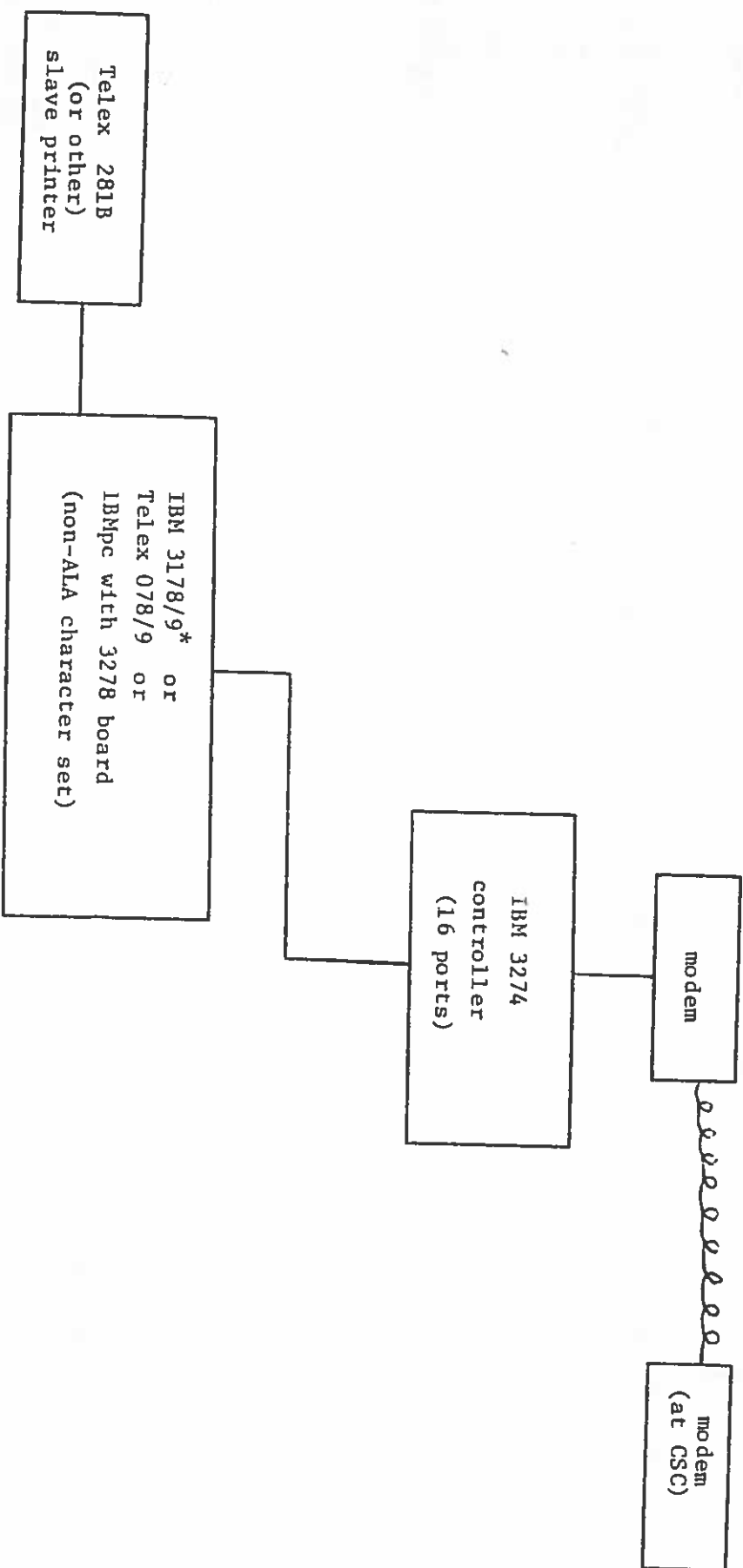
NOTIS Circulation Workstation Option 2



NOTIS Data entry station with OCLC hookup

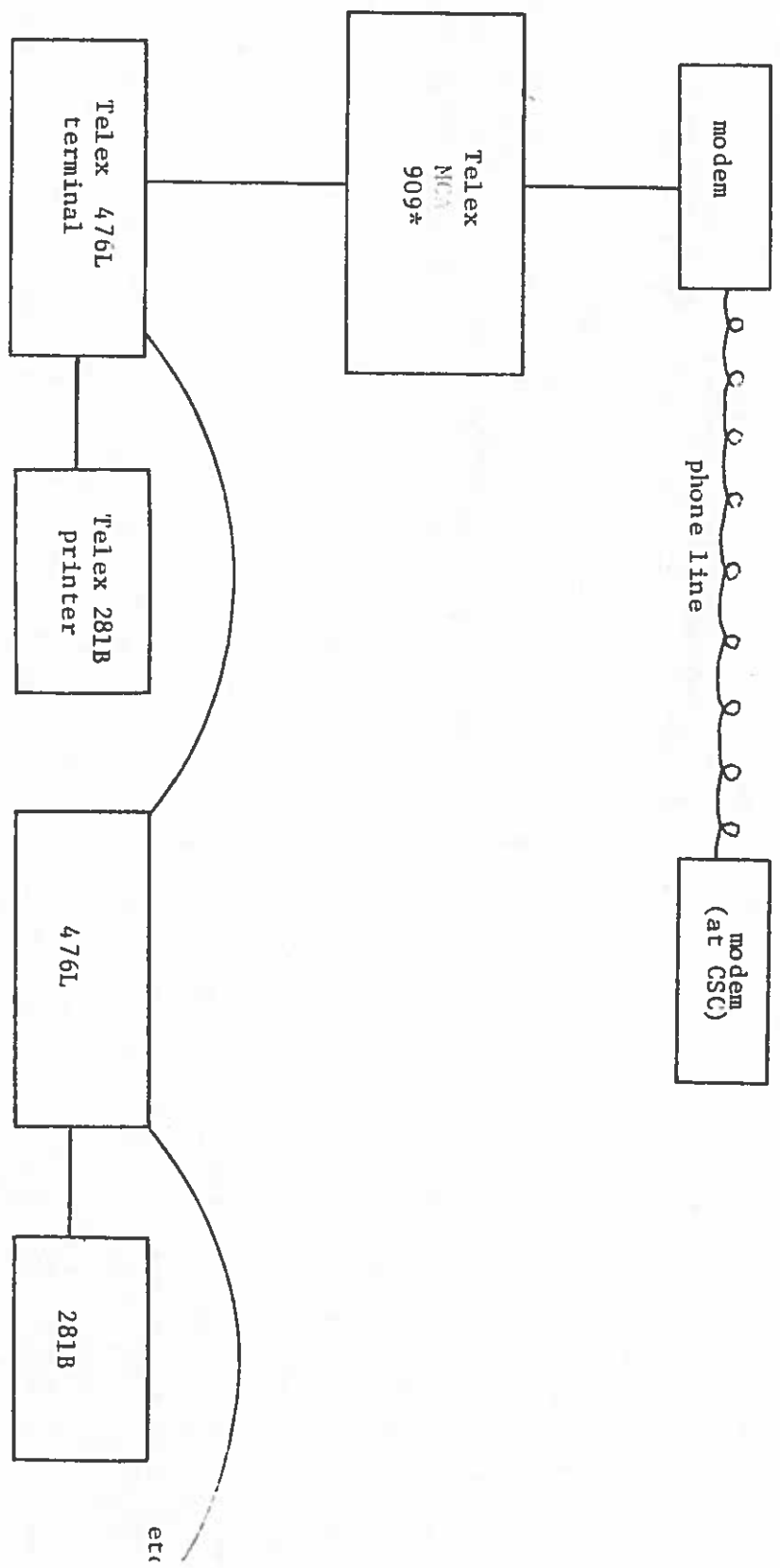


NOTIS Online catalog station Option 1



*Note: IBM 3178/9 cannot have a slave printer attached. Printer must be attached as in Circ Workstation Option 2, via a protocol converter.

NOTIS Online Catalog Station Option 2



*can chain 8 476L's in the same building

L. Bugg
3/7/86