

SERIES 200

1410/7010 LIBERATION

Liberator is a proven Honeywell concept for elevating users of older systems to third generation Series 200 dimensional data processing. The concept includes compatibility of hardware, programming languages, data files, and operating environments. For example, Series 200 processors include all but three of the 1410/7010 machine instructions in identical form. The exact 1410/7010 magnetic tape file structure is acceptable to the Series 200, including character codes, record and block format, tape marking, and label structure and handling. Within the greater scope of Series 200, compatible design is so carefully implemented that many 1410/7010 source programs and control cards are acceptable as written. When program conversion is required at all, it is low-cost, fast, and virtually automatic. In advancing to Series 200, the 1410/7010 user is freed from reprogramming, reconstructing files, redesigning systems, and retraining personnel. Instead, the liberated user enjoys the advantages of the powerful Model 2200 or 4200. Compared to the 1410, Series 200 provides 2.5 to 5 times increased throughput, four to eight times faster internal speeds, increased simultaneity with more input/output channels, less turnaround time, and modular growth potential.

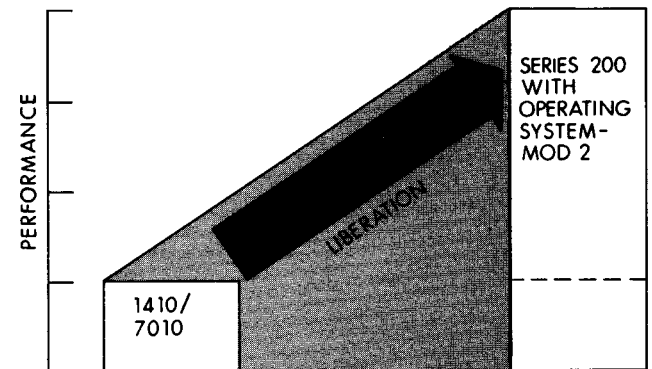
In the software dimension, the Series 200 Mod 2 Operating System surpasses the limits of the user's old system and exploits the Honeywell hardware advantage. The basic capabilities of the Mod 2 Operating System incorporate all the control, utility, and language processing functions of the 1410/7010 system. Efficient blocking of system files and use of the Honeywell read-backward feature minimize file access time for the operating System and result in faster operation. In addition, the Mod 2 Operating System provides advanced capabilities to effect total and flexible utilization of the system facilities.

When program conversion is required, Liberator offers one-time transition to Honeywell programs which capitalize on the improved Series 200 hardware. The speed of Model 2200 or 4200 is not compromised by inefficient simulation of an old machine.

EASY TRANSITION TO THE MOD 2 OPERATING SYSTEM

The basic control components of the Series 200 Mod 2 Operating System include all those of the 1410/7010 system; they accept all 1410/7010 control statements. Similarly, the basic Mod 2 COBOL compiler and tape sort program accept all 1410/7010 language elements and control cards.

The 1410/7010 Autocoder assembly language is a fully compatible subset of the Mod 2 assembly language. At the assembly-language level, the Easytran J transition program reconciles the few hardware dissimilarities be-



tween the 1410/7010 and Series 200. Easytran J resolves the differences in addressing, indexing, and internal character representation. Ninety-five percent of all Autocoder instructions are translated directly to Mod 2 language. Furthermore, an average of only one percent of the converted instructions actually require any programmer hand-tailoring. Easytran J converts all Autocoder programs which used 1410/7010 IOCS to Mod 2 programs, including programs which were not run in the 1410/7010 Operating System.

Programs running on the 1410/7010 in 1401 mode need not be deprived of an operating system after liberation to Series 200. Honeywell's success in 1401 liberation has culminated in the Easytran D System. Easytran D translates 1401 Autocoder programs to the assembly language of the Honeywell Mod 1 Operating System. Because of Series 200 upward compatibility, Mod 1 programs may be executed under the Mod 2 Operating System. Thus, the same programs which relegated a 1410 or 7010 to the status of a 1401 are liberated to Series 200 as full partners under the Mod 2 Operating System.

In summary, elimination of reprogramming, reconstructing files, and retraining personnel make 1410/7010 liberation both fast and inexpensive. Liberated programs take full advantage of Series 200 hardware with an immediate and dramatic increase in throughput. In addition, liberation to Series 200 provides the means for orderly growth into more comprehensive and more advanced applications.

Honeywell
ELECTRONIC DATA PROCESSING