HONEYWELL EDP

GENERAL BULLETIN

SERIES 200

PROGRAM STATUS, INPUT/OUTPUT, AND REQUIREMENT CONTROL SYSTEM

PURPOSE: Outlines a simple reporting method which provides regular reports on the status, information and approval requirements, as well as programmer assignments, for all programs included in a system during its planning, programming, and testing stages. This reporting method can be used in either a tabulating operation or a Series 200 computer installation.

DATE: January 24, 1966

FILE NO: 142.0000.0000.0-151*

8683
5166
Printed in U.S.A.

*When ordering this publication please specify Title and Underscored portion of File Number.

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

LIST OF TABLES

A PROGRAM STATUS, INPUT/OUTPUT, AND REQUIREMENT CONTROL SYSTEM

INTRODUCTION

Among the considerations involved in placing any data processing system on a computer are those concerned with keeping an up-to-date account of the status, requirements, and assignment of each program within the system. This bulletin outlines a simple reporting method which provides an up-to-date listing of:

1. The current status of each program.
2. The source of each input file and the destination of each output file.
3. The information and approvals required by a programmer in order to write each program and when they are needed.
4. The name, number, and programmer assigned to each program.

A typical payroll system (see Figure 1) will be used to illustrate the application of this reporting method. The reports can be run on either a Series 200 computer by using two Easytab Utility Routines, SORTB and PERIO, or on a tabulating configuration consisting of a printing keypunch, a sorter, and an accounting machine with all alphanumeric printing. The tabulating method begins on page 1; the Easytab method begins on page 12.

TABULATING SYSTEM

Step 1 - Systems Flowchart

SYSTEMS FLOWCHART CARD

Do the following for each program in the system:

1. Take one tab card and write across the top of the back;
   a. the number of the program;
   b. the initials or number of the programmer assigned; and
   c. the name of the program.
2. Draw a schematic of the run below this written information.
   For each input file, indicate:
   a. name of the file;
   b. number of the file (if any); and
   c. source of the file.
   For each output file, indicate:
   a. name of the file;
   b. number of the file (if any); and
   c. destination(s) of the file (run number or department).

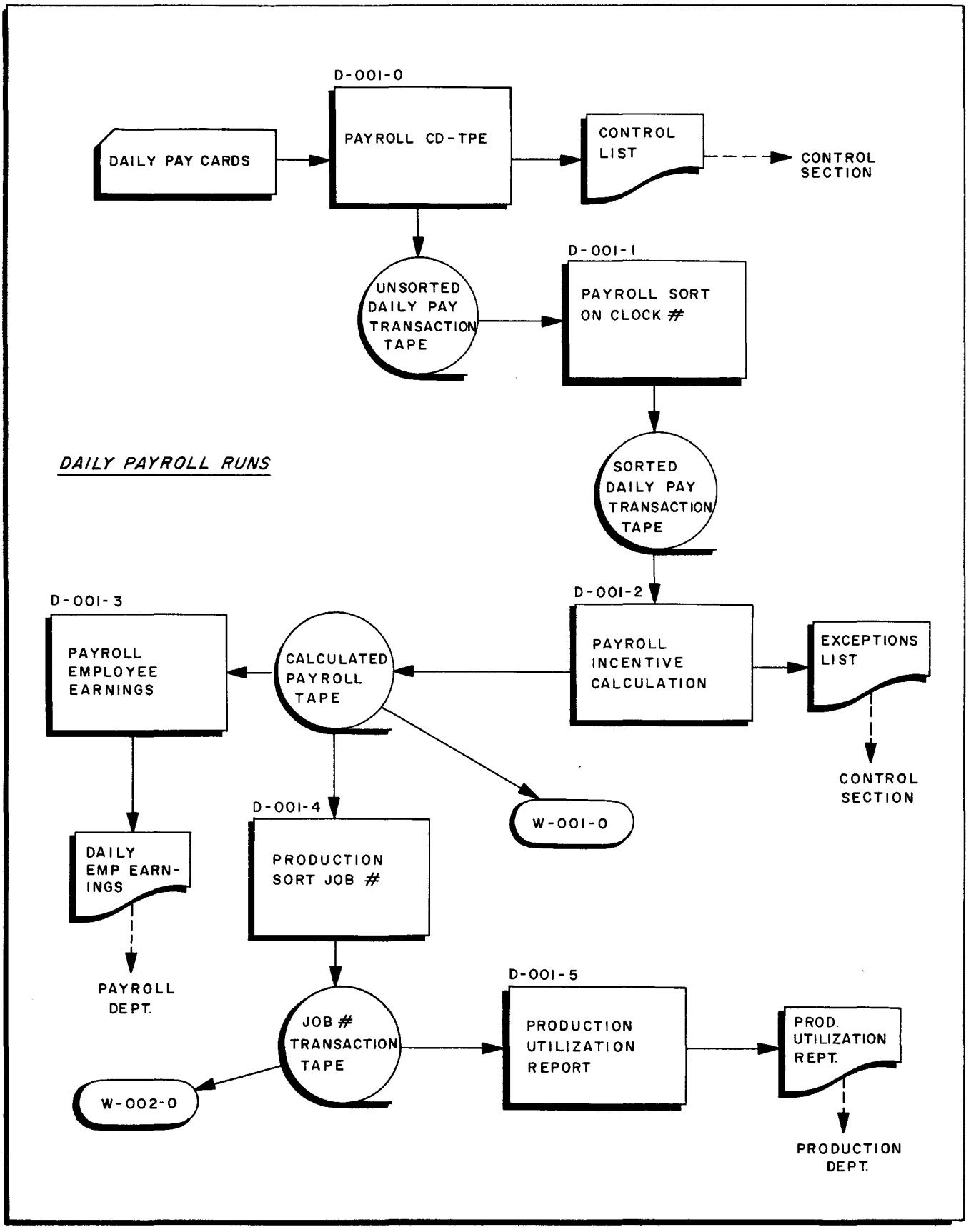

Figure 1. Payroll System

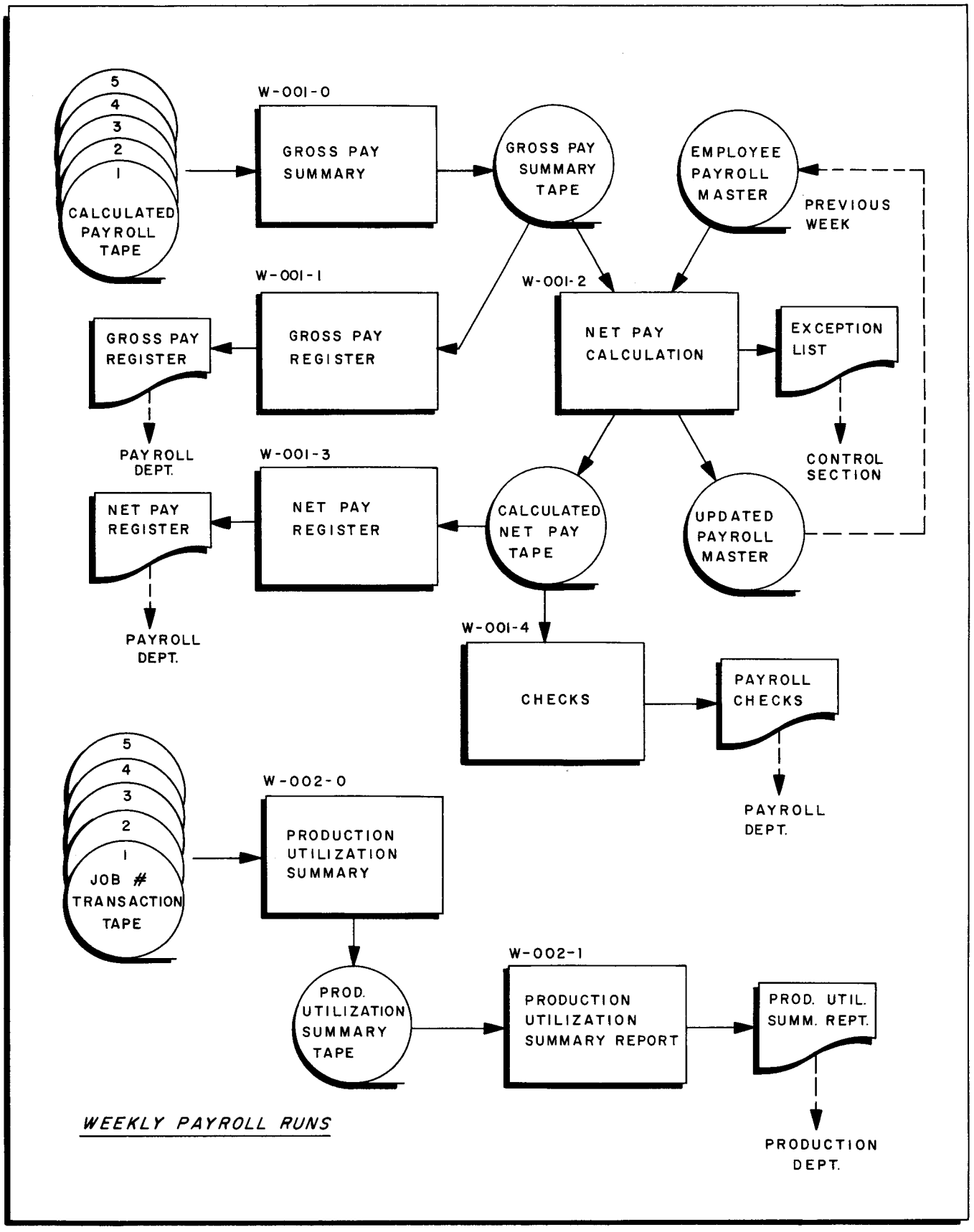

Figure 1 (cont). Payroll System

A sample flowchart card is shown in Figure 2.

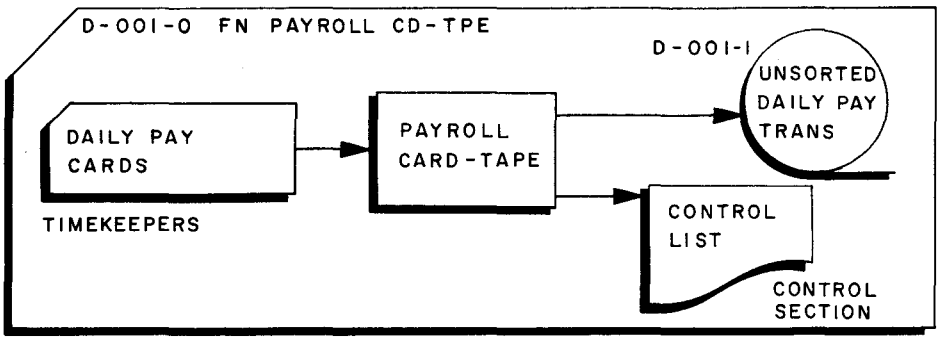

Figure 2. Systems Flowchart Card for First Payroll Run

The systems flowchart cards serve two purposes:

1. They are used in keypunching the input data for the various reports (see Steps 2, 3, and 4).

2. They can be arranged on a wall or other surface to form a systems flowchart. Revisions of the flowchart can be made by simply replacing or rearranging individual cards, rather than redrawing the entire chart (see Figure 3).

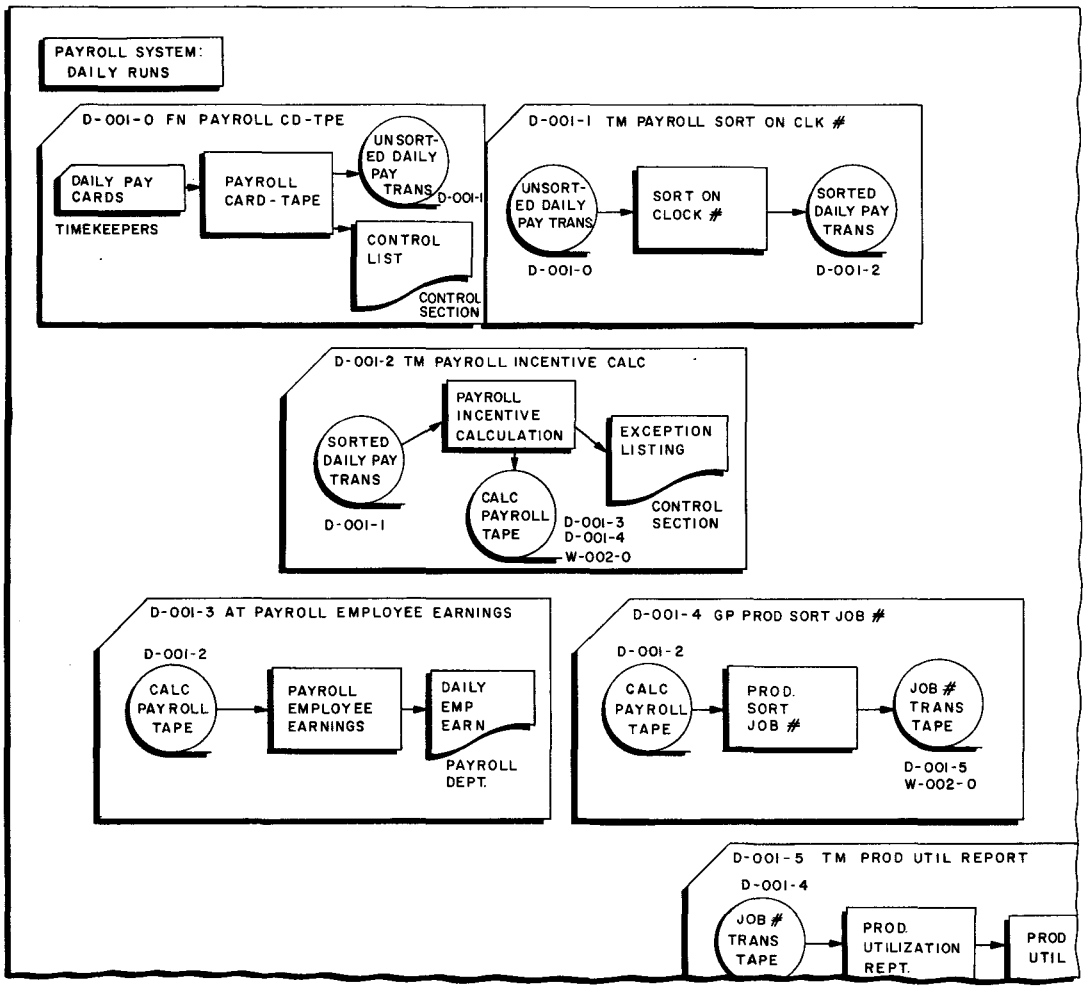

Figure 3. Cards Arranged for Systems Flowchart

Step - 2 Program Status Reports

Three types of cards must be punched for each program:

1. Header card;
2. Input/Output card(s); and
3. Requirement card(s).

HEADER CARD

Using the systems flowchart as a guide, punch one header card for each program in the system (see Figure 4 and Table 1).

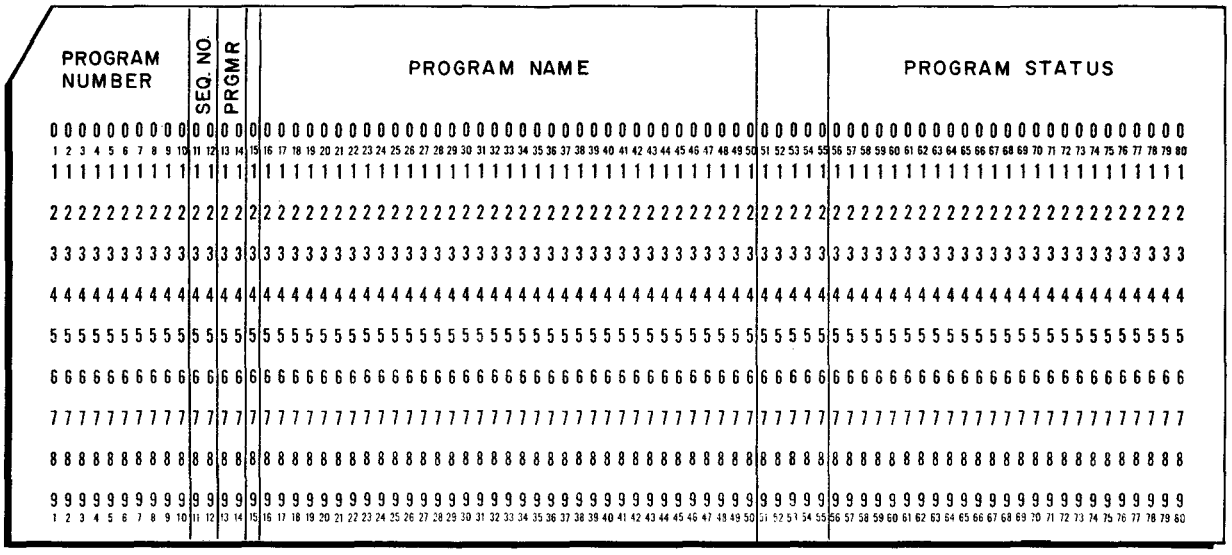

Figure 4. Header Card Format

Table 1. Header Card Format

Card Columns	Contents and Explanation
1 - 10	PROGRAM NUMBER
11 - 12	SEQUENCE NUMBER This field is punched only if the program numbers do not indicate the sequence in which the programs are run in production.
13 - 14	PROGRAMMER Identity (initials or number) of the programmer assigned
16 - 50	PROGRAM NAME
56 - 80	PROGRAM STATUS Program Preparation During the preparation of the program, this

Table 1. Cont. Header Card Format

Card Columns	Contents and Explanation
56 - 80 (Cont.)	field is updated to indicate the current status (analyzed, designed, flowcharted, coded, tested, parallel running, etc.) of the program. Full Production When the system has reached full production, the field may contain the day and time scheduled for the run. In this way, the header cards can be used to run a daily or weekly production schedule.

VERIFICATION LISTING

When all header cards have been punched, they are sorted on columns 11 and 12, listed, and the listing given to each programmer for verification. The programmer makes any necessary changes and indicates the current status of the program(s). The listing for the payroll system is shown in Figure 5.

PROGRAM STATUS AND ASSIGNMENT REPORTS

The header cards can then be updated and sorted either by program number for a current program status listing or by programmer for a current programmer assignment listing.

D-001-3	AT PAYROLL EMPLOYEE EARNINGS	FLOWCHARTED
W-001-3	AT NET PAY REGISTER	
W-001-0	CD GROSS PAY SUMMARY	
W-001-1	CD GROSS PAY REGISTER	
W-001-4	CD CHECKS	
D-001-0	GP PAYROLL CD-TPE	CODED
D-001-4	GP PRODUCTION SORT JOB #	FLOWCHARTED
W-001-2	MF NET PAY CALCULATION	ANALYZED
W-002-0	MF PRODUCTION UTILIZATION SUMMARY	
W-002-1	MF PRODUCTION UTIL SUMMARY REPORT	
D-001-1	TM PAYROLL SORT ON CLOCK #	CODED
D-001-2	TM PAYROLL INCENTIVE CALCULATION	FLOWCHARTED
D-001-5	TM PRODUCTION UTILIZATION REPORT	DESIGNED

Figure 5. Sample Listing of Header Cards by Programmer

Step 3 - Input/Output Reports

INPUT/OUTPUT CARD

Again using the systems flowchart cards as a guide, punch an input/output card (see Figure 5 and Table 2) for each file. If a file appears more than once (e.g., as output from one run, and input to another run), separate cards are punched.

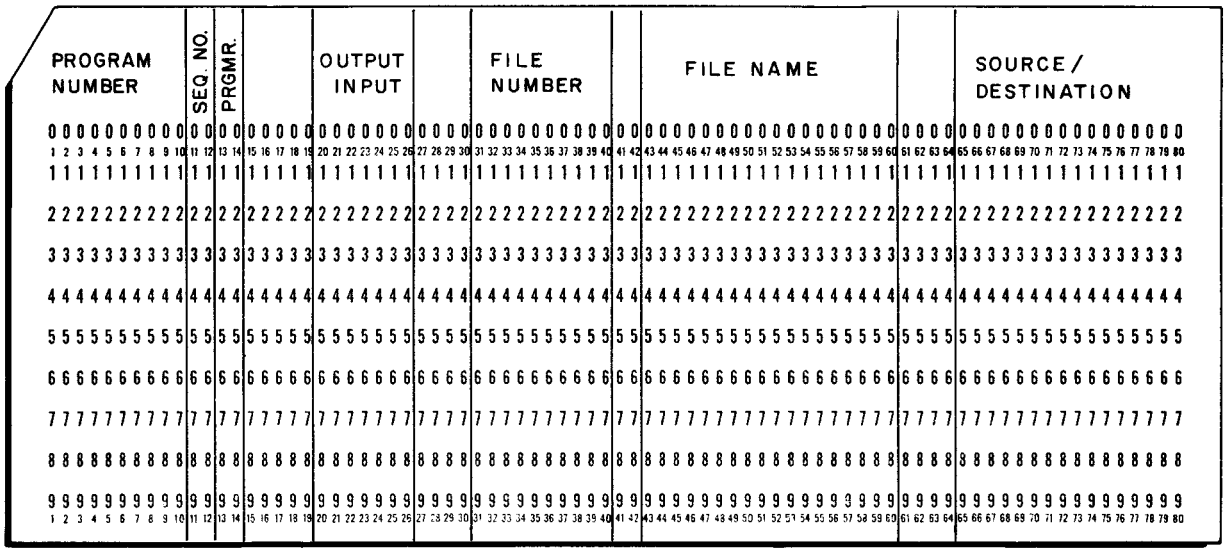

Figure 6. Input/Output Card Format

Table 2. Input/Output Card Format

Card Columns	Contents and Explanation
1 - 14	Same as Header Card
20 - 25	OUTPUT
22 - 26	INPUT The appropriate designation is punched to indicate the relationship of the file to the program punched in columns 1 - 10.
31 - 40	FILE NUMBER The number or label identification assigned to the file (if any).
43 - 60	FILE NAME The name of the file as shown on the systems chart.
65 - 80	SOURCE or DESTINATION Input files: The source (program number or department) of the data. Output files: The destination (program number or department) of the file after creation. If a file is input to more than one run, multiple cards are punched.

VERIFICATION LISTING

When all input/output cards are punched, they are sorted by columns 20 (input-output), 1-10 (program number), and 13 - 14 (programmer), and listed. The listing is sent to each programmer for verification and the necessary revisions are made. Figure 7 shows this listing for the payroll system.

D-001-3	AT	INPUT	CALC PAYROLL TAPE	D-001-2
D-001-3	AT	OUTPUT	DAILY EMP EARNINGS	PAYROLL DEPT
W-001-3	AT	INPUT	CALC NET PAY TAPE	W-001-2
W-001-3	AT	OUTPUT	NET PAY REGISTERS	PAYROLL DEPT
W-001-0	CD	INPUT	CALC PAYROLL TAPE	D-001-2
W-001-0	CD	OUTPUT	GROSS PAY SUMM TPE	W-001-1
W-001-0	CD	OUTPUT	GROSS PAY SUMM TPE	W-001-2
W-001-1	CD	INPUT	GROSS PAY SUMM TPE	W-001-0
W-001-1	CD	OUTPUT	GROSS PAY REGISTER	PAYROLL DEPT
W-001-4	CD	INPUT	CALC NET PAY TAPE	W-001-2
W-001-4	CD	OUTPUT	PAYROLL CHECKS	PAYROLL DEPT
D-001-0	GP	INPUT	DAILY PAY CARDS	TIMEKEEPERS
D-001-0	GP	OUTPUT	CONTROL LIST	CTL SECTION
D-001-0	GP	OUTPUT	UNSORTED DLY PAY	D-001-1
D-001-4	GP	INPUT	CALC PAYROLL TAPE	D-001-2
D-001-4	GP	OUTPUT	JOB # TRANS TAPE	D-001-5
D-001-4	GP	OUTPUT	JOB # TRANS TAPE	W-002-0
W-001-2	MF	INPUT	GROSS PAY SUMM TPE	W-001-0
W-001-2	MF	INPUT	EMP PAYROLL MASTER	W-001-2
W-001-2	MF	OUTPUT	EMP PAYROLL MASTER	W-001-2
W-001-2	MF	OUTPUT	CALC NET PAY TAPE	W-001-3
W-001-2	MF	OUTPUT	CALC NET PAY TAPE	W-001-4
W-001-2	MF	OUTPUT	EXCEPTION LISTING	CTL SECTION
W-002-0	MF	INPUT	JOB # TRANS TAPE	D-001-4
W-002-0	MF	OUTPUT	PROD UTIL SUMM TPE	W-002-1
W-002-1	MF	INPUT	PROD UTIL SUMM TPE	W-002-0
W-002-1	MF	OUTPUT	PROD UTIL SUMM RPT	PROD DEPT
D-001-1	TM	INPUT	UNSORTED DLY PAY	D-001-0
D-001-1	TM	OUTPUT	SORTED DLY PAY	D-001-2
D-001-2	TM	INPUT	SORTED DLY PAY	D-001-1
D-001-2	TM	OUTPUT	CALC PAYROLL TAPE	D-001-3
D-001-2	TM	OUTPUT	CALC PAYROLL TAPE	D-001-4
D-001-2	TM	OUTPUT	CALC PAYROLL TAPE	W-001-0
D-001-2	TM	OUTPUT	EXCEPTION LIST	CTL SECTION
D-001-5	TM	INPUT	JOB # TRANS TAPE	D-001-4
D-001-5	TM	OUTPUT	PROD UTIL REPT	PROD DEPT

Figure 7. Listing of Input/Output Cards by Programmer

INPUT/OUTPUT CONTROL REPORTS

Following the required revisions, the input/output cards are separated into two groups (input and output) by sorting on column 20. The input cards are sorted on columns 1 - 10 (program number), and the output cards are sorted on columns 65 - 74 (destination). The output deck is then placed in front of the input deck and both are sorted by either file number (columns 31 - 40) or file name (columns 43 - 60). The cards are then listed, and the program number in

the destination field of each output card for a file is checked to a corresponding program number in columns 1 - 10 of an input card for the file. This listing can be used to trace the flow of data through the system and is valuable in determining the effect of a change in an output file upon the programs which later use it as input. The listing for the payroll system appears in Figure 8.

W-001-2	MF	OUTPUT	CALC NET PAY TAPE	W-001-3
W-001-2	MF	OUTPUT	CALC NET PAY TAPE	W-001-4
W-001-3	AT	INPUT	CALC NET PAY TAPE	W-001-2
W-001-4	CD	INPUT	CALC NET PAY TAPE	W-001-2
D-001-2	TM	OUTPUT	CALC PAYROLL TAPE	D-001-3
D-001-2	TM	OUTPUT	CALC PAYROLL TAPE	D-001-4
D-001-2	TM	OUTPUT	CALC PAYROLL TAPE	W-001-0
D-001-3	AT	INPUT	CALC PAYROLL TAPE	D-001-2
D-001-4	GP	INPUT	CALC PAYROLL TAPE	D-001-2
W-001-0	CD	INPUT	CALC PAYROLL TAPE	D-001-2
D-001-0	GP	OUTPUT	CONTROL LIST	CTL SECTION
D-001-3	AT	OUTPUT	DAILY EMP EARNINGS	PAYROLL DEPT
D-001-0	GP	INPUT	DAILY PAY CARDS	TIMEKEEPERS
W-001-2	MF	OUTPUT	EMP PAYROLL MASTER	W-001-2
W-001-2	MF	INPUT	EMP PAYROLL MASTER	W-001-2
D-001-2	TM	OUTPUT	EXCEPTION LIST	CTL SECTION
W-001-2	MF	OUTPUT	EXCEPTION LISTING	CTL SECTION
W-001-1	CD	OUTPUT	GROSS PAY REGISTER	PAYROLL DEPT
W-001-0	CD	OUTPUT	GROSS PAY SUMM TPE	W-001-1
W-001-0	CD	OUTPUT	GROSS PAY SUMM TPE	W-001-2
W-001-1	CD	INPUT	GROSS PAY SUMM TPE	W-001-0
W-001-2	MF	INPUT	GROSS PAY SUMM TPE	W-001-0
D-001-4	GP	OUTPUT	JOB # TRANS TAPE	D-001-5
D-001-4	GP	OUTPUT	JOB # TRANS TAPE	W-002-0
D-001-5	TM	INPUT	JOB # TRANS TAPE	D-001-4
W-002-0	MF	INPUT	JOB # TRANS TAPE	D-001-4
W-001-3	AT	OUTPUT	NET PAY REGISTER	PAYROLL DEPT
W-001-4	CD	OUTPUT	PAYROLL CHECKS	PAYROLL DEPT
D-001-5	TM	OUTPUT	PROD UTIL REPT	PROD DEPT
W-002-1	MF	OUTPUT	PROD UTIL SUMM RPT	PROD DEPT
W-002-0	MF	OUTPUT	PROD UTIL SUMM TPE	W-002-1
W-002-1	MF	INPUT	PROD UTIL SUMM TPE	W-002-0
D-001-1	TM	OUTPUT	SORTED DLY PAY	D-001-2
D-001-2	TM	INPUT	SORTED DLY PAY	D-001-1
D-001-0	GP	OUTPUT	UNSORTED DLY PAY	D-001-1
D-001-1	TM	INPUT	UNSORTED DLY PAY	D-001-0

Figure 8. Listing of Input/Output Cards by File

Notice, for example, that if programmer GP were to change the format of his output file JOB # TRANS TAPE, he could see by the listing that he must notify programmers TM and MF, both of whom are writing programs using this file as input.

Step 4 - Program Requirements Reports

REQUIREMENTS CARD

As the programming of an application progresses, certain decisions must be made, information must be available, and approvals must be given. Such things as record layouts, output requirements, logic and calculation specifications, and schedules must be formulated and approved before the programmer can continue beyond certain points. As each programmer becomes aware of these needs, he submits Requirements cards (see Figure 9). At regularly scheduled intervals, these cards are collected, sorted, and listed.

REQUIREMENTS REPORTS

A listing by date required is useful in reminding those involved of the due date that information must be available or an approval must be made. It also helps in determining what decisions must be made first and whether it is possible to provide the information required in the order and by the date indicated.

A listing by source can be sent to each person or department to remind them of those areas in which they are responsible for supplying particular data.

A listing by program number indicates what information or approvals are required before a particular program can be completed and ready for production.

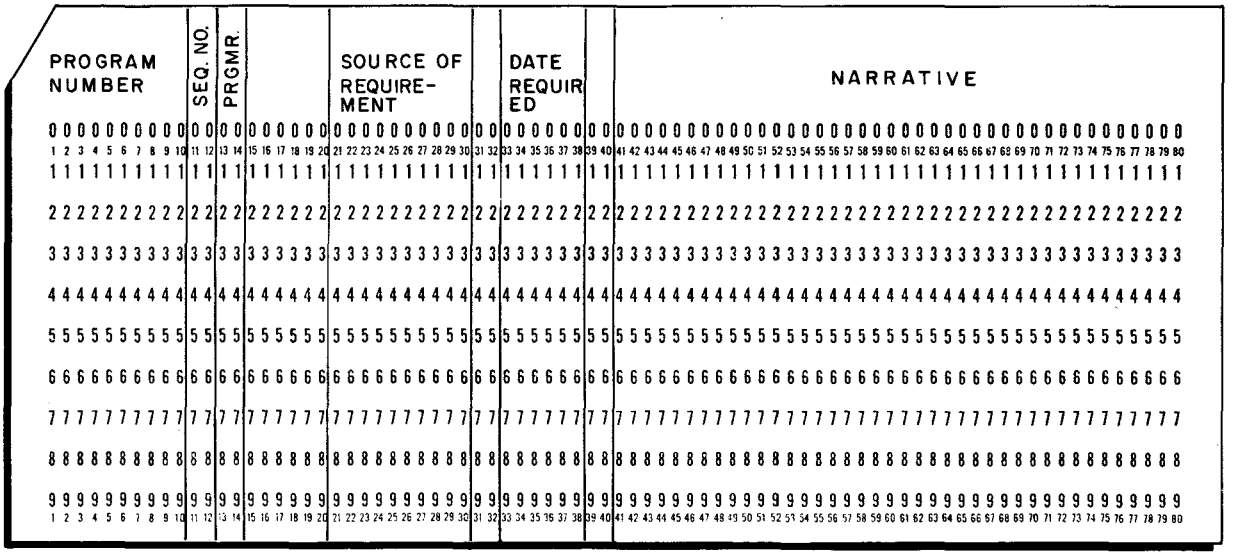

Figure 9. Requirements Card Format

Table 3. Requirements Card Format

Card Columns	Contents and Explanation
1 - 14	Same as Header Card
21 - 30	SOURCE OF REQUIREMENT Programmer (initials or number) or department from which the information or approval can be obtained.
33 - 38	DATE REQUIRED (Year, Month, Day)
41 - 80	NARRATIVE A brief description of the nature of the information or approval needed.

A sample requirement listing (by date required) is shown in Figure 10.

W-001-3	AT	PYRLL DPT	660314	SPECS FOR TAX CALCULATION
W-001-3	AT	MF	660314	CALC NET PAY TAPE FORMAT
W-001-4	CD	PRINTER	660325	FINAL PAYROLL CHECK FORMAT
D-001-5	TM	PROD DEPT	660401	APPROVE PROD UTIL REPORT
D-001-0	GP	CTL DEPT	660501	FINAL TIMECARD FORMAT
D-001-1	TM	GP	660505	DLY PAY RECORD LAYOUT
D-001-3	AT	TM	660512	CALC PAYROLL TPE RECORD LAYOUT
D-001-5	TM	GP	660520	JOB # TRANS TAPE LAYOUT
W-002-0	MF	GP	660522	JOB # TRANS TAPE LAYOUT
W-001-3	AT	PYRLL DPT	660523	APPROVAL OF NET PAY REGISTER
W-001-2	MF	CTL SECT	660523	APPROVAL OF EXCEPTION LISTING
W-002-1	MF	PROD DEPT	660530	APPROVAL OF PROD UTIL SUMM REPT
W-001-2	MF	PYRLL DPT	660530	TEST DATA

Figure 10. Requirements Listing for Payroll System

UPDATING THE REQUIREMENT DECK

As the programmer receives the information or approval desired, he removes the corresponding card from the deck. Thus, the listing shows only those requirements which have not been fulfilled. As each requirement is fulfilled and the card removed from the deck, the programmer might write the current date on the card and hold it for future reference.

CARD AND REPORT FORMATS

All card and report formats shown in this publication are provided only as examples and may be modified according to the individual user's needs. In addition, two or more card types may be sorted together and listed to produce a combined report, e.g., a program status and requirement listing.

COMPUTER SYSTEM:

USE OF EASYTAB UTILITY PACKAGES ON A SERIES 200 COMPUTER

Honeywell provides the user with a series of precoded programs, called Easytab Utility Routines, which simulate a number of tabulating functions on Series 200 computers. A further discussion of these routines can be found in the Honeywell Software Manual: Easytab System Utility Routines, File No. 123.6005.000B.0-206. Two of these routines, SORTB and PERIO, can be used to process the three card types previously described and to produce comparable reports on any Series 200 computer with a minimum of an 8K memory, three tape units, and the Advanced Programming Instructions (Feature 011).

The following pages contain a list of the steps to be performed and include the SORTB parameter cards to be used.

Step 1

1. Create the systems flowchart cards as described on pages 1 and 3.

Step 2

1. Punch a deck of header cards as described on pages 5 and 6.
2. Punch a SORTB parameter card as shown in Figure 12. Using the header cards as input, produce a sorted header card tape in order by program number (columns 1 - 10) within programmer (columns 13 - 14).
3. Produce a printed listing of this tape by using the utility program PERIO (PERipheral Input-Output). The printed output will appear as shown in Figure 7.

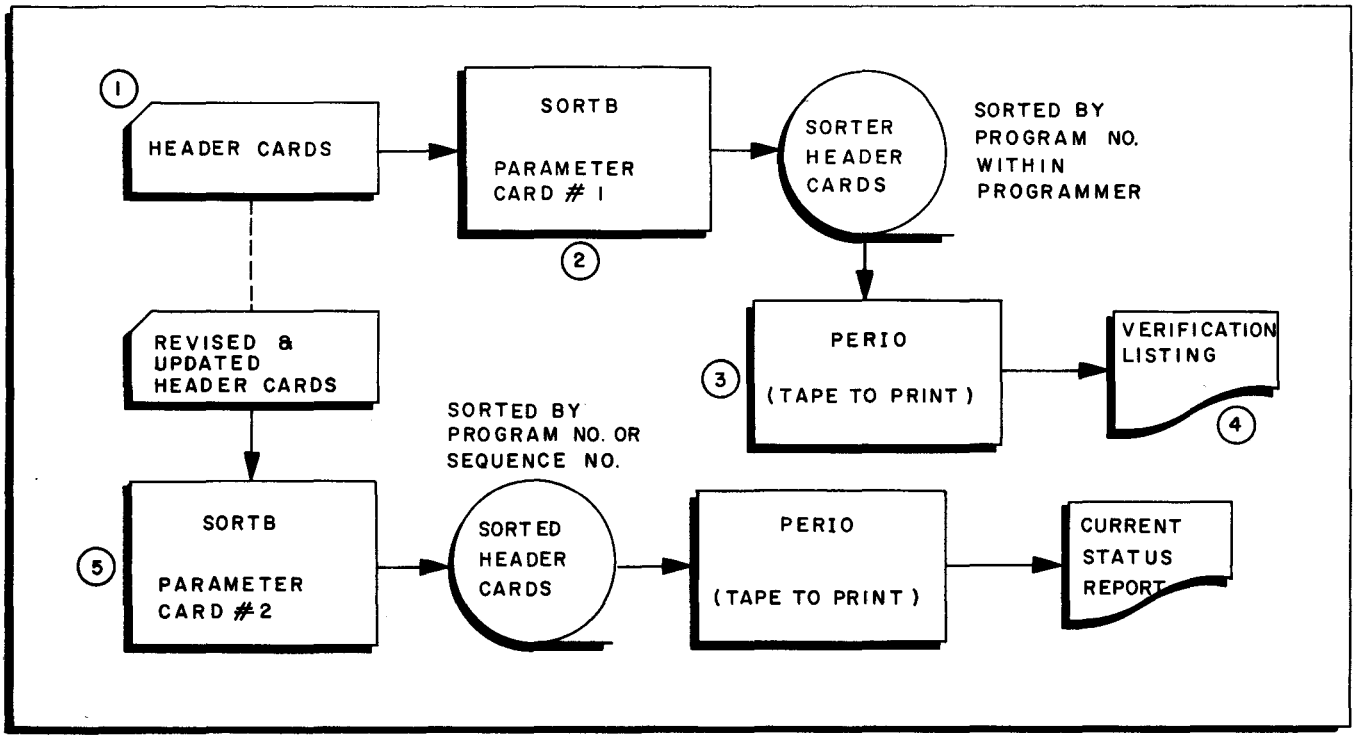

Figure 11. Easytab - Step 2

4. Have each programmer check and verify the listing, make the required changes, and update the status field.

5. As the preparation of the systems continues, update the cards and produce the reports on a regularly scheduled basis. For a current status listing by program number or sequence number (if punched), use the SORTB parameter card shown in Figure 13.

Step 3

1. Punch a deck of input/output cards as described on page 7 (Step 3).

2. Punch a SORTB parameter card as shown in Figure 15. Using the input/output cards as input, execute SORTB to produce a sorted input/output card tape in order by input or output (column 20) within program number (columns 1 - 10) within programmer (columns 13 - 14).

3. Use PERIO to produce an output listing of the tape. Have each programmer verify the listing and make any required revisions to the input/output cards.

4. Punch a SORTB parameter card as shown in Figure 16. If no card changes (3) were required, use the tape from (2) as input and punch a "T" in column 6. If corrections were required, use the input/output cards as input and punch a "C" in column 6. Execute SORTB and use PERIO to print the sorted output tape for Listing #1.

5. Punch a third SORTB parameter card as shown in Figure 17. Using as input the sorted tape from (4) above, execute SORTB and PERIO to print the sorted output tape for Listing #2.

6. Save the top half (INPUT) of Listing #1 and the top half (OUTPUT) of Listing #2. These two portions together provide the same information as the combined listing (Figure 8) produced under the tabulating method. The programs listed in the destination column for each file in the OUTPUT listing can be crosschecked to the programs listed in the program number field for the file on the INPUT listing. As in the combined listing, these two listings can be used to determine the data flow through the system, the effect of an output change on those programs receiving the data as input, and the programmers who should be notified if a change should be made.

Step 4

1. Punch a deck of requirements cards as shown in Figure 9.

2. Three reports can be produced from these cards:

   a. Requirement listing by date required: Punch a SORTB parameter card #6 as shown in Figure 19. Execute SORTB and PERIO to produce a listing of program requirements in order by date required.

   b. Requirement listing by source: Punch a SORTB parameter card #7 as shown in Figure 20. Execute SORTB and PERIO to produce a listing of program requirements by source.

   c. Requirement listing by program number: Punch a SORTB parameter card #8 as shown in Figure 21. Execute SORTB and PERIO to produce a listing of program requirements by program number.

Honeywell
ELECTRONIC DATA PROCESSING

EASYTAB - SORT B

Date _____

I.D. PARAMETER CARD #1

APPLICATION STEP 2 Author _____

SORTB
1 5

INPUT	4TH TAPE OPTION	INPUT TAPE OPTION ①	SEQUENCE
C		1	
6	7	8	9
C = Card T = Tape	Δ = No 4th Tape 4 = 4th Tape	R = Do Not Use Tape 1 as Work 1 = Use Tape 1 as Work	Δ = Ascending D = Descending

NO. OF REELS OF INPUT	MACHINE SIZE	INPUT BLOCKING ②	OUTPUT BLOCKING ②
10	11	15 16	17 18
1 Thru 9	Δ = 8K 3 = 12K 4 = 16K	ΔΔ = 02	ΔΔ = 02

Key 1	Key 2	Key 3	Key 4
1302	0110		
20 23	25 28	30 33	35 38

Key 5	Key 6	Key 7	Key 8
40 43	45 48	50 53	55 58

Input Reel Identification
61 70

Output Reel Identification
HDRCARDS 1
71 80

① Input tape(s) may contain no more than 40,000 items, Blocked 2, in order to use Tape 1 as a work tape.

② Tape input and output of Sort B are assumed to be blocked 2, within an 8K machine. If blocking factor is other than 2, the factor must be entered in the appropriate input and/or output box.

HONEYWELL EDP 2243 (10/65)

Figure 12. Easytab SORTB Parameter Card #1

Honeywell
ELECTRONIC DATA PROCESSING

EASYTAB - SORT B

Date _____

I.D. PARAMETER CARD #2

APPLICATION STEP 2 Author _____

SORTB
1 5

INPUT	4TH TAPE OPTION	INPUT TAPE OPTION ①	SEQUENCE
T		1	
6	7	8	9
C = Card T = Tape	Δ = No 4th Tape 4 = 4th Tape	R = Do Not Use Tape 1 as Work 1 = Use Tape 1 as Work	Δ = Ascending D = Descending

NO. OF REELS OF INPUT	MACHINE SIZE	INPUT BLOCKING ②	OUTPUT BLOCKING ②
1			
10	11	15 16	17 18
1 Thru 9	Δ = 8K 3 = 12K 4 = 16K	ΔΔ = 02	ΔΔ = 02

Key 1	Key 2	Key 3	Key 4
11Ø2	0110		
20 23	25 28	30 33	35 38

Key 5	Key 6	Key 7	Key 8
40 43	45 48	50 53	55 58

Input Reel Identification

HDRCARDS 1
61 70

Output Reel Identification

HDRCARDS 2
71 80

① Input tape(s) may contain no more than 40,000 items, Blocked 2, in order to use Tape 1 as a work tape.

② Tape input and output of Sort B are assumed to be blocked 2, within an 8K machine. If blocking factor is other than 2, the factor must be entered in the appropriate input and/or output box.

HONEYWELL EDP 2243 (10/65)

Figure 13. Easytab SORTB Parameter Card #2

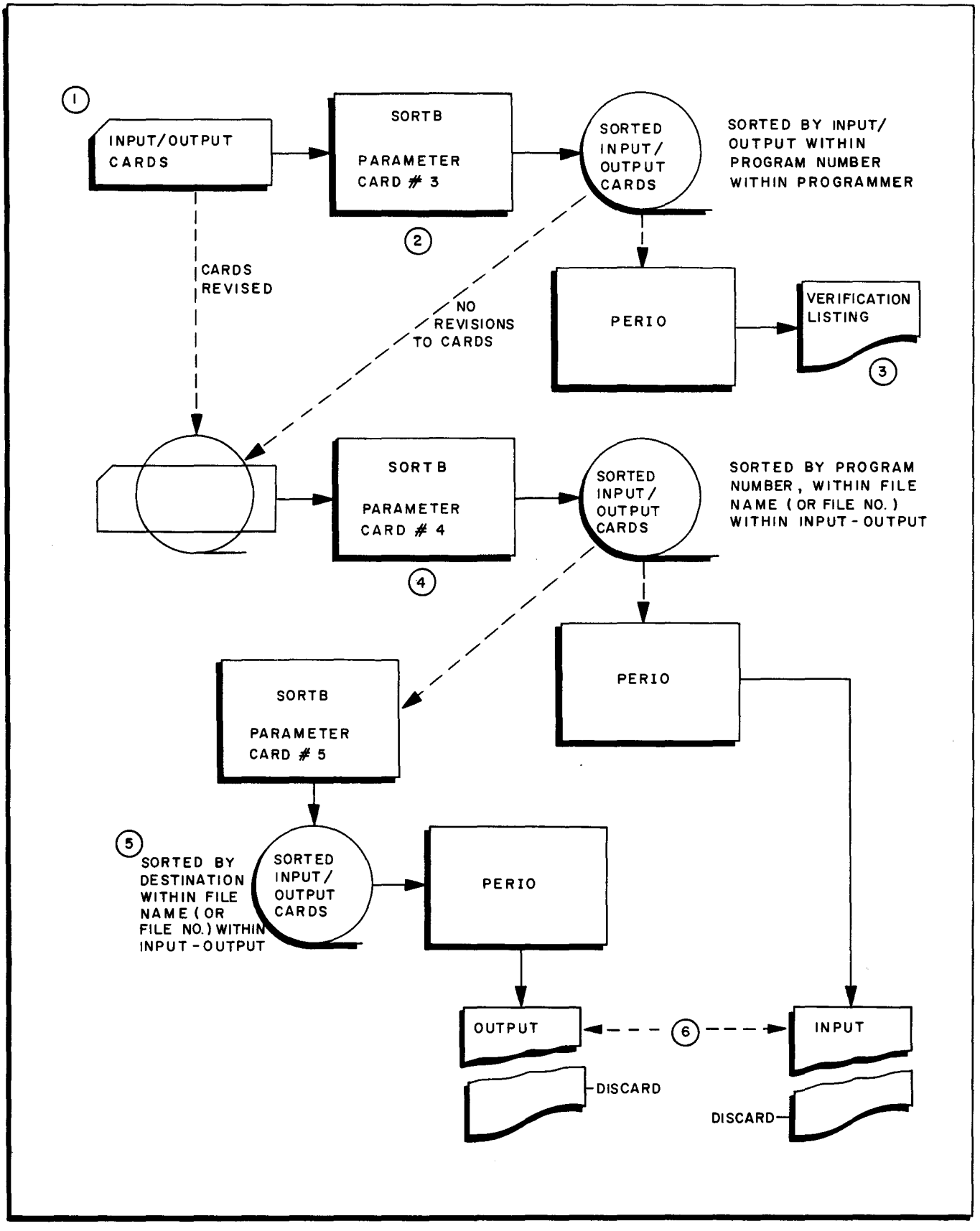

Figure 14. Easytab - Step 3

Honeywell
ELECTRONIC DATA PROCESSING

EASYTAB - SORT B

Date _____

I.D. PARAMETER CARD #3

APPLICATION STEP 3 Author _____

SORTB
1 5

INPUT	4TH TAPE OPTION	INPUT TAPE OPTION ①	SEQUENCE
C		1	
6	7	8	9
C = Card T = Tape	Δ = No 4th Tape 4 = 4th Tape	R = Do Not Use Tape 1 as Work 1 = Use Tape 1 as Work	Δ = Ascending D = Descending

NO. OF REELS OF INPUT	MACHINE SIZE	INPUT BLOCKING ②	OUTPUT BLOCKING ②
10	11	15 16	17 18
1 Thru 9	Δ = 8K 3 = 12K 4 = 16K	ΔΔ = 02	ΔΔ = 02

Key 1	Key 2	Key 3	Key 4
1302	0110	2001	
20 23	25 28	30 33	35 38

Key 5	Key 6	Key 7	Key 8
40 43	45 48	50 53	55 58

Input Reel Identification

61 70

Output Reel Identification

INP-OUTP 1
71 80

① Input tape(s) may contain no more than 40,000 items, Blocked 2, in order to use Tape 1 as a work tape.

② Tape input and output of Sort B are assumed to be blocked 2, within an 8K machine. If blocking factor is other than 2, the factor must be entered in the appropriate input and/or output box.

HONEYWELL EDP 2243 (10/65)

Figure 15. Easytab SORTB Parameter Card #3

Honeywell
ELECTRONIC DATA PROCESSING

EASYTAB - SORT B

Date _____

I.D. PARAMETER CARD #4

APPLICATION STEP 3 Author _____

SORTB
1 5

INPUT	4TH TAPE OPTION	INPUT TAPE OPTION ①	SEQUENCE
T/C		1	
6	7	8	9
C = Card T = Tape	Δ = No 4th Tape 4 = 4th Tape	R = Do Not Use Tape 1 as Work 1 = Use Tape 1 as Work	Δ = Ascending D = Descending

NO. OF REELS OF INPUT	MACHINE SIZE	INPUT BLOCKING ②	OUTPUT BLOCKING ②
1			
10	11	15 16	17 18
1 Thru 9	Δ = 8K 3 = 12K 4 = 16K	ΔΔ = 02	ΔΔ = 02

Key 1	Key 2	Key 3	Key 4
2ØØ1	43-31 FILE-NAME 11-8Ø FILE-NUMBER	ØIIØ	
20 23	25 28	30 33	35 38

Key 5	Key 6	Key 7	Key 8
40 43	45 48	50 53	55 58

Input Reel Identification

INP-OUTP 1
61 70

Output Reel Identification

INP-OUTP 2
71 80

① Input tape(s) may contain no more than 40,000 items, Blocked 2, in order to use Tape 1 as a work tape.

② Tape input and output of Sort B are assumed to be blocked 2, within an 8K machine. If blocking factor is other than 2, the factor must be entered in the appropriate input and/or output box.

HONEYWELL EDP 2243 (10/65)

Figure 16. Easytab SORTB Parameter Card #4

Honeywell
ELECTRONIC DATA PROCESSING

EASYTAB - SORT B

Date _____

I.D. PARAMETER CARD #5

APPLICATION STEP 3 Author _____

SORTB
1 5

INPUT	4TH TAPE OPTION	INPUT TAPE OPTION ①	SEQUENCE
T		1	
6	7	8	9
C = Card T = Tape	Δ = No 4th Tape 4 = 4th Tape	R = Do Not Use Tape 1 as Work 1 = Use Tape 1 as Work	Δ = Ascending D = Descending

NO. OF REELS OF INPUT	MACHINE SIZE	INPUT BLOCKING ②	OUTPUT BLOCKING ②
1			
10	11	15 16	17 18
1 Thru 9	Δ = 8K 3 = 12K 4 = 16K	ΔΔ = 02	ΔΔ = 02

Key 1	Key 2	Key 3	Key 4
2601	43187 (FILE-NAME: 4318; FILE NUMBER: 70)	0110	
20 23	25 28	30 33	35 38

Key 5	Key 6	Key 7	Key 8
40 43	45 48	50 53	55 58

Input Reel Identification

INP-OUTP 2
61 70

Output Reel Identification

INP-OUTP 3
71 80

① Input tape(s) may contain no more than 40,000 items, Blocked 2, in order to use Tape 1 as a work tape.

② Tape input and output of Sort B are assumed to be blocked 2, within an 8K machine. If blocking factor is other than 2, the factor must be entered in the appropriate input and/or output box.

Figure 17. Easytab SORTB Parameter Card #5

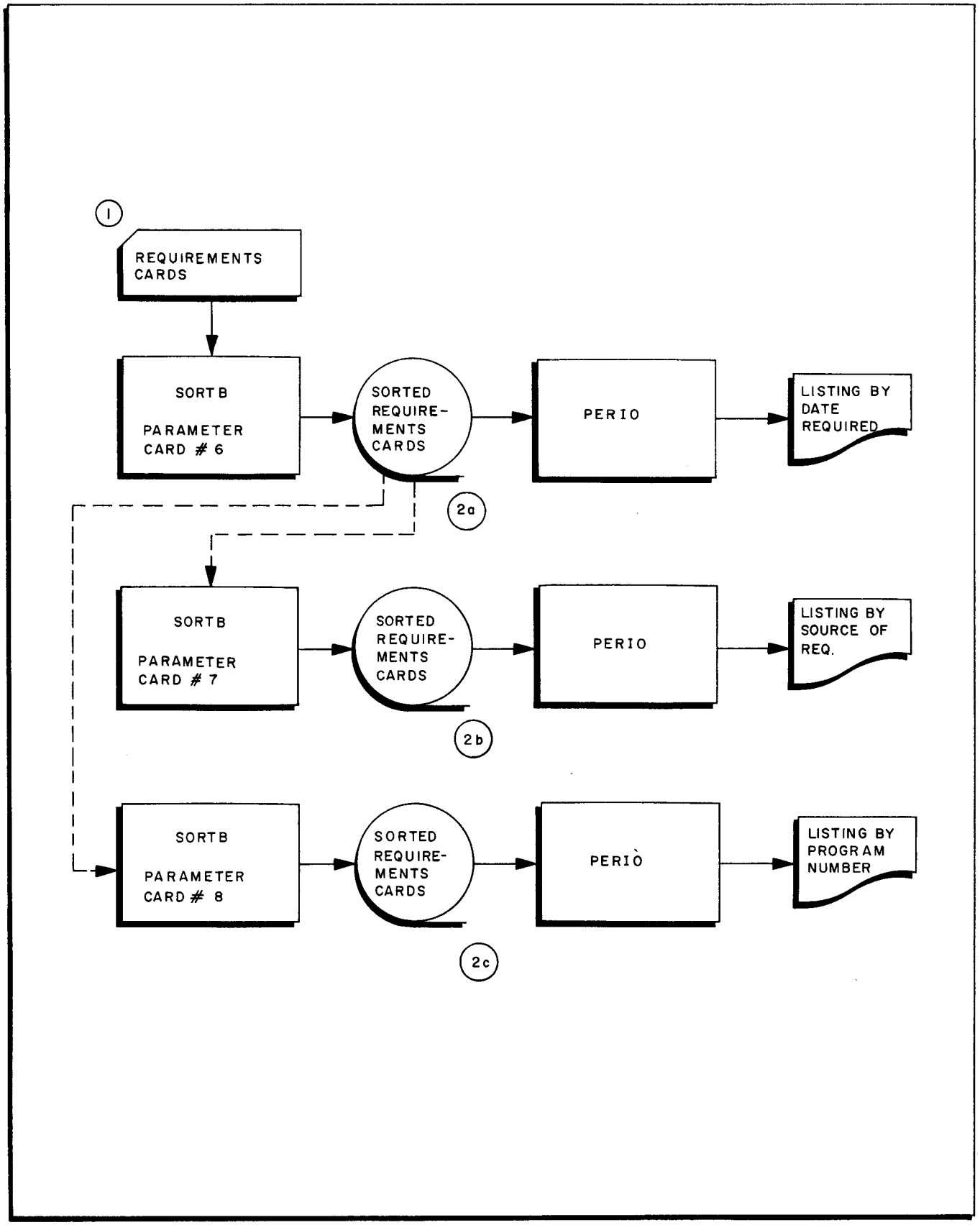

Figure 18. Easytab - Step 4

Honeywell
ELECTRONIC DATA PROCESSING

EASYTAB - SORT B

Date _____

I.D. PARAMETER CARD #6

APPLICATION STEP 4 Author _____

SORTB
1 5

INPUT	4TH TAPE OPTION	INPUT TAPE OPTION ①	SEQUENCE
C		1	
6	7	8	9
C = Card T = Tape	Δ = No 4th Tape 4 = 4th Tape	R = Do Not Use Tape 1 as Work 1 = Use Tape 1 as Work	Δ = Ascending D = Descending

NO. OF REELS OF INPUT	MACHINE SIZE	INPUT BLOCKING ②	OUTPUT BLOCKING ②
10	11	15 16	17 18
1 Thru 9	Δ = 8K 3 = 12K 4 = 16K	ΔΔ = 02	ΔΔ = 02

Key 1	Key 2	Key 3	Key 4
3306			
20 23	25 28	30 33	35 38

Key 5	Key 6	Key 7	Key 8
40 43	45 48	50 53	55 58

Input Reel Identification

61 70

Output Reel Identification

REQCARDS 1

71 80

① Input tape(s) may contain no more than 40,000 items, Blocked 2, in order to use Tape 1 as a work tape.

② Tape input and output of Sort B are assumed to be blocked 2, within an 8K machine. If blocking factor is other than 2, the factor must be entered in the appropriate input and/or output box.

HONEYWELL EDP 2243 (10/65)

Figure 19. Easytab SORTB Parameter Card #6

Honeywell
ELECTRONIC DATA PROCESSING

EASYTAB - SORT B

Date _____

I.D. PARAMETER CARD #7

APPLICATION STEP 4 Author _____

SORTB
1 5

INPUT	4TH TAPE OPTION	INPUT TAPE OPTION ①	SEQUENCE
T		1	
6	7	8	9
C = Card T = Tape	Δ = No 4th Tape 4 = 4th Tape	R = Do Not Use Tape 1 as Work 1 = Use Tape 1 as Work	Δ = Ascending D = Descending

NO. OF REELS OF INPUT	MACHINE SIZE	INPUT BLOCKING ②	OUTPUT BLOCKING ②
1			
10	11	15 16	17 18
1 Thru 9	Δ = 8K 3 = 12K 4 = 16K	ΔΔ = 02	ΔΔ = 02

Key 1	Key 2	Key 3	Key 4
2110			
20 23	25 28	30 33	35 38

Key 5	Key 6	Key 7	Key 8
40 43	45 48	50 53	55 58

Input Reel Identification

REQCARDS 1
61 70

Output Reel Identification

REQCARDS 2
71 80

① Input tape(s) may contain no more than 40,000 items, Blocked 2, in order to use Tape 1 as a work tape.

② Tape input and output of Sort B are assumed to be blocked 2, within an 8K machine. If blocking factor is other than 2, the factor must be entered in the appropriate input and/or output box.

HONEYWELL EDP 2243 (10/65)

Figure 20. Easytab SORTB Parameter Card #7

Honeywell
ELECTRONIC DATA PROCESSING

EASYTAB - SORT B

Date _____

I.D. PARAMETER CARD #8

APPLICATION STEP 4 Author _____

S O R T B
1 5

INPUT	4TH TAPE OPTION	INPUT TAPE OPTION ①	SEQUENCE
T		1	
6	7	8	9
C = Card T = Tape	Δ = No 4th Tape 4 = 4th Tape	R = Do Not Use Tape 1 as Work 1 = Use Tape 1 as Work	Δ = Ascending D = Descending

NO. OF REELS OF INPUT	MACHINE SIZE	INPUT BLOCKING ②	OUTPUT BLOCKING ②
1			
10	11	15 16	17 18
1 Thru 9	Δ = 8K 3 = 12K 4 = 16K	ΔΔ = 02	ΔΔ = 02

Key 1	Key 2	Key 3	Key 4
Ø 1 1 Ø			
20 23	25 28	30 33	35 38

Key 5	Key 6	Key 7	Key 8
40 43	45 48	50 53	55 58

Input Reel Identification

R E Q C A R D S 1
61 70

Output Reel Identification

R E Q C A R D S 3
71 80

① Input tape(s) may contain no more than 40,000 items, Blocked 2, in order to use Tape 1 as a work tape.

② Tape input and output of Sort B are assumed to be blocked 2, within an 8K machine. If blocking factor is other than 2, the factor must be entered in the appropriate input and/or output box.

Figure 21. Easytab SORTB Parameter Card #8

HONEYWELL EDP TECHNICAL PUBLICATIONS
USERS' REMARKS FORM

GENERAL BULLETIN

TITLE: SERIES 200 PROGRAM STATUS, INPUT/OUTPUT AND REQUIREMENT CONTROL SYSTEM

DATED: JANUARY 1966

FILE NO: 142.0000.0000.0-151

ERRORS NOTED:

Fold

SUGGESTIONS FOR IMPROVEMENT:

Fold

FROM: NAME _____ DATE _____

COMPANY _____

TITLE _____

ADDRESS _____

_____

Cut Along Line

FIRST CLASS
PERMIT NO. 39531
WELLESLEY HILLS
MASS.

BUSINESS REPLY MAIL

No postage stamp necessary if mailed in the United States

POSTAGE WILL BE PAID BY

HONEYWELL
ELECTRONIC DATA PROCESSING DIVISION
60 WALNUT STREET
WELLESLEY HILLS, MASS. 02181

ATT'N: PUBLICATIONS AND WRITING SERVICES DEPARTMENT

Cut Along Line

Honeywell
ELECTRONIC DATA PROCESSING