

WORST CASE B TIME TEST

A. PURPOSE OF TEST

1. Test maximum delay in B TIME and the 7090 channel priority circuit.

B. METHOD OF TEST

1. A test of TAU operations is made on each channel selected.
2. A B TIME with concurrent ORS instruction execution test is made to check specifically the -AND circuit 3G on systems page 2.09.00.1
3. 100 octal records consisting of 100 octal words are written, back-spaced, read and checked for errors on TAPE UNIT 2 CHANNEL A and TAPE UNIT 1 on each of the other channels selected.
4. If sense switch 5 is down, the program continuously stores the channel contents while reading information from tape.

C. MACHINE UNITS AND STORAGE AREA

1. Units

- a. Card reader or tape unit 1 on channel A for loading
- b. Main frame
- c. Core frame
- d. Tape unit 2 on channel A and tape unit 1 on each of the other channels to be tested.

2. Storage Locations

- | | |
|----------------|-------|
| a. 00030-06606 | 9B53B |
| b. 75300-76340 | 9IOCA |
| c. 76400-77710 | DEPRX |

D. PROGRAM CONTROL

1. Deck

- a. 000 9LD01A Low end loader
- b. 001-084 9B53B
- c. 085-109 9IOCA
- d. 110-141 DEPRX
- e. 142 Transfer card - TRA 00030
- f. 143-144 2 blank cards

2. Sense Switch Control

- a. Use of sense switches 1 through 4 are as outlined in DEPRX.
- b. Sense Switch 5 Up - Initially make 1 pass through entire program except for continuous STORE CHANNEL section and check sense switch 6.
- c. Sense Switch 5 Dn - Repeat continuous STORE CHANNEL routines.
- d. Sense Switch 6 Up - Load next program.
- e. Sense Switch 6 Dn - Repeat test (see section H-3)

E. NORMAL STOPS

- 1. 75320 - Enter keys for tape units on channels A-D
- 2. 75334 - Enter keys for tape units on channels E-H

F. ERROR STOPS

- 1. 01436 - No tape units selected; press start to return to IOC.
- 2. 02163 - Consult listing at this location for comments to aid in diagnosing error.

3. 75326 - Control word entered at location 75320 contained no tag bits for channels.
4. 76471 - Error while executing routines of 9B53.

G. PRINTOUTS

1. Program identification is printed on the initial pass with sense switch 3 up.
2. Pass complete is printed for each pass through program with sense switches 3 up and 6 down.
3. For errors while executing routines of 9B53, DEPRX printouts will result with sense switch 3 up.

H. COMMENTS

1. For worst case tests use 729 MOD IV tape frames.
2. If the contents of any channel becomes larger than it should, the channel will be reset and a halt will occur. The comments in the listing following location 02162 may be an aid in determining the trouble.
3. With sense switches 5 up and 6 down, the return is to the beginning of the program. To repeat the TAU operations and B TIME-ORS tests, manually store a NOP instruction in location 00542 or the above tests will be omitted after the initial pass.
4. For TAU operations and B TIME-ORS tests, only TAPE UNIT 2 on CHANNEL A is used but any number of units can be called for on other channels selected.
5. For WORST CASE routines, TAPE UNIT 2 on CHANNEL A and TAPE UNIT 1 on all other channels selected are the only drives used.
6. The sign key is used to designate the type of loading for the simulated load button sequence under sense switch 6 control.
7. To write this card deck program on a diagnostic program tape, only the loader must be replaced.

8. Consult write-ups of DEPRX and 9IOCA for details on error halt or printouts and I/O unit selection.
9. The release of this program obsoletes 9B53A.

9B53B

WORST CASE B TIME TEST

	00030		ORG 24	
00030	0500 00 0 01417		CLA SW6+2	POST
00031	0601 00 0 00000		STO 0	RESTART
00032	0760 00 0 00163		SWT 3	
00033	0020 00 0 00035		TRA *+2	
00034	0020 00 0 00037		TRA *+3	
00035	0766 00 0 01361	BEGIN	WPRA	
00036	0540 00 0 02336		RCHA STCTL	CONTROL FOR PRINTING STARTING HEADING
00037	0074 00 4 75316		TSX IOC,4	ENTER CONTROL WORDS
00040	0500 00 0 75300		CLA CTRL1	L CONTROL WORD
00041	-0120 00 0 00045		TMI *+4	FIX SELECT
00042	0500 00 0 00655		CLA READ5+2	IF THE SIGN
00043	0402 00 0 03466		SUB ONE	KEY WAS
00044	0601 00 0 01422		STO SW6+5	DEPRESSED
00045	0520 00 0 75303		ZET CTRA	SEE IF CHN. A IS ON LINE
00046	0020 00 0 00052		TRA *+4	NO ZERO
00047	0074 00 4 75315		TSX CTX,4	MAKE CHN. A EXCL. UNIT TWO MODIFY PROGRAM FOR FIRST UNIT TO BE TESTED
00050	0005 06 0 00062		HTR ABLE-4,0,OR2+1	
00051	0020 00 0 00057		TRA IONT+1	
00052	-0500 00 0 75300		CAL CTRL1	
00053	-0320 00 0 03437		ANA EXCL	MASK OUT CHN A
00054	-0501 00 0 03440		ORA EXCL+1	OR IN EXCL UNIT TWO
00055	0602 00 0 75300		SLW CTRL1	
00056	0074 00 4 75314	IONT	TSX IOCNT,4	
00057	0020 00 0 01427		TRA CHNG	
00060	0500 00 0 03414		CLA COUNT	SWITCH TO BYPASS
00061	-0100 00 0 00543		TNZ TEST	INITIAL SECTIONS

ROUTINES FROM THIS POINT TO SYMBOLIC LOCATION ***TEST*** WILL CHECK
BUFFER AND SYNCHRONIZER INSTRUCTIONS FOR ALL THE CHANNELS SELECTED

THE FOLLOWING ROUTINES WILL BE MODIFIED FOR ALL CHANNELS BY IOC

00062	-0760 00 0 01000		ETTA	
00063	0772 00 0 01202		REWA 2	
00064	0020 00 0 00066		TRA *+2	
00065	632346216060		BCD 1TCOA	TEST TRANS CHANNEL A IN OPN
00066	0766 00 0 01222	ABLE	WTBA 2	
00067	0060 00 0 00072		TGOA *+3	CHAN. SHOULD BE IN OPN.
00070	0074 00 4 76403		TSX ERROR-1,4	FAILED TO TRANS. IN OPN.
00071	-3 00000 0 00066		TXL ABLE	

00072	0540	00	0	03361		
00073	0060	00	0	00075		
00074	0074	00	4	76403		
00075	-3	00000	0	00065		
00076	0060	00	0	00076		
00077	0060	00	0	00101		
00100	0020	00	0	00103		
00101	0074	00	4	76403		
00102	-3	00000	0	00066		
00103	0074	00	4	76405		
00104	0020	00	0	00066		
00105	632345216060					
00106	-0060	00	0	00111		
00107	0074	00	4	76403		
00110	-3	00000	0	00106		
00111	0766	00	0	01222		
00112	-0060	00	0	00114		
00113	0020	00	0	00116		
00114	0074	00	4	76403		
00115	-3	00000	0	00106		
00116	0540	00	0	03362		
00117	-0060	00	0	00121		
00120	0020	00	0	00123		
00121	0074	00	4	76403		
00122	-3	00000	0	00106		
00123	0060	00	0	00123		
00124	-0060	00	0	00127		
00125	0074	00	4	76403		
00126	-3	00000	0	00106		
00127	0074	00	4	76405		
00130	0020	00	0	00106		
00131	226363216060					
00132	0772	00	0	01202		
00133	0764	00	0	01202		
00134	0772	00	0	01202		
00135	0764	00	0	01202		
00136	0060	00	0	00136		
00137	0760	00	0	01000		

	RCHA CNTL	NO TORS ON-WORD. CNT. 1
	TCOA *+3	SHOULD TRANS.
	TSX ERROR-1,4	FAILED TO TRANS. IN OPN.
	TXL ABLE	
	TCOA *	IF UNIT RUNS AWAY, OR
		MACHINE HANGS ON THIS
		OR ANY PREVIOUS TCOA
		OPN., BUFFER MAY NOT BE
		RECEIVING END OPER. FROM
		SYNC.
	TCOA *+2	SHOULD NOT TRANS.
	TRA *+3	OK
	TSX ERROR-1,4	TRANS. IN ERROR-TCOA
	TXL ABLE	
	TSX OK,4	OUT TO CHECK SWITCHES
	TRA ABLE	REPEAT
	BCD 1TCNA	TEST TRANS. CHAN NOT IN OPN
BAKER	TCNA *+3	SHOULD TRANS.
	TSX ERROR-1,4	FAILED TO TRANS.
	TXL BAKER	
	WTBA 2	
	TCNA *+2	SHOULD NOT TRANS.
	TRA *+3	OK
	TSX ERROR-1,4	SHOULD NOT ENTER HERE
	TXL BAKER	
	RCHA CNTL+1	NO TORS. ON-WRD. CNT. 1
	TCNA *+2	SHOULD NOT TRANS.
	TRA *+3	OK
	TSX ERROR-1,4	SHOULD NOT ENTER HERE
	TXL BAKER	
	TCOA *	
	TCNA *+3	SHOULD TRANS.
	TSX ERROR-1,4	SHOULD NOT ENTER HERE
	TXL BAKER	
	TSX OK,4	OUT TO CHECK SWITCHES
	TRA ABLE	REPEAT
	BCD 1B1TA	TEST BEGIN. TAPE
CHUCK	REWA 2	
	BSRA 2	BACKSPACE TO LOAD PT.
	REWA 2	SHOULD ACT AS NOP
	BSRA 2	TRY TO BCKSP OVER LD. PT.
	TCOA *	DELAY
		BEGIN TAPE TOR. SHOULD
		BE TURNED ON HERE
	B1TA	

00140 0020 00 0 00143
00141 0074 00 4 76403
00142 -3 00000 0 00132

TRA *+3 OK-SHOULD BE ON
TSX ERROR-1,4 SHLD NOT SKIP TO ENTER HERE
TXL CHUCK

00143 0760 00 0 01000
00144 0020 00 0 00146
00145 0020 00 0 00150
00146 0074 00 4 76403
00147 -3 00000 0 00132
00150 0074 00 4 76405
00151 0020 00 0 00132

BT TA
TRA *+2 ERROR-BTT SHOULD BE OFF
TRA *+3 OK-OFF
TSX ERROR-1,4 SHOULD NOT ENTER HERE
TXL CHUCK
TSX OK,4 OUT TO CHECK SWITCHES
TRA CHUCK

00152 314663606060

BCD 110T TEST I/O CHECK TGR.

00153 0766 00 0 01222
00154 0540 00 0 03361
00155 0060 00 0 00155
00156 0544 00 0 03362
00157 0760 00 0 00005
00160 0020 00 0 00163
00161 0074 00 4 76403
00162 -3 00000 0 00153

DOG

WTBA 2
RCHA CNTL NO TGRS. ON-WRD. CNT. 1
TCOA *
LCHA CNTL+1 SHOULD TURN ON IOT
IOT
TRA *+3 SHOULD ENTER HERE-OK
TSX ERROR-1,4 ERROR-SHOULD NOT SKIP
TXL DOG

00163 0760 00 0 00005
00164 0020 00 0 00166

IOT
TRA *+2 ERROR-TGR WAS NOT TURNED
OFF BY PREVIOUS SEQUENCE

00165 0020 00 0 00170
00166 0074 00 4 76403
00167 -3 00000 0 00153
00170 0074 00 4 76405
00171 0020 00 0 00153

TRA *+3 OK-TGR SHOULD BE OFF
TSX ERROR-1,4
TXL DOG
TSX OK,4 OUT TO CHECK SWITCHES
TRA DOG

00172 662526216060

BCD 1WEFA TEST TO SEE THAT WEF
BCD OR BINARY, BOTH
WRITE TAPE MARKS

WRITE 1 WORD RECORD OF 1-S, AN EOF, 1 WORD RECORD OF 0-S AND AN EOF

00173 0766 00 0 01202
00174 0540 00 0 03361
00175 0770 00 0 01202
00176 0766 00 0 01222
00177 0540 00 0 03362
00200 0770 00 0 01222

WTDA 2 WRITE 1 WORD RECORD OF 1-S
RCHA CNTL NO TGRS. ON-WRD. CNT. 1
WEFA 2 BCD EOF
WTBA 2 WRITE 1 WORD RECORD OF 0-S
RCHA CNTL+1 NO. TGRS ON-WRD. CNT. 1
WEFA 18 BINARY EOF. SHOULD
WRITE BCD TAPE MARK

00201 0020 00 0 00203

TRA *+2

00202 226251216002

BCD 1BSRA 2

00203 0764 00 0 01222
00204 0764 00 0 01202
00205 0762 00 0 01222
00206 0540 00 0 03364
00207 0060 00 0 00207

EASY

BSRA 18
BSRA 2
RTBA 2 READ 1 WORD RECORD OF 0-S
RCHA CNTL+1 NO TGRS ON-WRD CNT 2
TCOA *

00210 0774 00 2 00003

AXT 3,2 L 3 IN XRB

00211	0634	00	2	76415	SAX 10000*2	DATA FOR PRINTOUT
00212	0774	00	1	76412	DATA 1*1	DATA IN XBA
00213	0634	00	1	76407	DATA 1*1	DATA FOR PRINTOUT
00214	2	00002	2	76415	DATA 10000*2	DATA FOR PRINTOUT NUMBER
00215	2	00001	1	76415	DATA 10000*1	DATA FOR PRINTOUT NUMBER

CHECK 2ND RECORD IS ZEROS AND FOR EOF AFTER THE RECORD

00216	0500	00	0	00216	DATA READ	DATA READ
00217	0500	00	0	00216	DATA ZEROS	DATA WRITTEN
00220	0500	00	0	00216	CAS ZEROS	
00221	0020	00	0	00223	TRA 1*2	DATA
00222	0020	00	0	00225	TRA 1*3	DATA
00223	0074	01	4	76402	FOX ERROR-200*1	DATA HANDS ROUTINE
00224	0701	00	2	00205	DATA HANDS	DATA HANDS
00225	0074	00	4	76405	FOX ERROR*4	DATA HANDS
00226	0020	00	0	00223	TRA 1*1	DATA
00227	0500	00	0	00231	DATA 1*1	DATA HANDS
00230	0074	00	4	76403	FOX ERROR*1	DATA HANDS
00231	-3	00000	0	00234	FOX ERROR	DATA HANDS
00232	0020	00	0	00234	FOX ERROR	DATA HANDS
00233	270276216002				DATA 1*1	DATA HANDS
00234	-0764	00	0	01202	FOX	DATA 1*1
00235	-0764	00	0	01202	FOX	DATA 1*1
00236	0764	00	0	01202	DATA 1*1	DATA 1*1
00237	0762	00	0	01202	DATA 1*1	DATA 1*1
00240	0540	00	0	00304	DATA 1*1	DATA 1*1
00241	0060	00	0	00241	DATA 1*1	DATA 1*1
00242	0020	00	0	00244	DATA 1*1	DATA 1*1
00243	632576216002				DATA 1*1	DATA 1*1
00244	0030	00	0	00247	DATA 1*1	DATA 1*1
00245	0074	00	4	76403	FOX ERROR	DATA 1*1
00246	-3	00000	4	00246	FOX ERROR	DATA 1*1
00247	0030	00	0	00251	DATA 1*1	DATA 1*1
00250	0020	00	0	00253	DATA 1*1	DATA 1*1
00251	0074	00	4	76403	FOX ERROR	DATA 1*1
00252	-3	00000	4	00252	FOX ERROR	DATA 1*1
00253	0762	00	0	01202	FOX	DATA 1*1
00254	0540	00	0	00304	DATA 1*1	DATA 1*1
00255	0060	00	0	00255	DATA 1*1	DATA 1*1
00256	0020	00	0	00256	DATA 1*1	DATA 1*1
00257	606325252160				DATA 1*1	DATA 1*1
00260	0030	00	0	00260	DATA 1*1	DATA 1*1
00261	0074	00	4	76403	FOX ERROR	DATA 1*1
00262	-3	00000	4	00262	FOX ERROR	DATA 1*1

CHECK 1ST RECORD IS ONES

00263	0774	00	2	00002	AXT 2,2	L 2 IN XRB
00264	0500	00	0	03370	CLA READ	WORD READ
00265	0560	00	0	03367	LDQ ONES	WORD WRITTEN
00266	0340	00	0	03367	CAS ONES	
00267	0020	00	0	00271	TRA *+2	ERROR
00270	0020	00	0	00273	TRA *+3	OK
00271	0074	01	4	76402	TSX ERROR-2,4,1	TO ERROR ROUTINE
00272	0761	00	0	00234	NOP FOX	
00273	0074	00	4	76406	TSX RDNCK,4	TEST RDNCK
00274	0020	00	0	00234	TRA FOX	

CHECK 2ND RECORD IS ZEROS

00275	0500	00	0	03372	CLA READ+2	WORD READ
00276	0560	00	0	03366	LDQ ZEROS	WORD WRITTEN
00277	0340	00	0	03366	CAS ZEROS	
00300	2 00001	2	00303	TIX *+3,2,1	ERROR	
00301	0020	00	0	00305	TRA *+4	OK
00302	2 00001	2	00303	TIX *+1,2,1	ERROR	
00303	0074	01	4	76402	TSX ERROR-2,4,1	TO ERROR ROUTINE
00304	0761	00	0	00234	NOP FOX	
00305	0074	00	4	76405	TSX OK,4	OUT TO TEST SWITCHES
00306	0020	00	0	00234	TRA FOX	

PERFORM TAPE OPERATION AND EXECUTE ORS INSTRUCTION

00307	516322465162			BCD 1RTBORS		
00310	-0774	00	4	00314	OR	AXC *+4,4 2-S COMPLEMENT TO XRC
00311	0774	00	1	01000		AXT 512,1 L 1000 IN XRA
00312	0600	00	1	03361		STZ RCHA+512,1 CLEAR THESE
00313	2 00001	1	00312			TIX *-1,1,1 LOCATIONS
00314	0020	00	4	00001		TRA 1,4 PROCEED

WRITE 1000 OCTAL WORD RECORD OF ZEROS

00315	0766	00	0	01222	WTBA 2	1000 WORDS
00316	0540	00	0	03472	RCHA ORWRD	OF ZEROS
00317	0544	00	0	03473	LCHA ORWRD+1	ON TAPE
00320	-0760	00	0	01000	ETTA	CHECK FOR END OF TAPE
00321	0020	00	0	00324	TRA *+3	REACHED END OF TAPE
00322	0060	00	0	00320	TGOA *-2	REPEAT CHECKING FOR EOT
00323	0020	00	0	00327	TRA *+4	NO END OF TAPE, PROCEED
00324	0760	00	0	01352	RDCA	BLAST THE CHANNEL
00325	0522	00	0	00063	XEC TONT+5	REWIND TAPE AT EOT
00326	0020	00	0	00310	TRA OR	REPEAT ROUTINE
00327	0764	00	0	01202	BSRA 2	BACKSPACE RECORD
00330	0774	00	1	01000	AXT 512,1	L 1000 IN XRA
00331	-0754	00	0	00000	PXD	CLEAR ACCUMULATOR
00332	0760	00	0	00006	COM	ACC Q-35 NOW ONES
00333	0602	00	1	03361	SLW RCHA+512,1	STORE 1-5 IN

READ FIELD
ACCUMULATOR NOW ZEROS

READ TAPE AND EXECUTE 100 SUCCESSIVE ORS

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RTBA 2      START
RCHA ORWRD  READING
LCHA ORWRD+1 TAPE
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OR1 OR5 OR1ST EXECUTE SUCCESSIVE ORS

OKS OKTST

00420 -0602 00 0 03471	ORS	ORTST	
00421 -0602 00 0 03471	ORS	ORTST	
00422 -0602 00 0 03471	ORS	ORTST	
00423 -0602 00 0 03471	ORS	ORTST	
00424 -0602 00 0 03471	ORS	ORTST	
00425 -0602 00 0 03471	ORS	ORTST	
00426 -0602 00 0 03471	ORS	ORTST	
00427 -0602 00 0 03471	ORS	ORTST	
00430 -0602 00 0 03471	ORS	ORTST	
00431 -0602 00 0 03471	ORS	ORTST	
00432 -0602 00 0 03471	ORS	ORTST	
00433 -0602 00 0 03471	ORS	ORTST	
00434 -0602 00 0 03471	ORS	ORTST	
00435 -0602 00 0 03471	ORS	ORTST	
00436 -0602 00 0 03471	ORS	ORTST	
00437 -0602 00 0 03471	ORS	ORTST	
00440 -0602 00 0 03471	ORS	ORTST	
00441 -0602 00 0 03471	ORS	ORTST	
00442 -0602 00 0 03471	ORS	ORTST	
00443 -0602 00 0 03471	ORS	ORTST	
00444 -0602 00 0 03471	ORS	ORTST	
00445 -0602 00 0 03471	ORS	ORTST	
00446 -0602 00 0 03471	ORS	ORTST	
00447 -0602 00 0 03471	ORS	ORTST	
00450 -0602 00 0 03471	ORS	ORTST	
00451 -0602 00 0 03471	ORS	ORTST	
00452 -0602 00 0 03471	ORS	ORTST	
00453 -0602 00 0 03471	ORS	ORTST	
00454 -0602 00 0 03471	ORS	ORTST	
00455 -0602 00 0 03471	ORS	ORTST	
00456 -0602 00 0 03471	ORS	ORTST	
00457 -0602 00 0 03471	ORS	ORTST	
00460 -0602 00 0 03471	ORS	ORTST	
00461 -0602 00 0 03471	ORS	ORTST	
00462 -0602 00 0 03471	ORS	ORTST	
00463 -0602 00 0 03471	ORS	ORTST	
00464 -0602 00 0 03471	ORS	ORTST	
00465 -0602 00 0 03471	ORS	ORTST	
00466 -0602 00 0 03471	ORS	ORTST	
00467 -0602 00 0 03471	ORS	ORTST	
00470 -0602 00 0 03471	ORS	ORTST	
00471 -0602 00 0 03471	ORS	ORTST	
00472 -0602 00 0 03471	ORS	ORTST	
00473 -0602 00 0 03471	ORS	ORTST	
00474 -0602 00 0 03471	ORS	ORTST	
00475 -0602 00 0 03471	ORS	ORTST	
00476 -0602 00 0 03471	ORS	ORTST	
00477 -0602 00 0 03471	ORS	ORTST	
00500 -0602 00 0 03471	ORS	ORTST	
00501 -0602 00 0 03471	ORS	ORTST	
00502 -0602 00 0 03471	ORS	ORTST	
00503 -0602 00 0 03471	ORS	ORTST	
00504 -0602 00 0 03471	ORS	ORTST	
00505 -0600 00 0 00341	OR2	TCOA OR1	ORS IF CHANNEL IN OPERATION
00506 0774 00 1 01001		AXT 513.1	WORD NUMBER

00507	0634	00	1	76407	SXA WDNO,1	AND
00510	0774	00	2	00002	AXT 2,2	RECORD NUMBER
00511	0634	00	2	76410	SXA RECNO,2	FOR ERRORS
00512	2	00001	1	00513	TIX *+1,1,1	1000 IN XRA
00513	2	00001	2	00514	TIX *+1,2,1	2 IN XRB

CHECK LOCATIONS IN READ FIELD ARE ZEROS

00514	0500	00	1	03361	CLA RCHA+512,1	L CONTENTS READ FIELD
00515	0100	00	0	00521	TZE *+4	ARE LOCATIONS ZERO
00516	0560	00	0	03366	LDQ ZEROS	NO, CLEAR MQ
00517	0074	01	4	76402	TSX ERROR-2,4,1	CHECK CIRCUIT 3G
00520	0761	00	0	00310	NOP OR	SYSTEMS PAGE 2.09.00.1
00521	2	00001	1	00514	TIX *-5,1,1	CHECK 1000 OCTAL LOCATIONS

00522	0500	00	0	03471	CLA ORTST	CHECK ORS LOCATION
00523	0340	00	0	03367	CAS ONES	IS LOCATION 1-S
00524	0020	00	0	00526	TRA *+2	NO
00525	0020	00	0	00530	TRA *+3	YES
00526	0560	00	0	03367	LDQ ONES	1-S TO MQ
00527	0074	00	4	76404	TSX ERROR,4	TO ERROR ROUTINE
00530	0074	00	4	76405	TSX OK,4	
00531	0020	00	0	00310	TRA OR	

00532	0761	00	0	00000	NOP	
00533	0074	00	4	00311	TSX OR+1,4	TO CLEAR READ FIELD

00534	0074	00	4	75315	TSX CTX,4	
00535	0005	06	0	00062	HTR ABLE-4,0,OR2+1	
00536	0500	00	0	75302	CLA IOCT	
00537	0402	00	0	03466	SUB ONE	
00540	0601	00	0	75302	STO IOCT	
00541	-0100	00	0	00062	TNZ IONT+4	CHECK ALL TAPE UNITS

00542	-0625	00	0	03414	STL COUNT	
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THIS SECTION WRITES A 100 WORD RECORD ON ALL CHANNELS
SELECTED TO MOVE FROM LOAD POINT, THEN REPEAT THE SAME RECORD FOR TEST.

00543	0774	00	1	00454	TEST	AXT 300,1
00544	0774	00	2	00101		AXT 65,2
00545	-0520	00	0	75303	NZI CTRA	TEST FOR CHANNEL-A
00546	0020	00	0	00551	TRA *+3	NO-GO TO B
00547	0766	00	0	01222	WTDA 2	WRITE CHANNEL-A
00550	0540	00	0	02347	RCHA WR1	
00551	-0520	00	0	75304	NZI CTRB	TEST FOR CHANNEL-B
00552	0020	00	0	00555	TRA *+3	NO-GO TO C
00553	0766	00	0	02221	WTDB 1	WRITE CHANNEL-B
00554	-0540	00	0	02350	RCHB WR2	
00555	-0520	00	0	75305	NZI CTRC	TEST FOR CHANNEL-C
00556	0020	00	0	00561	TRA *+3	NO-GO TO D
00557	0766	00	0	03221	WTDC 1	WRITE CHANNEL C
00560	0541	00	0	02351	RCHC WR3	
00561	-0520	00	0	75306	NZI CTRD	TEST FOR CHANNEL-D

00562 0020 00 0 00565
00563 0766 00 0 04221
00564 -0541 00 0 02352
00565 -0520 00 0 75307
00566 0020 00 0 00571
00567 0766 00 0 05221
00570 0542 00 0 02353
00571 -0520 00 0 75310
00572 0020 00 0 00575
00573 0766 00 0 06221
00574 -0542 00 0 02354
00575 -0520 00 0 75311
00576 0020 00 0 00601
00577 0766 00 0 07221
00600 0543 00 0 02355
00601 -0520 00 0 75312
00602 0020 00 0 00605
00603 0766 00 0 10221
00604 -0543 00 0 02356
00605 0020 00 0 01354
00606 2 00001 2 00545

TEST2

TRA *+3
WTBD 1
RCHD WR4
NZT CTRE
TRA *+3
WTBE 1
RCHE WR5
NZT CTRF
TRA *+3
WTBF 1
RCHF WR6
NZT CTRG
TRA *+3
WTBG 1
RCHG WR7
NZT CTRH
TRA *+3
WTBH 1
RCHH WR10
TRA CLEAR+5
TIX TEST+2,2,1

NO-GO TO E
WRITE CHANNEL-D

TEST FOR CHANNEL-E
NO-GO TO F
WRITE CHANNEL-E

TEST FOR CHANNEL F
NO-GO TO G
WRITE CHANNEL-F

TEST FOR CHANNEL-G
NO-GO TO H
WRITE CHANNEL-G

TEST FOR CHANNEL-H
NO
WRITE CHANNEL-H

TAPE WILL BE WRITTEN 101
TIMES. THE FIRST TIME
TO MOVE FROM LOAD POINT

00607 0074 00 4 76405
00610 0020 00 0 00545
00611 0761 00 0 00000

TSX OK,4
TRA TEST+2
NOP

START WORST CASE SECTION

00612 0020 00 0 00614

TRA *+2

00613 666322606060

BCD 1WTB

00614 0074 00 4 76406

TSX RDNCK,4 TEST FOR TAPE CHECKS
NOP *-1

00615 0761 00 0 00614

THIS SECTION READS A 100 WORD RECORD FROM EACH CHANNEL SELECTED
WHILE ANS INDIRECTLY ADDRESSED GOES ON IN MF

TEST FOR BACKSPACE

00616 0760 00 0 00165
00617 0020 00 0 01771

SWT 5
TRA ANS

TEST SWITCH +5
TRY TO PIN POINT TROUBLE
TEST WORST CASE

00620 0774 00 2 00100
00621 -0520 00 0 75303
00622 0020 00 0 00624
00623 0764 00 0 01202
00624 -0520 00 0 75304
00625 0020 00 0 00627
00626 0764 00 0 02201
00627 -0520 00 0 75305
00630 0020 00 0 00632

RPEAT

AXT 64,2
NZT CTRA
TRA *+2
BSRA 2
NZT CTRD
TRA *+2
BSRB 1
NZT CTCR
TRA *+2

00631	0764	00	0	03201	BSRC 1
00632	-0520	00	0	75306	NZT CTRD
00633	0020	00	0	00635	TRA **2
00634	0764	00	0	04201	BSKD 1
00635	-0520	00	0	75307	NZT CTRE
00636	0020	00	0	00640	TRA **2
00637	0764	00	0	05201	BSRE 1
00640	-0520	00	0	75310	NZT CTRF
00641	0020	00	0	00643	TRA **2
00642	0764	00	0	06201	BSRF 1
00643	-0520	00	0	75311	NZT CTRG
00644	0020	00	0	00646	TRA **2
00645	0764	00	0	07201	BSRG 1
00646	-0520	00	0	75312	NZT CTRH
00647	0020	00	0	00651	TRA **2
00650	0764	00	0	10201	BSRH 1
00651	2 00001	2	00621		TIX RPEAT,2,1 BACKSPACE 100 RECS.

00652	0774	00	2	00100	AXT 64,2	
00653	-0520	00	0	75303	READ5 NZT CTRA	
00654	0020	00	0	00657	TRA **3	
00655	0762	00	0	01222	RTBA 2	READ TAPE CHAN A
00656	0540	00	0	04473	RCHA CCHA	
00657	-0520	00	0	75304	NZT CTRB	
00660	0020	00	0	00663	TRA **3	
00661	0762	00	0	02221	RTBB 1	READ TAPE CHAN B
00662	-0540	00	0	00000	RCHB **	
00663	-0520	00	0	75305	NZT CTRC	
00664	0020	00	0	00667	TRA **3	
00665	0762	00	0	03221	RTBC 1	READ TAPE CHAN C
00666	0541	00	0	00000	RCHC **	
00667	-0520	00	0	75306	NZT CTRD	
00670	0020	00	0	00673	TRA **3	
00671	0762	00	0	04221	RTBD 1	READ TAPE CHAN D
00672	-0541	00	0	00000	RCHD **	
00673	-0520	00	0	75307	NZT CTRE	
00674	0020	00	0	00677	TRA **3	
00675	0762	00	0	05221	RTBE 1	READ TAPE CHAN E
00676	0542	00	0	00000	RCHE **	
00677	-0520	00	0	75310	NZT CTRF	
00700	0020	00	0	00703	TRA **3	
00701	0762	00	0	06221	RTBF 1	READ TAPE CHAN F
00702	-0542	00	0	00000	RCHF **	
00703	-0520	00	0	75311	NZT CTRG	
00704	0020	00	0	00707	TRA **3	
00705	0762	00	0	07221	RTBG 1	READ TAPE CHAN G
00706	0543	00	0	00000	RCHG **	
00707	-0520	00	0	75312	NZT CTRH	
00710	0020	00	0	00713	TRA **3	
00711	0762	00	0	10221	RTBH 1	READ TAPE CHAN H
00712	-0543	00	0	00000	RCHH **	

00713	0320	60	0	02357	ANS* SAVE	CONTINUOUS
00714	0320	60	0	02357	ANS* SAVE	ANS INDIRECTLY
00715	0320	60	0	02357	ANS* SAVE	ADDRESSED
00716	0320	60	0	02357	ANS* SAVE	THESE INSTRUCTIONS

00717	0320	60	0	02357	ANS* SAVE	SHOULD NOT
00720	0320	60	0	02357	ANS* SAVE	INTERRUPT OR,
00721	0320	60	0	02357	ANS* SAVE	SHARE FOR
00722	0320	60	0	02357	ANS* SAVE	B TIME
00723	0320	60	0	02357	ANS* SAVE	FROM
00724	0320	60	0	02357	ANS* SAVE	BUFFER
00725	2	00001	1	00713	TIX *-10,1,1	
00726	0074	00	4	76405	TSX OK,4	
00727	0020	00	0	00621	TRA RPEAT	
00730	0761	00	0	00000	NGP	
00731	0060	00	0	00731	TCO	TCOA *
00732	0061	00	0	00732		TCOB *
00733	0062	00	0	00733		TCOC *
00734	0063	00	0	00734		TCOD *
00735	0064	00	0	00735		TCOE *
00736	0065	00	0	00736		TCOF *
00737	0066	00	0	00737		TCOG *
00740	0067	00	0	00740		TCOH *
00741	-0520	00	0	75303	NZT CTRA	TEST FOR CHAN A
00742	0020	00	0	00744	TRA *+2	
00743	0640	00	0	03404	SCHA SCH	
00744	-0520	00	0	75304	NZT CTRB	TEST FOR CHAN B
00745	0020	00	0	00747	TRA *+2	
00746	-0640	00	0	03405	SCHB SCH+1	
00747	-0520	00	0	75305	NZT CTRC	TEST FOR CHAN C
00750	0020	00	0	00752	TRA *+2	
00751	0641	00	0	03406	SCHC SCH+2	
00752	-0520	00	0	75306	NZT CTRD	TEST FOR CHAN D
00753	0020	00	0	00755	TRA *+2	
00754	-0641	00	0	03407	SCHD SCH+3	
00755	-0520	00	0	75307	NZT CTRE	TEST FOR CHAN E
00756	0020	00	0	00760	TRA *+2	
00757	0642	00	0	03410	SCH E SCH+4	
00760	-0520	00	0	75310	NZT CTRF	TEST FOR CHAN F
00761	0020	00	0	00763	TRA *+2	
00762	-0642	00	0	03411	SCHF SCH+5	
00763	-0520	00	0	75311	NZT CTRG	TEST FOR CHAN G
00764	0020	00	0	00766	TRA *+2	
00765	0643	00	0	03412	SCHG SCH+6	
00766	-0520	00	0	75312	NZT CTRH	TEST FOR CHAN H
00767	0020	00	0	00771	TRA *+2	
00770	-0643	00	0	03413	SCHH SCH+7	
00771	0500	00	0	03415	CLA CT	
00772	0601	00	0	76407	STO WDNO	
00773	0601	00	0	76410	STO RECNO	
00774	0020	00	0	00776	TRA *+2	

THE ROUTINES FROM THIS POINT TO END OF PROGRAM, TESTS FOR TAPE CHECKS, IOT LIGHT, INFORMATION STORED FROM CHANNELS, END OF FILE AND INFORMATION TRANSMITTED FOR ALL CHANNELS SELECTED

00775	516322606060		BCD 1RTB	
00776	0074 00 4 76406		TSX RDNCK,4	CHECK REDUNDANCY
00777	0761 00 0 00776		NOP *-1	
01000	0020 00 0 01002		TRA *+2	
01001	314663606060		BCD 110T	
01002	0760 00 0 00005		IOT	
01003	0020 00 0 01005		TRA *+2	ERROR
01004	0020 00 0 01007		TRA *+3	OK
01005	0074 00 4 76403		TSX ERROR-1,4	
01006	-3 00000 4 01002		TXL *-4,4	
01007	-0520 00 0 75303		NZT CTRA	TEST FOR CHN. A
01010	0020 00 0 01045		TRA TRB	NO-GO TO B
01011	0020 00 0 01013		TRA *+2	YES
01012	622330216060		BCD 1SCHA	
01013	0500 00 0 03404		CLA SCH	WORD FROM CHANNEL
01014	0560 00 0 03374		LDQ CINFO	CORRECT INFORMATION
01015	0340 00 0 03374		CAS CINFO	
01016	0020 00 0 01020		TRA *+2	ERROR
01017	0020 00 0 01022		TRA *+3	OK
01020	0074 00 4 76403		TSX ERROR-1,4	
01021	0761 00 0 01013		NOP *-6	
01022	0020 00 0 01024		TRA *+2	
01023	606325262160		BCD 1 TEFA	
01024	0030 00 0 01026		TEFA *+2	ERROR
01025	0020 00 0 01032		TRA *+5	OK
01026	0074 00 4 76403		TSX ERROR-1,4	EXIT HERE WILL INDICATE
01027	-3 00000 4 01024		TXL *-3,4	A DISCONNECT ON A FALSE FOR
01030	0020 00 0 01032		TRA *+2	CHANNEL A
01031	516322216002		BCD 1RTBA 2	
01032	0774 00 1 00100		AXT 64,1	
01033	0500 00 1 02461		CLA RCHA+64,1	WORD READ
01034	0560 00 1 03574		LDQ WTCHA+64,1	WORD GENERATED
01035	0340 00 1 03574		CAS WTCHA+64,1	
01036	0020 00 0 01040		TRA *+2	ERROR
01037	0020 00 0 01042		TRA *+3	OK
01040	0074 01 4 76402		TSX ERROR-2,4,1	TO ERROR ROUTINE
01041	0761 00 0 01032		NOP *-7	
01042	2 00001 1 01033		TIX *-7,1,1	RETURN TO CHECK ALL WORDS
01043	0020 00 0 01045		TRA *+2	
01044	622330226060		BCD 1SCHB	
01045	-0520 00 0 75304	TRB	NZT CTRB	TEST FOR CHN. B
01046	0020 00 0 01101		TRA TRC	NO-GO TO C
01047	0500 00 0 03405		CLA SCH+1	WORD FROM CHANNEL

01050	0560 00 0	03375	LDQ CINFO+1	CORRECT INFORMATION
01051	0340 00 0	03375	CAS CINFO+1	
01052	0020 00 0	01054	TRA *+2	ERROR
01053	0020 00 0	01056	TRA *+3	OK
01054	0074 00 4	76403	TSX ERROR-1,4	
01055	0761 00 0	01047	NOP *-6	
01056	0020 00 0	01060	TRA *+2	
01057 606325262260			BCD 1 TEFB	
01060	-0030 00 0	01062	TEFB *+2	ERROR
01061	0020 00 0	01066	TRA *+5	
01062	0074 00 4	76403	TSX ERROR-1,4	EXIT HERE WILL
01063	-3 00000 4	01060	TXL *-3,4	INDICATE FALSE EOF
01064	0020 00 0	01066	TRA *+2	CHANNEL B
01065 516322226001			BCD 1RTBB 1	
01066	0774 00 1	00100	AXT 64,1	
01067	0500 00 1	02561	CLA RCHB+64,1	WORD READ
01070	0560 00 1	03674	LDQ WTCHB+64,1	WORD GENERATED
01071	0340 00 1	03674	CAS WTCHB+64,1	
01072	0020 00 0	01074	TRA *+2	ERROR
01073	0020 00 0	01076	TRA *+3	OK
01074	0074 01 4	76402	TSX ERROR-2,4,1	TO ERROR ROUTINE
01075	0761 00 0	01066	NOP *-7	
01076	2 00001 1	01067	TIX *-7,1,1	RETURN TO CHECK ALL WORDS
01077 0020 00 0 01101			TRA *+2 YES	
01100 622330236060			BCD 1SCHC	
01101	-0520 00 0	75305	TRC NZT CTCR	TEST FOR CHN. C
01102	0020 00 0	01135	TRA TRD	NO-GO TO D
01103	0500 00 0	03406	CLA SCH+2	WORD FROM CHANNEL
01104	0560 00 0	03376	LDQ CINFO+2	CORRECT INFORMATION
01105	0340 00 0	03376	CAS CINFO+2	
01106	0020 00 0	01110	TRA *+2	ERROR
01107	0020 00 0	01112	TRA *+3	OK
01110	0074 00 4	76403	TSX ERROR-1,4	
01111	0761 00 0	01103	NOP *-6	
01112	0020 00 0	01114	TRA *+2	
01113 632526236060			BCD 1TEFC	
01114	0031 00 0	01116	TEFC *+2	ERROR
01115	0020 00 0	01122	TRA *+5	OK
01116	0074 00 4	76403	TSX ERROR-1,4	
01117	-3 00000 4	01114	TXL *-3,4	
01120	0020 00 0	01122	TRA *+2	
01121 516322236001			BCD 1RTBC 1	
01122	0774 00 1	00100	AXT 64,1	
01123	0500 00 1	02661	CLA RCHC+64,1	WORD READ
01124	0560 00 1	03774	LDQ WTCHC+64,1	WORD GENERATED

01125	0340	00	1	03774		CAS	WTCHC+64,1	
01126	0020	00	0	01130		TRA	*+2	ERROR
01127	0020	00	0	01132		TRA	*+3	OK
01130	0074	01	4	76402		TSX	ERROR-2,4,1	TO ERROR ROUTINE
01131	0761	00	0	01122		NOP	*-7	
01132	2 00001	1	0	01123		TIX	*-7,1,1	RETURN TO CHECK ALL WORDS
01133	0020	00	0	01135		TRA	*+2	
01134 622330246060						BCD	1SCHD	
01135	-0520	00	0	75306	TRD	NZT	CTRD	TEST FOR CHN. D
01136	0020	00	0	01171		TRA	TRE	NO-GO TO E
01137	0500	00	0	03407		CLA	SCH+3	WORD FROM CHANNEL
01140	0560	00	0	03377		LDQ	CINFO+3	CORRECT INFORMATION
01141	0340	00	0	03377		CAS	CINFO+3	
01142	0020	00	0	01144		TRA	*+2	ERROR
01143	0020	00	0	01146		TRA	*+3	OK
01144	0074	00	4	76403		TSX	ERROR-1,4	
01145	0761	00	0	01137		NOP	*-6	
01146	0020	00	0	01150		TRA	*+2	
01147 632526246060						BCD	1TEFD	
01150	-0031	00	0	01152		TEFD	*+2	ERROR
01151	0020	00	0	01156		TRA	*+5	OK
01152	0074	00	4	76403		TSX	ERROR-1,4	
01153	-3 00000	4	0	01150		TXL	*-3,4	
01154	0020	00	0	01156		TRA	*+2	
01155 516322246001						BCD	1RTBD 1	
01156	0774	00	1	00100		AXT	64,1	
01157	0500	00	1	02761		CLA	RCHD+64,1	WORD READ
01160	0560	00	1	04074		LDQ	WTCHD+64,1	WORD GENERATED
01161	0340	00	1	04074		CAS	WTCHD+64,1	
01162	0020	00	0	01164		TRA	*+2	ERROR
01163	0020	00	0	01166		TRA	*+3	OK
01164	0074	01	4	76402		TSX	ERROR-2,4,1	TO ERROR ROUTINE
01165	0761	00	0	01156		NOP	*-7	
01166	2 00001	1	0	01157		TIX	*-7,1,1	RETURN TO CHECK ALL WORDS
01167 0020 00 0 01171						TRA	*+2	
01170 622330256060						BCD	1SCHE	
01171	-0520	00	0	75307	TRE	NZT	CTRE	TEST FOR CHN. E
01172	0020	00	0	01225		TRA	TRF	NO-GO TO F
01173	0500	00	0	03410		CLA	SCH+4	WORD FROM CHANNEL
01174	0560	00	0	03400		LDQ	CINFO+4	CORRECT INFORMATION
01175	0340	00	0	03400		CAS	CINFO+4	
01176	0020	00	0	01200		TRA	*+2	ERROR
01177	0020	00	0	01202		TRA	*+3	OK
01200	0074	00	4	76403		TSX	ERROR-1,4	
01201	0761	00	0	01173		NOP	*-6	
01202	0020	00	0	01204		TRA	*+2	

01203	632526256060		BCD 1TEFE	
01204	0032 00 0 01206		TEFE *+2	ERROR
01205	0020 00 0 01212		TRA *+5	OK
01206	0074 00 4 76403		TSX ERROR-1,4	
01207	-3 00000 4 01204		TXL *-3,4	
01210	0020 00 0 01212		TRA *+2	
01211	516322256001		BCD 1RTBE 1	
01212	0774 00 1 00100		AXT 64,1	
01213	0500 00 1 03061		CLA RCHE+64,1	WORD READ
01214	0560 00 1 04174		LDQ WTCHE+64,1	WORD GENERATED
01215	0340 00 1 04174		CAS WTCHE+64,1	
01216	0020 00 0 01220		TRA *+2	ERROR
01217	0020 00 0 01222		TRA *+3	OK
01220	0074 01 4 76402		TSX ERROR-2,4,1	TO ERROR ROUTINE
01221	0761 00 0 01212		NOP *-7	
01222	2 00001 1 01213		TIX *-7,1,1	RETURN TO CHECK ALL WORDS
01223	0020 00 0 01225		TRA *+2	
01224	622330266060		BCD 1SCHF	
01225	-0520 00 0 75310	TRF	NZT CTRF	TEST FOR CHN. F
01226	0020 00 0 01261		TRA TRG	NO-GO TO G
01227	0500 00 0 03411		CLA SCH+5	WORD FROM CHANNEL
01230	0560 00 0 03401		LDQ CINFO+5	CORRECT INFORMATION
01231	0340 00 0 03401		CAS CINFO+5	
01232	0020 00 0 01234		TRA *+2	ERROR
01233	0020 00 0 01236		TRA *+3	OK
01234	0074 00 4 76403		TSX ERROR-1,4	
01235	0761 00 0 01227		NOP *-6	
01236	0020 00 0 01240		TRA *+2	
01237	632526266060		BCD 1TEFF	
01240	-0032 00 0 01242		TEFF *+2	ERROR
01241	0020 00 0 01246		TRA *+5	OK
01242	0074 00 4 76403		TSX ERROR-1,4	
01243	-3 00000 4 01240		TXL *-3,4	
01244	0020 00 0 01246		TRA *+2	
01245	516322266001		BCD 1RTBF 1	
01246	0774 00 1 00100		AXT 64,1	
01247	0500 00 1 03161		CLA RCHF+64,1	WORD READ
01250	0560 00 1 04274		LDQ WTCHE+64,1	WORD GENERATED
01251	0340 00 1 04274		CAS WTCHE+64,1	
01252	0020 00 0 01254		TRA *+2	ERROR
01253	0020 00 0 01256		TRA *+3	OK
01254	0074 01 4 76402		TSX ERROR-2,4,1	TO ERROR ROUTINE
01255	0761 00 0 01246		NOP *-7	
01256	2 00001 1 01247		TIX *-7,1,1	RETURN TO CHECK ALL WORDS
01257	0020 00 0 01261		TRA *+2	
01260	622330276060		BCD 1SCHG	

01261 -0520 00 0 75311	TRG	NZT	CTRG	TEST FOR CHN. G
01262 0020 00 0 01315		TRA	TRH	NO-GO TO H
01263 0500 00 0 03412		CLA	SCH+6	WORD FROM CHANNEL
01264 0560 00 0 03402		LDQ	CINFO+6	CORRECT INFORMATION
01265 0340 00 0 03402		CAS	CINFO+6	
01266 0020 00 0 01270		TRA	*+2	ERROR
01267 0020 00 0 01272		TRA	*+3	OK
01270 0074 00 4 76403		TSX	ERROR-1,4	
01271 0761 00 0 01263		NOP	*-6	
01272 0020 00 0 01274		TRA	*+2	
01273 632526276060		BCD	1TEFG	
01274 0033 00 0 01276		TEFG	*+2	ERROR
01275 0020 00 0 01302		TRA	*+5	OK
01276 0074 00 4 76403		TSX	ERROR-1,4	
01277 -3 00000 4 01274		TXL	*-3,4	
01300 0020 00 0 01302		TRA	*+2	
01301 516322276001		BCD	1RTBG 1	
01302 0774 00 1 00100		AXT	64,1	
01303 0500 00 1 03261		CLA	RCHG+64,1	WORD READ
01304 0560 00 1 04374		LDQ	WCHG+64,1	WORD GENERATED
01305 0340 00 1 04374		CAS	WCHG+64,1	
01306 0020 00 0 01310		TRA	*+2	ERROR
01307 0020 00 0 01312		TRA	*+3	OK
01310 0074 01 4 76402		TSX	ERROR-2,4,1	TO ERROR ROUTINE
01311 0761 00 0 01302		NOP	*-7	
01312 2 00001 1 01303		TIX	*-7,1,1	RETURN TO CHECK ALL WORDS
01313 0020 00 0 01315		TRA	*+2	
01314 622330306060		BCD	1SCHH	
01315 -0520 00 0 75312	TRH	NZT	CTRH	TEST FOR CHN. H
01316 0020 00 0 01347		TRA	CLEAR	NO-GO TO CLEAR READ AREA
01317 0500 00 0 03413		CLA	SCH+7	WORD FROM CHANNEL
01320 0560 00 0 03403		LDQ	CINFO+7	CORRECT INFORMATION
01321 0340 00 0 03403		CAS	CINFO+7	
01322 0020 00 0 01324		TRA	*+2	ERROR
01323 0020 00 0 01326		TRA	*+3	OK
01324 0074 00 4 76403		TSX	ERROR-1,4	
01325 0761 00 0 01317		NOP	*-6	
01326 0020 00 0 01330		TRA	*+2	
01327 632526306060		BCD	1TEFH	
01330 000 00 0 01332		TEFH	*+2	ERROR
01331 0020 00 0 01336		TRA	*+5	OK
01332 0074 00 4 76403		TSX	ERROR-1,4	
01333 -3 00000 4 01330		TXL	*-3,4	
01334 0020 00 0 01336		TRA	*+2	
01335 516322306001		BCD	1RTBH 1	

01336 0774 00 1 00100
01337 0500 00 1 03361
01340 0560 00 1 04474
01341 0340 00 1 04474
01342 0020 00 0 01344
01343 0020 00 0 01346
01344 0074 01 4 76402
01345 0761 00 0 01336
01346 2 00001 1 01337

AXT 64,1
CLA RCHH+64,1 WORD READ
LDQ WTCHH+64,1 WORD GENERATED
CAS WTCHH+64,1
TRA *+2 ERROR
TRA *+3 OK
TSX ERROR-2,4,1 TO ERROR ROUTINE
NOP *-7
TIX *-7,1,1 RETURN TO CHECK ALL WORDS

CLEAR READ FIELD AREAS

01347 0774 00 1 01000
01350 0600 00 1 03361
01351 2 00001 1 01350
01352 2 00001 2 00653
01353 0020 00 0 02223

CLEAR AXT 512,1 L 1000 IN XRA
STZ RCHA+512,1
TIX *-1,1,1
TIX READ5,2,1 REPEAT 100 TIMES
TRA PRINT PASS COMPLETE

01354 -0520 00 0 75303
01355 0020 00 0 01360
01356 -0760 00 0 01000
01357 0020 00 0 02170
01360 -0520 00 0 75304
01361 0020 00 0 01364
01362 -0760 00 0 02000
01363 0020 00 0 02170
01364 -0520 00 0 75305
01365 0020 00 0 01370
01366 -0760 00 0 03000
01367 0020 00 0 02170
01370 -0520 00 0 75306
01371 0020 00 0 01374
01372 -0760 00 0 04000
01373 0020 00 0 02170
01374 -0520 00 0 75307
01375 0020 00 0 01400
01376 -0760 00 0 05000
01377 0020 00 0 02170
01400 -0520 00 0 75310
01401 0020 00 0 01404
01402 -0760 00 0 06000
01403 0020 00 0 02170
01404 -0520 00 0 75311
01405 0020 00 0 01410
01406 -0760 00 0 07000
01407 0020 00 0 02170
01410 -0520 00 0 75312
01411 0020 00 0 01414
01412 -0760 00 0 10000
01413 0020 00 0 02170
01414 0020 00 0 00606

NZT CTRA
TRA *+3
ETTA
TRA EOT REWIND
NZT CTRB
TRA *+3
ETTB
TRA EOT REWIND
NZT CTRC
TRA *+3
ETTC
TRA EOT REWIND
NZT CTRD
TRA *+3
ETTD
TRA EOT REWIND
NZT CTRE
TRA *+3
ETTE
TRA EOT REWIND
NZT CTRF
TRA *+3
ETTF
TRA EOT REWIND
NZT CTRG
TRA *+3
ETTG
TRA EOT
NZT CTRH
TRA *+3
ETTH
TRA EOT
TRA TEST2+7 CONTINUE WRITING

01415	0760	00	0	00166	SW6	SWT 6	TEST SWITCH 6
01416	0020	00	0	01420		TRA *+2	UP-TURN ON LITE 1
01417	0020	00	0	00037		TRA BEGIN+2	AND GO TO REWIND
01420	0760	00	0	00141		SLN 1	DOWN-RETURN TO
01421	0020	00	0	02170		TRA EOT	ENTER KEYS
							REWIND TAPES
01422	0762	00	0	01321		RCDA	CALL IN
01423	0540	00	0	01426		RCHA *+3	NEXT PROGRAM
01424	0544	00	0	00000		LCHA 0	
01425	0020	00	0	00001		TRA 1	
01426	-1	00003	0	00000		IOCT 0,0,3	
01427	0500	00	0	03366	CHNG	CLA ZEROS	
01430	0774	00	1	00010		AXT 8,1	L-10
01431	0520	00	1	75313		ZET CTRA+8,1	ZERO TEST CTRA-CTRH
01432	0400	00	0	03466		ADD ONE	ADD ONE FOR EACH UNIT
01433	2	00001	1	01431		TIX *-2,1,1	TIX UNTIL EIGHT CHNS CHECKED
01434	0601	00	0	02337		STO CNT	NUMBER OF UNITS ON LINE
01435	-0520	00	0	02337		NZT CNT	
01436	0000	00	0	00037		HTR BEGIN+2	NO UNITS ON LINE
01437	0500	00	0	02341	HERE	CLA BUFTM	THIS IS 72 US X100
01440	0765	00	0	00043		LRS 35	MACH CYCLE X100
01441	0760	00	0	00000		CLM	
01442	0221	00	0	02340		DVP MCYCL	
01443	0131	00	0	00000		XCA	
01444	0402	00	0	03470		SUB SIX	
01445	0131	00	0	00000		XCA	
01446	-0600	00	0	02342		STQ BUF1	WORST CASE TIME
							BETWEEN BDW ON
01447	0760	00	0	00000		CLM	ONE CHANNEL.
01450	0221	00	0	02337		DVP CNT	NO. OF CHANNELS
01451	-0600	00	0	02343		STQ BUBAS	ON LINE.
01452	0500	00	0	02343		CLA BUBAS	BASIC B CYCLES FOR
01453	0200	00	0	02337		MPY CNT	ALL CHANNELS.
01454	-0600	00	0	02344		STQ TEM	
01455	0500	00	0	02342		CLA BUF1	
01456	0402	00	0	02344		SUB TEM	
01457	0601	00	0	02345		STO TEM1	NO. OF CHANNELS
							NEEDING AN EXTRA
01460	0500	00	0	03441		CLA TCH	BCW
01461	-0520	00	0	75303		NZT CTRA	ORIGINAL TCH
01462	0020	00	0	01511		TRA BEE	TEST FOR CHANNEL A
							NO
01463	0074	00	4	02236		TSX CNVRT,4	ALTER INDEX COUNT NUMBER
01464	0621	00	0	00656		STA READ5+3	YES-STORE ADDRESS OF FIRST
							COMMAND IN RCHA

01465 0560 00 0 03442
01466 0774 00 4 00077
01467 0534 00 2 02346
01470 0621 00 0 01473
01471 0400 00 0 03466
01472 -0130 00 0 00000
01473 0602 00 0 00000
01474 0400 00 0 03466
01475 -0130 00 0 00000
01476 0621 00 0 01500
01477 0400 00 0 03466
01500 0602 00 0 00000
01501 2 00001 2 01476
01502 2 00001 4 01467
01503 0560 00 0 03443
01504 0621 00 0 01505
01505 -0600 00 0 00000
01506 0400 00 0 03466
01507 0734 00 1 00000
01510 -0634 00 1 03374
01511 -0520 00 0 75304
01512 0020 00 0 01542
01513 0074 00 4 02236
01514 0621 00 0 00662
01515 0621 00 0 02033
01516 0560 00 0 03444
01517 0774 00 4 00077
01520 0534 00 2 02346
01521 0621 00 0 01524
01522 0400 00 0 03466
01523 -0130 00 0 00000
01524 0602 00 0 00000
01525 0400 00 0 03466
01526 -0130 00 0 00000
01527 0621 00 0 01531
01530 0400 00 0 03466
01531 0602 00 0 00000
01532 2 00001 2 01527
01533 2 00001 4 01520
01534 0560 00 0 03445
01535 0621 00 0 01536
01536 -0600 00 0 00000
01537 0400 00 0 03466
01540 0734 00 1 00000
01541 -0634 00 1 03375
01542 -0520 00 0 75305
01543 0020 00 0 01573
01544 0074 00 4 02236
01545 0621 00 0 00666
01546 0621 00 0 02037
01547 0560 00 0 03446
01550 0774 00 4 00077
01551 0534 00 2 02346
01552 0621 00 0 01555
01553 0400 00 0 03466
01554 -0130 00 0 00000

LDQ IOCPA
AXT 63,4
LXA BCYCL,2
STA *+3
ADD ONE
XCL
SLW
ADD ONE
XCL
STA *+2
ADD ONE
SLW
TIX *-3,2,1
TIX *-11,4,1
LDQ IOCPA
STA *+1
STQ
ADD ONE
PAX ,1
SXD CINFO,1
NZI CTRB
TRA CEE
TSX CNVRT,4
STA READ5+7
STA RD10+7
LDQ IOCPB
AXT 63,4
LXA BCYCL,2
STA *+3
ADD ONE
XCL
SLW
ADD ONE
XCL
STA *+2
ADD ONE
SLW
TIX *-3,2,1
TIX *-11,4,1
LDQ IOCPB
STA *+1
STQ
ADD ONE
PAX ,1
SXD CINFO+1,1
NZI CTRC
TRA DEE
TSX CNVRT,4
STA READ5+11
STA RD10+11
LDQ IOCPB
AXT 63,4
LXA BCYCL,2
STA *+3
ADD ONE
XCL

GENERATE
COMMANDS

CHANNEL
A

STORE PROPER CONSTANT TO TEST
STORE CHANNEL
TEST FOR CHANNEL B

ALTER INDEX COUNT NUMBER
STORE ADDR OF FIRST
COMMAND IN RCHB
B

BEE

CEE

TEST FOR CHANNEL C
NO
ALTER INDEX COUNT NUMBER
YES-STORE ADDRESS OF FIRST
COMMAND IN RCHC
C

01555 0602 00 0 00000
01556 0400 00 0 03466
01557 -0130 00 0 00000
01560 0621 00 0 01562
01561 0400 00 0 03466
01562 0602 00 0 00000
01563 2 00001 2 01560
01564 2 00001 4 01551
01565 0560 00 0 03447
01566 0621 00 0 01567
01567 -0600 00 0 00000
01570 0400 00 0 03466
01571 0734 00 1 00000
01572 -0634 00 1 03376
01573 -0520 00 0 75306
01574 0020 00 0 01624
01575 0074 00 4 02236
01576 0621 00 0 00672
01577 0621 00 0 02043
01600 0560 00 0 03450
01601 0774 00 4 00077
01602 0534 00 2 02346
01603 0621 00 0 01606
01604 0400 00 0 03466
01605 -0130 00 0 00000
01606 0602 00 0 00000
01607 0400 00 0 03466
01610 -0130 00 0 00000
01611 0621 00 0 01613
01612 0400 00 0 03466
01613 0602 00 0 00000
01614 2 00001 2 01611
01615 2 00001 4 01602
01616 0560 00 0 03451
01617 0621 00 0 01620
01620 -0600 00 0 00000
01621 0400 00 0 03466
01622 0734 00 1 00000
01623 -0634 00 1 03377
01624 -0520 00 0 75307
01625 0020 00 0 01655
01626 0074 00 4 02236
01627 0621 00 0 00676
01630 0621 00 0 02047
01631 0560 00 0 03452
01632 0774 00 4 00077
01633 0534 00 2 02346
01634 0621 00 0 01637
01635 0400 00 0 03466
01636 -0130 00 0 00000
01637 0602 00 0 00000
01640 0400 00 0 03466
01641 -0130 00 0 00000
01642 0621 00 0 01644
01643 0400 00 0 03466
01644 0602 00 0 00000

SLW
ADD ONE
XCL
STA *+2
ADD ONE
SLW
TIX *-3,2,1
TIX *-11,4,1
LDQ IOCDC
STA *+1
STQ
ADD ONE
PAX ,1
SXD CINFO+2,1
DEE NZT CTRD TEST FOR CHANNEL D
TRA EEE NO
TSX CNVRT,4 ALTER INDEX COUNT NUMBER
STA READ5+15
STA RD10+15
LDQ IOCPD D
AXT 63,4
LXA BCYCL,2
STA *+3
ADD ONE
XCL
SLW
ADD ONE
XCL
STA *+2
ADD ONE
SLW
TIX *-3,2,1
TIX *-11,4,1
LDQ IOCD
STA *+1
STQ
ADD ONE
PAX ,1
SXD CINFO+3,1
EEE NZT CTRD TEST FOR CHANNEL E
TRA FFF
TSX CNVRT,4 ALTER INDEX COUNT NUMBER
STA READ5+19 YES
STA RD10+19
LDQ IOCPD
AXT 63,4
LXA BCYCL,2
STA *+3
ADD ONE
XCL
SLW
ADD ONE
XCL
STA *+2
ADD ONE
SLW

01645 2 00001 2 01642
01646 2 00001 4 01633
01647 0560 00 0 03453
01650 0621 00 0 01651
01651 -0600 00 0 00000
01652 0400 00 0 03466
01653 0734 00 1 00000
01654 -0634 00 1 03400
01655 -0520 00 0 75310
01656 0020 00 0 01706
01657 0074 00 4 02236
01660 0621 00 0 00702
01661 0621 00 0 02053
01662 0560 00 0 03454
01663 0774 00 4 00077
01664 0534 00 2 02346
01665 0621 00 0 01670
01666 0400 00 0 03466
01667 -0130 00 0 00000
01670 0602 00 0 00000
01671 0400 00 0 03466
01672 -0130 00 0 00000
01673 0621 00 0 01675
01674 0400 00 0 03466
01675 0602 00 0 00000
01676 2 00001 2 01673
01677 2 00001 4 01664
01700 0560 00 0 03455
01701 0621 00 0 01702
01702 -0600 00 0 00000
01703 0400 00 0 03466
01704 0734 00 1 00000
01705 -0634 00 1 03401
01706 -0520 00 0 75311
01707 0020 00 0 01737
01710 0074 00 4 02236
01711 0621 00 0 00706
01712 0621 00 0 02057

01713 0560 00 0 03456
01714 0774 00 4 00077
01715 0534 00 2 02346
01716 0621 00 0 01721
01717 0400 00 0 03466
01720 -0130 00 0 00000
01721 0602 00 0 00000
01722 0400 00 0 03466
01723 -0130 00 0 00000
01724 0621 00 0 01726
01725 0400 00 0 03466
01726 0602 00 0 00000
01727 2 00001 2 01724
01730 2 00001 4 01715
01731 0560 00 0 03457
01732 0621 00 0 01733
01733 -0600 00 0 00000

TIX *-3,2,1
TIX *-11,4,1
LDQ IOCD E
STA *+1
STQ
ADD ONE
PAX ,1
SXD CINFO+4,1
FFF NZT CTRF TEST FOR CHANNEL F
TRA GGG NO
TSX CNVRT,4 ALTER INDEX COUNT NUMBER
STA READ5+23
STA RD10+23
LDQ IOCPF F
AXT 63,4
LXA BCYCL,2
STA *+3
ADD ONE
XCL
SLW
ADD ONE
XCL
STA *+2
ADD ONE
SLW
TIX *-3,2,1
TIX *-11,4,1
LDQ IOCDF
STA *+1
STQ
ADD ONE
PAX ,1
SXD CINFO+5,1
GGG NZT CTRG
TRA HHH
TSX CNVRT,4 ALTER INDEX COUNT NUMBER
STA READ5+27 YES-STORE ADDRESS
STA RD10+27

LDQ IOCPG
AXT 63,4
LXA BCYCL,2
STA *+3
ADD ONE
XCL
SLW
ADD ONE
XCL
STA *+2
ADD ONE
SLW
TIX *-3,2,1
TIX *-11,4,1
LDQ IOCDG
STA *+1
STQ
OF FIRST COMMAND
GENERATE COMMANDS
FOR CHANNEL

01734 0400 00 0 03466
01735 0734 00 1 00000
01736 -0634 00 1 03402
01737 -0520 00 0 75312
01740 0020 00 0 00060
01741 0074 00 4 02236
01742 0621 00 0 00712
01743 0621 00 0 02063
01744 0560 00 0 03460
01745 0774 00 4 00077
01746 0534 00 2 02346
01747 0621 00 0 01752
01750 0400 00 0 03466
01751 -0130 00 0 00000
01752 0602 00 0 00000
01753 0400 00 0 03466
01754 -0130 00 0 00000
01755 0621 00 0 01757
01756 0400 00 0 03466
01757 0602 00 0 00000
01760 2 00001 2 01755
01761 2 00001 4 01746
01762 0560 00 0 03461
01763 0621 00 0 01764
01764 -0600 00 0 00000
01765 0400 00 0 03466
01766 0734 00 1 00000
01767 -0634 00 1 03403
01770 0020 00 0 00060

HHH

ADD ONE
PAX ,1
SXD CINFO+6,1
NXT CTRH
TRA IONT+2 RETURN TO PROGRAM
TSX CNVRT,4 ALTER INDEX COUNT NUMBER
STA READ5+31
STA RD10+31 ADDRESS OF H COMMANDS
LDQ IOCPH
AXT 63,4
LXA BCYCL,2
STA *+3
ADD ONE
XCL
SLW
ADD ONE
XCL
STA *+2
ADD ONE
SLW
TIX *-3,2,1
TIX *-11,4,1
LDQ IOCDH
STA *+1
STQ
ADD ONE
PAX ,1
SXD CINFO+7,1
TRA IONT+2 RETURN TO PROGRAM

01771 0774 00 2 00100
01772 -0520 00 0 75303
01773 0020 00 0 01775
01774 0764 00 0 01202
01775 -0520 00 0 75304
01776 0020 00 0 02000
01777 0764 00 0 02201
02000 -0520 00 0 75305
02001 0020 00 0 02003
02002 0764 00 0 03201
02003 -0520 00 0 75306
02004 0020 00 0 02006
02005 0764 00 0 04201
02006 -0520 00 0 75307
02007 0020 00 0 02011
02010 0764 00 0 05201
02011 -0520 00 0 75310
02012 0020 00 0 02014
02013 0764 00 0 06201
02014 -0520 00 0 75311
02015 0020 00 0 02017
02016 0764 00 0 07201
02017 -0520 00 0 75312
02020 0020 00 0 02022
02021 0764 00 0 10201

ANS
BKSP

AXT 64,2
NXT CTRA TEST FOR CHANNEL A
TRA *+2
BSRA 2
NXT CTRB TEST FOR CHANNEL B
TRA *+2
BSRB 1
NXT CTCRC TEST FOR CHANNEL C
TRA *+2
BSRC 1
NXT CTRD TEST FOR CHANNEL D
TRA *+2
BSRD 1
NXT CTRE TEST FOR CHANNEL E
TRA *+2
BSRE 1
NXT CTRF TEST FOR CHANNEL F
TRA *+2
BSRF 1
NXT CTRG TEST FOR CHANNEL G
TRA *+2
BSRG 1
NXT CTRH TEST FOR CHANNEL H
TRA *+2
BSRH 1

02022 2 00001 2 01772

TIX BKSP,2,1 BACKSPACE 100 RECORDS

THIS SECTION WILL TEST THE CONTENTS OF THE CHANNELS
WHILE THE READ OPERATION IS BEING PERFORMED. IT
WILL RESET AND LOAD CHANNEL WITH ZEROS. IF THE CONTENTS

OF THE DSC EVER BECOME LARGER THAN THEY SHOULD.
THIS WILL NOT RESET THE DSC COMPLETELY,
BUT IT WILL STOP THE READ OPERATION, AND HALT, SO
THAT MEMORY WILL NOT BE WIPED OUT BY A LARGE
WORD COUNT.

02023	0774	00	2	00100	AXT 64,2	
02024	-0520	00	0	75303	RD10 NZT CTRA	TEST FOR CHANNEL A
02025	0020	00	0	02030	TRA *+3	NO
02026	0762	00	0	01222	RTBA 2	
02027	0540	00	0	04473	RCHA CCHA	
02030	-0520	00	0	75304	NZT CTRB	TEST FOR CHANNEL B
02031	0020	00	0	02034	TRA *+3	NO
02032	0762	00	0	02221	RTBB 1	
02033	-0540	00	0	00000	RCHB **	
02034	-0520	00	0	75305	NZT CTRC	TEST FOR CHANNEL C
02035	0020	00	0	02040	TRA *+3	NO
02036	0762	00	0	03221	RTBC 1	
02037	0541	00	0	00000	RCHC **	
02040	-0520	00	0	75306	NZT CTRD	TEST FOR CHANNEL D
02041	0020	00	0	02044	TRA *+3	NO
02042	0762	00	0	04221	RTBD 1	
02043	-0541	00	0	00000	RCHD **	
02044	-0520	00	0	75307	NZT CTRE	TEST FOR CHANNEL E
02045	0020	00	0	02050	TRA *+3	NO
02046	0762	00	0	05221	RTBE 1	
02047	0542	00	0	00000	RCHE **	
02050	-0520	00	0	75310	NZT CTRF	TEST FOR CHANNEL F
02051	0020	00	0	02054	TRA *+3	NO
02052	0762	00	0	06221	RTBF 1	
02053	-0542	00	0	00000	RCHF **	
02054	-0520	00	0	75311	NZT CTRG	TEST FOR CHANNEL G
02055	0020	00	0	02060	TRA *+3	NO
02056	0762	00	0	07221	RTBG 1	
02057	0543	00	0	00000	RCHG **	
02060	-0520	00	0	75312	NZT CTRH	TEST FOR CHANNEL H
02061	0020	00	0	02064	TRA *+3	
02062	0762	00	0	10221	RTBH 1	
02063	-0543	00	0	00000	RCHH **	
02064	0640	00	0	03404	SCHS SCHA SCH	STORE
02065	-0640	00	0	03405	SCHB SCH+1	ADDRESS AND
02066	0641	00	0	03406	SCHC SCH+2	LOCATION
02067	-0641	00	0	03407	SCHD SCH+3	REGISTERS FOR
02070	0642	00	0	03410	SCHB SCH+4	EACH
02071	-0642	00	0	03411	SCHF SCH+5	CHANNEL
02072	0643	00	0	03412	SCHG SCH+6	
02073	-0643	00	0	03413	SCHH SCH+7	

02074	0774	00	1	00010	TRY	AXT 8,1	
02075	0774	00	4	00030		AXT 24,4	
02076	0320	60	0	02357		ANS* SAVE	
02077	0560	00	1	03404		LDQ CINFO+8,1	
02100	-0500	00	1	03404		CAL CINFO+8,1	CORRECT INFORMATION
02101	0622	00	0	02116		STD *+13	STORE LOCATION REG.
02102	0767	00	0	00022		ALS 18	
02103	0622	00	0	02113		STD *+8	STORE ADDRESS REG.
02104	0402	00	0	03464		SUB K1000	
02105	0622	00	0	02115		STD *+8	
02106	-0500	00	1	03414		CAL SCH+8,1	CONTENTS DSC
02107	-0634	00	1	03465		SXD SINDX,1	SAVE XRA
02110	0634	00	4	03465		SXA SINDX,4	SAVE XRC
02111	0734	00	1	00000		PAX 0,1	ADDRESS REGISTER TO XRA
02112	-0734	00	4	00000		PDX 0,4	LOCATION REGISTER TO XRC
02113	3 00000	1	02124			TXH TOOT,1,**	IF HIGH ADDR. REG. ERROR
02114	-3 00000	1	02117			TXL *+3,1,0	
02115	3 00000	1	02126			TXH HOOT,1,**	IF EQUAL READ NEXT REC.
02116	3 00000	4	02124			TXH TOOT,4,**	IF HIGH LOC. REG. ERROR
02117	0534	00	4	03465		LXA SINDX,4	RESTORE XRC
02120	-0534	00	1	03465		LXD SINDX,1	RESTORE XRA
02121	2 00003	4	02122			TIX *+1,4,3	DECREMENT ERROR LOC.
02122	2 00001	1	02076			TIX TRY+2,1,1	BACK FOR NEXT SCH
02123	0020	00	0	02064		TRA SCHS	AROUND AGAIN
02124	0534	00	4	03465	TOOT	LXA SINDX,4	ERROR
02125	0020	00	4	02160		TRA ERCHA+24,4	
02126	2 00001	2	02024		HOOT	TIX RD10,2,1	
02127	0020	00	0	00731		TRA TCO	
02130	-0625	00	0	02162	ERCHA	STL HPR	
02131	0540	00	0	03426		RCHA BLCHA	BLAST CHANNEL A
02132	0020	00	0	02160		TRA XEC	
02133	-0625	00	0	02162	ERCHB	STL HPR	
02134	-0540	00	0	03427		RCHB BLCHB	BLAST CHANNEL B
02135	0020	00	0	02160		TRA XEC	
02136	-0625	00	0	02162	ERCHC	STL HPR	
02137	0541	00	0	03430		RCHC BLCHC	BLAST CHANNEL C
02140	0020	00	0	02160		TRA XEC	
02141	-0625	00	0	02162		STL HPR	
02142	-0541	00	0	03431	ERCHD	RCHD BLCHD	BLAST CHANNEL D
02143	0020	00	0	02160		TRA XEC	
02144	-0625	00	0	02162		STL HPR	
02145	0542	00	0	03432	ERCHE	RCHE BLCH E	BLAST CHANNEL E
02146	0020	00	0	02160		TRA XEC	

02147 -0625 00 0 02162
02150 -0542 00 0 03433 ERCHF RCHF BLCHF BLAST CHANNEL F
02151 0020 00 0 02160 TRA XEC

02152 -0625 00 0 02162
02153 0543 00 0 03434 ERCHG RCHG BLCHG BLAST CHANNEL G
02154 0020 00 0 02160 TRA XEC

02155 -0625 00 0 02162
02156 -0543 00 0 03435 ERCHH RCHH BLCHH BLAST CHANNEL H
02157 0020 00 0 02160 TRA XEC

02160 0760 00 0 00005 XEC IOT TURN OFF
02161 0761 00 0 00000 NOP IOT INDICATOR

02162 0420 00 0 00000 HPR HPR **

THE STORAGE REGISTER WILL CONTAIN THE ADDRESS OF THE RESET CHANNEL INSTRUCTION WHICH DISCONNECTED THE BUFFER.

THE INFORMATION RECEIVED DURING THE STORE CHANNEL INSTRUCTION WAS HIGHER THAN IT SHOULD HAVE BEEN.

THE LOCATION REGISTER AND ADDRESS REGISTER SHOULD BE NO LARGER THAN WHAT IS DISPLAYED IN THE MQ AT THIS TIME. THE INFORMATION RECEIVED FROM THE DSC APPEARS IN THE ACCUMULATOR.

THE DS IN ERROR MAY HAVE TO BE RESET MANUALLY BEFORE THE START BUTTON IS DEPRESSED, BECAUSE RESET CHANNEL WITH ZEROS MAY NOT COMPLETELY DISCONNECT THE CHANNEL, AND A HANG UP CONDITION MAY OCCUR.

02163 02 00001 2 00543 TIX TEST,2,1 RETURN TO WRITE AGAIN

IF A HALT HAS OCCURRED AT THE ABOVE LOCATION, IT IS ADVISABLE NOT TO ENTER THE WORST CASE SECTION OF THIS TEST, AS THE TEST ITSELF MAY BE WIPED OUT.

02164 0074 00 4 76405 TSX OK,4
02165 0020 00 0 01771 TRA BKSP-1 REPEAT
02166 0761 00 0 00000 NOP
02167 0020 00 0 00731 TRA TCO

02170 -0520 00 0 75303 EOT NZT CTRA
02171 0020 00 0 02173 TRA *+2 ZERO
02172 0772 00 0 01202 REWA 2
02173 -0520 00 0 75304 NZT CTRB
02174 0020 00 0 02176 TRA *+2 ZERO
02175 0772 00 0 02201 REWB 1
02176 -0520 00 0 75305 NZT CTCR
02177 0020 00 0 02201 TRA *+2 ZERO
02200 0772 00 0 03201 REWC 1
02201 -0520 00 0 75306 NZT CTRD

02202	0020	00	0	02204	TRA **2	ZERO
02203	0772	00	0	04201	REWD 1	
02204	-0520	00	0	75307	NZT CTRE	
02205	0020	00	0	02207	TRA **2	ZERO
02206	0772	00	0	05201	REWE 1	
02207	-0520	00	0	75310	NZT CTRF	
02210	0020	00	0	02212	TRA **2	ZERO
02211	0772	00	0	06201	REWF 1	
02212	-0520	00	0	75311	NZT CTRG	
02213	0020	00	0	02215	TRA **2	ZERO
02214	0772	00	0	07201	REWG 1	
02215	-0520	00	0	75312	NZT CTRH	
02216	0020	00	0	02220	TRA **2	ZERO
02217	0772	00	0	10201	REWH 1	
02220	-0760	00	0	00141	SLT 1	
02221	0020	00	0	00543	TRA TEST	LITE OFF-START WRITE AGAIN
02222	0020	00	0	01422	TRA SW6+5	RETURN TO CALL NEXT PROGRAM
02223	0760	00	0	00163	PRINT SWT 3	
02224	0020	00	0	02226	TRA **2	
02225	0020	00	0	02233	TRA SW5	
02226	0766	00	0	01361	WPRA	TO
02227	0760	00	0	01363	SPRA 3	PRINT
02230	0540	00	0	02232	RCHA **2	PASS
02231	0020	00	0	02233	TRA SW5	
02232	0000	30	0	02255	IOCD PCOM,0,24	
02233	0760	00	0	00165	SW5 SWT 5	TEST FOR REPEAT OF MULTI CHANNEL OPERATION
02234	0020	00	0	01415	TRA SW6	UP-TEST SWITCH 6
02235	0020	00	0	00543	TRA TEST	DN-REPEAT MULTI- CHANNEL OPERATION
02236	0601	00	0	02344	CNVRT STO TEM	
02237	-0520	00	0	02345	NZT TEM1	NUMBER OF CHAN. NEEDING EXTRA BCW
02240	0020	00	0	02250	TRA **8	ALL CHAN. NEED SAME NUMBER OF BCW
02241	0500	00	0	02343	CLA BUBAS	
02242	0402	00	0	03466	SUB ONE	
02243	0601	00	0	02346	STO BCYCL	
02244	0500	00	0	02345	CLA TEM1	
02245	0402	00	0	03466	SUB ONE	
02246	0601	00	0	02345	STO TEM1	
02247	0520	00	0	02253	TRA **4	
02250	0500	00	0	02343	CLA BUBAS	
02251	0402	00	0	03467	SUB TWO	

02252 0601 00 0 02346
02253 0500 00 0 02344
02254 0020 00 4 00001

STO BCYCL
CLA TEM
TRA 1,4

02255 +000000000010	PCOM	OCT 10	9L
02256 +004000400000		OCT 4000400000	9R
02257 +000000000000		OCT 0	8L
02260 +000000000000		OCT 0	8R
02261 +000002004000		OCT 2004000	7L
02262 +000000000000		OCT 0	7R
02263 +000000020000		OCT 20000	6L
02264 +030000000000		OCT 300000000000	6R
02265 +000000001202		OCT 1202	5L
02266 +000020100000		OCT 20100000	5R
02267 +000000010000		OCT 10000	4L
02270 +000000200000		OCT 200000	4R
02271 +000000042401		OCT 42401	3L
02272 +001201000000		OCT 1201000000	3R
02273 +000000000004		OCT 600004	2L
02274 +002044000000		OCT 2044000000	2R
02275 +000001000000		OCT 1000000	1L
02276 +000100000000		OCT 100000000	1R
02277 +000000600400		OCT 600400	0L
02300 +023041000000		OCT 23041000000	0R
02301 +000002036040		OCT 2036040	11L
02302 +114000200000		OCT 114000200000	11R
02303 +000001041204		OCT 1041204	12L
02304 +000324500000		OCT 324500000	12R
02305 +0000000112020	PPER	OCT 112020	9L
02306 +010001000000		OCT 10001000000	9R
02307 +000000000000		OCT 0	8L
02310 +000000000000		OCT 0	8R
02311 +000000400400		OCT 400400	7L
02312 +000000000000		OCT 0	7R
02313 +000006060000		OCT 6060000	6L
02314 +060000000000		OCT 600000000000	6R
02315 +000010201004		OCT 10201004	5L
02316 +000040200000		OCT 40200000	5R
02317 +000000004000		OCT 4000	4L
02320 +000000400000		OCT 400000	4R
02321 +000000000002		OCT 2	3L
02322 +002402000000		OCT 2402000000	3R
02323 +000000000010		OCT 10	2L
02324 +004110000000		OCT 4110000000	2R
02325 +000000000000		OCT 0	1L
02326 +000200000000		OCT 200000000	1R
02327 +000002000000		OCT 2000000	0L
02330 +046102000000		OCT 46102000000	0R
02331 +000014535100		OCT 14535100	11L
02332 +230000400000		OCT 230000400000	11R
02333 +000000242410		OCT 242410	12L
02334 +000651200000		OCT 651200000	12R
02335 +000000000000	CTRL	OCT 0	

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02336 0000 30 0 02305 STCTL IOCD PPER,0,24

02337 +0000000000000000 CNT OCT 0
02340 +0000000000332 MCYCL DEC 218 MACH CYCLE X 100
02341 +0000000016040 BUFTM DEC 7200
02342 +0000000000000000 BUF1 OCT **
02343 +0000000000000000 BUBAS OCT **
02344 +0000000000000000 TEM OCT **
02345 +0000000000000000 TEM1 OCT **
02346 +0000000000000000 BCYCL OCT **

02347 0001 00 0 03474 WR1 IOCD WTCHA,0,64 TO WRITE TAPE CHAN A
02350 0001 00 0 03574 WR2 IOCD WTCHB,0,64 TO WRITE TAPE CHAN B
02351 0001 00 0 03674 WR3 IOCD WTCHC,0,64 TO WRITE TAPE CHAN C
02352 0001 00 0 03774 WR4 IOCD WTCHD,0,64 TO WRITE TAPE CHAN D
02353 0001 00 0 04074 WR5 IOCD WTCH E,0,64 TO WRITE TAPE CHAN E
02354 0001 00 0 04174 WR6 IOCD WTCHF,0,64 TO WRITE TAPE CHAN F
02355 0001 00 0 04274 WR7 IOCD WTCHG,0,64 TO WRITE TAPE CHAN G
02356 0001 00 0 04374 WR10 IOCD WTCHH,0,64 TO WRITE TAPE CHAN H

02357 0761 00 0 02360 SAVE NOP *+1
02360 +0000000000000000 SAVE1 OCT
                                02361 RCHA BSS 64 100 WORD
                                02461 RCHB BSS 64
                                02561 RCHC BSS 64 BLOCKS FOR
                                02661 RCHD BSS 64
                                02761 RCHE BSS 64 TAPE READ
                                03061 RCHF BSS 64
                                03161 RCHG BSS 64
                                03261 RCHH BSS 64

03361 0000 01 0 03367 CNTL IOCD ONES,0,1 WRITE ONE WORD-ONES
03362 0000 01 0 03366 IOCD ZEROS,0,1 WRITE ONE WORD-ZEROS

03363 0000 01 0 03370 CNTLR IOCD READ,0,1 READ ONE WORD
03364 0000 02 0 03370 IOCD READ,0,2 READ ONE WORD AND BCD EOF
03365 0000 02 0 03372 IOCD READ+2,0,2 READ ONE WORD AND BIN EOF

03366 +0000000000000000 ZEROS OCT 0
03367 -3777777777777777 ONES OCT 7777777777777777

03370 +0000000000000000 READ OCT 0
03371 +0000000000000000 OCT 0
03372 +0000000000000000 OCT 0
03373 +0000000000000000 OCT 0

03374 0046 72 0 02461 CINFO IOCD RCHA+64,0,CCHA+127 CORRECT
03375 0000 00 0 02561 IOCD RCHB+64,0,** INFORMATION
03376 0000 00 0 02661 IOCD RCHC+64,0,** TO COMPARE
03377 0000 00 0 02761 IOCD RCHD+64,0,** STORE
03400 0000 00 0 03061 IOCD RCHE+64,0,** CHANNEL
03401 0000 00 0 03161 IOCD RCHF+64,0,** OPERATIONS
03402 0000 00 0 03261 IOCD RCHG+64,0,**
03403 0000 00 0 03361 IOCD RCHH+64,0,**

03404 +0000000000000000 SCH OCT 0

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03405	+000000000000	OCT 0	
03406	+000000000000	OCT 0	
03407	+000000000000	OCT 0	
03410	+000000000000	OCT 0	
03411	+000000000000	OCT 0	
03412	+000000000000	OCT 0	
03413	+000000000000	OCT 0	
03414	+000000000000	COUNT OCT 0	
03415	+000000000101	CT DEC 65	
03416	+000000000000	SAVE2 OCT 0	STORAGE
03417	+000000000000	SAVE3 OCT 0	FOR
03420	+000000000000	SAVE4 OCT 0	STORE
03421	+000000000000	SAVE5 OCT 0	CHANNEL
03422	+000000000000	SAVE6 OCT 0	INFORMATION
03423	+000000000000	SAVE7 OCT 0	
03424	+000000000000	SAVE8 OCT 0	
03425	+000000000000	SAVE9 OCT 0	
03426	0000 00 0 02131	BLCHA IOCD ERCHA+1	
03427	0000 00 0 02134	BLCHB IOCD ERCHB+1	
03430	0000 00 0 02137	BLCHC IOCD ERCHC+1	
03431	0000 00 0 02143	BLCHD IOCD ERCHD+1	
03432	0000 00 0 02146	BLCHE IOCD ERCHE+1	
03433	0000 00 0 02151	BLCHF IOCD ERCHF+1	
03434	0000 00 0 02154	BLCHG IOCD ERCHG+1	
03435	0000 00 0 02157	BLCHH IOCD ERCHH+1	
03436	+077777777777	MASK OCT 077777777777	
03437	-3777777777407	EXCL OCT 7777777777407	
03440	+000000000220	OCT 220	
03441	1 00000 0 04473	TCH TCH CCHA	
03442	-0000 01 0 02361	IOCPA IOCP RCHA,0,1	
03443	0000 01 0 02460	IOCDA IOCD RCHA+63,0,1	
03444	-0000 01 0 02461	IOCPB IOCP RCHB,0,1	
03445	0000 01 0 02560	IOCDB IOCD RCHB+63,0,1	
03446	-0000 01 0 02561	IOCPD IOCP RCHD,0,1	
03447	0000 01 0 02660	IOCDD IOCD RCHD+63,0,1	
03450	-0000 01 0 02661	IOCPD IOCP RCHD,0,1	
03451	0000 01 0 02760	IOCDD IOCD RCHD+63,0,1	
03452	-0000 01 0 02761	IOCPD IOCP RCHD,0,1	
03453	0000 01 0 03060	IOCPD IOCP RCHD,0,1	
03454	-0000 01 0 03061	IOCPD IOCP RCHD,0,1	
03455	0000 01 0 03160	IOCPD IOCP RCHD,0,1	
03456	-0000 01 0 03161	IOCPD IOCP RCHD,0,1	
03457	0000 01 0 03260	IOCPD IOCP RCHD,0,1	
03460	-0000 01 0 03261	IOCPD IOCP RCHD,0,1	
03461	0000 01 0 03360	IOCPD IOCP RCHD,0,1	
03462	0 00000 0 00000	IOCPD IOCP RCHD,0,1	
03463	0 00000 0 00000	XRA PZE	
03464	+000001000000	XRB PZE	
03465	+000000000000	K1000 OCT 1000000	
03466	+000000000001	SINDX OCT 0	
03467	+000000000002	ONE OCT 1	
		TWO DEC 2	

03470 +0000000000006 SIX DEC 6
03471 -3777777777777 ORTST OCT 777777777777
03472 -1 00001 0 02361 ORWRD 1OCT RCHA,0,1
03473 0007 77 0 02362 1OCD RCHA+1,0,511

FROM THIS POINT TO SYMBOLIC LOCATION-CCHA-, IS THE INFORMATION WRITTEN ON TAPE. EACH CHANNELS INFORMATION IS UNIQUE. THE SECOND TWO CHARACTERS FOR CHANNEL A IS A BCD A. THE SECOND TWO CHARACTERS FOR CHANNEL B IS A BCD B ETC. EACH CHANNEL HAS ITS CORRESPONDING LETTER IN THE MIDDLE TWO CHARACTERS OF EACH WORD TRANSMITTED.

03474 +010121210101	WTCHA OCT 010121210101	FROM WTCHA
03475 +020221210202	OCT 020221210202	
03476 +030321210303	OCT 030321210303	TO WTCHA+63
03477 +040421210404	OCT 040421210404	
03500 +050521210505	OCT 050521210505	IS FIXED PATTERN
03501 +060621210606	OCT 060621210606	
03502 +070721210707	OCT 070721210707	FOR WRITING TAPE
03503 +101021211010	OCT 101021211010	
03504 +111121211111	OCT 111121211111	CHANNEL A.
03505 +121221211212	OCT 121221211212	
03506 +131321211313	OCT 131321211313	
03507 +141421211414	OCT 141421211414	
03510 +151521211515	OCT 151521211515	
03511 +161621211616	OCT 161621211616	
03512 +171721211717	OCT 171721211717	
03513 +202021212020	OCT 202021212020	
03514 +212121212121	OCT 212121212121	
03515 +222221212222	OCT 222221212222	
03516 +232321212323	OCT 232321212323	
03517 +242421212424	OCT 242421212424	
03520 +252521212525	OCT 252521212525	
03521 +262621212626	OCT 262621212626	
03522 +272721212727	OCT 272721212727	
03523 +303021213030	OCT 303021213030	
03524 +313121213131	OCT 313121213131	
03525 +323221213232	OCT 323221213232	
03526 +333321213333	OCT 333321213333	
03527 +343421213434	OCT 343421213434	
03530 +353521213535	OCT 353521213535	
03531 +363621213636	OCT 363621213636	
03532 +373721213737	OCT 373721213737	
03533 -004021214040	OCT 404021214040	
03534 -014121214141	OCT 414121214141	
03535 -024221214242	OCT 424221214242	
03536 -034321214343	OCT 434321214343	
03537 -044421214444	OCT 444421214444	
03540 -054521214545	OCT 454521214545	
03541 -064621214646	OCT 464621214646	
03542 -074721214747	OCT 474721214747	
03543 -105021215050	OCT 505021215050	
03544 -115121215151	OCT 515121215151	
03545 -125221215252	OCT 525221215252	
03546 -135321215353	OCT 535321215353	
03547 -145421215454	OCT 545421215454	

03550 -155521215555
03551 -165621215656
03552 -175721215757
03553 -206021216060
03554 -216121216161
03555 -226221216262
03556 -236321216363
03557 -246421216464
03560 -256521216565
03561 -266621216666
03562 -276721216767
03563 -307021217070
03564 -317121217171
03565 -327221217272
03566 -337321217373
03567 -347421217474
03570 -357521217575
03571 -367621217676
03572 -377721217777
03573 +010121210100

OCT 555521215555
OCT 565621215656
OCT 575721215757
OCT 606021216060
OCT 616121216161
OCT 626221216262
OCT 636321216363
OCT 646421216464
OCT 656521216565
OCT 666621216666
OCT 676721216767
OCT 707021217070
OCT 717121217171
OCT 727221217272
OCT 737321217373
OCT 747421217474
OCT 757521217575
OCT 767621217676
OCT 777721217777
OCT 010121210100

03574 +010122220101
03575 +020222220202
03576 +030322220303
03577 +040422220404
03600 +050522220505
03601 +060622220606
03602 +070722220707
03603 +101022221010
03604 +111122221111
03605 +121222221212
03606 +131322221313
03607 +141422221414
03610 +151522221515
03611 +161622221616
03612 +171722221717
03613 +202022222020
03614 +212122222121
03615 +222222222222
03616 +232322222323
03617 +242422222424
03620 +252522222525
03621 +262622222626
03622 +272722222727
03623 +303022223030
03624 +313122223131
03625 +323222223232
03626 +333322223333
03627 +343422223434
03630 +353522223535
03631 +363622223636
03632 +373722223737
03633 -004022224040
03634 -014122224141
03635 -024222224242
03636 -034322224343

WTCHB OCT 010122220101 FROM WTCHB
OCT 020222220202
OCT 030322220303 TO WTCHB+63
OCT 040422220404
OCT 050522220505 IS FIXED PATTERN
OCT 060622220606
OCT 070722220707 FOR WRITING TAPE
OCT 101022221010
OCT 111122221111 CHANNEL B
OCT 121222221212
OCT 131322221313
OCT 141422221414
OCT 151522221515
OCT 161622221616
OCT 171722221717
OCT 202022222020
OCT 212122222121
OCT 222222222222
OCT 232322222323
OCT 242422222424
OCT 252522222525
OCT 262622222626
OCT 272722222727
OCT 303022223030
OCT 313122223131
OCT 323222223232
OCT 333322223333
OCT 343422223434
OCT 353522223535
OCT 363622223636
OCT 373722223737
OCT 404022224040
OCT 414122224141
OCT 424222224242
OCT 434322224343

03637 -044422224444
03640 -054522224545
03641 -064622224646
03642 -074722224747
03643 -105022225050
03644 -115122225151
03645 -125222225252
03646 -135322225353
03647 -145422225454
03650 -155522225555
03651 -165622225656
03652 -175722225757
03653 -206022226060
03654 -216122226161
03655 -226222226262
03656 -236322226363
03657 -246422226464
03660 -256522226565
03661 -266622226666
03662 -276722226767
03663 -307022227070
03664 -317122227171
03665 -327222227272
03666 -337322227373
03667 -347422227474
03670 -357522227575
03671 -367622227676
03672 -377722227777
03673 +010122220100

OCT 444422224444
OCT 454522224545
OCT 464622224646
OCT 474722224747
OCT 505022225050
OCT 515122225151
OCT 525222225252
OCT 535322225353
OCT 545422225454
OCT 555522225555
OCT 565622225656
OCT 575722225757
OCT 606022226060
OCT 616122226161
OCT 626222226262
OCT 636322226363
OCT 646422226464
OCT 656522226565
OCT 666622226666
OCT 676722226767
OCT 707022227070
OCT 717122227171
OCT 727222227272
OCT 737322227373
OCT 747422227474
OCT 757522227575
OCT 767622227676
OCT 777722227777
OCT 010122220100

03674 +010123230101
03675 +020223230202
03676 +030323230303
03677 +040423230404
03700 +050523230505
03701 +060623230606
03702 +070723230707
03703 +101023231010
03704 +111123231111
03705 +121223231212
03706 +131323231313
03707 +141423231414
03710 +151523231515
03711 +161623231616
03712 +171723231717
03713 +202023232020
03714 +212123232121
03715 +222223232222
03716 +232323232323
03717 +242423232424
03720 +252523232525
03721 +262623232626
03722 +272723232727
03723 +303023233030
03724 +313123233131
03725 +323223233232

WTCHC OCT 010123230101 FROM WTCHC
OCT 020223230202
OCT 030323230303 TO WTCHC+63
OCT 040423230404
OCT 050523230505 IS FIXED PATTERN
OCT 060623230606
OCT 070723230707 FOR WRITING TAPE
OCT 101023231010
OCT 111123231111 CHANNEL C.
OCT 121223231212
OCT 131323231313
OCT 141423231414
OCT 151523231515
OCT 161623231616
OCT 171723231717
OCT 202023232020
OCT 212123232121
OCT 222223232222
OCT 232323232323
OCT 242423232424
OCT 252523232525
OCT 262623232626
OCT 272723232727
OCT 303023233030
OCT 313123233131
OCT 323223233232

03726 +333323233333
03727 +343423233434
03730 +353523233535
03731 +363623233636
03732 +373723233737
03733 -004023234040
03734 -014123234141
03735 -024223234242
03736 -034323234343
03737 -044423234444
03740 -054523234545
03741 -064623234646
03742 -074723234747
03743 -105023235050
03744 -115123235151
03745 -125223235252
03746 -135323235353
03747 -145423235454
03750 -155523235555
03751 -165623235656
03752 -175723235757
03753 -206023236060
03754 -216123236161
03755 -226223236262
03756 -236323236363
03757 -246423236464
03760 -256523236565
03761 -266623236666
03762 -276723236767
03763 -307023237070
03764 -317123237171
03765 -327223237272
03766 -337323237373
03767 -347423237474
03770 -357523237575
03771 -367623237676
03772 -377723237777
03773 +010123230100

OCT 333323233333
OCT 343423233434
OCT 353523233535
OCT 363623233636
OCT 373723233737
OCT 404023234040
OCT 414123234141
OCT 424223234242
OCT 434323234343
OCT 444423234444
OCT 454523234545
OCT 464623234646
OCT 474723234747
OCT 505023235050
OCT 515123235151
OCT 525223235252
OCT 535323235353
OCT 545423235454
OCT 555523235555
OCT 565623235656
OCT 575723235757
OCT 606023236060
OCT 616123236161
OCT 626223236262
OCT 636323236363
OCT 646423236464
OCT 656523236565
OCT 666623236666
OCT 676723236767
OCT 707023237070
OCT 717123237171
OCT 727223237272
OCT 737323237373
OCT 747423237474
OCT 757523237575
OCT 767623237676
OCT 777723237777
OCT 010123230100

03774 +010124240101
03775 +020224240202
03776 +030324240303
03777 +040424240404
04000 +050524240505
04001 +060624240606
04002 +070724240707
04003 +101024241010
04004 +111124241111
04005 +121224241212
04006 +131324241313
04007 +141424241414
04010 +151524241515
04011 +161624241616
04012 +171724241717
04013 +202024242020
04014 +212124242121

WTCHD OCT 010124240101
OCT 020224240202
OCT 030324240303
OCT 040424240404
OCT 050524240505
OCT 060624240606
OCT 070724240707
OCT 101024241010
OCT 111124241111
OCT 121224241212
OCT 131324241313
OCT 141424241414
OCT 151524241515
OCT 161624241616
OCT 171724241717
OCT 202024242020
OCT 212124242121

04015 +222224242222
04016 +232324242323
04017 +242424242424
04020 +252524242525
04021 +262624242626
04022 +272724242727
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OCT 010124240100

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WTCHE OCT 010125250101
OCT 020225250202
OCT 030325250303
OCT 040425250404
OCT 050525250505
OCT 060625250606
OCT 070725250707
OCT 101025251010

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04107	+141425251414	OCT	141425251414
04110	+151525251515	OCT	151525251515
04111	+161625251616	OCT	161625251616
04112	+171725251717	OCT	171725251717
04113	+202025252020	OCT	202025252020
04114	+212125252121	OCT	212125252121
04115	+222225252222	OCT	222225252222
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04117	+242425252424	OCT	242425252424
04120	+252525252525	OCT	252525252525
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04122	+272725252727	OCT	272725252727
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04124	+313125253131	OCT	313125253131
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04262	-276726266767		OCT	676726266767

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OCT 040427270404
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OCT 101027271010
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OCT 010127270100

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OCT 101030301010
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OCT 121230301212
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OCT 171730301717
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OCT 232330302323
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OCT 424230304242
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04442	-074730304747	OCT	474730304747
04443	-105030305050	OCT	505030305050
04444	-115130305151	OCT	515130305151
04445	-125230305252	OCT	525230305252
04446	-135330305353	OCT	535330305353
04447	-145430305454	OCT	545430305454
04450	-155530305555	OCT	555530305555
04451	-165630305656	OCT	565630305656
04452	-175730305757	OCT	575730305757
04453	-206030306060	OCT	606030306060
04454	-226230306262	OCT	626230306262
04455	-236330306363	OCT	636330306363
04456	-246430306464	OCT	646430306464
04457	-256530306565	OCT	656530306565
04460	-266630306666	OCT	666630306666
04461	-276730306767	OCT	676730306767
04462	-307030307070	OCT	707030307070
04463	-317130307171	OCT	717130307171
04464	-327230307272	OCT	727230307272
04465	-337330307373	OCT	737330307373
04466	-347430307474	OCT	747430307474
04467	-357530307575	OCT	757530307575
04470	-367630307676	OCT	767630307676
04471	-377730307777	OCT	777730307777
04472	+010130300100	OCT	010130300100

I - O C O M M A N D F I E L D

04473 CCHA BSS 1100

I-O COMMANDS WILL BE
GENERATED FOR ALL
COMBINATIONS OF CHANNELS.

75300	CTRL1 EQU 31424	COUNT WORD FOR CHNS A-B-C-D
75301	CTRL2 EQU 31425	COUNT WORD FOR CHNS E-F-G-H
75302	IOCT EQU 31426	TOTAL I-O COUNT
75314	IOCNT EQU 31436	ENTRY TO RECALCULATE COUNT
75316	IOC EQU 31438	ENTRY FOR CONTROL WORDS
75313	CMKW EQU 31435	COUNT WORD - CARD MACHINES
75303	CTRA EQU 31427	NO. OF TAPE UNITS - CHN A
75304	CTRB EQU 31428	NO. OF TAPE UNITS - CHN B
75305	CTRC EQU 31429	NO. OF TAPE UNITS - CHN C
75306	CTRD EQU 31430	NO. OF TAPE UNITS - CHN D
75307	CTRE EQU 31431	NO. OF TAPE UNITS - CHN E
75310	CTRF EQU 31432	NO. OF TAPE UNITS - CHN F
75311	CTRG EQU 31433	NO. OF TAPE UNITS - CHN G
75312	CTRH EQU 31434	NO. OF TAPE UNITS - CHN H
75315	CTX EQU 31437	ENTRY TO MODIFY PROGRAM
76404	ERROR EQU 32004	
76405	OK EQU 32005	
76407	WDNO EQU 32007	
76410	RECNO EQU 32008	
76406	RDNCK EQU 32006	
00000	END	

