

9B03B

BUFFER-WORST CASE B TIME TEST

A. UNIT TESTED

1. PURPOSE OF TEST

- A. THIS TEST WAS WRITTEN TO TEST MAXIMUM DELAY IN B TIME AND PRIORITY CIRCUITS IN THE 766 DATA SYNCHRONIZER.
- B. A TEST OF DATA SYNCHRONIZER AND TAPE CONTROL UNIT OPERATIONS IS ALSO INCLUDED.
- C. THIS LEVEL DIFFER FROM A LEVEL IN TWO WAYS.

- 1. THE A LEVEL ACCOMPLISHED THE WORST CASE B TIME ONLY IF 6 DSCS WERE TESTED.

A NEW ROUTINE HAS BEEN ADDED WHICH ADDS A NUMBER OF TCH CHANNEL COMMANDS DEPENDING ON THE NUMBER OF BUFFERS BEING TESTED TO ESTABLISH WORST CASE FOR ANY NUMBER OF BUFFERS.

- 2. A ROUTINE WAS ALSO ADDED WHICH STORES THE CONTENTS OF EACH CHANNEL AND CHECKS THE CONTENTS OF THE LOCATION REGISTER AND ADDRESS REGISTER, CONTINUOUSLY, WHILE READING.
IF THE CONTENTS OF ANY CHANNEL BECOME LARGER THEN THEY SHOULD, THE CHANNEL WILL BE RESET WITH ZEROS AND A HALT WILL OCCUR, WITH THE ERROR INFORMATION IN THE ACCUMULATOR. THE INFORMATION DISPLAYED IN THE MQ WILL SHOW THE LARGEST ADDRESSES THE LOCATION REGISTER AND ADDRESS REGISTER SHOULD HAVE REACHED.

IF AN ERROR OCCURS THE CONTENTS OF EITHER/OR THE ADDRESS REGISTER AND LOCATION REGISTER BECAME TOO LARGE.

2. METHOD OF TEST

- A. A TEST OF DS AND TCU OPERATIONS IS MADE ON EACH DSC SELECTED.
- B. ONE HUNDRED 101 WORD RECORDS ARE WRITTEN ON TAPE UNIT 2 OF DSC A AND TAPE UNIT 1 OF EACH OTHER DSC SELECTED. 100 OF THESE RECORDS ARE BACKSPACED OVER. RECORDS ARE READ ONE AT A TIME AND INFORMATION CHECKED FOR ERROR.
- C. THE STANDARD DIAGNOSTIC PRINT SUBROUTINE WILL BE USED THROUGHOUT.

B. MF, CD, 1, 2, OR 3 BUFFERS, 1 TAPE UNIT PER DSC

2. STORAGE LOCATION

A. 9B03 0030-6300
 9DEPRA 6500-7663

C. PROGRAM CONTROL

1. DECK 000 9LD01A BINARY LOADER
 001-124 PROGRAM CARDS - 9B03
 125-153 PROGRAM CARDS - 9DEPRA
 154 TRANSFER CARD-TRA 0030
 155-156 BLANK CARDS

2. SENSE SWITCH CONTROL

SWITCH 1 UP - CONTINUE
 1 DN - LOOP CONTINUOUSLY IN SECTION

SWITCH 2 UP - INDICATE ERROR
 2 DN - BYPASS ERROR

SWITCH 3 UP - PRINT ERROR
 3 DN - HALT ON ERROR

SWITCH 4 UP - CONTINUE
 4 DN - LOOP 50 TIMES IN EACH ROUTINE

SWITCH =5 UP - PROGRAM WILL MAKE ONE PASS THROUGH THE SECTION
 WHICH CONTINUOUSLY STORES AND CHECKS DSC CONTENTS.
 DN - REPEAT TEST BY RETURNING TO INITIAL HALT TO
 ENTER CONTROL.

NOTE SWITCH =5 MUST BE DOWN TO PERFORM WORST CASE
 SECTION

SWITCH =6 UP - READ IN NEXT PROGRAM.

 DN - REPEAT TEST BY RETURNING TO INITIAL HALT TO ENTER
 CONTROL.

D. NORMAL STOPS

1. HALT AT 0037 TO ENTER KEYS FOR I/O SELECTION

THE TAG KEYS ARE THE ONLY KEYS USED

KEY 20 - TAPE UNIT 2 ON CHANNELS A AND B
 19 - TAPE UNIT 1 ON CHANNELS C AND D
 18 - TAPE UNIT 1 ON CHANNELS E AND F

E. ERROR STOPS

1. NO TAG KEYS DOWN - 00045 - ENTER TAG KEY AND PRESS START.

2. WITH SWITCH =5 UP - 02650 - CONTENTS OF LOCATION REGISTER OR
 LOCATION REGISTER BECAME TOO LARGE. PRESS START TO GO BACK
 TO BEGIN SECTION AGAIN.

3. WITH SWITCH =3 DOWN - 06517 - OR - 06545 - ERROR IN 9DEPRA

DISPLAY XRC FOR 2S COMPLEMENT OF ERROR LOCATION. PRESS START TO CONTINUE.

NOTE -- IF A HALT OCCURS AT SECOND STOP LISTED. THE BUFFER MAY HAVE TO BE RESET MANUALLY -SEE ADDED COMMENTS IN LISTING AT HALT LOCATION.

F. I/O SELECTION

NOTE 9IOM I/O MODIFICATION IS NOT USED. ONLY TAPE UNIT 2 ON CHANNEL A, WILL BE USED. ALL OTHER CHANNELS WILL USE UNIT 1.

G. PRINT OUTS

1. ERROR PRINTS FROM 9DEPRA WILL INCLUDE A MF TYPE PRINT OUT FOR ERRORS IN STORING CONTENTS OF DSC AND I/O TYPE PRINT OUTS FOR READ ERRORS.

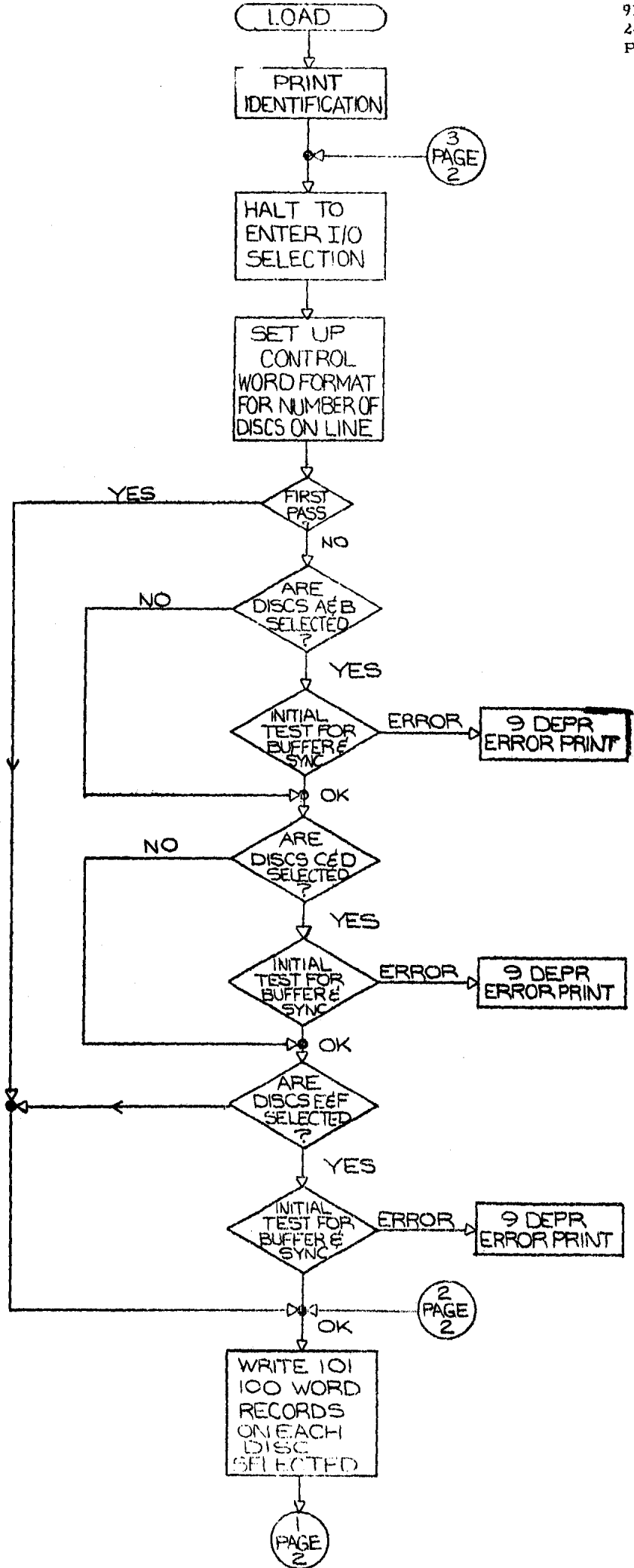
H. COMMENTS

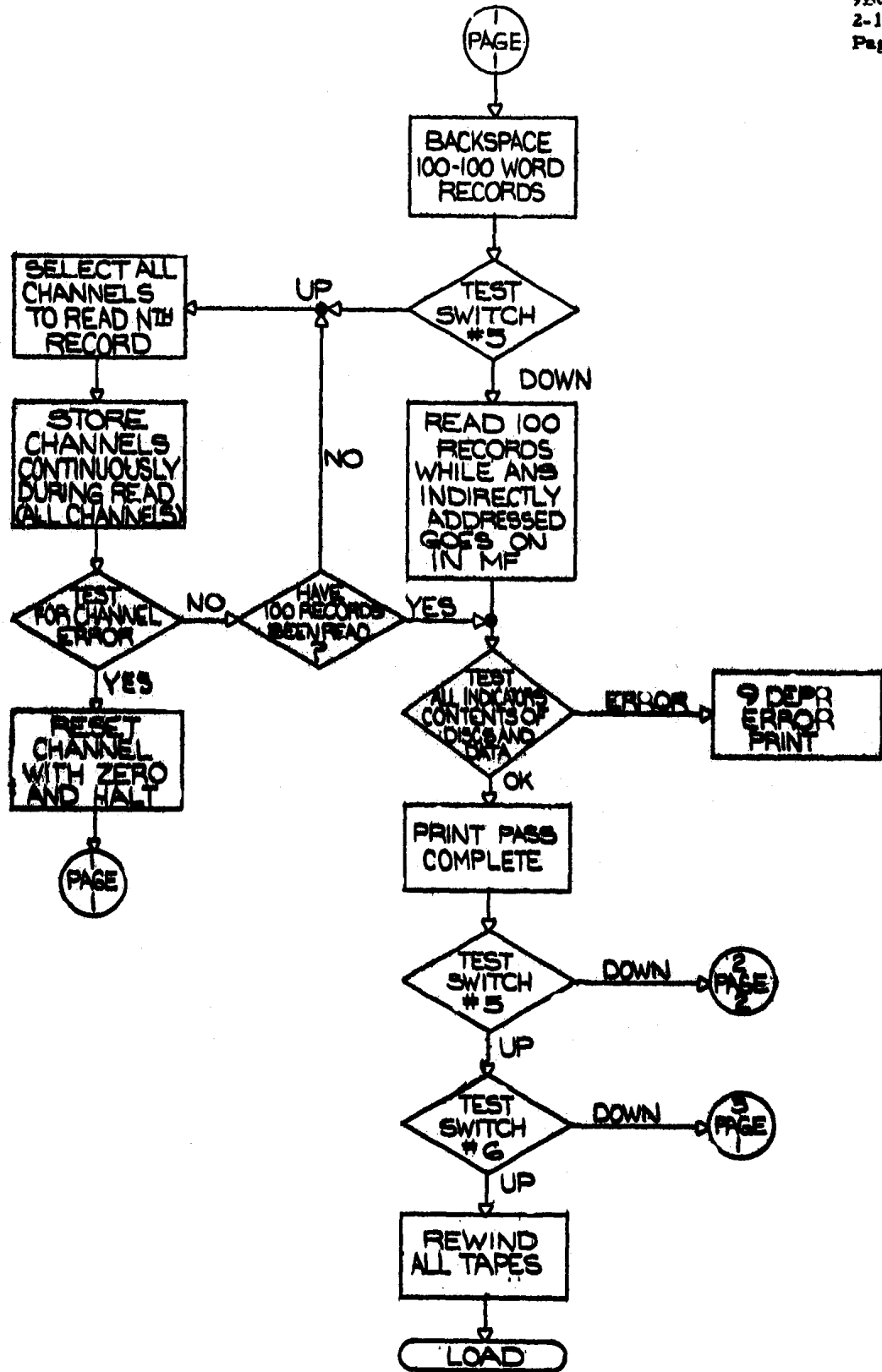
WE HOPE TO HIT A WORST CASE FOR B TIME AND PRIORITY CIRCUITS BY.

1. DURING READ OPERATION THE COMMANDS USED ARE IOCP-WC 1 WHICH WILL PICK UP A TCH TO THE NEXT IOCP-WC 1 ETC.. WHILE MF IS PERFORMING ANS. INDIRECTLY ADDRESSED
2. THE WORST CASE SHOULD BE WHEN SIX CHANNELS ARE CALLING FOR A B TIME ON AN INDIRECTLY ADDRESSED CONTROL WORD. WHILE A MF ANS INDIRECTLY ADDRESSED HOLDS UP THE 766. THIS WILL SERVE TO DELAY THE FIRST CHANNEL WHICH HAD PRIORITY FOR 200 US BEFORE IT CAN BE SERVICED.
4. EACH DSC HAS ITS OWN BCD CHARACTER IN THE MIDDLE TWO CHARACTERS OF EACH WORD TRANSMITTED. TO ENABLE THE OPERATOR TO SEE FROM AN ERROR PRINT IF A DSC READ INTO THE WRONG READ IN AREA. CHANNEL A, BCD A. CHANNEL B BCD B. CHANNEL C, BCD C. ETC.

EXAMPLE 010121210101 - CHANNEL A
010122220101 - CHANNEL B
010123230101 - CHANNEL C
010124240101 - CHANNEL D
010125250101 - CHANNEL E
010126260101 - CHANNEL F

5. IF LESS THEN 6 DSCS ARE SELECTED THE CONTROL WORDS WHICH APPEAR IN THE LISTING WILL NOT APPEAR THE SAME IN STORAGE. BECAUSE OF THE ADDITION OF THE TCH INSTRUCTIONS. THE LOCATIONS CHANGED ARE 04472-06063.
6. THE ADDED SECTION OF THE PROGRAM WHICH CONTINUOUSLY TESTS THE CONTENTS OF THE CHANNELS, WILL NOT BE ENTERED UNLESS SWITCH =5 IS UP.





9B03B-WORST CASE B TIME

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00030      00030      ORG 24
00030 0500 00 0 02251  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 02771      RCHA STCTL      CONTROL FOR PRINTING
                                STARTING HEADING

00037 0000 00 0 00040      HTR *+1      HALT TO ENTER KEYS

*ENTER INTO KEYS-BIT 20 TO DEFINE CHANNELS A+B
*      BIT 19 TO DEFINE CHANNELS C+D
*      BIT 18 TO DEFINE CHANNELS E+F

00040 0760 00 0 00004      ENK
00041 -0600 00 0 02770      STQ CTRL
00042 0441 00 0 02770      LDI CTRL

00043 0054 00 700000      RFT 700000      TEST FOR ANY TAG BIT
00044 0020 00 0 00046      TRA *+2      YES

00045 0000 00 0 00040      HTR BEGIN+3      NO TAG KEYS DOWN-THROW
                                DOWN CORRECT KEYS, AND
                                PROGRAM WILL PROCEED,
                                AFTER START KEY IS
                                DEPRESSED.

00046 0020 00 0 02261      TRA CHNG
00047 0500 00 0 03631      CLA COUNT      SWITCH TO BYPASS
00050 -0100 00 0 01604      TNZ TEST      INITIAL SECTIONS
00051 -0625 00 0 03631      STL COUNT      AFTER FIRST PASS
00052 0056 00 100000      RNT 0,1      TEST FOR CHANNELS A+B
00053 0020 00 0 00510      TRA OPAL-6      NO

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

00054 -0760 00 0 01000      ETTA
00055 0772 00 0 01202      REWA 2
00056 0020 00 0 00060      TRA *+2

00057 632346216060      BCD 1TCOA      TEST TRANS CHANNEL A IN OPN

00060 0766 00 0 01222  ABLE WTBA 2
00061 0060 00 0 00064      TCOA *+3      CHAN. SHOULD BE IN OPN.
00062 0074 00 4 06503      TSX ERROR-1,4  FAILED TO TRANS. IN OPN.
00063 -3 00000 0 00060      TXL ABLE

00064 0540 00 0 03602      RCHA CNTL      NO TRGS ON-WORD. CNT. 1
00065 0060 00 0 00070      TCOA *+3      SHOULD TRANS.

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00066	0074	00	4	06503		TSX ERROR-1,4	FAILED TO TRANS. IN OPN.
00067	-3	00000	0	00060		TXL	ABLE
00070	0060	00	0	00070		TCOA *	IF UNIT RUNS AWAY,OR MACHINE HANGS ON THIS OR ANY PREVIOUS TCOA OPN.,BUFFER MAY NOT BE RECEIVING END OPER. FROM SYNC.
00071	0060	00	0	00073		TCOA *+2	SHOULD NOT TRANS.
00072	0020	00	0	00075		TRA *+3	OK
00073	0074	00	4	06503		TSX ERROR-1,4	TRANS. IN ERROR-TCOA
00074	-3	00000	0	00060		TXL	ABLE
00075	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
00076	0020	00	0	00060		TRA	ABLE REPEAT
00077	632345216060					BCD 1TCNA	TEST TRANS. CHAN NOT IN OPN
00100	-0060	00	0	00103	BAKER	TCNA *+3	SHOULD TRANS.
00101	0074	00	4	06503		TSX ERROR-1,4	FAILED TO TRANS.
00102	-3	00000	0	00100		TXL	BAKER
00103	0766	00	0	01222		WTBA 2	
00104	-0060	00	0	00106		TCNA *+2	SHOULD NOT TRANS.
00105	0020	00	0	00110		TRA *+3	OK
00106	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
00107	-3	00000	0	00100		TXL	BAKER
00110	0540	00	0	03603		RCHA CNTL+1	NO TGRS. ON-WRD. CNT. 1
00111	-0060	00	0	00113		TCNA *+2	SHOULD NOT TRANS.
00112	0020	00	0	00115		TRA *+3	OK
00113	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
00114	-3	00000	0	00100		TXL	BAKER
00115	0060	00	0	00115		TCOA *	
00116	-0060	00	0	00121		TCNA *+3	SHOULD TRANS.
00117	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
00120	-3	00000	0	00100		TXL	BAKER
00121	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
00122	0020	00	0	00100		TRA	BAKER REPEAT
00123	226363216060					BCD 1BTTA	TEST BEGIN. TAPE
00124	0772	00	0	01202	CHUCK	REWA 2	
00125	0764	00	0	01202		BSRA 2	BACKSPACE TO LOAD PT.
00126	0772	00	0	01202		REWA 2	SHOULD ACT AS NOP
00127	0764	00	0	01202		BSRA 2	TRY TO BACKSP OVER LD. PT.
00130	0060	00	0	00130		TCOA *	DELAY BEGIN. TAPE TGR. SHOULD BE TURNED ON HERE
00131	0760	00	0	01000		BTTA	
00132	0020	00	0	00135		TRA *+3	OK-SHOULD BE ON
00133	0074	00	4	06503		TSX ERROR-1,4	SHLD NOT SKIP TO ENTER HERE
00134	-3	00000	0	00124		TXL	CHUCK

00135	0760	00	0	01000		BTTA	
00136	0020	00	0	00140		TRA *+2	ERROR-BTT SHOULD BE OFF
00137	0020	00	0	00142		TRA *+3	OK-OFF
00140	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
00141	-3	00000	0	00124		TXL CHUCK	
00142	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
00143	0020	00	0	00124		TRA CHUCK	
00144	314663606060					BCD 1IOT	TEST I/O CHECK TGR.
00145	0766	00	0	01222	DOG	WTBA 2	
00146	0540	00	0	03602		RCHA CNTL	NO TGRS. ON-WRD. CNT. 1
00147	0060	00	0	00147		TCOA *	
00150	0544	00	0	03603		LCHA CNTL+1	SHOULD TURN ON IOT
00151	0760	00	0	00005		IOT	
00152	0020	00	0	00155		TRA *+3	SHOULD ENTER HERE-OK
00153	0074	00	4	06503		TSX ERROR-1,4	ERROR-SHOULD NOT SKIP
00154	-3	00000	0	00145		TXL DOG	
00155	0760	00	0	00005		IOT	
00156	0020	00	0	00160		TRA *+2	ERROR-TGR WAS NOT TURNED OFF BY PREVIOUS SEQUENCE
00157	0020	00	0	00162		TRA *+3	OK-TGR SHOULD BE OFF
00160	0074	00	4	06503		TSX ERROR-1,4	
00161	-3	00000	0	00145		TXL DOG	
00162	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
00163	0020	00	0	00145		TRA DOG	
00164	662526216060					BCD 1WEFA	TEST TO SEE THAT WEF BCD OR BINARY, BOTH WRITE TAPE MARKS
00165	0766	00	0	01202		WTDA 2	
00166	0540	00	0	03602		RCHA CNTL	NO TRGS. ON-WRD. CNT. 1
00167	0770	00	0	01202		WEFA 2	BCD EOF
00170	0766	00	0	01222		WTBA 2	
00171	0540	00	0	03603		RCHA CNTL+1	NO. TGRS ON-WRD. CNT. 1
00172	0770	00	0	01222		WEFA 18	BINARY EOF, SHOULD WRITE BCD TAPE MARK
00173	0020	00	0	00175		TRA *+2	
00174	226251216001					BCD 1BSRA 1	
00175	0764	00	0	01222	EASY	BSRA 18	
00176	0764	00	0	01202		BSRA 2	
00177	0762	00	0	01222		RTBA 2	
00200	0540	00	0	03605		RCHA CNTLR+1	NO TGRS ON-WRD CNT 2
00201	0060	00	0	00201		TCOA *	
00202	0500	00	0	03611		CLA READ	WORD READ
00203	0560	00	0	03607		LDQ ZEROS	WORD WRITTEN
00204	0340	00	0	03607		CAS ZEROS	
00205	0020	00	0	00207		TRA *+2	ERROR
00206	0020	00	0	00211		TRA *+3	OK
00207	0074	00	4	06502		TSX ERROR-2,4	

00210	0761	00	0	00175		NOP EASY	DO NOT REPEAT
00211	0074	00	4	06560		TSX RDNCK,4	
00212	0020	00	0	00175		TRA EASY	
00213	0030	00	0	00216		TEFA *+3	SHOULD TRANS.
00214	0074	00	4	06503		TSX ERROR-1,4	EOF DID NOT COME UP
00215	-3	00000	0	00230		TXL GEORG	
00216	0020	00	0	00220		TRA *+2	
00217	226226216002					BCD 1BSFA 2	
00220	-0764	00	0	01202	FOX	BSFA 2	BKSP OVER EOF
00221	-0764	00	0	01202		BSFA 2	BKSP OVER EOF AND 1 REC
00222	0764	00	0	01202		BSRA 2	BKSP OVER 1 REC
00223	0762	00	0	01202		RTDA 2	
00224	0540	00	0	03605		RCHA CNTLR+1	NO TGRS ON-WRD CNT 2
00225	0060	00	0	00225		TCOA *	TO READ ONE WD AND BCD EOF
00226	0020	00	0	00230		TRA *+2	CONTINUE
00227	632526216060					BCD 1TEFA	TEST EOF TGR + INDICATOR
00230	0030	00	0	00233	GEORG	TEFA *+3	SHOULD TRANS.
00231	0074	00	4	06503		TSX ERROR-1,4	
00232	-3	00000	4	00230		TXL GEORG,4,0	DO NOT REPEAT
00233	0030	00	0	00235		TEFA *+2	SHOULD NOT TRANS.
00234	0020	00	0	00237		TRA *+3	OK
00235	0074	00	4	06503		TSX ERROR-1,4	ERROR-TGR SHOULD BE OFF
00236	-3	00000	4	00230		TXL GEORG,4,0	DO NOT REPEAT
00237	0762	00	0	01222		RTBA 2	
00240	0540	00	0	03606		RCHA CNTLR+2	NO TGRS ON-WRD CNT 2 TO READ ONE WD AND BIN EOF
00241	0060	00	0	00241		TCOA *	DELAY
00242	0020	00	0	00244		TRA *+2	
00243	606325262160					BCD 1 TEFA	TEST EOF TGR + INDICATOR
00244	0030	00	0	00247		TEFA *+3	
00245	0074	00	4	06503		TSX ERROR-1,4	
00246	-3	00000	4	00244		TXL *-2,4,0	DO NOT REPEAT
00247	0500	00	0	03611		CLA READ	WORD READ
00250	0560	00	0	03610		LDQ ONES	WORD WRITTEN
00251	0340	00	0	03610		CAS ONES	
00252	0020	00	0	00254		TRA *+2	ERROR
00253	0020	00	0	00256		TRA *+3	OK
00254	0074	00	4	06502		TSX ERROR-2,4	
00255	0761	00	0	00220		NOP FOX	
00256	0074	00	4	06560		TSX RDNCK,4	TEST RDNCY
00257	0020	00	0	00220		TRA FOX	
00260	0500	00	0	03613		CLA READ+2	WORD READ
00261	0560	00	0	03607		LDQ ZEROS	WORD WRITTEN
00262	0340	00	0	03607		CAS ZEROS	
00263	0020	00	0	00265		TRA *+2	ERROR

00264	0020	00	0	00267		TRA	++3	OK
00265	0074	00	4	06502		TSX	ERROR-2,4	
00266	0761	00	0	00220		NOP	FOX	
00267	0074	00	4	06511		TSX	OK,4	OUT TO TEST SWITCHES
00270	0020	00	0	00220		TRA	FOX	
00271	0761	00	0	00000		NOP		
00272	-0760	00	0	02000		ETTB		
00273	0772	00	0	02201		REWB	1	
00274	0020	00	0	00276		TRA	++2	
00275	632346226060					BCD	1TCOB	TEST TRANS CHANNEL B IN OPN
00276	0766	00	0	02221	HOG	WTBB	1	
00277	0061	00	0	00302		TCOB	++3	CHAN. SHOULD BE IN OPN.
00300	0074	00	4	06503		TSX	ERROR-1,4	FAILED TO TRANS. IN OPN.
00301	-3	00000	0	00276		TXL	HOG	
00302	-0540	00	0	03602		RCHB	CNTL	NO TGRS ON-WORD. CNT. 1
00303	0061	00	0	00306		TCOB	++3	SHOULD TRANS.
00304	0074	00	4	06503		TSX	ERROR-1,4	FAILED TO TRANS. IN OPN.
00305	-3	00000	0	00276		TXL	HOG	
00306	0061	00	0	00306		TCOB	*	IF UNIT RUNS AWAY,OR MACHINE HANGS ON THIS OR ANY PREVIOUS TCOB IPN.,BUFFER MAY NOT BE RECEIVING END OPER. FROM SYNC.
00307	0061	00	0	00311		TCOB	++2	SHOULD NOT TRANS.
00310	0020	00	0	00313		TRA	++3	OK
00311	0074	00	4	06503		TSX	ERROR-1,4	TRANS. IN ERROR-TCOB
00312	-3	00000	0	00276		TXL	HOG	
00313	0074	00	4	06511		TSX	OK,4	OUT TO CHECK SWITCHES
00314	0020	00	0	00276		TRA	HOG	
00315	632345226060					BCD	1TCNB	TEST TRANS. CHAN NOT IN OPN
00316	-0061	00	0	00321	INDIA	TCNB	++3	SHOULD TRANS
00317	0074	00	4	06503		TSX	ERROR-1,4	FAILED TO TRANS.
00320	-3	00000	0	00316		TXL	INDIA	
00321	0766	00	0	02221		WTBB	1	
00322	-0061	00	0	00324		TCNB	++2	SHOULD NOT TRANS.
00323	0020	00	0	00326		TRA	++3	OK
00324	0074	00	4	06503		TSX	ERROR-1,4	SHOULD NOT ENTER HERE
00325	-3	00000	0	00316		TXL	INDIA	
00326	-0540	00	0	03603		RCHB	CNTL+1	NO TGRS. ON-WRD. CNT. 1
00327	-0061	00	0	00331		TCNB	++2	SHOULD NOT TRANS.
00330	0020	00	0	00333		TRA	++3	OK
00331	0074	00	4	06503		TSX	ERROR-1,4	SHOULD NOT ENTER HERE
00332	-3	00000	0	00316		TXL	INDIA	

00333	0061	00	0	00333		TCOB *	
00334	-0061	00	0	00337		TCNB *+3	SHOULD TRANS.
00335	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
00336	-3	00000	0	00316		TXL INDIA	
00337	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
00340	0020	00	0	00316		TRA INDIA	
00341	226363226060					BCD 1BTTB	TEST BEGIN. TAPE
00342	0772	00	0	02201	JACK	REWB 1	
00343	0764	00	0	02201		BSRB 1	BACKSPACE TO LOAD PT.
00344	0772	00	0	02201		REWB 1	SHOULD ACT AS NOP
00345	0764	00	0	02201		BSRB 1	TRY TO BCKSP OVER LD. PT.
00346	0061	00	0	00346		TCOB *	DELAY BEGIN. TAPE TGR. SHOULD BE TURNED ON HERE
00347	0760	00	0	02000		BTTB	
00350	0020	00	0	00353		TRA *+3	OK-SHOULD BE ON
00351	0074	00	4	06503		TSX ERROR-1,4	SHLD NOT SKIP TO ENTER HERE
00352	-3	00000	0	00342		TXL JACK	
00353	0760	00	0	02000		BTTB	
00354	0020	00	0	00356		TRA *+2	ERROR-BIT SHOULD BE OFF
00355	0020	00	0	00360		TRA *+3	OK-OFF
00356	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
00357	-3	00000	0	00342		TXL JACK	
00360	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
00361	0020	00	0	00342		TRA JACK	
00362	314663606060					BCD 1IOT	TEST I/O CHECK TGR.
00363	0766	00	0	02221	KING	WTBB 1	
00364	-0540	00	0	03602		RCHB CNTL	NO TGRS. ON-WRD. CNT. 1
00365	0061	00	0	00365		TCOB *	
00366	-0544	00	0	03603		LCHB CNTL+1	SHOULD TURN ON IOT
00367	0760	00	0	00005		IOT	
00370	0020	00	0	00373		TRA *+3	SHOULD ENTER HERE-OK
00371	0074	00	4	06503		TSX ERROR-1,4	ERROR-SHOULD NOT SKIP
00372	-3	00000	0	00363		TXL KING	
00373	0760	00	0	00005		IOT	
00374	0020	00	0	00376		TRA *+2	ERROR-TGR WAS NOT TURNED OFF BY PREVIOUS SEQUENCE
00375	0020	00	0	00400		TRA *+3	OK-TGR SHOULD BE OFF
00376	0074	00	4	06503		TSX ERROR-1,4	
00377	-3	00000	0	00363		TXL KING	
00400	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
00401	0020	00	0	00363		TRA KING	
00402	662526226060					BCD 1WEFB	TEST TO SEE THAT WEF BCD OR BINARY BOTH WRITE TAPE MARKS
00403	0766	00	0	02201		WTDB 1	

00404	-0540	00	0	03602		RCHB CNTL	NO TGRS. ON-WRD. CNT. 1
00405	0770	00	0	02201		WEFB 1	BCD EOF
00406	0766	00	0	02221		WTBB 1	
00407	-0540	00	0	03603		RCHB CNTL+1	NO. TGRS ON-WRD. CNT. 1
00410	0770	00	0	02221		WEFB 17	BINARY EOF. SHOULD WRITE BCD TAPE MARK
00411	0020	00	0	00413		TRA *+2	
00412	226251226001					BCD 1BSRB 1	
00413	0764	00	0	02221	LOST	BSRB 17	
00414	0764	00	0	02201		BSRB 1	
00415	0762	00	0	02221		RTBB 1	
00416	-0540	00	0	03605		RCHB CNTLR+1	NO TGRS ON-WRD CNT 2
00417	0061	00	0	00417		TCOB *	
00420	0500	00	0	03611		CLA READ	WORD READ
00421	0560	00	0	03607		LDQ ZEROS	WORD WRITTEN
00422	0340	00	0	03607		CAS ZEROS	
00423	0020	00	0	00425		TRA *+2	ERROR
00424	0020	00	0	00427		TRA *+3	OK
00425	0074	00	4	06502		TSX ERROR-2,4	
00426	0761	00	0	00413		NOP LOST	
00427	0074	00	4	06560		TSX RDNCK,4	
00430	0020	00	0	00413		TRA LOST	
00431	-0030	00	0	00434		TEFB *+3	SHOULD TRANS.
00432	0074	00	4	06503		TSX ERROR-1,4	EOF DID NOT COME UP
00433	-3	00000	0	00446		TXL NILL	
00434	0020	00	0	00436		TRA *+2	
00435	226226226001					BCD 1BSFB 1	
00436	-0764	00	0	02201	MOST	BSFB 1	BKSP OVER EOF
00437	-0764	00	0	02201		BSFB 1	BKSP OVER EOF AND 1 REC.
00440	0764	00	0	02201		BSRB 1	BKSP OVER 1 REC
00441	0762	00	0	02201		RTDB 1	
00442	-0540	00	0	03605		RCHB CNTLR+1	NO TGRS ON-WRD CNT 2
00443	0061	00	0	00443		TCOB *	TO READ ONE WD AND BCD EOF
00444	0020	00	0	00446		TRA *+2	CONTINUE
00445	632526226060					BCD 1TEFB	TEST EOF TGR + INDICATOR
00446	-0030	00	0	00451	NILL	TEFB *+3	SHOULD TRANS
00447	0074	00	4	06503		TSX ERROR-1,4	
00450	-3	00000	4	00446		TXL NILL,4	DO NOT REPEAT
00451	-0030	00	0	00453		TEFB *+2	SHOULD NOT TRANS
00452	0020	00	0	00455		TRA *+3	OK
00453	0074	00	4	06503		TSX ERROR-1,4	ERROR-TGR SHOULD BE OFF
00454	-3	00000	4	00446		TXL NILL,4	DO NOT REPEAT
00455	0762	00	0	02221		RTBB 1	
00456	-0540	00	0	03606		RCHB CNTLR+2	NO TGRS ON-WRD CNT 2 TO READ ONE WD AND BIN EOF
00457	0061	00	0	00457		TCOB *	DELAY

00460	0020	00	0	00462	TRA	*+2	
00461	606325262260				BCD 1	TEFB	TEST EOF TGR + INDICATOR
00462	-0030	00	0	00465	TEFB	*+3	
00463	0074	00	4	06503	TSX	ERROR-1,4	
00464	-3	00000	4	00462	TXL	*-2,4,0	DO NOT REPEAT
00465	0500	00	0	03611	CLA	READ	WORD READ
00466	0560	00	0	03610	LDQ	ONES	WORD WRITTEN
00467	0340	00	0	03610	CAS	ONES	
00470	0020	00	0	00472	TRA	*+2	ERROR
00471	0020	00	0	00474	TRA	*+3	OK
00472	0074	00	4	06502	TSX	ERROR-2,4	
00473	0761	00	0	00436	NOP	MOST	
00474	0074	00	4	06560	TSX	RDNCK,4	TEST RDNCY
00475	0020	00	0	00436	TRA	MOST	
00476	0500	00	0	03613	CLA	READ+2	WORD READ
00477	0560	00	0	03607	LDQ	ZEROS	WORD WRITTEN
00500	0340	00	0	03607	CAS	ZEROS	
00501	0020	00	0	00503	TRA	*+2	ERROR
00502	0020	00	0	00505	TRA	*+3	OK
00503	0074	00	4	06502	TSX	ERROR-2,4	
00504	0761	00	0	00436	NOP	MOST	
00505	0074	00	4	06511	TSX	OK,4	OUT TO TEST SWITCHES
00506	0020	00	0	00436	TRA	MOST	
00507	0761	00	0	00000	NOP		
00510	0056	00	200000		RNT	0,2	TEST FOR CHANNELS C+D
00511	0020	00	0	01146	TRA	GO-6	NO
00512	-0760	00	0	03000	ETTC		
00513	0772	00	0	03201	REWC	1	
00514	0020	00	0	00516	TRA	*+2	
00515	632346236060				BCD 1	TCOC	TEST TRANS CHANNEL C IN OPR
00516	0766	00	0	03221	OPAL	WTBC 1	
00517	0062	00	0	00522	TCOC	*+3	CHAN. SHOULD BE IN OPN.
00520	0074	00	4	06503	TSX	ERROR-1,4	FAILED TO TRANS. IN OPN.
00521	-3	00000	0	00516	TXL	OPAL	
00522	0541	00	0	03602	RCHC	CNTL	NO TGRS ON-WORDS+ CNT. 1
00523	0062	00	0	00526	TCOC	*+3	SHOULD TRANS.
00524	0074	00	4	06503	TSX	ERROR-1,4	FAILED TO TRANS. IN OPN.
00525	-3	00000	0	00516	TXL	OPAL	
00526	0062	00	0	00526	TCOC	*	IF UNIT RUNS AWAY,OR MACHINE HANGS ON THIS OR ANY PREVIOUS TCOC OPN.,BUFFER MAY NOT BE RECEIVING END OPER. FROM SYNC.
00527	0062	00	0	00531	TCOC	*+2	SHOULD NOT TRANS.

00530	0020	00	0	00533		TRA	++3	OK
00531	0074	00	4	06503		TSX	ERROR-1,4	TRANS. IN ERROR-TCOC
00532	-3	00000	0	00516		TXL	OPAL	
00533	0074	00	4	06511		TSX	OK,4	OUT TO CHECK SWITCHES
00534	0020	00	0	00516		TRA	OPAL	
00535	632345236060					BCD	1TCNC	TEST TRNS. CHAN NOT IN OPN
00536	-0062	00	0	00541	PAUL	TCNC	++3	SHOULD TRANS
00537	0074	00	4	06503		TSX	ERROR-1,4	FAILED TO TRANS.
00540	-3	00000	0	00536		TXL	PAUL	
00541	0766	00	0	03221		WTBC	1	
00542	-0062	00	0	00544		TCNC	++2	SHOULD NOT TRANS.
00543	0020	00	0	00546		TRA	++3	OK
00544	0074	00	4	06503		TSX	ERROR-1,4	SHOULD NOT ENTER HERE
00545	-3	00000	0	00536		TXL	PAUL	
00546	0541	00	0	03603		RCHC	CNTL+1	NO TGRS. ON-WRD. CNT. 1
00547	-0062	00	0	00551		TCNC	++2	SHOULD NOT TRANS.
00550	0020	00	0	00553		TRA	++3	OK
00551	0074	00	4	06503		TSX	ERROR-1,4	SHOULD NOT ENTER HERE
00552	-3	00000	0	00536		TXL	PAUL	
00553	0062	00	0	00553		TCOC	*	
00554	-0062	00	0	00557		TCNC	++3	SHOULD TRANS.
00555	0074	00	4	06503		TSX	ERROR-1,4	SHOULD NOT ENTER HERE
00556	-3	00000	0	00536		TXL	PAUL	
00557	0074	00	4	06511		TSX	OK,4	OUT TO CHECK SWITCHES
00560	0020	00	0	00536		TRA	PAUL	
00561	226363236060					BCD	1BTTC	TEST BEGIN. TAPE
00562	0772	00	0	03201	QUICK	REWC	1	
00563	0764	00	0	03201		BSRC	1	BACKSPACE TO LOAD PT.
00564	0772	00	0	03201		REWC	1	SHOULD ACT AS NOP
00565	0764	00	0	03201		BSRC	1	TRY TO BCKSP OVER LD. PT.
00566	0062	00	0	00566		TCOC	*	DELAY
								BEGIN. TAPE TGR. SHOULD
								BE TURNED ON HERE
00567	0760	00	0	03000		BTTC		
00570	0020	00	0	00573		TRA	++3	OK-SHOULD BE ON
00571	0074	00	4	06503		TSX	ERROR-1,4	SHLD NOT SKIP TO ENTER HERE
00572	-3	00000	0	00562		TXL	QUICK	
00573	0760	00	0	03000		BTTC		
00574	0020	00	0	00576		TRA	++2	ERROR-BTT SHOULD BE OFF
00575	0020	00	0	00600		TRA	++3	OK-OFF
00576	0074	00	4	06503		TSX	ERROR-1,4	SHOULD NOT ENTER HERE
00577	-3	00000	0	00562		TXL	QUICK	
00600	0074	00	4	06511		TSX	OK,4	OUT TO CHECK SWITCHES
00601	0020	00	0	00562		TRA	QUICK	
00602	314663606060					BCD	1IOT	

00603	0766	00	0	03221	RATS	WTBC 1	
00604	0541	00	0	03602		RCHC CNTL	NO TGRS. ON-WRD. CNT. 1
00605	0062	00	0	00605		TCOC *	
00606	0545	00	0	03603		LCHC CNTL+1	SHOULD TURN ON IOT
00607	0760	00	0	00005		IOT	
00610	0020	00	0	00613		TRA *+3	SHOULD ENTER HERE-OK
00611	0074	00	4	06503		TSX ERROR-1,4	ERROR-SHOULD NOT SKIP
00612	-3	00000	0	00603		TXL RATS	
00613	0760	00	0	00005		IOT	
00614	0020	00	0	00616		TRA *+2	ERROR-TGR WAS NOT TURNED OFF BY PREVIOUS SEQUENCE
00615	0020	00	0	00620		TRA *+3	OK-TGR SHOULD BE OFF
00616	0074	00	4	06503		TSX ERROR-1,4	
00617	-3	00000	0	00603		TXL RATS	
00620	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
00621	0020	00	0	00603		TRA RATS	
00622	662526236060					BCD 1WEFC	TEST TO SEE THAT WEF BCD OR BINARY, BOTH WRITE TAPE MARKS
00623	0766	00	0	03201		WTDC 1	
00624	0541	00	0	03602		RCHC CNTL	NO TGRS. ON-WRD. CNT. 1
00625	0770	00	0	03201		WEFC 1	BCD EOF
00626	0766	00	0	03221		WTBC 1	
00627	0541	00	0	03603		RCHC CNTL+1	NO. TGRS ON-WRD. CNT. 1
00630	0770	00	0	03221		WEFC 17	BINARY EOF. SHOULD WRITE BCD TAPE MARK
00631	0020	00	0	00633		TRA *+2	
00632	226251236001					BCD 1BSRC 1	
00633	0764	00	0	03221	STAG	BSRC 17	
00634	0764	00	0	03201		BSRC 1	
00635	0762	00	0	03221		RTBC 1	
00636	0541	00	0	03605		RCHC CNTLR+1	NO TGRS ON-WRD CNT 2
00637	0062	00	0	00637		TCOC *	
00640	0500	00	0	03611		CLA READ	WORD READ
00641	0560	00	0	03607		LDQ ZEROS	WORD WRITTEN
00642	0340	00	0	03607		CAS ZEROS	
00643	0020	00	0	00645		TRA *+2	ERROR
00644	0020	00	0	00647		TRA *+3	OK
00645	0074	00	4	06502		TSX ERROR-2,4	
00646	0761	00	0	00633		NOP STAG	
00647	0074	00	4	06560		TSX RDNCK,4	
00650	0020	00	0	00633		TRA STAG	
00651	0031	00	0	00654		TEFC *+3	SHOULD TRANS.
00652	0074	00	4	06503		TSX ERROR-1,4	EOF DID NOT COME UP
00653	-3	00000	0	00666		TXL UNCLE	
00654	0020	00	0	00656		TRA *+2	
00655	226226236001					BCD 1BSFC 1	

00656	-0764	00	0	03201	TOP	BSFC 1	BKSP OVER EOF
00657	-0764	00	0	03201		BSFC 1	BKSP OVER EOF AND 1REC.
00660	0764	00	0	03201		BSRC 1	BKSP OVER 1 REC
00661	0762	00	0	03201		RTDC 1	
00662	0541	00	0	03605		RCHC CNTLR+1	NO TGRS ON-WRD CNT 2
00663	0062	00	0	00663		TCOC *	TO READ ONE WD AND BCD EOF
00664	0020	00	0	00666		TRA *+2	CONTINUE
00665	632526236060					BCD 1TEFC	TEST EOF TGR + INDICATOR
00666	0031	00	0	00671	UNCLE	TEFC *+3	SHOULD TRANS
00667	0074	00	4	06503		TSX ERROR-1,4	
00670	-3	00000	4	00666		TXL UNCLE,4	DO NOT REPEAT
00671	0031	00	0	00673		TEFC *+2	SHOULD NOT TRANS.
00672	0020	00	0	00675		TRA *+3	OK
00673	0074	00	4	06503		TSX ERROR-1,4	ERROR-TGR SHOULD BE OFF
00674	-3	00000	4	00666		TXL UNCLE,4	DO NOT REPEAT
00675	0762	00	0	03221		RTBC 1	
00676	0541	00	0	03606		RCHC CNTLR+2	NO TGRS ON-WRD CNT 2 TO READ ONE WD AND BIN EOF
00677	0062	00	0	00677		TCOC *	DELAY
00700	0020	00	0	00702		TRA *+2	
00701	606325262360					BCD 1 TEFC	TEST EOF TGR + INDICATOR
00702	0031	00	0	00705		TEFC *+3	
00703	0074	00	4	06503		TSX ERROR-1,4	
00704	-3	00000	4	00702		TXL *-2,4,0	DO NOT REPEAT
00705	0500	00	0	03611		CLA READ	WORD READ
00706	0560	00	0	03610		LDQ ONES	WORD WRITTEN
00707	0340	00	0	03610		CAS ONES	
00710	0020	00	0	00712		TRA *+2	ERROR
00711	0020	00	0	00714		TRA *+3	OK
00712	0074	00	4	06502		TSX ERROR-2,4	
00713	0761	00	0	00656		NOP TOP	
00714	0074	00	4	06560		TSX RDNCK,4	TEST RDNCY
00715	0020	00	0	00656		TRA TOP	
00716	0500	00	0	03613		CLA READ+2	WORD READ
00717	0560	00	0	03607		LDQ ZEROS	WORD WRITTEN
00720	0340	00	0	03607		CAS ZEROS	
00721	0020	00	0	00723		TRA *+2	ERROR
00722	0020	00	0	00725		TRA *+3	OK
00723	0074	00	4	06502		TSX ERROR-2,4	
00724	0761	00	0	00656		NOP TOP	
00725	0074	00	4	06511		TSX OK,4	OUT TO TEST SWITCHES
00726	0020	00	0	00656		TRA TOP	
00727	0761	00	0	00000		NOP	
00730	-0760	00	0	04000		ETTD	

00731	0772	00	0	04201		REWD 1	
00732	0020	00	0	00734		TRA *+2	
00733	632346246060					BCD 1TCOD	TEST TRANS CHANNEL D IN OPN
00734	0766	00	0	04221	VERY	WTBD 1	
00735	0063	00	0	00740		TCOD *+3	CHAN. SHOULD BE IN OPN.
00736	0074	00	4	06503		TSX ERROR-1,4	FAILED TO TRANS. OPN.
00737	-3	00000	0	00734		TXL VERY	
00740	-0541	00	0	03602		RCHD CNTL	NO TGRS ON-WORD. CNT. 1
00741	0063	00	0	00744		TCOD *+3	SHOULD TRANS.
00742	0074	00	4	06503		TSX ERROR-1,4	FAILED TO TRANS. IN OPN.
00743	-3	00000	0	00734		TXL VERY	
00744	0063	00	0	00744		TCOD *	IF UNIT RUNS AWAY,OR MACHINE HANGS ON THIS OR ANY PREVIOUS TCOD OPN.,BUFFER MAY NOT BE RECEIVING END OPER. FROM SYNC.
00745	0063	00	0	00747		TCOD *+2	SHOULD NOT TRANS.
00746	0020	00	0	00751		TRA *+3	
00747	0074	00	4	06503		TSX ERROR-1,4	TRANS. IN ERROR-TCOD
00750	-3	00000	0	00734		TXL VERY	
00751	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
00752	0020	00	0	00734		TRA VERY	
00753	632345246060					BCD 1TCND	TEST TRANS. CHAN NOT IN OPN
00754	-0063	00	0	00757	WAKE	TCND *+3	SHOULD TRANS
00755	0074	00	4	06503		TSX ERROR-1,4	FAILED TO TRANS.
00756	-3	00000	0	00754		TXL WAKE	
00757	0766	00	0	04221		WTBD 1	
00760	-0063	00	0	00762		TCND *+2	SHOULD NOT TRANS.
00761	0020	00	0	00764		TRA *+3	OK
00762	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
00763	-3	00000	0	00754		TXL WAKE	
00764	-0541	00	0	03603		RCHD CNTL+1	NO TGRS. ON-WRD. CNT. 1
00765	-0063	00	0	00767		TCND *+2	SHOULD NOT TRANS.
00766	0020	00	0	00771		TRA *+3	OK
00767	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
00770	-3	00000	0	00754		TXL WAKE	
00771	0063	00	0	00771		TCOD *	
00772	-0063	00	0	00775		TCND *+3	SHOULD TRANS.
00773	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
00774	-3	00000	0	00754		TXL WAKE	
00775	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
00776	0020	00	0	00754		TRA WAKE	
00777	226363246060					BCD 1BTDD	TEST BEGIN. TAPE

01000	0772	00	0	04201	XTRA	REWD 1	
01001	0764	00	0	04201		BSRD 1	BACKSPACE TO LOAD PT.
01002	0772	00	0	04201		REWD 1	SHOULD ACT AS NOP
01003	0764	00	0	04201		BSRD 1	TRY TO BCKSP OVER LD. PT.
01004	0063	00	0	01004		TCOD *	DELAY BEGIN. TAPE TGR. SHOULD BE TURNED ON HERE
01005	0760	00	0	04000		BTTD	
01006	0020	00	0	01011		TRA *+3	OK-SHOULD BE ON
01007	0074	00	4	06503		TSX ERROR-1,4	SHLD NOT SKIP TO ENTER HERE
01010	-3	00000	0	01000		TXL XTRA	
01011	0760	00	0	04000		BTTD	
01012	0020	00	0	01014		TRA *+2	ERROR-BTT SHOULD BE OFF
01013	0020	00	0	01016		TRA *+3	OK-OFF
01014	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
01015	-3	00000	0	01000		TXL XTRA	
01016	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
01017	0020	00	0	01000		TRA XTRA	
01020	314663606060					BCD 1IOT	TEST I/O CHECK TGR.
01021	0766	00	0	04221	YALE	WTBD 1	
01022	-0541	00	0	03602		RCHD CNTL	NO TGRS. ON-WRD. CNT. 1
01023	0063	00	0	01023		TCOD *	
01024	-0545	00	0	03603		LCHD CNTL+1	SHOULD TURN ON IOT
01025	0760	00	0	00005		IOT	
01026	0020	00	0	01031		TRA *+3	SHOULD ENTER HERE-OK
01027	0074	00	4	06503		TSX ERROR-1,4	ERROR-SHOULD NOT SKIP
01030	-3	00000	0	01021		TXL YALE	
01031	0760	00	0	00005		IOT	
01032	0020	00	0	01034		TRA *+2	ERROR-TGR WAS NOT TURNED OFF BY PREVIOUS SEQUENCE
01033	0020	00	0	01036		TRA *+3	OK-TGR SHOULD BE OFF
01034	0074	00	4	06503		TSX ERROR-1,4	
01035	-3	00000	0	01021		TXL YALE	
01036	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
01037	0020	00	0	01021		TRA YALE	
01040	662526246060					BCD 1WEFD	TEST TO SEE THAT WEF BCD OR BINARY, BOTH WRITE TAPE MARKS
01041	0766	00	0	04201		WTDD 1	
01042	-0541	00	0	03602		RCHD CNTL	NO TGRS. ON-WRD. CNT. 1
01043	0770	00	0	04201		WEFD 1	BCD EOF
01044	0766	00	0	04221		WTBD 1	
01045	-0541	00	0	03603		RCHD CNTL+1	NO. TGRS ON-WRD. CNT. 1
01046	0770	00	0	04221		WEFD 17	BINARY EOF. SHOULD WRITE BCD TAPE MARK
01047	0020	00	0	01051		TRA *+2	
01050	226251246001					BCD 1BSRD 1	

01051	0764	00	0	04221	ZEKE	BSRD	17	
01052	0764	00	0	04201		BSRD	1	
01053	0762	00	0	04221		RTBD	1	
01054	-0541	00	0	03605		RCHD CNTLR+1	NO TGRS ON-WRD CNT 2	
01055	0063	00	0	01055		TCOD *		
01056	0500	00	0	03611		CLA READ	WORD READ	
01057	0560	00	0	03607		LDQ ZEROS	WORD WRITTEN	
01060	0340	00	0	03607		CAS ZEROS		
01061	0020	00	0	01063		TRA *+2	ERROR	
01062	0020	00	0	01065		TRA *+3	OK	
01063	0074	00	4	06502		TSX ERROR-2,4		
01064	0761	00	0	01051		NOP ZEKE		
01065	0074	00	4	06560		TSX RDNCK,4		
01066	0020	00	0	01051		TRA ZEKE		
01067	-0031	00	0	01072		TEFD *+3	SHOULD TRANS.	
01070	0074	00	4	06503		TSX ERROR-1,4	EOF DID NOT COME UP	
01071	-3	00000	0	01104		TXL BETA		
01072	0020	00	0	01074		TRA *+2		
01073	226226246001					BCD 1BSFD 1		
01074	-0764	00	0	04201	ALPHA	BSFD 1	BKSP OVER EOF	
01075	-0764	00	0	04201		BSFD 1	BKSP OVER EOF AND 1 REC.	
01076	0764	00	0	04201		BSRD 1	BKSP OVER 1 REC	
01077	0762	00	0	04201		RTDD 1		
01100	-0541	00	0	03605		RCHD CNTLR+1	NO TGRS ON-WRD CNT 2	
01101	0063	00	0	01101		TCOD *	TO READ ONE WD AND BCD EOF	
01102	0020	00	0	01104		TRA *+2	CONTINUE	
01103	632526246060					BCD 1TEFD	TEST EOF TGR + INDICATOR	
01104	-0031	00	0	01107	BETA	TEFD *+3	SHOULD TRANS	
01105	0074	00	4	06503		TSX ERROR-1,4		
01106	-3	00000	4	01104		TXL BETA,4		
01107	-0031	00	0	01111		TEFD *+2	SHOULD NOT TRANS.	
01110	0020	00	0	01113		TRA *+3	OK	
01111	0074	00	4	06503		TSX ERROR-1,4	ERROR-TGR SHOULD BE OFF	
01112	-3	00000	4	01104		TXL BETA,4		
01113	0762	00	0	04221		RTBD 1		
01114	-0541	00	0	03606		RCHD CNTLR+2	NO TGRS ON-WRD CNT 2	
							TO READ ONE WD AND BIN EOF	
01115	0063	00	0	01115		TCOD *	DELAY	
01116	0020	00	0	01120		TRA *+2		
01117	632526246060					BCD 1TEFD	TEST EOF + INDICATOR	
01120	-0031	00	0	01123		TEFD *+3		
01121	0074	00	4	06503		TSX ERROR-1,4		
01122	-3	00000	4	01120		TXL *-2,4,0	DO NOT REPEAT	
01123	0500	00	0	03611		CLA READ	WORD READ	
01124	0560	00	0	03610		LDQ ONES	WORD WRITTEN	

01125	0340	00	0	03610		CAS ONES	
01126	0020	00	0	01130		TRA *+2	ERROR
01127	0020	00	0	01132		TRA *+3	OK
01130	0074	00	4	06502		TSX ERROR-2,4	
01131	0761	00	0	01074		NOP ALPHA	
01132	0074	00	4	06560		TSX RDNCK,4	TEST RDNCY
01133	0020	00	0	01074		TRA ALPHA	
01134	0500	00	0	03613		CLA READ+2	WORD READ
01135	0560	00	0	03607		LDQ ZEROS	WORD WRITTEN
01136	0340	00	0	03607		CAS ZEROS	
01137	0020	00	0	01141		TRA *+2	ERROR
01140	0020	00	0	01143		TRA *+3	OK
01141	0074	00	4	06502		TSX ERROR-2,4	
01142	0761	00	0	01074		NOP ALPHA	
01143	0074	00	4	06511		TSX OK,4	OUT TO TEST SWITCHES
01144	0020	00	0	01074		TRA ALPHA	
01145	0761	00	0	00000		NOP	
01146	0056	00		400000		RNT 0,4	TEST FOR CHANNELS E+F
01147	0020	00	0	01604		TRA TEST	NO
01150	-0760	00	0	05000		ETTE	
01151	0772	00	0	05201		REWE 1	
01152	0020	00	0	01154		TRA *+2	
01153	632346256060					BCD 1TCOE	TEST TRANS CHANNEL E IN OPN
01154	0766	00	0	05221	GO	WTBE 1	
01155	0064	00	0	01160		TCOE *+3	CHAN. SHOULD BE IN OPN.
01156	0074	00	4	06503		TSX ERROR-1,4	FAILED TO TRANS. IN OPN.
01157	-3	00000	0	01154		TXL GO	
01160	0542	00	0	03602		RCHE CNTL	NO TGRS ON-WORD. CNT. 1
01161	0064	00	0	01164		TCOE *+3	SHOULD TRANS.
01162	0074	00	4	06503		TSX ERROR-1,4	FAILED TO TRANS. IN OPN.
01163	-3	00000	0	01154		TXL GO	
01164	0064	00	0	01164		TCOE *	IF UNIT RUNS AWAY,OR MACHINE HANGS ON THIS OR ANY PREVIOUS TCOE OPN.,BUFFER MAY NOT BE RECEIVING END OPER. FROM SYNC.
01165	0064	00	0	01167		TCOE *+2	SHOULD NOT TRANS.
01166	0020	00	0	01171		TRA *+3	OK
01167	0074	00	4	06503		TSX ERROR-1,4	TRANS. IN ERROR-TCOE
01170	-3	00000	0	01154		TXL GO	
01171	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
01172	0020	00	0	01154		TRA GO	
01173	632345256060					BCD 1TCNE	TEST TRANS. CHAN NOT IN OPN
01174	-0064	00	0	01177	JUMP	TCNE *+3	SHOULD TRANS

01175	0074	00	4	06503		TSX ERROR-1,4	FAILED TO TRANS.
01176	-3	00000	0	01174		TXL JUMP	
01177	0766	00	0	05221		WTBE 1	
01200	-0064	00	0	01202		TCNE *+2	SHOULD NOT TRANS,
01201	0020	00	0	01204		TRA *+3	OK
01202	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
01203	-3	00000	0	01174		TXL JUMP	
01204	0542	00	0	03603		RCHE CNTL+1	NO TGRS. ON-WRD. CNT. 1
01205	-0064	00	0	01207		TCNE *+2	SHOULD NOT TRANS.
01206	0020	00	0	01211		TRA *+3	OK
01207	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
01210	-3	00000	0	01174		TXL JUMP	
01211	0064	00	0	01211		TCOE *	
01212	-0064	00	0	01215		TCNE *+3	SHOULD TRANS.
01213	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
01214	-3	00000	0	01174		TXL JUMP	
01215	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
01216	0020	00	0	01174		TRA JUMP	
01217	226363256060					BCD 1BTTE	TEST BEGIN. TAPE
01220	0772	00	0	05201	INTO	REWE 1	
01221	0764	00	0	05201		BSRE 1	BACKSPACE TO LOAD PT.
01222	0772	00	0	05201		REWE 1	SHOULD ACT AS NOP
01223	0764	00	0	05201		BSRE 1	TRY TO BSKSP OVER LD. PT.
01224	0064	00	0	01224		TCOE *	DELAY
							BEGIN. TAPE TGR. SHOULD
							BE TURNED ON HERE
01225	0760	00	0	05000		BTTE	
01226	0020	00	0	01231		TRA *+3	OK-SHOULD BE ON
01227	0074	00	4	06503		TSX ERROR-1,4	SHLD NOT SKIP TO ENTER HERE
01230	-3	00000	0	01220		TXL INTO	
01231	0760	00	0	05000		BTTE	
01232	0020	00	0	01234		TRA *+2	ERROR-BTT SHOULD BE OFF
01233	0020	00	0	01236		TRA *+3	OK-OFF
01234	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
01235	-3	00000	0	01220		TXL INTO	
01236	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
01237	0020	00	0	01220		TRA INTO	
01240	314663606060					BCD 1IOT	TEST I/O CHECK TGR.
01241	0766	00	0	05221	THE	WTBE 1	
01242	0542	00	0	03602		RCHE CNTL	NO TGRS. ON-WRD. CNT. 1
01243	0064	00	0	01243		TCOE *	
01244	0546	00	0	03603		LCHE CNTL+1	SHOULD TURN ON IOT
01245	0760	00	0	00005		IOT	
01246	0020	00	0	01251		TRA *+3	SHOULD ENTER HERE-OK
01247	0074	00	4	06503		TSX ERROR-1,4	ERROR-SHOULD NOT SKIP
01250	-3	00000	0	01241		TXL THE	

01251	0760	00	0	00005		IOT	
01252	0020	00	0	01254		TRA *+2	ERROR-TGR WAS NOT TURNED OFF BY PREVIOUS SEQUENCE
01253	0020	00	0	01256		TRA *+3	OK-TGR SHOULD BE OFF
01254	0074	00	4	06503		TSX ERROR-1,4	
01255	-3	00000	0	01241		TXL THE	
01256	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
01257	0020	00	0	01241		TRA THE	
01260	662526256060					BCD 1WEFE	TEST TO SEE THAT WEF BCD OR BINARY, BOTH WRITE TAPE MARKS
01261	0766	00	0	05201		WTDE 1	
01262	0542	00	0	03602		RCHE CNTL	NO TGRS. ON-WRD. CNT. 1
01263	0770	00	0	05201		WEFE 1	BCD EOF
01264	0766	00	0	05221		WTBE 1	
01265	0542	00	0	03603		RCHE CNTL+1	NO. TGRS ON-WRD. CNT. 1
01266	0770	00	0	05221		WEFE 17	BINARY EOF. SHOULD WRITE BCD TAPE MARK
01267	0020	00	0	01271		TRA *+2	
01270	226226256001					BCD 1BSFE 1	
01271	0764	00	0	05221	LAKE	BSRE 17	
01272	0764	00	0	05201		BSRE 1	
01273	0762	00	0	05221		RTBE 1	
01274	0542	00	0	03605		RCHE CNTLR+1	NO TGRS ON-WRD CNT 2
01275	0064	00	0	01275		TCOE *	
01276	0500	00	0	03611		CLA READ	WORD READ
01277	0560	00	0	03607		LDQ ZEROS	WORD WRITTEN
01300	0340	00	0	03607		CAS ZEROS	
01301	0020	00	0	01303		TRA *+2	ERROR
01302	0020	00	0	01305		TRA *+3	OK
01303	0074	00	4	06502		TSX ERROR-2,4	
01304	0761	00	0	01271		NOP LAKE	
01305	0074	00	4	06560		TSX RDNCK,4	
01306	0020	00	0	01271		TRA LAKE	
01307	0032	00	0	01312		TEFE *+3	SHOULD TRANS.
01310	0074	00	4	06503		TSX ERROR-1,4	EOF DID NOT COME UP
01311	-3	00000	0	01324		TXL A	
01312	0020	00	0	01314		TRA *+2	
01313	226251256001					BCD 1BSRE 1	
01314	-0764	00	0	05201	RING	BSFE 1	BKSP OVER EOF
01315	-0764	00	0	05201		BSFE 1	BKSP OVER EOF AND 1 REC
01316	0764	00	0	05201		BSRE 1	BKSP OVER 1 REC
01317	0762	00	0	05201		RTDE 1	
01320	0542	00	0	03605		RCHE CNTLR+1	NO TGRS ON-WRD CNT 2
01321	0064	00	0	01321		TCOE *	TO READ ONE WD AND BCD EOF
01322	0020	00	0	01324		TRA *+2	CONTINUE
01323	632526256060					BCD 1TEFE	TEST EOF TGR + INDICATOR

01324	0032	00	0	01327	A	TEFE *+3	SHOULD TRANS
01325	0074	00	4	06503		TSX ERROR-1,4	
01326	-3	00000	4	01324		TXL A,4	
01327	0032	00	0	01331		TEFE *+2	SHOULD NOT TRANS.
01330	0020	00	0	01333		TRA *+3	OK
01331	0074	00	4	06503		TSX ERROR-1,4	ERROR-TGR SHOULD BE OFF
01332	-3	00000	4	01324		TXL A,4	
01333	0762	00	0	05221		RTBE 1	
01334	0542	00	0	03606		RCHE CNTLR+2	NO TGRS ON-WRD CNT 2 TO READ ONE WD AND BIN EOF
01335	0064	00	0	01335		TCOE *	DELAY
01336	0020	00	0	01340		TRA *+2	
01337	632526256060					BCD 1TEFE	TEST EOF TGR + INDICATOR
01340	0032	00	0	01343		TEFE *+3	
01341	0074	00	4	06503		TSX ERROR-1,4	
01342	-3	00000	4	01340		TXL *-2,4,0	DO NOT REPEAT
01343	0500	00	0	03611		CLA READ	WORD READ
01344	0560	00	0	03610		LDQ ONES	WORD WRITTEN
01345	0340	00	0	03610		CAS ONES	
01346	0020	00	0	01350		TRA *+2	ERROR
01347	0020	00	0	01352		TRA *+3	OK
01350	0074	00	4	06502		TSX ERROR-2,4	
01351	0761	00	0	01314		NOP RING	
01352	0074	00	4	06560		TSX RDNCK,4	TEST RDNCY
01353	0020	00	0	01314		TRA RING	
01354	0500	00	0	03613		CLA READ+2	WORD READ
01355	0560	00	0	03607		LDQ ZEROS	WORD WRITTEN
01356	0340	00	0	03607		CAS ZEROS	
01357	0020	00	0	01361		TRA *+2	ERROR
01360	0020	00	0	01363		TRA *+3	OK
01361	0074	00	4	06502		TSX ERROR-2,4	
01362	0761	00	0	01314		NOP RING	
01363	0074	00	4	06511		TSX OK,4	OUT TO TEST SWITCHES
01364	0020	00	0	01314		TRA RING	
01365	0761	00	0	00000		NOP	
01366	-0760	00	0	06000		ETTF	
01367	0772	00	0	06201		REWF 1	
01370	0020	00	0	01372		TRA *+2	
01371	632346266060					BCD 1TCOF	TEST TRANS CHANNEL F IN OPN
01372	0766	00	0	06221	ROUND	WTBF 1	
01373	0065	00	0	01376		TCOF *+3	CHNA. SHOULD BE IN OPN.
01374	0074	00	4	06503		TSX ERROR-1,4	FAILED TO TRANS. IN OPN.
01375	-3	00000	0	01372		TXL ROUND	

01376	-0542	00	0	03602		RCHF CNTL	NO TGRS ON-WORD. CNT. 1
01377	0065	00	0	01402		TCOF *+3	SHOULD TRANS.
01400	0074	00	4	06503		TSX ERROR-1,4	FAILED TO TRANS. IN OPN
01401	-3	00000	0	01372		TXL ROUND	
01402	0065	00	0	01402		TCOF *	IF UNIT RUNS AWAY,OR MACHINE HANGS ON THIS OR ANY PREVIOUS TCOF OPN.,BUFFER MAY NOT BE RECEIVING END OPER. FROM SYNC.
01403	0065	00	0	01405		TCOF *+2	SHOULD NOT TRANS.
01404	0020	00	0	01407		TRA *+3	OK
01405	0074	00	4	06503		TSX ERROR-1,4	TRANS. IN ERROR-TCOF
01406	-3	00000	0	01372		TXL ROUND	
01407	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
01410	0020	00	0	01372		TRA ROUND	
01411	632345266060					BCD 1TCNF	TEST TRANS. CHAN NOT IN OPN
01412	-0065	00	0	01415	ROSY	TCNF *+3	SHOULD TRANS
01413	0074	00	4	06503		TSX ERROR-1,4	FAILED TO TRANS.
01414	-3	00000	0	01412		TXL ROSY	
01415	0766	00	0	06221		WTBF 1	
01416	-0065	00	0	01420		TCNF *+2	SHOULD NOT TRANS.
01417	0020	00	0	01422		TRA *+3	OK
01420	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
01421	-3	00000	0	01412		TXL ROSY	
01422	-0542	00	0	03603		RCHF CNTL+1	NO TGRS. ON-WRD. CNT. 1
01423	-0065	00	0	01425		TCNF *+2	SHOULD NOT TRANS.
01424	0020	00	0	01427		TRA *+3	OK
01425	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
01426	-3	00000	0	01412		TXL ROSY	
01427	0065	00	0	01427		TCOF *	
01430	-0065	00	0	01433		TCNF *+3	SHOULD TRANS.
01431	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
01432	-3	00000	0	01412		TXL ROSY	
01433	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
01434	0020	00	0	01412		TRA ROSY	
01435	226363266060					BCD 1BTTF	TEST BEGIN. TAP
01436	0772	00	0	06201	POCK	REWF 1	
01437	0764	00	0	06201		BSRF 1	BACKSPACE TO LOAD PT.
01440	0772	00	0	06201		REWF 1	SHOULD ACT AS NOP
01441	0764	00	0	06201		BSRF 1	TRY TO BCKSP OVER LD. PT.
01442	0065	00	0	01442		TCOF *	DELAY BEGIN. TAPE TGR. SHOULD BE TURNED ON HERE
01443	0760	00	0	06000		BTTF	
01444	0020	00	0	01447		TRA *+3	ON SHOULD BE OK

01445	0074	00	4	06503		TSX ERROR-1,4	SHLD NOT SKIP TO ENTER HERE
01446	-3	00000	0	01436		TXL	POCK
01447	0760	00	0	06000		BTTF	
01450	0020	00	0	01452		TRA *+2	ERROR-BTT SHOULD BE OFF
01451	0020	00	0	01454		TRA *+3	OK-OFF
01452	0074	00	4	06503		TSX ERROR-1,4	SHOULD NOT ENTER HERE
01453	-3	00000	0	01436		TXL	POCK
01454	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
01455	0020	00	0	01436		TRA	POCK
01456	314663606060					BCD 1IOT	TEST I/O CHECK TGR.
01457	0766	00	0	06221	ET	WTBF 1	
01460	-0542	00	0	03602		RCHF CNTL	NO TGRS. ON-WRD. CNT. 1
01461	0065	00	0	01461		TCOF *	
01462	-0546	00	0	03603		LCHF CNTL+1	SHOULD TURN ON IOT
01463	0760	00	0	00005		IOT	
01464	0020	00	0	01467		TRA *+3	SHOULD ENTER HERE-OK
01465	0074	00	4	06503		TSX ERROR-1,4	ERROR-SHOULD NOT SKIP
01466	-3	00000	0	01457		TXL	ET
01467	0760	00	0	00005		IOT	
01470	0020	00	0	01472		TRA *+2	ERROR-TGR WAS NOT TURNED OFF BY PREVIOUS SEQUENCE
01471	0020	00	0	01474		TRA *+3	OK-TGR SHOULD BE OFF
01472	0074	00	4	06503		TSX ERROR-1,4	
01473	-3	00000	0	01457		TXL	ET
01474	0074	00	4	06511		TSX OK,4	OUT TO CHECK SWITCHES
01475	0020	00	0	01457		TRA	ET
01476	662526266060					BCD 1WEFF	TEST TO SEE THAT WEF BCD OR BINARY, BOTH WRITE TAPE MARKS
01477	0766	00	0	06201		WTDF 1	
01500	-0542	00	0	03602		RCHF CNTL	NO TGRS. ON-WRD. CNT. 1
01501	0770	00	0	06201		WEFF 1	BCD EOF
01502	0766	00	0	06221		WTBF 1	
01503	-0542	00	0	03603		RCHF CNTL+1	NO. TGRS ON-WRD. CNT. 1
01504	0770	00	0	06221		WEFF 17	BINARY EOF. SHOULD WRITE BCD TAPE MARK
01505	0020	00	0	01507		TRA *+2	
01506	226251266001					BCD 1BSRF 1	
01507	0764	00	0	06221	FULL	BSRF 17	
01510	0764	00	0	06201		BSRF 1	
01511	0762	00	0	06221		RTBF 1	
01512	-0542	00	0	03605		RCHF CNTLR+1	NO TGRS ON-WRD CNT 2
01513	0065	00	0	01513		TCOF *	
01514	0500	00	0	03611		CLA READ	WORD READ
01515	0560	00	0	03607		LDQ ZEROS	WORD WRITTEN
01516	0340	00	0	03607		CAS ZEROS	
01517	0020	00	0	01521		TRA *+2	ERROR

01520	0020	00	0	01523		TRA	*/+3	OK
01521	0074	00	4	06502		TSX	ERROR-2,4	
01522	0761	00	0	01507		NOP	FULL	
01523	0074	00	4	06560		TSX	RDNCK,4	
01524	0020	00	0	01507		TRA	FULL	
01525	-0032	00	0	01530		TEFF	*/+3	SHOULD TRANS.
01526	0074	00	4	06503		TSX	ERROR-1,4	EOF DID NOT COME UP
01527	-3	00000	0	01542		TXL	POSYS	
01530	0020	00	0	01532		TRA	*/+2	
01531	226226266001					BCD	1BSFF	1
01532	-0764	00	0	06201	OF	BSFF	1	BKSP OVER EOF
01533	-0764	00	0	06201		BSFF	1	BKSP OVER EOF AND 1 REC
01534	0764	00	0	06201		BSRF	1	BKSP OVER 1 REC
01535	0762	00	0	06201		RTDF	1	
01536	-0542	00	0	03605		RCHF	CNTRLR+1	NO TGRS ON-WRD CNT 2
01537	0065	00	0	01537		TCOF	*	TO READ ONE WD AND BCD EOF
01540	0020	00	0	01542		TRA	*/+2	CONTINUE
01541	632526266060					BCD	1TEFF	TEST EOF TGR + INDICATOR
01542	-0032	00	0	01545	POSYS	TEFF	*/+3	SHOULD TRANS
01543	0074	00	4	06503		TSX	ERROR-1,4	
01544	-3	00000	4	01542		TXL	POSYS,4	
01545	-0032	00	0	01547		TEFF	*/+2	SHOULD NOT TRANS.
01546	0020	00	0	01551		TRA	*/+3	OK
01547	0074	00	4	06503		TSX	ERROR-1,4	ERROR-TGR SHOULD BE OFF
01550	-3	00000	4	01542		TXL	POSYS,4	
01551	0762	00	0	06221		RTBF	1	
01552	-0542	00	0	03606		RCHF	CNTRLR+2	NO TGRS ON-WRD CNT 2 TO READ ONE WD AND BIN EOF
01553	0065	00	0	01553		TCOF	*	DELAY
01554	0020	00	0	01556		TRA	*/+2	
01555	632526266060					BCD	1TEFF	TEST EOF TGR + INDICATOR
01556	-0032	00	0	01561		TEFF	*/+3	
01557	0074	00	4	06503		TSX	ERROR-1,4	
01560	-3	00000	4	01556		TXL	*/-2,4,0	DO NOT REPEAT
01561	0500	00	0	03611		CLA	READ	WORD READ
01562	0560	00	0	03610		LDQ	ONES	WORD WRITTEN
01563	0340	00	0	03610		CAS	ONES	
01564	0020	00	0	01566		TRA	*/+2	ERROR
01565	0020	00	0	01570		TRA	*/+3	OK
01566	0074	00	4	06502		TSX	ERROR-2,4	
01567	0761	00	0	01532		NOP	OF	
01570	0074	00	4	06560		TSX	RDNCK,4	TEST RDNCY
01571	0020	00	0	01532		TRA	OF	
01572	0500	00	0	03613		CLA	READ+2	WORD READ
01573	0560	00	0	03607		LDQ	ZEROS	WORD WRITTEN

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01574 0340 00 0 03607      CAS ZEROS
01575 0020 00 0 01577      TRA *+2          ERROR
01576 0020 00 0 01601      TRA *+3          OK
01577 0074 00 4 06502      TSX ERROR-2,4
01600 0761 00 0 01532      NOP OF
01601 0074 00 4 06511      TSX OK,4        OUT TO TEST SWITCHES
01602 0020 00 0 01532      TRA OF
01603 0761 00 0 00000      NOP

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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.

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01604 0774 00 1 00106  TEST  AXT 70,1
01605 0774 00 2 00101      AXT 65,2

01606 0056 00 100000      RNT 0,1        TEST FOR CHANNELS A+B
01607 0020 00 0 01614      TRA TEST1      NO
01610 0766 00 0 01222      WTBA 2        WRITE CHAN A
01611 0540 00 0 02772      RCHA WR1
01612 0766 00 0 02221      WTBB 1        WRITE CHAN B
01613 -0540 00 0 02773      RCHB WR2

01614 0056 00 200000  TEST1  RNT 0,2        TEST FOR CHANNELS C+D
01615 0020 00 0 01622      TRA TEST2      NO
01616 0766 00 0 03221      WTBC 1        WRITE CHAN C
01617 0541 00 0 02774      RCHC WR3
01620 0766 00 0 04221      WTBD 1        WRITE CHAN D
01621 -0541 00 0 02775      RCHD WR4

01622 0056 00 400000  TEST2  RNT 0,4        TEST FOR CHANNELS E+F
01623 0020 00 0 01630      TRA TEST2+6    NO
01624 0766 00 0 05221      WTBE 1        WRITE CHAN E
01625 0542 00 0 02776      RCHE WR5
01626 0766 00 0 06221      WTBF 1        WRITE CHAN F
01627 -0542 00 0 02777      RCHF WR6
01630 0020 00 0 02232      TRA CLEAR+5
01631 2 00001 2 01606      TIX TEST+2,2,1 TAPE WILL BE WRITTEN 101
                                TIMES. THE FIRST TIME
                                TO MOVE FROM LOAD POINT

01632 0074 00 4 06511      TSX OK,4
01633 0020 00 0 01606      TRA TEST+2
01634 0761 00 0 00000      NOP

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*START WORST CASE SECTION

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01635 0020 00 0 01637      TRA *+2
01636 666322606060      BCD 1WTB
01637 0074 00 4 06560      TSX RDNCK,4    TEST FOR TAPE CHECKS
01640 0761 00 0 01637      NOP *-1

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*THIS SECTION READS A 100 WORD RECORD FROM EACH CHANNEL SELECTED

*WHILE ANS INDIRECTLY ADDRESSED GOES ON IN MF

*TEST FOR BACKSPACE

01641	0760	00	0	00165		SWT 5	TEST SWITCH {5
01642	0020	00	0	02521		TRA ANS	TRY TO PIN POINT TROUBLE TEST WORST CASE
01643	0774	00	2	00100		AXT 64,2	
01644	0056	00		100000	RPEAT	RNT 0,1	TEST BKSPAC A+B
01645	0020	00	0	01650		TRA *+3	
01646	0764	00	0	01202		BSRA 2	
01647	0764	00	0	02201		BSRB 1	
01650	0056	00		200000		RNT 0,2	TEST BACKSPACE C+D
01651	0020	00	0	01654		TRA *+3	
01652	0764	00	0	03201		BSRC 1	
01653	0764	00	0	04201		BSRD 1	
01654	0056	00		400000		RNT 0,4	TEST BACKSPACE E+F
01655	0020	00	0	01660		TRA *+3	
01656	0764	00	0	05201		BSRE 1	
01657	0764	00	0	06201		BSRF 1	
01660	2	00001	2	01644		TIX RPEAT,2,1	BACKSPACE 100 RECS.
01661	0774	00	2	00100		AXT 64,2	
01662	0056	00		100000	READ5	RNT 0,1	TEST FOR READ
01663	0020	00	0	01670		TRA *+5	NO
01664	0762	00	0	01222		RTBA 2	READ TAPE CHAN A
01665	0540	00	0	04472		RCHA CCHA	
01666	0762	00	0	02221		RTBB 1	READ TAPE CHAN B
01667	-0540	00	0	04671		RCHB CCHB	
01670	0056	00		200000		RNT 0,2	TEST TO READ C+D
01671	0020	00	0	01676		TRA *+5	NO
01672	0762	00	0	03221		RTBC 1	READ TAPE CHAN C
01673	0541	00	0	05070		RCHC CCHC	
01674	0762	00	0	04221		RTBD 1	READ TAPE CHAN D
01675	-0541	00	0	05267		RCHD CCHD	
01676	0056	00		400000		RNT 0,4	TEST TO READ E+F
01677	0020	00	0	01704		TRA *+5	NO
01700	0762	00	0	05221		RTBE 1	READ TAPE CHAN E
01701	0542	00	0	05466		RCHE CCHE	
01702	0762	00	0	06221		RTBF 1	READ TAPE CHAN F
01703	-0542	00	0	05665		RCHF CCHF	
01704	0320	60	0	03000		ANS* SAVE	CONTINUOUS
01705	0320	60	0	03000		ANS* SAVE	ANS INDIRECTLY
01706	0320	60	0	03000		ANS* SAVE	ADDRESSED
01707	0320	60	0	03000		ANS* SAVE	THESE INSTRUCTIONS
01710	0320	60	0	03000		ANS* SAVE	SHOULD NOT
01711	0320	60	0	03000		ANS* SAVE	INTERRUPT OR,
01712	0320	60	0	03000		ANS* SAVE	SHARE FOR
01713	0320	60	0	03000		ANS* SAVE	B TIME
01714	0320	60	0	03000		ANS* SAVE	FROM
01715	0320	60	0	03000		ANS* SAVE	BUFFER
01716	2	00001	1	01704		TIX *-10,1,1	

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01717 0074 00 4 06511      TSX OK,4
01720 0020 00 0 01644      TRA RPEAT
01721 0761 00 0 00000      NOP

01722 0060 00 0 01722  TCO  TCOA *      DELAY
01723 0061 00 0 01723      TCOB *      TO
01724 0062 00 0 01724      TCOC *      ENABLE
01725 0063 00 0 01725      TCOD *      SCH TO
01726 0064 00 0 01726      TCOE *      GET CORRECT
01727 0065 00 0 01727      TCOF *      INFORMATION

01730 0056 00 100000      RNT 0,1      TEST FOR CHAN A+B
01731 0020 00 0 01734      TRA *+3      NO
01732 0640 00 0 03623      SCHA SCH
01733 -0640 00 0 03624      SCHB SCH+1

01734 0056 00 200000      RNT 0,2      TEST FOR CHAN C+D
01735 0020 00 0 01740      TRA *+3      NO
01736 0641 00 0 03625      SCHC SCH+2
01737 -0641 00 0 03626      SCHD SCH+3

01740 0056 00 400000      RNT 0,4      TEST FOR CHAN E+F
01741 0020 00 0 01744      TRA *+3      NO
01742 0642 00 0 03627      SCHE SCH+4
01743 -0642 00 0 03630      SCHF SCH+5

01744 0500 00 0 03632      CLA CT
01745 0601 00 0 06556      STO WDNO
01746 0500 00 0 03633      CLA CT1
01747 0601 00 0 06557      STO RECNO

01750 0020 00 0 01752      TRA *+2

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

01751 516322606060      BCD 1RTB

01752 0074 00 4 06560      TSX RDNCK,4  CHECK REDUNDANCY
01753 0761 00 0 01752      NOP *-1
01754 0020 00 0 01756      TRA *+2

01755 314663606060      BCD 1IOT

01756 0760 00 0 00005      IOT
01757 0020 00 0 01761      TRA *+2      ERROR
01760 0020 00 0 01763      TRA *+3      OK
01761 0074 00 4 06503      TSX ERROR-1,4
01762 -3 00000 4 01756      TXL *-4,4

01763 0056 00 100000      RNT 0,1      TEST FOR CHANS A+B
01764 0020 00 0 02051      TRA A1      NO
01765 0020 00 0 01767      TRA *+2      YES

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01766	622330216060	BCD 1SCHA	
01767	0500 00 0 03623	CLA SCH	WORD FROM CHANNEL
01770	0560 00 0 03615	LDQ CINFO	CORRECT INFORMATION
01771	0340 00 0 03615	CAS CINFO	
01772	0020 00 0 01774	TRA *+2	ERROR
01773	0020 00 0 01776	TRA *+3	OK
01774	0074 00 4 06503	TSX ERROR-1,4	
01775	0761 00 0 01767	NOP *-6	
01776	0020 00 0 02000	TRA *+2	
01777	622330226060	BCD 1SCHB	
02000	0500 00 0 03624	CLA SCH+1	WORD FROM CHANNEL
02001	0560 00 0 03616	LDQ CINFO+1	CORRECT INFORMATION
02002	0340 00 0 03616	CAS CINFO+1	
02003	0020 00 0 02005	TRA *+2	ERROR
02004	0020 00 0 02007	TRA *+3	OK
02005	0074 00 4 06503	TSX ERROR-1,4	
02006	0761 00 0 02000	NOP *-6	
02007	0020 00 0 02011	TRA *+2	
02010	606325262160	BCD 1 TEFA	
02011	0030 00 0 02013	TEFA *+2	ERROR
02012	0020 00 0 02017	TRA *+5	OK
02013	0074 00 4 06503	TSX ERROR-1,4	EXIT HERE WILL INDICATE
02014	-3 00000 4 02011	TXL *-3,4	A DISCONNECT ON A FALSE EOF
02015	0020 00 0 02017	TRA *+2	CHANNEL A
02016	606325262260	BCD 1 TEFB	
02017	-0030 00 0 02021	TEFB *+2	ERROR
02020	0020 00 0 02025	TRA *+5	
02021	0074 00 4 06503	TSX ERROR-1,4	EXIT HERE WILL
02022	-3 00000 4 02017	TXL *-3,4	INDICATE FALSE EOF
02023	0020 00 0 02025	TRA *+2	CHANNEL B
02024	605163222160	BCD 1 RTBA	
02025	0774 00 1 00100	AXT 64,1	
02026	0500 00 1 03102	CLA RCHA+64,1	WORD READ
02027	0560 00 1 03773	LDQ WTCHA+64,1	WORD GENERATED
02030	0340 00 1 03773	CAS WTCHA+64,1	
02031	0020 00 0 02033	TRA *+2	ERROR
02032	0020 00 0 02035	TRA *+3	OK
02033	0074 00 4 06502	TSX ERROR-2,4	
02034	0761 00 0 02025	NOP *-7	
02035	2 00001 1 02026	TIX *-7,1,1	RETURN TO CHECK ALL WORDS
02036	0020 00 0 02040	TRA *+2	
02037	516322226001	BCD 1RTBB 1	
02040	0774 00 1 00100	AXT 64,1	

02041	0500	00	1	03202		CLA	RCHB+64,1	WORD READ	
02042	0560	00	1	04073		LDQ	WTCHB+64,1	WORD GENERATED	
02043	0340	00	1	04073		CAS	WTCHB+64,1		
02044	0020	00	0	02046		TRA	*+2	ERROR	
02045	0020	00	0	02050		TRA	*+3	OK	
02046	0074	00	4	06502		TSX	ERROR-2,4		
02047	0761	00	0	02040		NOP	*-7		
02050	2 00001	1	1	02041		TIX	*-7,1,1	RETURN TO CHECK ALL WORDS	
02051	0056	00	200000	A1		RNT	0,2	TEST FOR CHANNELS C+D	
02052	0020	00	0	02137		TRA	A2	NO	
02053	0020	00	0	02055		TRA	*+2	YES	
02054	622330236060					BCD	1SCHC		
02055	0500	00	0	03625		CLA	SCH+2	WORD FROM CHANNEL	
02056	0560	00	0	03617		LDQ	CINFO+2	CORRECT INFORMATION	
02057	0340	00	0	03617		CAS	CINFO+2		
02060	0020	00	0	02062		TRA	*+2	ERROR	
02061	0020	00	0	02064		TRA	*+3	OK	
02062	0074	00	4	06503		TSX	ERROR-1,4		
02063	0761	00	0	02055		NOP	*-6		
02064	0020	00	0	02066		TRA	*+2		
02065	622330246060					BCD	1SCHD		
02066	0500	00	0	03626		CLA	SCH+3	WORD FOR CHANNEL	
02067	0560	00	0	03620		LDQ	CINFO+3	CORRECT INFORMATION	
02070	0340	00	0	03620		CAS	CINFO+3		
02071	0020	00	0	02073		TRA	*+2	ERROR	
02072	0020	00	0	02075		TRA	*+3	OK	
02073	0074	00	4	06503		TSX	ERROR-1,4		
02074	0761	00	0	02066		NOP	*-6		
02075	0020	00	0	02077		TRA	*+2		
02076	632526236060					BCD	1TEFC		
02077	0031	00	0	02101		TEFC	*+2	ERROR	
02100	0020	00	0	02105		TRA	*+5	OK	
02101	0074	00	4	06503		TSX	ERROR-1,4		
02102	-3 00000	4	4	02077		TXL	*-3,4		
02103	0020	00	0	02105		TRA	*+2		
02104	632526246060					BCD	1TEFD		
02105	-0031	00	0	02107		TEFD	*+2	ERROR	
02106	0020	00	0	02113		TRA	*+5	OK	
02107	0074	00	4	06503		TSX	ERROR-1,4		
02110	-3 00000	4	4	02105		TXL	*-3,4		
02111	0020	00	0	02113		TRA	*+2		
02112	516322236060					BCD	1RTBC		
02113	0774	00	1	00100		AXT	64,1		
02114	0500	00	1	03302		CLA	RCHC+64,1	WORD READ	
02115	0560	00	1	04173		LDQ	WTCHC+64,1	WORD GENERATED	

02116	0340	00	1	04173		CAS	WTCHC+64,1		
02117	0020	00	0	02121		TRA	*+2	ERROR	
02120	0020	00	0	02123		TRA	*+3	OK	
02121	0074	00	4	06502		TSX	ERROR-2,4		
02122	0761	00	0	02113		NOP	*-7		
02123	2	00001	1	02114		TIX	*-7,1,1	RETURN TO CHECK ALL WORDS	
02124	0020	00	0	02126		TRA	*+2		
02125	516322246001					BCD	1RTBD	1	
02126	0774	00	1	00100		AXT	64,1		
02127	0500	00	1	03402		CLA	RCHD+64,1	WORD READ	
02130	0560	00	1	04273		LDQ	WTCHD+64,1	WORD GENERATED	
02131	0340	00	1	04273		CAS	WTCHD+64,1		
02132	0020	00	0	02134		TRA	*+2	ERROR	
02133	0020	00	0	02136		TRA	*+3	OK	
02134	0074	00	4	06502		TSX	ERROR-2,4		
02135	0761	00	0	02126		NOP	*-7		
02136	2	00001	1	02127		TIX	*-7,1,1	RETURN TO CHECK ALL WORDS	
02137	0056	00	400000	A2		RNT	0,4	TEST FOR CHANNELS E+F	
02140	0020	00	0	02225		TRA	CLEAR	NO-GO TO CLEAR READ AREA	
02141	0020	00	0	02143		TRA	*+2		
02142	622330256060					BCD	1SCHE		
02143	0500	00	0	03627		CLA	SCH+4	WORD FROM CHANNEL	
02144	0560	00	0	03621		LDQ	CINFO+4	CORRECT INFORMATION	
02145	0340	00	0	03621		CAS	CINFO+4		
02146	0020	00	0	02150		TRA	*+2	ERROR	
02147	0020	00	0	02152		TRA	*+3	OK	
02150	0074	00	4	06503		TSX	ERROR-1,4		
02151	0761	00	0	02143		NOP	*-6		
02152	0020	00	0	02154		TRA	*+2		
02153	622330266060					BCD	1SCHF		
02154	0500	00	0	03630		CLA	SCH+5	WORD FROM CHANNEL	
02155	0560	00	0	03622		LDQ	CINFO+5	CORRECT INFORMATION	
02156	0340	00	0	03622		CAS	CINFO+5		
02157	0020	00	0	02161		TRA	*+2	ERROR	
02160	0020	00	0	02163		TRA	*+3	OK	
02161	0074	00	4	06503		TSX	ERROR-1,4		
02162	0761	00	0	02154		NOP	*-6		
02163	0020	00	0	02165		TRA	*+2		
02164	632526256060					BCD	1TEFE		
02165	0032	00	0	02167		TEFE	*+2	ERROR	
02166	0020	00	0	02173		TRA	*+5	OK	
02167	0074	00	4	06503		TSX	ERROR-1,4		
02170	-3	00000	4	02165		TXL	*-3,4		
02171	0020	00	0	02173		TRA	*+2		
02172	632526266060					BCD	1TEFF		

02173	-0032	00	0	02175	TEFF	*+2	ERROR
02174	0020	00	0	02201	TRA	*+5	OK
02175	0074	00	4	06503	TSX	ERROR-1,4	
02176	-3	00000	4	02173	TXL	*-3,4	
02177	0020	00	0	02201	TRA	*+2	
02200 516322256060					BCD 1RTBE		
02201	0774	00	1	00100	AXT	64,1	
02202	0500	00	1	03502	CLA	RCHE+64,1	WORD READ
02203	0560	00	1	04373	LDQ	WTCHE+64,1	WORD GENERATED
02204	0340	00	1	04373	CAS	WTCHE+64,1	
02205	0020	00	0	02207	TRA	*+2	ERROR
02206	0020	00	0	02211	TRA	*+3	OK
02207	0074	00	4	06502	TSX	ERROR-2,4	
02210	0761	00	0	02201	NOP	*-7	
02211	2	00001	1	02202	TIX	*-7,1,1	RETURN TO CHECK ALL WORDS
02212	0020	00	0	02214	TRA	*+2	
02213 516322266001					BCD 1RTBF 1		
02214	0774	00	1	00100	AXT	64,1	
02215	0500	00	1	03602	CLA	RCHF+64,1	WORD READ
02216	0560	00	1	04473	LDQ	WTCHF+64,1	WORD GENERATED
02217	0340	00	1	04473	CAS	WTCHF+64,1	
02220	0020	00	0	02222	TRA	*+2	ERROR
02221	0020	00	0	02224	TRA	*+3	OK
02222	0074	00	4	06502	TSX	ERROR-2,4	
02223	0761	00	0	02214	NOP	*-7	
02224	2	00001	1	02215	TIX	*-7,1,1	RETURN TO CHECK ALL WORDS
*CLEAR READ FIELD AREAS							
02225	0774	00	1	00600	CLEAR	AXT 384,1	L 600 IN XRA
02226	0600	00	1	03602	STZ	RCHA+384,1	
02227	2	00001	1	02226	TIX	*-1,1,1	
02230	2	00001	2	01662	TIX	READ5,2,1	REPEAT 100 TIMES
02231	0020	00	0	02675	TRA	PRINT	PASS COMPLETE
02232 -0760 00 0 01000					ETTA		
02233	0020	00	0	02656	TRA	EOT	REWIND
02234 -0760 00 0 02000					ETTB		
02235	0020	00	0	02656	TRA	EOT	REWIND
02236 -0760 00 0 03000					ETTC		
02237	0020	00	0	02656	TRA	EOT	REWIND
02240 -0760 00 0 04000					ETTD		
02241	0020	00	0	02656	TRA	EOT	REWIND
02242 -0760 00 0 05000					ETTE		
02243	0020	00	0	02656	TRA	EOT	REWIND
02244 -0760 00 0 06000					ETTF		
02245	0020	00	0	02656	TRA	EOT	REWIND
02246	0020	00	0	01631	TRA	TEST2+7	CONTINUE WRITING

02247	0760	00	0	00166	SW6	SWT 6	TEST SWITCH 6
02250	0020	00	0	02252		TRA *+2	UP-TURN ON LITE 1
							AND GO TO REWIND
02251	0020	00	0	00037		TRA BEGIN+2	DOWN-RETURN TO
							ENTER KEYS
02252	0760	00	0	00141		SLN 1	
02253	0020	00	0	02656		TRA EOT	REWIND TAPES
02254	0762	00	0	01321		RCDA	CALL IN
02255	0540	00	0	02260		RCHA *+3	NEXT PROGRAM
02256	0544	00	0	00000		LCHA 0	
02257	0020	00	0	00001		TRA 1	
02260	-1	00003	0	00000		IOCT 0,0,3	
02261	0056	00	700000		CHNG	RNT 700000	TEST FOR ALL CHANNELS
02262	0020	00	0	02265		TRA *+3	NO
02263	0774	00	3	00001		AXT 1,3	YES SET UP FOR 38 CYCLES EACH
02264	0020	00	0	02304		TRA ALL	GO GENERATE COMMANDS
02265	0774	00	1	00003		AXT 3,1	SET UP 58 CYCLES, CHANS A,C AND OR E
02266	0774	00	2	00002		AXT 2,2	SET UP 48 CYCLES, CHANS B,D AND OR F
02267	0056	00	600000			RNT 600000	AB+CD
02270	0020	00	0	02272		TRA *+2	NO
02271	0020	00	0	02304		TRA ALL	YES
02272	0056	00	500000			RNT 500000	AB+EF
02273	0020	00	0	02275		TRA *+2	NO
02274	0020	00	0	02304		TRA ALL	YESS
02275	0056	00	300000			RNT 300000	CD+EF
02276	0020	00	0	02300		TRA *+2	NO
02277	0020	00	0	02304		TRA ALL	YES
02300	0774	00	3	00007		AXT 7,3	SET UP 98 CYCLES
02301	0054	00	700000			RFT 700000	ANY
02302	0020	00	0	02304		TRA ALL	YES
02303	0020	00	0	00045		TRA BEGIN+8	NO CHANNELS SPECIFIED
02304	0634	00	1	03666	ALL	SXA XRA,1	STORE { OF TCH COMMANDS FOR A,B,E
02305	0634	00	2	03667		SXA XRB,2	B,D,F.
02306	-0500	00	0	03651		CAL TCH	GET ORIGINAL TCH
02307	0056	00	100000			RNT 100000	A+B
02310	0020	00	0	02364		TRA B	NO
02311	0621	00	0	01665		STA READ5+3	YES-STORE ADDRESS OF FIRST
							COMMAND IN RCHA
02312	0560	00	0	03652		LDQ IOCPA	GENERATE
02313	0774	00	4	00077		AXT 63,4	COMMANDS
02314	0534	00	1	03666		LXA XRA,1	FOR
02315	0621	00	0	02320		STA *+3	CHANNEL
02316	0400	00	0	03672		ADD ONE	A
02317	-0130	00	0	00000		XCL	
02320	0602	00	0	00000		SLW	
02321	0400	00	0	03672		ADD ONE	
02322	-0130	00	0	00000		XCL	
02323	0621	00	0	02325		STA *+2	
02324	0400	00	0	03672		ADD ONE	
02325	0602	00	0	00000		SLW	
02326	2	00001	1	02323		TIX *-3,1,1	

02327	2	00001	4	02314	TIX	*-11,4,1	
02330	0560	00	0	03653	LDQ	IOCDA	
02331	0621	00	0	02332	STA	*+1	
02332	-0600	00	0	00000	STQ		
02333	0400	00	0	03672	ADD	ONE	
02334	0621	00	0	01667	STA	READ5+5	STORE ADDR OF FIRST
02335	0621	00	0	02545	STA	RD10+5	COMMMAND IN RCHB
02336	0734	00	1	00000	PAX	,1	STORE PROPER CONSTANT TO TEST
02337	-0634	00	1	03615	SXD	CINFO,1	STORE CHANNEL
02340	0560	00	0	03654	LDQ	IOCPB	B
02341	0774	00	4	00077	AXT	63,4	
02342	0534	00	2	03667	LXA	XRB,2	
02343	0621	00	0	02346	STA	*+3	
02344	0400	00	0	03672	ADD	ONE	
02345	-0130	00	0	00000	XCL		
02346	0602	00	0	00000	SLW		
02347	0400	00	0	03672	ADD	ONE	
02350	-0130	00	0	00000	XCL		
02351	0621	00	0	02353	STA	*+2	
02352	0400	00	0	03672	ADD	ONE	
02353	0602	00	0	00000	SLW		
02354	2	00001	2	02351	TIX	*-3,2,1	
02355	2	00001	4	02342	TIX	*-11,4,1	
02356	0560	00	0	03655	LDQ	IOCDB	
02357	0621	00	0	02360	STA	*+1	
02360	-0600	00	0	00000	STQ		
02361	0400	00	0	03672	ADD	ONE	
02362	0734	00	1	00000	PAX	,1	
02363	-0634	00	1	03616	SXD	CINFO+1,1	
02364	0056	00	200000	B	RNT	200000	C+D
02365	0020	00	0	02442	TRA	C	NO
02366	0621	00	0	01673	STA	READ5+9	YES-STORE ADDRESS OF FIRST
02367	0621	00	0	02551	STA	RD10+9	COMMAND IN RCHC
02370	0560	00	0	03656	LDQ	IOCPC	C
02371	0774	00	4	00077	AXT	63,4	
02372	0534	00	1	03666	LXA	XRA,1	
02373	0621	00	0	02376	STA	*+3	
02374	0400	00	0	03672	ADD	ONE	
02375	-0130	00	0	00000	XCL		
02376	0602	00	0	00000	SLW		
02377	0400	00	0	03672	ADD	ONE	THIS
02400	-0130	00	0	00000	XCL		
02401	0621	00	0	02403	STA	*+2	
02402	0400	00	0	03672	ADD	ONE	
02403	0602	00	0	00000	SLW		
02404	2	00001	1	02401	TIX	*-3,1,1	
02405	2	00001	4	02372	TIX	*-11,4,1	ROUTINE
02406	0560	00	0	03657	LDQ	IOCDC	
02407	0621	00	0	02410	STA	*+1	
02410	-0600	00	0	00000	STQ		
02411	0400	00	0	03672	ADD	ONE	
02412	0621	00	0	01675	STA	READ5+11	
02413	0621	00	0	02553	STA	RD10+11	
02414	0734	00	1	00000	PAX	,1	
02415	-0634	00	1	03617	SXD	CINFO+2,1	
02416	0560	00	0	03660	LDQ	IOCPD	D

02417	0774	00	4	00077	AXT	63,4	
02420	0534	00	2	03667	LXA	XRB,2	
02421	0621	00	0	02424	STA	*+3	
02422	0400	00	0	03672	ADD	ONE	
02423	-0130	00	0	00000	XCL		WILL STORE
02424	0602	00	0	00000	SLW		
02425	0400	00	0	03672	ADD	ONE	
02426	-0130	00	0	00000	XCL		
02427	0621	00	0	02431	STA	*+2	
02430	0400	00	0	03672	ADD	ONE	
02431	0602	00	0	00000	SLW		
02432	2	00001	2	02427	TIX	*-3,2,1	
02433	2	00001	4	02420	TIX	*-11,4,1	
02434	0560	00	0	03661	LDQ	IOCDD	ADDED TCH
02435	0621	00	0	02436	STA	*+1	
02436	-0600	00	0	00000	STQ		
02437	0400	00	0	03672	ADD	ONE	
02440	0734	00	1	00000	PAX	,1	
02441	-0634	00	1	03620	SXD	CINFO+3,1	
02442	0056	00	400000		RNT	400000	ESF
02443	0020	00	0	00047	TRA	BEGIN+10	NO
02444	0621	00	0	01701	STA	READ5+15	YES
02445	0621	00	0	02557	STA	RD10+15	COMMANDS
02446	0560	00	0	03662	LDQ	IOCPE	
02447	0774	00	4	00077	AXT	63,4	
02450	0534	00	1	03666	LXA	XRA,1	
02451	0621	00	0	02454	STA	*+3	
02452	0400	00	0	03672	ADD	ONE	
02453	-0130	00	0	00000	XCL		
02454	0602	00	0	00000	SLW		
02455	0400	00	0	03672	ADD	ONE	
02456	-0130	00	0	00000	XCL		FOR
02457	0621	00	0	02461	STA	*+2	
02460	0400	00	0	03672	ADD	ONE	
02461	0602	00	0	00000	SLW		
02462	2	00001	1	02457	TIX	*-3,1,1	
02463	2	00001	4	02450	TIX	*-11,4,1	
02464	0560	00	0	03663	LDQ	IOCDE	CHANNELS
02465	0621	00	0	02466	STA	*+1	
02466	-0600	00	0	00000	STQ		
02467	0400	00	0	03672	ADD	ONE	
02470	0621	00	0	01703	STA	READ5+17	
02471	0621	00	0	02561	STA	RD10+17	
02472	0734	00	1	00000	PAX	,1	
02473	-0634	00	1	03621	SXD	CINFO+4,1	
02474	0560	00	0	03664	LDQ	IOCPF	F
02475	0774	00	4	00077	AXT	63,4	
02476	0534	00	2	03667	LXA	XRB,2	
02477	0621	00	0	02502	STA	*+3	C AND E-F
02500	0400	00	0	03672	ADD	ONE	
02501	-0130	00	0	00000	XCL		
02502	0602	00	0	00000	SLW		
02503	0400	00	0	03672	ADD	ONE	
02504	-0130	00	0	00000	XCL		
02505	0621	00	0	02507	STA	*+2	
02506	0400	00	0	03672	ADD	ONE	

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02507 0602 00 0 00000      SLW
02510 2 00001 2 02505      TIX *-3,2,1
02511 2 00001 4 02476      TIX *-11,4,1
02512 0560 00 0 03665      LDQ IOCDF
02513 0621 00 0 02514      STA *+1
02514 -0600 00 0 00000      STQ
02515 0400 00 0 03672      ADD ONE
02516 0734 00 1 00000      PAX ,1
02517 -0634 00 1 03622      SXD CINFO+5,1
02520 0020 00 0 00047      TRA BEGIN+10 RETURN TO PROGRAM

02521 0774 00 2 00100  ANS  AXT 64,2
02522 0056 00 100000 BKSP  RNT 0,1      TEST FOR BACKSPACE A+B
02523 0020 00 0 02526      TRA *+3
02524 0764 00 0 01202      BSRA 2
02525 0764 00 0 02201      BSRB 1

02526 0056 00 200000      RNT 0,2      TEST FOR BACKSPACE C+D
02527 0020 00 0 02532      TRA *+3
02530 0764 00 0 03201      BSRC 1
02531 0764 00 0 04201      BSRD 1

02532 0056 00 400000      RNT 0,4      TEST FOR BACKSPACE E+F
02533 0020 00 0 02536      TRA *+3
02534 0764 00 0 05201      BSRE 1
02535 0764 00 0 06201      BSRF 1
02536 2 00001 2 02522      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.

02537 0774 00 2 00100      AXT 64,2
02540 0056 00 100000 RD10 RNT 0,1      TEST FOR READ A+B
02541 0020 00 0 02546      TRA *+5      NO
02542 0762 00 0 01222      RTBA 2
02543 0540 00 0 04472      RCHA CCHA    READ TAPE-A
02544 0762 00 0 02221      RTBB 1
02545 -0540 00 0 04671      RCHB CCHB    READ TAPE-B

02546 0056 00 200000      RNT 0,2      TEST TO READ C+D
02547 0020 00 0 02554      TRA *+5      NO
02550 0762 00 0 03221      RTBC 1      READ TAPE-C
02551 0541 00 0 05070      RCHC CCHC
02552 0762 00 0 04221      RTBD 1      READ TAPE-D
02553 -0541 00 0 05267      RCHD CCHD

02554 0056 00 400000      RNT 0,4      TEST TO READ E+F

```

02555	0020	00	0	02562		TRA	++5	NO
02556	0762	00	0	05221		RTBE	1	READ TAPE-E
02557	0542	00	0	05466		RCHE	CCHE	
02560	0762	00	0	06221		RTBF	1	READ TAPE-F
02561	-0542	00	0	05665		RCHF	CCHF	
02562	0640	00	0	03623	SCHS	SCHA	SCH	STORE
02563	-0640	00	0	03624		SCHB	SCH+1	ADDRESS AND
02564	0641	00	0	03625		SCHC	SCH+2	LOCATION
02565	-0641	00	0	03626		SCHD	SCH+3	REGISTERS FOR
02566	0642	00	0	03627		SCHE	SCH+4	EACH
02567	-0642	00	0	03630		SCHF	SCH+5	CHANNEL
02570	0774	00	1	00006	TRY	AXT	6,1	
02571	0774	00	4	00022		AXT	18,4	
02572	0320	60	0	03000		ANS*	SAVE	
02573	0560	00	1	03623		LDQ	CINFO+6,1	
02574	-0500	00	1	03623		CAL	CINFO+6,1	CORRECT INFORMATION
02575	0622	00	0	02612		STD	++13	STORE LOCATION REG.
02576	0767	00	0	00022		ALS	18	
02577	0622	00	0	02607		STD	++8	STORE ADDRESS REG.
02600	0402	00	0	03670		SUB	K1000	
02601	0622	00	0	02611		STD	++8	
02602	-0500	00	1	03631		CAL	SCH+6,1	CONTENTS DSC
02603	-0634	00	1	03671		SXD	SINDX,1	SAVE XRA
02604	0634	00	4	03671		SXA	SINDX,4	SAVE XRC
02605	0734	00	1	00000		PAX	0,1	ADDRESS REGISTER TO XRA
02606	-0734	00	4	00000		PDX	0,4	LOCATION REGISTER TO XRC
02607	3	00000	1	02620		TXH	TOOT,1,**	IF HIGH ADDR. REG. ERROR
02610	-3	00000	1	02613		TXL	++3,1,0	
02611	3	00000	1	02622		TXH	HOOT,1,**	IF EQUAL READ NEXT REC.
02612	3	00000	4	02620		TXH	TOOT,4,**	IF HIGH LOC. REG. ERROR
02613	0534	00	4	03671		LXA	SINDX,4	RESTORE XRC
02614	-0534	00	1	03671		LXD	SINDX,1	RESTORE XRA
02615	2	00003	4	02616		TIX	++1,4,3	DECREMENT ERROR LOC.
02616	2	00001	1	02572		TIX	TRY+2,1,1	BACK FOR NEXT SCH
02617	0020	00	0	02562		TRA	SCHS	AROUND AGAIN
02620	0534	00	4	03671	TOOT	LXA	SINDX,4	ERROR
02621	0020	00	4	02646		TRA	ERCHA+18,4	
02622	2	00001	2	02540	HOOT	TIX	RD10,2,1	
02623	0020	00	0	01722		TRA	TCO	
02624	-0625	00	0	02650	ERCHA	STL	HPR	
02625	0540	00	0	03642		RCHA	BLCHA	BLAST CHANNEL A
02626	0020	00	0	02646		TRA	XEC	
02627	-0625	00	0	02650	ERCHB	STL	HPR	
02630	-0540	00	0	03643		RCHB	BLCHB	BLAST CHANNEL B
02631	0020	00	0	02646		TRA	XEC	

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02632 -0625 00 0 02650 ERCHC STL HPR
02633 0541 00 0 03644 RCHC BLCHC BLAST CHANNEL C
02634 0020 00 0 02646 TRA XEC

02635 -0625 00 0 02650 STL HPR
02636 -0541 00 0 03645 ERCHD RCHD BLCHD BLAST CHANNEL D
02637 0020 00 0 02646 TRA XEC

02640 -0625 00 0 02650 STL HPR
02641 0542 00 0 03646 ERCHE RCHE BLCHE BLAST CHANNEL E
02642 0020 00 0 02646 TRA XEC

02643 -0625 00 0 02650 STL HPR
02644 -0542 00 0 03647 ERCHF RCHF BLCHF BLAST CHANNEL F
02645 0020 00 0 02646 TRA XEC

02646 0760 00 0 00005 XEC IOT TURN OFF
02647 0761 00 0 00000 NOP IOT INDICATOR

02650 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. BECUASE RESET
*CHANNEL WITH ZEROS MAY NOT COMPLETELY DISCONNECT THE
*CHANNEL, AND A HANG UP CONDITION MAY OCCUR.

```
02651 2 00001 2 01604 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.

```

02652 0074 00 4 06511 TSX OK,4
02653 0020 00 0 02521 TRA BKSP-1 REPEAT
02654 0761 00 0 00000 NOP
02655 0020 00 0 01722 TRA TCO

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02656 0056 00 100000 EOT RNT 0,1 TEST FOR DSC A+B
02657 0020 00 0 02662 TRA *+3
02660 0772 00 0 01202 REWA 2
02661 0772 00 0 02201 REWB 1
02662 0056 00 200000 RNT 0,2 TEST FOR DSC C+D
02663 0020 00 0 02666 TRA *+3
02664 0772 00 0 03201 REWC 1

```

02665	0772	00	0	04201		REWD 1	
02666	0056	00		400000		RNT 0,4	TEST FOR DSC E+F
02667	0020	00	0	02672		TRA *+3	
02670	0772	00	0	05201		REWE 1	
02671	0772	00	0	06201		REWF 1	
02672	-0760	00	0	00141		SLT 1	
02673	0020	00	0	01604		TRA TEST	LITE OFF-START WRITE AGAIN
02674	0020	00	0	02254		TRA SW6+5	RETURN TO CALL NEXT PROGRAM
02675	0760	00	0	00163	PRINT	SWT 3	
02676	0020	00	0	02700		TRA *+2	
02677	0020	00	0	02705		TRA SW5	
02700	0766	00	0	01361		WPRA	TO
02701	0760	00	0	01363		SPRA 3	PRINT
02702	0540	00	0	02704		RCHA *+2	PASS
02703	0020	00	0	02705		TRA SW5	
02704	0000	30	0	02710		IOCD PCOM,0,24	
02705	0760	00	0	00165	SW5	SWT 5	TEST FOR REPEAT OF
							6 CHANNEL OPERATION
02706	0020	00	0	02247		TRA SW6	UP-TEST SWITCH 6
02707	0020	00	0	01604		TRA TEST	DN-REPEAT MULTI- CHANNEL OPERATION
02710	+0000000000010				PCOM	OCT 10	9L
02711	+004000400000					OCT 4000400000	9R
02712	+000000000000					OCT 0	8L
02713	+000000000000					OCT 0	8R
02714	+000002004000					OCT 2004000	7L
02715	+000000000000					OCT 0	7R
02716	+000000020000					OCT 20000	6L
02717	+030000000000					OCT 3000000000	6R
02720	+000000001200					OCT 1200	5L
02721	+000020100000					OCT 20100000	5R
02722	+000000010000					OCT 10000	4L
02723	+000000200000					OCT 200000	4R
02724	+000000042401					OCT 42401	3L
02725	+001201000000					OCT 1201000000	3R
02726	+000000600004					OCT 600004	2L
02727	+002044000000					OCT 2044000000	2R
02730	+000001000000					OCT 1000000	1L
02731	+000100000000					OCT 10000000	1R
02732	+000000600402					OCT 600402	0L
02733	+023041000000					OCT 23041000000	0R
02734	+000002036040					OCT 2036040	11L
02735	+114000200000					OCT 114000200000	11R
02736	+000001041204					OCT 1041204	12L
02737	+000324500000					OCT 324500000	12R

02740	+000000112020	PPER	OCT 112020	9L
02741	+010001000000		OCT 10001000000	9R
02742	+000000000000		OCT 0	8L
02743	+000000000000		OCT 0	8R
02744	+000000400400		OCT 400400	7L
02745	+000000000000		OCT 0	7R
02746	+000006060000		OCT 6060000	6L
02747	+060000000000		OCT 60000000000	6R
02750	+000010201000		OCT 10201000	5L
02751	+000040200000		OCT 40200000	5R
02752	+000000004000		OCT 4000	4L
02753	+000000400000		OCT 400000	4R
02754	+000000000002		OCT 2	3L
02755	+002402000000		OCT 2402000000	3R
02756	+000000000010		OCT 10	2L
02757	+004110000000		OCT 4110000000	2R
02760	+000000000000		OCT 0	1L
02761	+000200000000		OCT 20000000	1R
02762	+000002000004		OCT 2000004	0L
02763	+046102000000		OCT 46102000000	0R
02764	+000014535100		OCT 14535100	11L
02765	+230000400000		OCT 230000400000	11R
02766	+000000242410		OCT 242410	12R
02767	+000651200000		OCT 651200000	12L
02770	+000000000000	CTRL	OCT 0	
02771	0000 30 0 02740	STCTL	IOCD PPER,0,24	
02772	0001 00 0 03673	WR1	IOCD WTCHA,0,64	TO WRITE TAPE CHAN A
02773	0001 00 0 03773	WR2	IOCD WTCHB,0,64	TO WRITE TAPE CHAN B
02774	0001 00 0 04073	WR3	IOCD WTCHC,0,64	TO WRITE TAPE CHAN C
02775	0001 00 0 04173	WR4	IOCD WTCHD,0,64	TO WRITE TAPE CHAN D
02776	0001 00 0 04273	WR5	IOCD WTCH E,0,64	TO WRITE TAPE CHAN E
02777	0001 00 0 04373	WR6	IOCD WTCHF,0,64	TO WRITE TAPE CHAN F
03000	0761 00 0 03001	SAVE	NOP *+1	
03001	0 00000 0 00000	SAVE1		
	03002	RCHA	BSS 64	100 WORD
	03102	RCHB	BSS 64	
	03202	RCHC	BSS 64	BLOCKS FOR
	03302	RCHD	BSS 64	
	03402	RCHE	BSS 64	TAPE READ
	03502	RCHF	BSS 64	
03602	0000 01 0 03610	CNTL	IOCD ONES,0,1	WRITE ONE WORD-ONES
03603	0000 01 0 03607		IOCD ZEROS,0,1	WRITE ONE WORD-ZEROS
03604	0000 01 0 03611	CNTLR	IOCD READ,0,1	READ ONE WORD
03605	0000 02 0 03611		IOCD READ,0,2	READ ONE WORD AND BCD EOF
03606	0000 02 0 03613		IOCD READ+2,0,2	READ ONE WORD AND BIN EOF
03607	+000000000000	ZEROS	OCT 0	
03610	-377777777777	ONES	OCT 777777777777	
03611	+000000000000	READ	OCT 0	
03612	+000000000000		OCT 0	

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03613 +0000000000000      OCT 0
03614 +0000000000000      OCT 0

03615  0046 71 0 03102  CINFO  IOCD RCHA+64,0,CCHA+127 CORRECT
03616  0050 70 0 03202      IOCD RCHB+64,0,CCHB+127 INFORMATION
03617  0052 67 0 03302      IOCD RCHC+64,0,CCHC+127 TO COMPARE
03620  0054 66 0 03402      IOCD RCHD+64,0,CCHD+127 STORE
03621  0056 65 0 03502      IOCD RCHE+64,0,CCHE+127 CHANNEL
03622  0060 64 0 03602      IOCD RCHF+64,0,CCHF+127 OPERATIONS

03623 +0000000000000      SCH    OCT 0
03624 +0000000000000      OCT 0
03625 +0000000000000      OCT 0
03626 +0000000000000      OCT 0
03627 +0000000000000      OCT 0
03630 +0000000000000      OCT 0
03631 +0000000000000      COUNT OCT 0

03632 +0000000000101      CT     DEC 65
03633 +0000000000101      CT1    OCT 101

03634 +0000000000000      SAVE2  OCT 0          STORAGE
03635 +0000000000000      SAVE3  OCT 0          FOR
03636 +0000000000000      SAVE4  OCT 0          STORE
03637 +0000000000000      SAVE5  OCT 0          CHANNEL
03640 +0000000000000      SAVE6  OCT 0          INFORMATION
03641 +0000000000000      SAVE7  OCT 0

03642  0000 00 0 02625  BLCHA  IOCD ERCHA+1
03643  0000 00 0 02630  BLCHB  IOCD ERCHB+1
03644  0000 00 0 02633  BLCHC  IOCD ERCHC+1
03645  0000 00 0 02637  BLCHD  IOCD ERCHD+1
03646  0000 00 0 02642  BLCHE  IOCD ERCHE+1
03647  0000 00 0 02645  BLCHF  IOCD ERCHF+1
03650 +0777777777777777  MASK   OCT 0777777777777777
03651  1 00000 0 04472  TCH    TCH CCHA
03652 -0000 01 0 03002  IOCPA  IOCP RCHA,0,1
03653  0000 01 0 03101  IOCPA  IOCD RCHA+63,0,1
03654 -0000 01 0 03102  IOCPB  IOCP RCHB,0,1
03655  0000 01 0 03201  IOCPB  IOCD RCHB+63,0,1
03656 -0000 01 0 03202  IOCPC  IOCP RCHC,0,1
03657  0000 01 0 03301  IOCPC  IOCD RCHC+63,0,1
03660 -0000 01 0 03302  IOCPD  IOCP RCHD,0,1
03661  0000 01 0 03401  IOCPD  IOCD RCHD+63,0,1
03662 -0000 01 0 03402  IOCPE  IOCP RCHE,0,1
03663  0000 01 0 03501  IOCPE  IOCD RCHE+63,0,1
03664 -0000 01 0 03502  IOCPF  IOCP RCHF,0,1
03665  0000 01 0 03601  IOCPF  IOCD RCHF+63,0,1
03666  0 00000 0 00000  XRA    PZE
03667  0 00000 0 00000  XRB    PZE
03670 +0000010000000      K1000 OCT 1000000
03671 +0000000000000      SINDX  OCT 0
03672 +0000000000001      ONE    OCT 1

```

*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 E

*EACH CHANNEL HAS ITS CORRESPONDING LETTER IN THE MIDDLE TWO CHARACTERS OF EACH
*WORD TRANSMITTED.

03673	+010121210101	WTCHA	OCT	010121210101	FROM WTCHA
03674	+020221210202		OCT	020221210202	
03675	+030321210303		OCT	030321210303	TO WTCHA+63
03676	+040421210404		OCT	040421210404	
03677	+050521210505		OCT	050521210505	IS FIXED PATTERN
03700	+060621210606		OCT	060621210606	
03701	+070721210707		OCT	070721210707	FOR WRITING TAPE
03702	+101021211010		OCT	101021211010	
03703	+111121211111		OCT	111121211111	CHANNEL A.
03704	+121221211212		OCT	121221211212	
03705	+131321211313		OCT	131321211313	
03706	+141421211414		OCT	141421211414	
03707	+151521211515		OCT	151521211515	
03710	+161621211616		OCT	161621211616	
03711	+171721211717		OCT	171721211717	
03712	+202021212020		OCT	202021212020	
03713	+212121212121		OCT	212121212121	
03714	+222221212222		OCT	222221212222	
03715	+232321212323		OCT	232321212323	
03716	+242421212424		OCT	242421212424	
03717	+252521212525		OCT	252521212525	
03720	+262621212626		OCT	262621212626	
03721	+272721212727		OCT	272721212727	
03722	+303021213030		OCT	303021213030	
03723	+313121213131		OCT	313121213131	
03724	+323221213232		OCT	323221213232	
03725	+333321213333		OCT	333321213333	
03726	+343421213434		OCT	343421213434	
03727	+353521213535		OCT	353521213535	
03730	+363621213636		OCT	363621213636	
03731	+373721213737		OCT	373721213737	
03732	-004021214040		OCT	404021214040	
03733	-014121214141		OCT	414121214141	
03734	-024221214242		OCT	424221214242	
03735	-034321214343		OCT	434321214343	
03736	-044421214444		OCT	444421214444	
03737	-054521214545		OCT	454521214545	
03740	-064621214646		OCT	464621214646	
03741	-074721214747		OCT	474721214747	
03742	-105021215050		OCT	505021215050	
03743	-115121215151		OCT	515121215151	
03744	-125221215252		OCT	525221215252	
03745	-135321215353		OCT	535321215353	
03746	-145421215454		OCT	545421215454	
03747	-155521215555		OCT	555521215555	
03750	-165621215656		OCT	565621215656	
03751	-175721215757		OCT	575721215757	
03752	-206021216060		OCT	606021216060	
03753	-216121216161		OCT	616121216161	
03754	-226221216262		OCT	626221216262	
03755	-236321216363		OCT	636321216363	
03756	-246421216464		OCT	646421216464	
03757	-256521216565		OCT	656521216565	

03760	-266621216666	OCT	666621216666	
03761	-276721216767	OCT	676721216767	
03762	-307021217070	OCT	707021217070	
03763	-317121217171	OCT	717121217171	
03764	-327221217272	OCT	727221217272	
03765	-337321217373	OCT	737321217373	
03766	-347421217474	OCT	747421217474	
03767	-357521217575	OCT	757521217575	
03770	-367621217676	OCT	767621217676	
03771	-377721217777	OCT	777721217777	
03772	+010121210100	OCT	010121210100	
03773	+010122220101	WTCHB	OCT	010122220101 FROM WTCHB
03774	+020222220202		OCT	020222220202
03775	+030322220303		OCT	030322220303 TO WTCHB+63
03776	+040422220404		OCT	040422220404
03777	+050522220505		OCT	050522220505 IS FIXED PATTERN
04000	+060622220606		OCT	060622220606
04001	+070722220707		OCT	070722220707 FOR WRITING TAPE
04002	+101022221010		OCT	101022221010
04003	+111122221111		OCT	111122221111 CHANNEL B.
04004	+121222221212		OCT	121222221212
04005	+131322221313		OCT	131322221313
04006	+141422221414		OCT	141422221414
04007	+151522221515		OCT	151522221515
04010	+161622221616		OCT	161622221616
04011	+171722221717		OCT	171722221717
04012	+202022222020		OCT	202022222020
04013	+212122222121		OCT	212122222121
04014	+222222222222		OCT	222222222222
04015	+232322222323		OCT	232322222323
04016	+242422222424		OCT	242422222424
04017	+252522222525		OCT	252522222525
04020	+262622222626		OCT	262622222626
04021	+272722222727		OCT	272722222727
04022	+303022223030		OCT	303022223030
04023	+313122223131		OCT	313122223131
04024	+323222223232		OCT	323222223232
04025	+333322223333		OCT	333322223333
04026	+343422223434		OCT	343422223434
04027	+353522223535		OCT	353522223535
04030	+363622223636		OCT	363622223636
04031	+373722223737		OCT	373722223737
04032	-004022224040		OCT	404022224040
04033	-014122224141		OCT	414122224141
04034	-024222224242		OCT	424222224242
04035	-034322224343		OCT	434322224343
04036	-044422224444		OCT	444422224444
04037	-054522224545		OCT	454522224545
04040	-064622224646		OCT	464622224646
04041	-074722224747		OCT	474722224747
04042	-105022225050		OCT	505022225050
04043	-115122225151		OCT	515122225151
04044	-125222225252		OCT	525222225252
04045	-135322225353		OCT	535322225353
04046	-145422225454		OCT	545422225454

04047	-155522225555	OCT	555522225555
04050	-165622225656	OCT	565622225656
04051	-175722225757	OCT	575722225757
04052	-206022226060	OCT	606022226060
04053	-216122226161	OCT	616122226161
04054	-226222226262	OCT	626222226262
04055	-236322226363	OCT	636322226363
04056	-246422226464	OCT	646422226464
04057	-256522226565	OCT	656522226565
04060	-266622226666	OCT	666622226666
04061	-276722226767	OCT	676722226767
04062	-307022227070	OCT	707022227070
04063	-317122227171	OCT	717122227171
04064	-327222227272	OCT	727222227272
04065	-337322227373	OCT	737322227373
04066	-347422227474	OCT	747422227474
04067	-357522227575	OCT	757522227575
04070	-367622227676	OCT	767622227676
04071	-377722227777	OCT	777722227777
04072	+010122220100	OCT	010122220100
04073	+010123230101	WTCHC	OCT 010123230101 FROM WTCHC
04074	+020223230202		OCT 020223230202
04075	+030323230303		OCT 030323230303 TO WTCHC+63
04076	+040423230404		OCT 040423230404
04077	+050523230505		OCT 050523230505 IS FIXED PATTERN
04100	+060623230606		OCT 060623230606
04101	+070723230707		OCT 070723230707 FOR WRITING TAPE
04102	+101023231010		OCT 101023231010
04103	+111123231111		OCT 111123231111 CHANNEL C.
04104	+121223231212		OCT 121223231212
04105	+131323231313		OCT 131323231313
04106	+141423231414		OCT 141423231414
04107	+151523231515		OCT 151523231515
04110	+161623231616		OCT 161623231616
04111	+171723231717		OCT 171723231717
04112	+202023232020		OCT 202023232020
04113	+212123232121		OCT 212123232121
04114	+222223232222		OCT 222223232222
04115	+232323232323		OCT 232323232323
04116	+242423232424		OCT 242423232424
04117	+252523232525		OCT 252523232525
04120	+262623232626		OCT 262623232626
04121	+272723232727		OCT 272723232727
04122	+303023233030		OCT 303023233030
04123	+313123233131		OCT 313123233131
04124	+323223233232		OCT 323223233232
04125	+333323233333		OCT 333323233333
04126	+343423233434		OCT 343423233434
04127	+353523233535		OCT 353523233535
04130	+363623233636		OCT 363623233636
04131	+373723233737		OCT 373723233737
04132	-004023234040		OCT 404023234040
04133	-014123234141		OCT 414123234141
04134	-024223234242		OCT 424223234242
04135	-034323234343		OCT 434323234343

04136	-044423234444	OCT	444423234444
04137	-054523234545	OCT	454523234545
04140	-064623234646	OCT	464623234646
04141	-074723234747	OCT	474723234747
04142	-105023235050	OCT	505023235050
04143	-115123235151	OCT	515123235151
04144	-125223235252	OCT	525223235252
04145	-135323235353	OCT	535323235353
04146	-145423235454	OCT	545423235454
04147	-155523235555	OCT	555523235555
04150	-165623235656	OCT	565623235656
04151	-175723235757	OCT	575723235757
04152	-206023236060	OCT	606023236060
04153	-216123236161	OCT	616123236161
04154	-226223236262	OCT	626223236262
04155	-236323236363	OCT	636323236363
04156	-246423236464	OCT	646423236464
04157	-256523236565	OCT	656523236565
04160	-266623236666	OCT	666623236666
04161	-276723236767	OCT	676723236767
04162	-307023237070	OCT	707023237070
04163	-317123237171	OCT	717123237171
04164	-327223237272	OCT	727223237272
04165	-337323237373	OCT	737323237373
04166	-347423237474	OCT	747423237474
04167	-357523237575	OCT	757523237575
04170	-367623237676	OCT	767623237676
04171	-377723237777	OCT	777723237777
04172	+010123230100	OCT	010123230100

04173	+010124240101	WTCHD	OCT	010124240101
04174	+020224240202		OCT	020224240202
04175	+030324240303		OCT	030324240303
04176	+040424240404		OCT	040424240404
04177	+050524240505		OCT	050524240505
04200	+060624240606		OCT	060624240606
04201	+070724240707		OCT	070724240707
04202	+101024241010		OCT	101024241010
04203	+111124241111		OCT	111124241111
04204	+121224241212		OCT	121224241212
04205	+131324241313		OCT	131324241313
04206	+141424241414		OCT	141424241414
04207	+151524241515		OCT	151524241515
04210	+161624241616		OCT	161624241616
04211	+171724241717		OCT	171724241717
04212	+202024242020		OCT	202024242020
04213	+212124242121		OCT	212124242121
04214	+222224242222		OCT	222224242222
04215	+232324242323		OCT	232324242323
04216	+242424242424		OCT	242424242424
04217	+252524242525		OCT	252524242525
04220	+262624242626		OCT	262624242626
04221	+272724242727		OCT	272724242727
04222	+303024243030		OCT	303024243030
04223	+313124243131		OCT	313124243131
04224	+323224243232		OCT	323224243232

04225	+333324243333	OCT	333324243333
04226	+343424243434	OCT	343424243434
04227	+353524243535	OCT	353524243535
04230	+363624243636	OCT	363624243636
04231	+373724243737	OCT	373724243737
04232	-004024244040	OCT	404024244040
04233	-014124244141	OCT	414124244141
04234	-024224244242	OCT	424224244242
04235	-034324244343	OCT	434324244343
04236	-044424244444	OCT	444424244444
04237	-054524244545	OCT	454524244545
04240	-064624244646	OCT	464624244646
04241	-074724244747	OCT	474724244747
04242	-105024245050	OCT	505024245050
04243	-115124245151	OCT	515124245151
04244	-125224245252	OCT	525224245252
04245	-135324245353	OCT	535324245353
04246	-145424245454	OCT	545424245454
04247	-155524245555	OCT	555524245555
04250	-165624245656	OCT	565624245656
04251	-175724245757	OCT	575724245757
04252	-206024246060	OCT	606024246060
04253	-216124246161	OCT	616124246161
04254	-226224246262	OCT	626224246262
04255	-236324246363	OCT	636324246363
04256	-246424246464	OCT	646424246464
04257	-256524246565	OCT	656524246565
04260	-266624246666	OCT	666624246666
04261	-276724246767	OCT	676724246767
04262	-307024247070	OCT	707024247070
04263	-317124247171	OCT	717124247171
04264	-327224247272	OCT	727224247272
04265	-337324247373	OCT	737324247373
04266	-347424247474	OCT	747424247474
04267	-357524247575	OCT	757524247575
04270	-367624247676	OCT	767624247676
04271	-377724247777	OCT	777724247777
04272	+010124240100	OCT	010124240100

04273	+010125250101	WTCHE	OCT	010125250101
04274	+020225250202		OCT	020225250202
04275	+030325250303		OCT	030325250303
04276	+040425250404		OCT	040425250404
04277	+050525250505		OCT	050525250505
04300	+060625250606		OCT	060625250606
04301	+070725250707		OCT	070725250707
04302	+101025251010		OCT	101025251010
04303	+111125251111		OCT	111125251111
04304	+121225251212		OCT	121225251212
04305	+131325251313		OCT	131325251313
04306	+141425251414		OCT	141425251414
04307	+151525251515		OCT	151525251515
04310	+161625251616		OCT	161625251616
04311	+171725251717		OCT	171725251717
04312	+202025252020		OCT	202025252020
04313	+212125252121		OCT	212125252121

04314	+222225252222	OCT	222225252222
04315	+232325252323	OCT	232325252323
04316	+242425252424	OCT	242425252424
04317	+252525252525	OCT	252525252525
04320	+262625252626	OCT	262625252626
04321	+272725252727	OCT	272725252727
04322	+303025253030	OCT	303025253030
04323	+313125253131	OCT	313125253131
04324	+323225253232	OCT	323225253232
04325	+333325253333	OCT	333325253333
04326	+343425253434	OCT	343425253434
04327	+353525253535	OCT	353525253535
04330	+363625253636	OCT	363625253636
04331	+373725253737	OCT	373725253737
04332	-004025254040	OCT	404025254040
04333	-014125254141	OCT	414125254141
04334	-024225254242	OCT	424225254242
04335	-034325254343	OCT	434325254343
04336	-044425254444	OCT	444425254444
04337	-054525254545	OCT	454525254545
04340	-064625254646	OCT	464625254646
04341	-074725254747	OCT	474725254747
04342	-105025255050	OCT	505025255050
04343	-115125255151	OCT	515125255151
04344	-125225255252	OCT	525225255252
04345	-135325255353	OCT	535325255353
04346	-145425255454	OCT	545425255454
04347	-155525255555	OCT	555525255555
04350	-165625255656	OCT	565625255656
04351	-175725255757	OCT	575725255757
04352	-206025256060	OCT	606025256060
04353	-216125256161	OCT	616125256161
04354	-226225256262	OCT	626225256262
04355	-236325256363	OCT	636325256363
04356	-246425256464	OCT	646425256464
04357	-256525256565	OCT	656525256565
04360	-266625256666	OCT	666625256666
04361	-276725256767	OCT	676725256767
04362	-307025257070	OCT	707025257070
04363	-317125257171	OCT	717125257171
04364	-327225257272	OCT	727225257272
04365	-337325257373	OCT	737325257373
04366	-347425257474	OCT	747425257474
04367	-357525257575	OCT	757525257575
04370	-367625257676	OCT	767625257676
04371	-377725257777	OCT	777725257777
04372	+010125250100	OCT	010125250100

04373	+010126260101	WTCHF	OCT	010126260101
04374	+020226260202		OCT	020226260202
04375	+030326260303		OCT	030326260303
04376	+040426260404		OCT	040426260404
04377	+050526260505		OCT	050526260505
04400	+060626260606		OCT	060626260606
04401	+070726260707		OCT	070726260707
04402	+101026261010		OCT	101026261010

04403	+111126261111	OCT	111126261111
04404	+121226261212	OCT	121226261212
04405	+131326261313	OCT	131326261313
04406	+141426261414	OCT	141426261414
04407	+151526261515	OCT	151526261515
04410	+161626261616	OCT	161626261616
04411	+171726261717	OCT	171726261717
04412	+202026262020	OCT	202026262020
04413	+212126262121	OCT	212126262121
04414	+222226262222	OCT	222226262222
04415	+232326262323	OCT	232326262323
04416	+242426262424	OCT	242426262424
04417	+252526262525	OCT	252526262525
04420	+262626262626	OCT	262626262626
04421	+272726262727	OCT	272726262727
04422	+303026263030	OCT	303026263030
04423	+313126263131	OCT	313126263131
04424	+323226263232	OCT	323226263232
04425	+333326263333	OCT	333326263333
04426	+343426263434	OCT	343426263434
04427	+353526263535	OCT	353526263535
04430	+363626263636	OCT	363626263636
04431	+373726263737	OCT	373726263737
04432	-004026264040	OCT	404026264040
04433	-014126264141	OCT	414126264141
04434	-024226264242	OCT	424226264242
04435	-034326264343	OCT	434326264343
04436	-044426264444	OCT	444426264444
04437	-054526264545	OCT	454526264545
04440	-064626264646	OCT	464626264646
04441	-105026265050	OCT	505026265050
04442	-115126265151	OCT	515126265151
04443	-125226265252	OCT	525226265252
04444	-135326265353	OCT	535326265353
04445	-145426265454	OCT	545426265454
04446	-155526265555	OCT	555526265555
04447	-165626265656	OCT	565626265656
04450	-175726265757	OCT	575726265757
04451	-206026266060	OCT	606026266060
04452	-216126266161	OCT	616126266161
04453	-226226266262	OCT	626226266262
04454	-236326266363	OCT	636326266363
04455	-246426266464	OCT	646426266464
04456	-256526266565	OCT	656526266565
04457	-266626266666	OCT	666626266666
04460	-276726266767	OCT	676726266767
04461	-307026267070	OCT	707026267070
04462	-317126267171	OCT	717126267171
04463	-327226267272	OCT	727226267272
04464	-337326267373	OCT	737326267373
04465	-347426267474	OCT	747426267474
04466	-357526267575	OCT	757526267575
04467	-367626267676	OCT	767626267676
04470	-377726267777	OCT	777726267777
04471	+010126260100	OCT	010126260100

*FROM THIS POINT TO END OF CONSTANT FIELD ARE THE CONTROL WORDS USED FOR
 *CHANNEL. EVERY OTHER CONTROL WORD READS ONE WORD FOLLOWED BY ONE INDIRECTLY
 *ADDRESSED TO THE NEXT, WHICH READS ONE WORD.

*CONTROL TO READ 100 WORDS FROM TAPE-CHANNNNN

04472	-0000	01	0	03002	CCHA	IOCP	RCHA,0,1
04473	1	00000	0	04474		TCH	*+1
04474	-0000	01	0	03003		IOCP	RCHA+1,0,1
04475	1	00000	0	04476		TCH	*+1
04476	-0000	01	0	03004		IOCP	RCHA+2,0,1
04477	1	00000	0	04500		TCH	*+1
04500	-0000	01	0	03005		IOCP	RCHA+3,0,1
04501	1	00000	0	04502		TCH	*+1
04502	-0000	01	0	03006		IOCP	RCHA+4,0,1
04503	1	00000	0	04504		TCH	*+1
04504	-0000	01	0	03007		IOCP	RCHA+5,0,1
04505	1	00000	0	04506		TCH	*+1
04506	-0000	01	0	03010		IOCP	RCHA+6,0,1
04507	1	00000	0	04510		TCH	*+1
04510	-0000	01	0	03011		IOCP	RCHA+7,0,1
04511	1	00000	0	04512		TCH	*+1
04512	-0000	01	0	03012		IOCP	RCHA+8,0,1
04513	1	00000	0	04514		TCH	*+1
04514	-0000	01	0	03013		IOCP	RCHA+9,0,1
04515	1	00000	0	04516		TCH	*+1
04516	-0000	01	0	03014		IOCP	RCHA+10,0,1
04517	1	00000	0	04520		TCH	*+1
04520	-0000	01	0	03015		IOCP	RCHA+11,0,1
04521	1	00000	0	04522		TCH	*+1
04522	-0000	01	0	03016		IOCP	RCHA+12,0,1
04523	1	00000	0	04524		TCH	*+1
04524	-0000	01	0	03017		IOCP	RCHA+13,0,1
04525	1	00000	0	04526		TCH	*+1
04526	-0000	01	0	03020		IOCP	RCHA+14,0,1
04527	1	00000	0	04530		TCH	*+1
04530	-0000	01	0	03021		IOCP	RCHA+15,0,1
04531	1	00000	0	04532		TCH	*+1
04532	-0000	01	0	03022		IOCP	RCHA+16,0,1
04533	1	00000	0	04534		TCH	*+1
04534	-0000	01	0	03023		IOCP	RCHA+17,0,1
04535	1	00000	0	04536		TCH	*+1
04536	-0000	01	0	03024		IOCP	RCHA+18,0,1
04537	1	00000	0	04540		TCH	*+1
04540	-0000	01	0	03025		IOCP	RCHA+19,0,1
04541	1	00000	0	04542		TCH	*+1
04542	-0000	01	0	03026		IOCP	RCHA+20,0,1
04543	1	00000	0	04544		TCH	*+1
04544	-0000	01	0	03027		IOCP	RCHA+21,0,1
04545	1	00000	0	04546		TCH	*+1
04546	-0000	01	0	03030		IOCP	RCHA+22,0,1
04547	1	00000	0	04550		TCH	*+1
04550	-0000	01	0	03031		IOCP	RCHA+23,0,1
04551	1	00000	0	04552		TCH	*+1
04552	-0000	01	0	03032		IOCP	RCHA+24,0,1
04553	1	00000	0	04554		TCH	*+1

04554	-0000	01	0	03033	IOCP RCHA+25,0,1
04555	1	00000	0	04556	TCH *+1
04556	-0000	01	0	03034	IOCP RCHA+26,0,1
04557	1	00000	0	04560	TCH *+1
04560	-0000	01	0	03035	IOCP RCHA+27,0,1
04561	1	00000	0	04562	TCH *+1
04562	-0000	01	0	03036	IOCP RCHA+28,0,1
04563	1	00000	0	04564	TCH *+1
04564	-0000	01	0	03037	IOCP RCHA+29,0,1
04565	1	00000	0	04566	TCH *+1
04566	-0000	01	0	03040	IOCP RCHA+30,0,1
04567	1	00000	0	04570	TCH *+1
04570	-0000	01	0	03041	IOCP RCHA+31,0,1
04571	1	00000	0	04572	TCH *+1
04572	-0000	01	0	03042	IOCP RCHA+32,0,1
04573	1	00000	0	04574	TCH *+1
04574	-0000	01	0	03043	IOCP RCHA+33,0,1
04575	1	00000	0	04576	TCH *+1
04576	-0000	01	0	03044	IOCP RCHA+34,0,1
04577	1	00000	0	04600	TCH *+1
04600	-0000	01	0	03045	IOCP RCHA+35,0,1
04601	1	00000	0	04602	TCH *+1
04602	-0000	01	0	03046	IOCP RCHA+36,0,1
04603	1	00000	0	04604	TCH *+1
04604	-0000	01	0	03047	IOCP RCHA+37,0,1
04605	1	00000	0	04606	TCH *+1
04606	-0000	01	0	03050	IOCP RCHA+38,0,1
04607	1	00000	0	04610	TCH *+1
04610	-0000	01	0	03051	IOCP RCHA+39,0,1
04611	1	00000	0	04612	TCH *+1
04612	-0000	01	0	03052	IOCP RCHA+40,0,1
04613	1	00000	0	04614	TCH *+1
04614	-0000	01	0	03053	IOCP RCHA+41,0,1
04615	1	00000	0	04616	TCH *+1
04616	-0000	01	0	03054	IOCP RCHA+42,0,1
04617	1	00000	0	04620	TCH *+1
04620	-0000	01	0	03055	IOCP RCHA+43,0,1
04621	1	00000	0	04622	TCH *+1
04622	-0000	01	0	03056	IOCP RCHA+44,0,1
04623	1	00000	0	04624	TCH *+1
04624	-0000	01	0	03057	IOCP RCHA+45,0,1
04625	1	00000	0	04626	TCH *+1
04626	-0000	01	0	03060	IOCP RCHA+46,0,1
04627	1	00000	0	04630	TCH *+1
04630	-0000	01	0	03061	IOCP RCHA+47,0,1
04631	1	00000	0	04632	TCH *+1
04632	-0000	01	0	03062	IOCP RCHA+48,0,1
04633	1	00000	0	04634	TCH *+1
04634	-0000	01	0	03063	IOCP RCHA+49,0,1
04635	1	00000	0	04636	TCH *+1
04636	-0000	01	0	03064	IOCP RCHA+50,0,1
04637	1	00000	0	04640	TCH *+1
04640	-0000	01	0	03065	IOCP RCHA+51,0,1
04641	1	00000	0	04642	TCH *+1
04642	-0000	01	0	03066	IOCP RCHA+52,0,1
04643	1	00000	0	04644	TCH *+1

04644	-0000	01	0	03067	IOCP	RCHA+53,0,1
04645	1	00000	0	04646	TCH	*+1
04646	-0000	01	0	03070	IOCP	RCHA+54,0,1
04647	1	00000	0	04650	TCH	*+1
04650	-0000	01	0	03071	IOCP	RCHA+55,0,1
04651	1	00000	0	04652	TCH	*+1
04652	-0000	01	0	03072	IOCP	RCHA+56,0,1
04653	1	00000	0	04654	TCH	*+1
04654	-0000	01	0	03073	IOCP	RCHA+57,0,1
04655	1	00000	0	04656	TCH	*+1
04656	-0000	01	0	03074	IOCP	RCHA+58,0,1
04657	1	00000	0	04660	TCH	*+1
04660	-0000	01	0	03075	IOCP	RCHA+59,0,1
04661	1	00000	0	04662	TCH	*+1
04662	-0000	01	0	03076	IOCP	RCHA+60,0,1
04663	1	00000	0	04664	TCH	*+1
04664	-0000	01	0	03077	IOCP	RCHA+61,0,1
04665	1	00000	0	04666	TCH	*+1
04666	-0000	01	0	03100	IOCP	RCHA+62,0,1
04667	1	00000	0	04670	TCH	*+1
04670	0000	01	0	03101	IOCD	RCHA+63,0,1

*CONTROL TO READ 100 WORDS FROM TAPE-CHANNEL B

04671	-0000	01	0	03102	CCHB	IOCP	RCHB,0,1
04672	1	00000	0	04673	TCH	*+1	
04673	-0000	01	0	03103	IOCP	RCHB+1,0,1	
04674	1	00000	0	04675	TCH	*+1	
04675	-0000	01	0	03104	IOCP	RCHB+2,0,1	
04676	1	00000	0	04677	TCH	*+1	
04677	-0000	01	0	03105	IOCP	RCHB+3,0,1	
04700	1	00000	0	04701	TCH	*+1	
04701	-0000	01	0	03106	IOCP	RCHB+4,0,1	
04702	1	00000	0	04703	TCH	*+1	
04703	-0000	01	0	03107	IOCP	RCHB+5,0,1	
04704	1	00000	0	04705	TCH	*+1	
04705	-0000	01	0	03110	IOCP	RCHB+6,0,1	
04706	1	00000	0	04707	TCH	*+1	
04707	-0000	01	0	03111	IOCP	RCHB+7,0,1	
04710	1	00000	0	04711	TCH	*+1	
04711	-0000	01	0	03112	IOCP	RCHB+8,0,1	
04712	1	00000	0	04713	TCH	*+1	
04713	-0000	01	0	03113	IOCP	RCHB+9,0,1	
04714	1	00000	0	04715	TCH	*+1	
04715	-0000	01	0	03114	IOCP	RCHB+10,0,1	
04716	1	00000	0	04717	TCH	*+1	
04717	-0000	01	0	03115	IOCP	RCHB+11,0,1	
04720	1	00000	0	04721	TCH	*+1	
04721	-0000	01	0	03116	IOCP	RCHB+12,0,1	
04722	1	00000	0	04723	TCH	*+1	
04723	-0000	01	0	03117	IOCP	RCHB+13,0,1	
04724	1	00000	0	04725	TCH	*+1	
04725	-0000	01	0	03120	IOCP	RCHB+14,0,1	
04726	1	00000	0	04727	TCH	*+1	
04727	-0000	01	0	03121	IOCP	RCHB+15,0,1	
04730	1	00000	0	04731	TCH	*+1	

04731	-0000	01	0	03122	IOCP RCHB+16,0,1
04732	1	00000	0	04733	TCH *+1
04733	-0000	01	0	03123	IOCP RCHB+17,0,1
04734	1	00000	0	04735	TCH *+1
04735	-0000	01	0	03124	IOCP RCHB+18,0,1
04736	1	00000	0	04737	TCH *+1
04737	-0000	01	0	03125	IOCP RCHB+19,0,1
04740	1	00000	0	04741	TCH *+1
04741	-0000	01	0	03126	IOCP RCHB+20,0,1
04742	1	00000	0	04743	TCH *+1
04743	-0000	01	0	03127	IOCP RCHB+21,0,1
04744	1	00000	0	04745	TCH *+1
04745	-0000	01	0	03130	IOCP RCHB+22,0,1
04746	1	00000	0	04747	TCH *+1
04747	-0000	01	0	03131	IOCP RCHB+23,0,1
04750	1	00000	0	04751	TCH *+1
04751	-0000	01	0	03132	IOCP RCHB+24,0,1
04752	1	00000	0	04753	TCH *+1
04753	-0000	01	0	03133	IOCP RCHB+25,0,1
04754	1	00000	0	04755	TCH *+1
04755	-0000	01	0	03134	IOCP RCHB+26,0,1
04756	1	00000	0	04757	TCH *+1
04757	-0000	01	0	03135	IOCP RCHB+27,0,1
04760	1	00000	0	04761	TCH *+1
04761	-0000	01	0	03136	IOCP RCHB+28,0,1
04762	1	00000	0	04763	TCH *+1
04763	-0000	01	0	03137	IOCP RCHB+29,0,1
04764	1	00000	0	04765	TCH *+1
04765	-0000	01	0	03140	IOCP RCHB+30,0,1
04766	1	00000	0	04767	TCH *+1
04767	-0000	01	0	03141	IOCP RCHB+31,0,1
04770	1	00000	0	04771	TCH *+1
04771	-0000	01	0	03142	IOCP RCHB+32,0,1
04772	1	00000	0	04773	TCH *+1
04773	-0000	01	0	03143	IOCP RCHB+33,0,1
04774	1	00000	0	04775	TCH *+1
04775	-0000	01	0	03144	IOCP RCHB+34,0,1
04776	1	00000	0	04777	TCH *+1
04777	-0000	01	0	03145	IOCP RCHB+35,0,1
05000	1	00000	0	05001	TCH *+1
05001	-0000	01	0	03146	IOCP RCHB+36,0,1
05002	1	00000	0	05003	TCH *+1
05003	-0000	01	0	03147	IOCP RCHB+37,0,1
05004	1	00000	0	05005	TCH *+1
05005	-0000	01	0	03150	IOCP RCHB+38,0,1
05006	1	00000	0	05007	TCH *+1
05007	-0000	01	0	03151	IOCP RCHB+39,0,1
05010	1	00000	0	05011	TCH *+1
05011	-0000	01	0	03152	IOCP RCHB+40,0,1
05012	1	00000	0	05013	TCH *+1
05013	-0000	01	0	03153	IOCP RCHB+41,0,1
05014	1	00000	0	05015	TCH *+1
05015	-0000	01	0	03154	IOCP RCHB+42,0,1
05016	1	00000	0	05017	TCH *+1
05017	-0000	01	0	03155	IOCP RCHB+43,0,1
05020	1	00000	0	05021	TCH *+1

05021	-0000	01	0	03156	IOCP	RCHB+44,0,1
05022	1	00000	0	05023	TCH	*+1
05023	-0000	01	0	03157	IOCP	RCHB+45,0,1
05024	1	00000	0	05025	TCH	*+1
05025	-0000	01	0	03160	IOCP	RCHB+46,0,1
05026	1	00000	0	05027	TCH	*+1
05027	-0000	01	0	03161	IOCP	RCHB+47,0,1
05030	1	00000	0	05031	TCH	*+1
05031	-0000	01	0	03162	IOCP	RCHB+48,0,1
05032	1	00000	0	05033	TCH	*+1
05033	-0000	01	0	03163	IOCP	RCHB+49,0,1
05034	1	00000	0	05035	TCH	*+1
05035	-0000	01	0	03164	IOCP	RCHB+50,0,1
05036	1	00000	0	05037	TCH	*+1
05037	-0000	01	0	03165	IOCP	RCHB+51,0,1
05040	1	00000	0	05041	TCH	*+1
05041	-0000	01	0	03166	IOCP	RCHB+52,0,1
05042	1	00000	0	05043	TCH	*+1
05043	-0000	01	0	03167	IOCP	RCHB+53,0,1
05044	1	00000	0	05045	TCH	*+1
05045	-0000	01	0	03170	IOCP	RCHB+54,0,1
05046	1	00000	0	05047	TCH	*+1
05047	-0000	01	0	03171	IOCP	RCHB+55,0,1
05050	1	00000	0	05051	TCH	*+1
05051	-0000	01	0	03172	IOCP	RCHB+56,0,1
05052	1	00000	0	05053	TCH	*+1
05053	-0000	01	0	03173	IOCP	RCHB+57,0,1
05054	1	00000	0	05055	TCH	*+1
05055	-0000	01	0	03174	IOCP	RCHB+58,0,1
05056	1	00000	0	05057	TCH	*+1
05057	-0000	01	0	03175	IOCP	RCHB+59,0,1
05060	1	00000	0	05061	TCH	*+1
05061	-0000	01	0	03176	IOCP	RCHB+60,0,1
05062	1	00000	0	05063	TCH	*+1
05063	-0000	01	0	03177	IOCP	RCHB+61,0,1
05064	1	00000	0	05065	TCH	*+1
05065	-0000	01	0	03200	IOCP	RCHB+62,0,1
05066	1	00000	0	05067	TCH	*+1
05067	0000	01	0	03201	IOCD	RCHB+63,0,1

*CONTROL TO READ 100 WORDS FROM TAPE-CHANNEL C

05070	-0000	01	0	03202	CCHC	IOCP	RCHC,0,1
05071	1	00000	0	05072	TCH	*+1	
05072	-0000	01	0	03203	IOCP	RCHC+1,0,1	
05073	1	00000	0	05074	TCH	*+1	
05074	-0000	01	0	03204	IOCP	RCHC+2,0,1	
05075	1	00000	0	05076	TCH	*+1	
05076	-0000	01	0	03205	IOCP	RCHC+3,0,1	
05077	1	00000	0	05100	TCH	*+1	
05100	-0000	01	0	03206	IOCP	RCHC+4,0,1	
05101	1	00000	0	05102	TCH	*+1	
05102	-0000	01	0	03207	IOCP	RCHC+5,0,1	
05103	1	00000	0	05104	TCH	*+1	
05104	-0000	01	0	03210	IOCP	RCHC+6,0,1	
05105	1	00000	0	05106	TCH	*+1	

05106	-0000	01	0	03211	IOCP RCHC+7,0,1
05107	1	00000	0	05110	TCH *+1
05110	-0000	01	0	03212	IOCP RCHC+8,0,1
05111	1	00000	0	05112	TCH *+1
05112	-0000	01	0	03213	IOCP RCHC+9,0,1
05113	1	00000	0	05114	TCH *+1
05114	-0000	01	0	03214	IOCP RCHC+10,0,1
05115	1	00000	0	05116	TCH *+1
05116	-0000	01	0	03215	IOCP RCHC+11,0,1
05117	1	00000	0	05120	TCH *+1
05120	-0000	01	0	03216	IOCP RCHC+12,0,1
05121	1	00000	0	05122	TCH *+1
05122	-0000	01	0	03217	IOCP RCHC+13,0,1
05123	1	00000	0	05124	TCH *+1
05124	-0000	01	0	03220	IOCP RCHC+14,0,1
05125	1	00000	0	05126	TCH *+1
05126	-0000	01	0	03221	IOCP RCHC+15,0,1
05127	1	00000	0	05130	TCH *+1
05130	-0000	01	0	03222	IOCP RCHC+16,0,1
05131	1	00000	0	05132	TCH *+1
05132	-0000	01	0	03223	IOCP RCHC+17,0,1
05133	1	00000	0	05134	TCH *+1
05134	-0000	01	0	03224	IOCP RCHC+18,0,1
05135	1	00000	0	05136	TCH *+1
05136	-0000	01	0	03225	IOCP RCHC+19,0,1
05137	1	00000	0	05140	TCH *+1
05140	-0000	01	0	03226	IOCP RCHC+20,0,1
05141	1	00000	0	05142	TCH *+1
05142	-0000	01	0	03227	IOCP RCHC+21,0,1
05143	1	00000	0	05144	TCH *+1
05144	-0000	01	0	03230	IOCP RCHC+22,0,1
05145	1	00000	0	05146	TCH *+1
05146	-0000	01	0	03231	IOCP RCHC+23,0,1
05147	1	00000	0	05150	TCH *+1
05150	-0000	01	0	03232	IOCP RCHC+24,0,1
05151	1	00000	0	05152	TCH *+1
05152	-0000	01	0	03233	IOCP RCHC+25,0,1
05153	1	00000	0	05154	TCH *+1
05154	-0000	01	0	03234	IOCP RCHC+26,0,1
05155	1	00000	0	05156	TCH *+1
05156	-0000	01	0	03235	IOCP RCHC+27,0,1
05157	1	00000	0	05160	TCH *+1
05160	-0000	01	0	03236	IOCP RCHC+28,0,1
05161	1	00000	0	05162	TCH *+1
05162	-0000	01	0	03237	IOCP RCHC+29,0,1
05163	1	00000	0	05164	TCH *+1
05164	-0000	01	0	03240	IOCP RCHC+30,0,1
05165	1	00000	0	05166	TCH *+1
05166	-0000	01	0	03241	IOCP RCHC+31,0,1
05167	1	00000	0	05170	TCH *+1
05170	-0000	01	0	03242	IOCP RCHC+32,0,1
05171	1	00000	0	05172	TCH *+1
05172	-0000	01	0	03243	IOCP RCHC+33,0,1
05173	1	00000	0	05174	TCH *+1
05174	-0000	01	0	03244	IOCP RCHC+34,0,1
05175	1	00000	0	05176	TCH *+1

05176	-0000	01	0	03245	IOCP RCHC+35,0,1
05177	1	00000	0	05200	TCH *+1
05200	-0000	01	0	03246	IOCP RCHC+36,0,1
05201	1	00000	0	05202	TCH *+1
05202	-0000	01	0	03247	IOCP RCHC+37,0,1
05203	1	00000	0	05204	TCH *+1
05204	-0000	01	0	03250	IOCP RCHC+38,0,1
05205	1	00000	0	05206	TCH *+1
05206	-0000	01	0	03251	IOCP RCHC+39,0,1
05207	1	00000	0	05210	TCH *+1
05210	-0000	01	0	03252	IOCP RCHC+40,0,1
05211	1	00000	0	05212	TCH *+1
05212	-0000	01	0	03253	IOCP RCHC+41,0,1
05213	1	00000	0	05214	TCH *+1
05214	-0000	01	0	03254	IOCP RCHC+42,0,1
05215	1	00000	0	05216	TCH *+1
05216	-0000	01	0	03255	IOCP RCHC+43,0,1
05217	1	00000	0	05220	TCH *+1
05220	-0000	01	0	03256	IOCP RCHC+44,0,1
05221	1	00000	0	05222	TCH *+1
05222	-0000	01	0	03257	IOCP RCHC+45,0,1
05223	1	00000	0	05224	TCH *+1
05224	-0000	01	0	03260	IOCP RCHC+46,0,1
05225	1	00000	0	05226	TCH *+1
05226	-0000	01	0	03261	IOCP RCHC+47,0,1
05227	1	00000	0	05230	TCH *+1
05230	-0000	01	0	03262	IOCP RCHC+48,0,1
05231	1	00000	0	05232	TCH *+1
05232	-0000	01	0	03263	IOCP RCHC+49,0,1
05233	1	00000	0	05234	TCH *+1
05234	-0000	01	0	03264	IOCP RCHC+50,0,1
05235	1	00000	0	05236	TCH *+1
05236	-0000	01	0	03265	IOCP RCHC+51,0,1
05237	1	00000	0	05240	TCH *+1
05240	-0000	01	0	03266	IOCP RCHC+52,0,1
05241	1	00000	0	05242	TCH *+1
05242	-0000	01	0	03267	IOCP RCHC+53,0,1
05243	1	00000	0	05244	TCH *+1
05244	-0000	01	0	03270	IOCP RCHC+54,0,1
05245	1	00000	0	05246	TCH *+1
05246	-0000	01	0	03271	IOCP RCHC+55,0,1
05247	1	00000	0	05250	TCH *+1
05250	-0000	01	0	03272	IOCP RCHC+56,0,1
05251	1	00000	0	05252	TCH *+1
05252	-0000	01	0	03273	IOCP RCHC+57,0,1
05253	1	00000	0	05254	TCH *+1
05254	-0000	01	0	03274	IOCP RCHC+58,0,1
05255	1	00000	0	05256	TCH *+1
05256	-0000	01	0	03275	IOCP RCHC+59,0,1
05257	1	00000	0	05260	TCH *+1
05260	-0000	01	0	03276	IOCP RCHC+60,0,1
05261	1	00000	0	05262	TCH *+1
05262	-0000	01	0	03277	IOCP RCHC+61,0,1
05263	1	00000	0	05264	TCH *+1
05264	-0000	01	0	03300	IOCP RCHC+62,0,1
05265	1	00000	0	05266	TCH *+1

05266 0000 01 0 03301 IOCD RCHC+63,0,1

*CONTROL TO READ 100 WORDS FROM TAPE-CHANNEL D

05267	-0000	01	0	03302	CCHD	IOCP RCHD,0,1
05270	1	00000	0	05271		TCH *+1
05271	-0000	01	0	03303		IOCP RCHD+1,0,1
05272	1	00000	0	05273		TCH *+1
05273	-0000	01	0	03304		IOCP RCHD+2,0,1
05274	1	00000	0	05275		TCH *+1
05275	-0000	01	0	03305		IOCP RCHD+3,0,1
05276	1	00000	0	05277		TCH *+1
05277	-0000	01	0	03306		IOCP RCHD+4,0,1
05300	1	00000	0	05301		TCH *+1
05301	-0000	01	0	03307		IOCP RCHD+5,0,1
05302	1	00000	0	05303		TCH *+1
05303	-0000	01	0	03310		IOCP RCHD+6,0,1
05304	1	00000	0	05305		TCH *+1
05305	-0000	01	0	03311		IOCP RCHD+7,0,1
05306	1	00000	0	05307		TCH *+1
05307	-0000	01	0	03312		IOCP RCHD+8,0,1
05310	1	00000	0	05311		TCH *+1
05311	-0000	01	0	03313		IOCP RCHD+9,0,1
05312	1	00000	0	05313		TCH *+1
05313	-0000	01	0	03314		IOCP RCHD+10,0,1
05314	1	00000	0	05315		TCH *+1
05315	-0000	01	0	03315		IOCP RCHD+11,0,1
05316	1	00000	0	05317		TCH *+1
05317	-0000	01	0	03316		IOCP RCHD+12,0,1
05320	1	00000	0	05321		TCH *+1
05321	-0000	01	0	03317		IOCP RCHD+13,0,1
05322	1	00000	0	05323		TCH *+1
05323	-0000	01	0	03320		IOCP RCHD+14,0,1
05324	1	00000	0	05325		TCH *+1
05325	-0000	01	0	03321		IOCP RCHD+15,0,1
05326	1	00000	0	05327		TCH *+1
05327	-0000	01	0	03322		IOCP RCHD+16,0,1
05330	1	00000	0	05331		TCH *+1
05331	-0000	01	0	03323		IOCP RCHD+17,0,1
05332	1	00000	0	05333		TCH *+1
05333	-0000	01	0	03324		IOCP RCHD+18,0,1
05334	1	00000	0	05335		TCH *+1
05335	-0000	01	0	03325		IOCP RCHD+19,0,1
05336	1	00000	0	05337		TCH *+1
05337	-0000	01	0	03326		IOCP RCHD+20,0,1
05340	1	00000	0	05341		TCH *+1
05341	-0000	01	0	03327		IOCP RCHD+21,0,1
05342	1	00000	0	05343		TCH *+1
05343	-0000	01	0	03330		IOCP RCHD+22,0,1
05344	1	00000	0	05345		TCH *+1
05345	-0000	01	0	03331		IOCP RCHD+23,0,1
05346	1	00000	0	05347		TCH *+1
05347	-0000	01	0	03332		IOCP RCHD+24,0,1
05350	1	00000	0	05351		TCH *+1
05351	-0000	01	0	03333		IOCP RCHD+25,0,1
05352	1	00000	0	05353		TCH *+1

05353	-0000	01	0	03334	IOCP RCHD+26,0,1
05354	1	00000	0	05355	TCH *+1
05355	-0000	01	0	03335	IOCP RCHD+27,0,1
05356	1	00000	0	05357	TCH *+1
05357	-0000	01	0	03336	IOCP RCHD+28,0,1
05360	1	00000	0	05361	TCH *+1
05361	-0000	01	0	03337	IOCP RCHD+29,0,1
05362	1	00000	0	05363	TCH *+1
05363	-0000	01	0	03340	IOCP RCHD+30,0,1
05364	1	00000	0	05365	TCH *+1
05365	-0000	01	0	03341	IOCP RCHD+31,0,1
05366	1	00000	0	05367	TCH *+1
05367	-0000	01	0	03342	IOCP RCHD+32,0,1
05370	1	00000	0	05371	TCH *+1
05371	-0000	01	0	03343	IOCP RCHD+33,0,1
05372	1	00000	0	05373	TCH *+1
05373	-0000	01	0	03344	IOCP RCHD+34,0,1
05374	1	00000	0	05375	TCH *+1
05375	-0000	01	0	03345	IOCP RCHD+35,0,1
05376	1	00000	0	05377	TCH *+1
05377	-0000	01	0	03346	IOCP RCHD+36,0,1
05400	1	00000	0	05401	TCH *+1
05401	-0000	01	0	03347	IOCP RCHD+37,0,1
05402	1	00000	0	05403	TCH *+1
05403	-0000	01	0	03350	IOCP RCHD+38,0,1
05404	1	00000	0	05405	TCH *+1
05405	-0000	01	0	03351	IOCP RCHD+39,0,1
05406	1	00000	0	05407	TCH *+1
05407	-0000	01	0	03352	IOCP RCHD+40,0,1
05410	1	00000	0	05411	TCH *+1
05411	-0000	01	0	03353	IOCP RCHD+41,0,1
05412	1	00000	0	05413	TCH *+1
05413	-0000	01	0	03354	IOCP RCHD+42,0,1
05414	1	00000	0	05415	TCH *+1
05415	-0000	01	0	03355	IOCP RCHD+43,0,1
05416	1	00000	0	05417	TCH *+1
05417	-0000	01	0	03356	IOCP RCHD+44,0,1
05420	1	00000	0	05421	TCH *+1
05421	-0000	01	0	03357	IOCP RCHD+45,0,1
05422	1	00000	0	05423	TCH *+1
05423	-0000	01	0	03360	IOCP RCHD+46,0,1
05424	1	00000	0	05425	TCH *+1
05425	-0000	01	0	03361	IOCP RCHD+47,0,1
05426	1	00000	0	05427	TCH *+1
05427	-0000	01	0	03362	IOCP RCHD+48,0,1
05430	1	00000	0	05431	TCH *+1
05431	-0000	01	0	03363	IOCP RCHD+49,0,1
05432	1	00000	0	05433	TCH *+1
05433	-0000	01	0	03364	IOCP RCHD+50,0,1
05434	1	00000	0	05435	TCH *+1
05435	-0000	01	0	03365	IOCP RCHD+51,0,1
05436	1	00000	0	05437	TCH *+1
05437	-0000	01	0	03366	IOCP RCHD+52,0,1
05440	1	00000	0	05441	TCH *+1
05441	-0000	01	0	03367	IOCP RCHD+53,0,1
05442	1	00000	0	05443	TCH *+1

05443	-0000	01	0	03370	IOCP	RCHD+54,0,1
05444	1	00000	0	05445	TCH	*+1
05445	-0000	01	0	03371	IOCP	RCHD+55,0,1
05446	1	00000	0	05447	TCH	*+1
05447	-0000	01	0	03372	IOCP	RCHD+56,0,1
05450	1	00000	0	05451	TCH	*+1
05451	-0000	01	0	03373	IOCP	RCHD+57,0,1
05452	1	00000	0	05453	TCH	*+1
05453	-0000	01	0	03374	IOCP	RCHD+58,0,1
05454	1	00000	0	05455	TCH	*+1
05455	-0000	01	0	03375	IOCP	RCHD+59,0,1
05456	1	00000	0	05457	TCH	*+1
05457	-0000	01	0	03376	IOCP	RCHD+60,0,1
05460	1	00000	0	05461	TCH	*+1
05461	-0000	01	0	03377	IOCP	RCHD+61,0,1
05462	1	00000	0	05463	TCH	*+1
05463	-0000	01	0	03400	IOCP	RCHD+62,0,1
05464	1	00000	0	05465	TCH	*+1
05465	0000	01	0	03401	IOCD	RCHD+63,0,1

*CONTROL TO READ 100 WORDS FROM TAPE-CHANNEL E

05466	-0000	01	0	03402	CCHE	IOCP	RCHE,0,1
05467	1	00000	0	05470	TCH	*+1	
05470	-0000	01	0	03403	IOCP	RCHE+1,0,1	
05471	1	00000	0	05472	TCH	*+1	
05472	-0000	01	0	03404	IOCP	RCHE+2,0,1	
05473	1	00000	0	05474	TCH	*+1	
05474	-0000	01	0	03405	IOCP	RCHE+3,0,1	
05475	1	00000	0	05476	TCH	*+1	
05476	-0000	01	0	03406	IOCP	RCHE+4,0,1	
05477	1	00000	0	05500	TCH	*+1	
05500	-0000	01	0	03407	IOCP	RCHE+5,0,1	
05501	1	00000	0	05502	TCH	*+1	
05502	-0000	01	0	03410	IOCP	RCHE+6,0,1	
05503	1	00000	0	05504	TCH	*+1	
05504	-0000	01	0	03411	IOCP	RCHE+7,0,1	
05505	1	00000	0	05506	TCH	*+1	
05506	-0000	01	0	03412	IOCP	RCHE+8,0,1	
05507	1	00000	0	05510	TCH	*+1	
05510	-0000	01	0	03413	IOCP	RCHE+9,0,1	
05511	1	00000	0	05512	TCH	*+1	
05512	-0000	01	0	03414	IOCP	RCHE+10,0,1	
05513	1	00000	0	05514	TCH	*+1	
05514	-0000	01	0	03415	IOCP	RCHE+11,0,1	
05515	1	00000	0	05516	TCH	*+1	
05516	-0000	01	0	03416	IOCP	RCHE+12,0,1	
05517	1	00000	0	05520	TCH	*+1	
05520	-0000	01	0	03417	IOCP	RCHE+13,0,1	
05521	1	00000	0	05522	TCH	*+1	
05522	-0000	01	0	03420	IOCP	RCHE+14,0,1	
05523	1	00000	0	05524	TCH	*+1	
05524	-0000	01	0	03421	IOCP	RCHE+15,0,1	
05525	1	00000	0	05526	TCH	*+1	
05526	-0000	01	0	03422	IOCP	RCHE+16,0,1	
05527	1	00000	0	05530	TCH	*+1	

05530	-0000	01	0	03423	IOCP RCHE+17,0,1
05531	1	00000	0	05532	TCH *+1
05532	-0000	01	0	03424	IOCP RCHE+18,0,1
05533	1	00000	0	05534	TCH *+1
05534	-0000	01	0	03425	IOCP RCHE+19,0,1
05535	1	00000	0	05536	TCH *+1
05536	-0000	01	0	03426	IOCP RCHE+20,0,1
05537	1	00000	0	05540	TCH *+1
05540	-0000	01	0	03427	IOCP RCHE+21,0,1
05541	1	00000	0	05542	TCH *+1
05542	-0000	01	0	03430	IOCP RCHE+22,0,1
05543	1	00000	0	05544	TCH *+1
05544	-0000	01	0	03431	IOCP RCHE+23,0,1
05545	1	00000	0	05546	TCH *+1
05546	-0000	01	0	03432	IOCP RCHE+24,0,1
05547	1	00000	0	05550	TCH *+1
05550	-0000	01	0	03433	IOCP RCHE+25,0,1
05551	1	00000	0	05552	TCH *+1
05552	-0000	01	0	03434	IOCP RCHE+26,0,1
05553	1	00000	0	05554	TCH *+1
05554	-0000	01	0	03435	IOCP RCHE+27,0,1
05555	1	00000	0	05556	TCH *+1
05556	-0000	01	0	03436	IOCP RCHE+28,0,1
05557	1	00000	0	05560	TCH *+1
05560	-0000	01	0	03437	IOCP RCHE+29,0,1
05561	1	00000	0	05562	TCH *+1
05562	-0000	01	0	03440	IOCP RCHE+30,0,1
05563	1	00000	0	05564	TCH *+1
05564	-0000	01	0	03441	IOCP RCHE+31,0,1
05565	1	00000	0	05566	TCH *+1
05566	-0000	01	0	03442	IOCP RCHE+32,0,1
05567	1	00000	0	05570	TCH *+1
05570	-0000	01	0	03443	IOCP RCHE+33,0,1
05571	1	00000	0	05572	TCH *+1
05572	-0000	01	0	03444	IOCP RCHE+34,0,1
05573	1	00000	0	05574	TCH *+1
05574	-0000	01	0	03445	IOCP RCHE+35,0,1
05575	1	00000	0	05576	TCH *+1
05576	-0000	01	0	03446	IOCP RCHE+36,0,1
05577	1	00000	0	05600	TCH *+1
05600	-0000	01	0	03447	IOCP RCHE+37,0,1
05601	1	00000	0	05602	TCH *+1
05602	-0000	01	0	03450	IOCP RCHE+38,0,1
05603	1	00000	0	05604	TCH *+1
05604	-0000	01	0	03451	IOCP RCHE+39,0,1
05605	1	00000	0	05606	TCH *+1
05606	-0000	01	0	03452	IOCP RCHE+40,0,1
05607	1	00000	0	05610	TCH *+1
05610	-0000	01	0	03453	IOCP RCHE+41,0,1
05611	1	00000	0	05612	TCH *+1
05612	-0000	01	0	03454	IOCP RCHE+42,0,1
05613	1	00000	0	05614	TCH *+1
05614	-0000	01	0	03455	IOCP RCHE+43,0,1
05615	1	00000	0	05616	TCH *+1
05616	-0000	01	0	03456	IOCP RCHE+44,0,1
05617	1	00000	0	05620	TCH *+1

05620	-0000	01	0	03457	IOCP RCHE+45,0,1
05621	1	00000	0	05622	TCH *+1
05622	-0000	01	0	03460	IOCP RCHE+46,0,1
05623	1	00000	0	05624	TCH *+1
05624	-0000	01	0	03461	IOCP RCHE+47,0,1
05625	1	00000	0	05626	TCH *+1
05626	-0000	01	0	03462	IOCP RCHE+48,0,1
05627	1	00000	0	05630	TCH *+1
05630	-0000	01	0	03463	IOCP RCHE+49,0,1
05631	1	00000	0	05632	TCH *+1
05632	-0000	01	0	03464	IOCP RCHE+50,0,1
05633	1	00000	0	05634	TCH *+1
05634	-0000	01	0	03465	IOCP RCHE+51,0,1
05635	1	00000	0	05636	TCH *+1
05636	-0000	01	0	03466	IOCP RCHE+52,0,1
05637	1	00000	0	05640	TCH *+1
05640	-0000	01	0	03467	IOCP RCHE+53,0,1
05641	1	00000	0	05642	TCH *+1
05642	-0000	01	0	03470	IOCP RCHE+54,0,1
05643	1	00000	0	05644	TCH *+1
05644	-0000	01	0	03471	IOCP RCHE+55,0,1
05645	1	00000	0	05646	TCH *+1
05646	-0000	01	0	03472	IOCP RCHE+56,0,1
05647	1	00000	0	05650	TCH *+1
05650	-0000	01	0	03473	IOCP RCHE+57,0,1
05651	1	00000	0	05652	TCH *+1
05652	-0000	01	0	03474	IOCP RCHE+58,0,1
05653	1	00000	0	05654	TCH *+1
05654	-0000	01	0	03475	IOCP RCHE+59,0,1
05655	1	00000	0	05656	TCH *+1
05656	-0000	01	0	03476	IOCP RCHE+60,0,1
05657	1	00000	0	05660	TCH *+1
05660	-0000	01	0	03477	IOCP RCHE+61,0,1
05661	1	00000	0	05662	TCH *+1
05662	-0000	01	0	03500	IOCP RCHE+62,0,1
05663	1	00000	0	05664	TCH *+1
05664	0000	01	0	03501	IOCD RCHE+63,0,1

*CONTROL TO READ 100 WORDS FROM TAPE-CHANNEL F

05665	-0000	01	0	03502	CCHF	IOCP RCHF,0,1
05666	1	00000	0	05667		TCH *+1
05667	-0000	01	0	03503		IOCP RCHF+1,0,1
05670	1	00000	0	05671		TCH *+1
05671	-0000	01	0	03504		IOCP RCHF+2,0,1
05672	1	00000	0	05673		TCH *+1
05673	-0000	01	0	03505		IOCP RCHF+3,0,1
05674	1	00000	0	05675		TCH *+1
05675	-0000	01	0	03506		IOCP RCHF+4,0,1
05676	1	00000	0	05677		TCH *+1
05677	-0000	01	0	03507		IOCP RCHF+5,0,1
05700	1	00000	0	05701		TCH *+1
05701	-0000	01	0	03510		IOCP RCHF+6,0,1
05702	1	00000	0	05703		TCH *+1
05703	-0000	01	0	03511		IOCP RCHF+7,0,1
05704	1	00000	0	05705		TCH *+1

05705	-0000	01	0	03512	IOCP RCHF+8,0,1
05706	1	00000	0	05707	TCH *+1
05707	-0000	01	0	03513	IOCP RCHF+9,0,1
05710	1	00000	0	05711	TCH *+1
05711	-0000	01	0	03514	IOCP RCHF+10,0,1
05712	1	00000	0	05713	TCH *+1
05713	-0000	01	0	03515	IOCP RCHF+11,0,1
05714	1	00000	0	05715	TCH *+1
05715	-0000	01	0	03516	IOCP RCHF+12,0,1
05716	1	00000	0	05717	TCH *+1
05717	-0000	01	0	03517	IOCP RCHF+13,0,1
05720	1	00000	0	05721	TCH *+1
05721	-0000	01	0	03520	IOCP RCHF+14,0,1
05722	1	00000	0	05723	TCH *+1
05723	-0000	01	0	03521	IOCP RCHF+15,0,1
05724	1	00000	0	05725	TCH *+1
05725	-0000	01	0	03522	IOCP RCHF+16,0,1
05726	1	00000	0	05727	TCH *+1
05727	-0000	01	0	03523	IOCP RCHF+17,0,1
05730	1	00000	0	05731	TCH *+1
05731	-0000	01	0	03524	IOCP RCHF+18,0,1
05732	1	00000	0	05733	TCH *+1
05733	-0000	01	0	03525	IOCP RCHF+19,0,1
05734	1	00000	0	05735	TCH *+1
05735	-0000	01	0	03526	IOCP RCHF+20,0,1
05736	1	00000	0	05737	TCH *+1
05737	-0000	01	0	03527	IOCP RCHF+21,0,1
05740	1	00000	0	05741	TCH *+1
05741	-0000	01	0	03530	IOCP RCHF+22,0,1
05742	1	00000	0	05743	TCH *+1
05743	-0000	01	0	03531	IOCP RCHF+23,0,1
05744	1	00000	0	05745	TCH *+1
05745	-0000	01	0	03532	IOCP RCHF+24,0,1
05746	1	00000	0	05747	TCH *+1
05747	-0000	01	0	03533	IOCP RCHF+25,0,1
05750	1	00000	0	05751	TCH *+1
05751	-0000	01	0	03534	IOCP RCHF+26,0,1
05752	1	00000	0	05753	TCH *+1
05753	-0000	01	0	03535	IOCP RCHF+27,0,1
05754	1	00000	0	05755	TCH *+1
05755	-0000	01	0	03536	IOCP RCHF+28,0,1
05756	1	00000	0	05757	TCH *+1
05757	-0000	01	0	03537	IOCP RCHF+29,0,1
05760	1	00000	0	05761	TCH *+1
05761	-0000	01	0	03540	IOCP RCHF+30,0,1
05762	1	00000	0	05763	TCH *+1
05763	-0000	01	0	03541	IOCP RCHF+31,0,1
05764	1	00000	0	05765	TCH *+1
05765	-0000	01	0	03542	IOCP RCHF+32,0,1
05766	1	00000	0	05767	TCH *+1
05767	-0000	01	0	03543	IOCP RCHF+33,0,1
05770	1	00000	0	05771	TCH *+1
05771	-0000	01	0	03544	IOCP RCHF+34,0,1
05772	1	00000	0	05773	TCH *+1
05773	-0000	01	0	03545	IOCP RCHF+35,0,1
05774	1	00000	0	05775	TCH *+1

05775	-0000	01	0	03546	IOCP RCHF+36,0,1
05776	1	00000	0	05777	TCH *+1
05777	-0000	01	0	03547	IOCP RCHF+37,0,1
06000	1	00000	0	06001	TCH *+1
06001	-0000	01	0	03550	IOCP RCHF+38,0,1
06002	1	00000	0	06003	TCH *+1
06003	-0000	01	0	03551	IOCP RCHF+39,0,1
06004	1	00000	0	06005	TCH *+1
06005	-0000	01	0	03552	IOCP RCHF+40,0,1
06006	1	00000	0	06007	TCH *+1
06007	-0000	01	0	03553	IOCP RCHF+41,0,1
06010	1	00000	0	06011	TCH *+1
06011	-0000	01	0	03554	IOCP RCHF+42,0,1
06012	1	00000	0	06013	TCH *+1
06013	-0000	01	0	03555	IOCP RCHF+43,0,1
06014	1	00000	0	06015	TCH *+1
06015	-0000	01	0	03556	IOCP RCHF+44,0,1
06016	1	00000	0	06017	TCH *+1
06017	-0000	01	0	03557	IOCP RCHF+45,0,1
06020	1	00000	0	06021	TCH *+1
06021	-0000	01	0	03560	IOCP RCHF+46,0,1
06022	1	00000	0	06023	TCH *+1
06023	-0000	01	0	03561	IOCP RCHF+47,0,1
06024	1	00000	0	06025	TCH *+1
06025	-0000	01	0	03562	IOCP RCHF+48,0,1
06026	1	00000	0	06027	TCH *+1
06027	-0000	01	0	03563	IOCP RCHF+49,0,1
06030	1	00000	0	06031	TCH *+1
06031	-0000	01	0	03564	IOCP RCHF+50,0,1
06032	1	00000	0	06033	TCH *+1
06033	-0000	01	0	03565	IOCP RCHF+51,0,1
06034	1	00000	0	06035	TCH *+1
06035	-0000	01	0	03566	IOCP RCHF+52,0,1
06036	1	00000	0	06037	TCH *+1
06037	-0000	01	0	03567	IOCP RCHF+53,0,1
06040	1	00000	0	06041	TCH *+1
06041	-0000	01	0	03570	IOCP RCHF+54,0,1
06042	1	00000	0	06043	TCH *+1
06043	-0000	01	0	03571	IOCP RCHF+55,0,1
06044	1	00000	0	06045	TCH *+1
06045	-0000	01	0	03572	IOCP RCHF+56,0,1
06046	1	00000	0	06047	TCH *+1
06047	-0000	01	0	03573	IOCP RCHF+57,0,1
06050	1	00000	0	06051	TCH *+1
06051	-0000	01	0	03574	IOCP RCHF+58,0,1
06052	1	00000	0	06053	TCH *+1
06053	-0000	01	0	03575	IOCP RCHF+59,0,1
06054	1	00000	0	06055	TCH *+1
06055	-0000	01	0	03576	IOCP RCHF+60,0,1
06056	1	00000	0	06057	TCH *+1
06057	-0000	01	0	03577	IOCP RCHF+61,0,1
06060	1	00000	0	06061	TCH *+1
06061	-0000	01	0	03600	IOCP RCHF+62,0,1
06062	1	00000	0	06063	TCH *+1
06063	0000	01	0	03601	IOCD RCHF+63,0,1
			06504	ERROR EQU 3396	

06511	OK	EQU 3401
06560	RDNCK	EQU 3440
06556	WDNO	EQU 3438
06557	RECNO	EQU 3439
00000		END

EOF*