

8CU30B

**NON STOP & INTERRUPT FEATURE
TEST**

May 15, 1961

gscans/g0015443.png



done OOW 11-22-61

DSD POUGHKEEPSIE

Dept. 265 - Bldg. 918
June 30, 1961ERRATA SHEET FOR 8CU30B
7080 - NON STOP TESTCorrection to:

1. Program Listing

Page 04 - The following locations should be corrected as shown:

<u>Location</u>	<u>Listed as</u>	<u>Correction</u>
00444	LIM, 070000 0 & 0	EIM, 060000 0 -0
00449	EIM, 060000 0 -0	TRSO090454 0 MV4
00454	TRSO090459 0 MV9	TRSO090494 0 MZ4

325
385

390



NON STOP & INTERRUPT FEATURE TEST

I. PURPOSE OF TEST

To check the operation of interrupt and automatic restart circuitry when the console Non Stop switch is ON.

II. METHOD OF TEST

It is assumed that the 7080 CPU is in good working order in all areas other than the one tested in this program. The Program consists of 40 Routines, each being independent.

A. Special Features

1. When Non Stop is ON, the HLT instruction will be executed only if it is in the Interrupt Program. For this reason the Halts in all the error routines are preceded by TIP. The LIP 3700 instruction which immediately follows the Halt, takes the machine to the next IC location.
2. There are two sub-routines, one for routines 1 through 23 and the other for routines 24 through 40. These have the function of setting up IW 250 so that when an interrupt occurs the machine goes to sub-routines 3 or 4 depending on whether the interrupt takes place in routines 1 - 23 or 24 - 40.
3. Sub-routines 3 and 4 have the function of resetting all the check triggers and typing out the IC locations from which the error interrupts come. Sub-routine 4 performs an additional function of unloading the entire content of CASU 15 for subsequent examination in the main program.

III. AREA OF MACHINE REQUIRED

A. Units

7080 CPU

B. Memory Locations

1. 00000 - 06459 8CU30
2. 18200 - 18800 Load Program

IV. LOADING PROCEDURE

A. Card

Use standard load program 8LD01 with cards in the following order:

8LD01	2 cards
8CU30	100 cards
8TR02	1 card
Blanks	3 cards

B. Tape

Use a tape generated by 8TR06. Refer to the 8TR06 write-up for complete details on generating and using this tape.

V. PROGRAM CONTROL

A. Check Switches - all in automatic

B. Alteration Switches

911 ON	- Bypass Timeouts
912 ON	- Repeat Routine
913 ON	- Stop on Error
914 ON	- Repeat Program
915	- Not used
916	- Not used

C. Other Switches

705 I/II OFF
40K OFF
I/O Interpret OFF

Non Stop Switch On

VI. NORMAL STOPS

A. Halt 0000 - On program entry, set switches per typeout and Start.

B. Halt 9999 - On program completion with 914 OFF. Set switches per typeout and Start to read in next program.

VII. ERROR STOPS

- A. Halt - 00XX Routine failure with 913 ON. "XX" indicates the number of the routine that failed. To continue, hit start.

Example: HLT 0015 means that Routine 15 failed.

- B. Halt 1111 - This indicates that either NON STOP is OFF or that TRA 07 instruction failed. In the first case, turn NON STOP ON & Start. In the second case just Start.

- C. Halt 7777 - This occurs in Routine 7 and indicates failure of Non Stop to over-ride the Halt. To continue, hit start.

VIII. TYPEOUTS

A. Error Typeouts

1. Typeout 00XX indicates failure of a routine. "XX" indicates the number of the routine that failed.

Example: 0003 means that Routine 3 failed.

2. Typeout IC - XXXX indicates a bad interrupt where XXXX stands for the location from which the interrupt came.

Example: IC - 2004 means a bad interrupt coming from 2004.

3. "NON STOP NOT ON" - This indicates that either NON STOP is not ON or that TRA 07 instruction failed.

B. Normal Typeouts

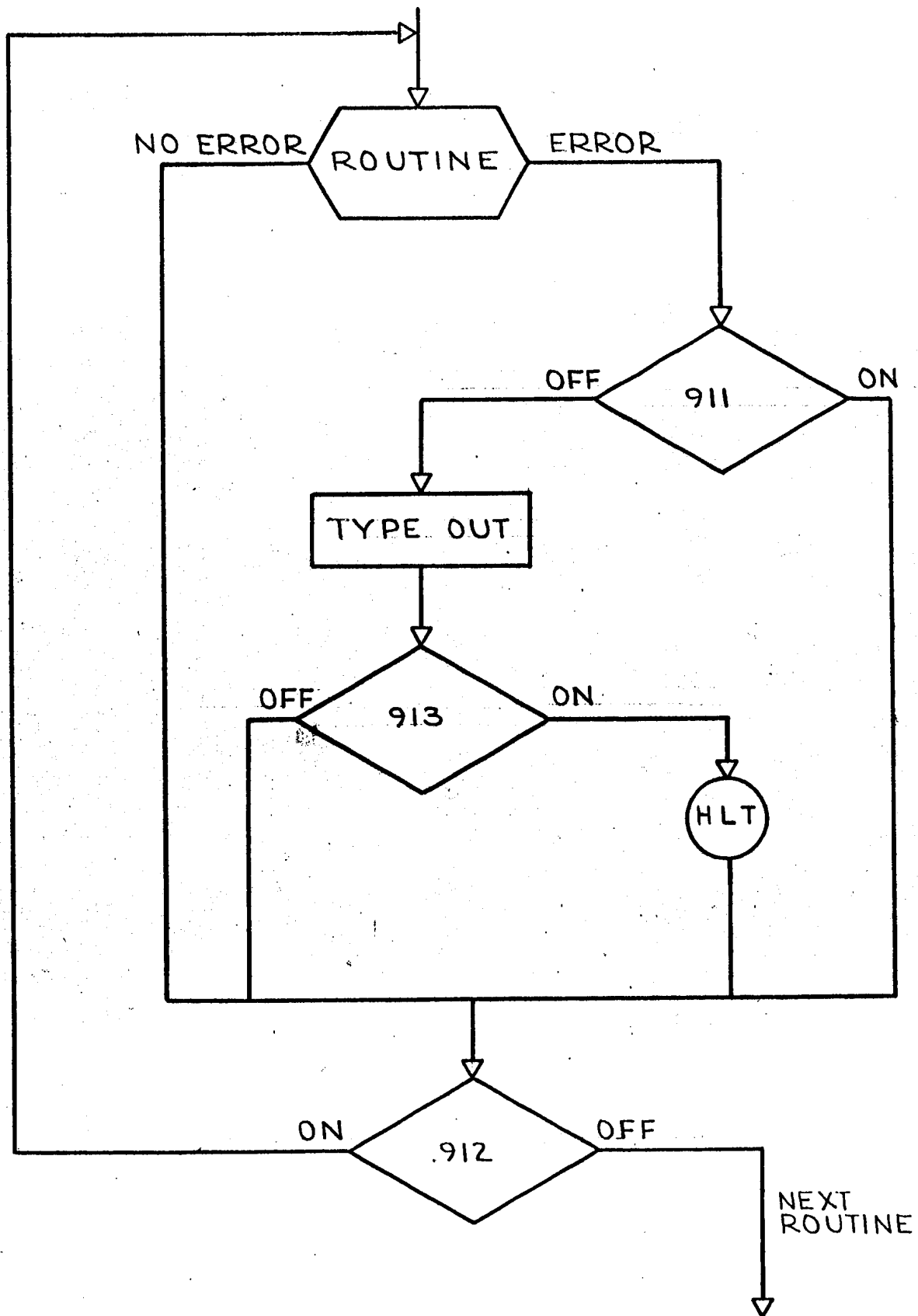
1. Z - Occurs after each complete pass.

2. CHK SW ON AUTO. NON STOP ON - Occurs at the beginning of the program.

3. TURN NON STOP OFF - Occurs at end of program with 914 OFF.

IX. COMMENTS

- A. It takes approximately two seconds for Automatic Restart to take place after a hang up condition has been forced. This may lead the operator to assume that the machine has hung up, when the apparent hang up is actually a temporary condition. Unless a Z is not typed out after some time, do not assume that a hang up has occurred.
- B. Whenever the machine hangs up with a check light on or due to a Halt instruction and it is in the Interrupt mode but not in an Interrupt program, there has been a failure in the Non-Stop area. In all such cases Reset and Start.



LAYOUT OF TYPICAL ROUTINE

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8CU30B . MAY/15/1961
NON STOP PROGRAM
LOAD PROGRAM IN WITH NON STOP
OFF.AWAIT TYPEOUT WHICH IS
CHECK SW ON AUTO.NON STOP ON
TO RUN.FOLLOW THE TYPEOUT
INSTRUCTIONS & HIT START

00004	NOP	A	0064	
00009	SGN	T 12	0000	0600
00014	SEL	2	0500	
00019	WR	R	0030	
00024	HLT	J	0000	
00029	TR	1	0064	

2 027 00056
2 001 00057

CONSTANTS & WORK AREA
CHK SW ON AUTO.NON STOP ON

INTERROGATE NON STOP
TO VERIFY IT IS ON

00064	EEM	3 14	0000	06-0	
00069	TRA	I 07	0099	0 19	
00074	SEL	2	0500		
00079	WR	R	0100		
00084	TIP	14	0089	06Q9	
00089	HLT	J	1111		
00094	LIP	15	3700	3660	
00099	TR	1	0124		A02

2 015 00114
2 001 00115

CONSTANTS & WORK AREA
NON STOP NOT ON

ROUTINE 1
 TEST ABILITY TO STORE STATUS
 OF INTERRUPT PROGRAM IN IW 250
 USING LIP 2500
 STATUS STORED IS ACCUMULATOR
 & ASU ZERO, STORAGE HI
 & 7080 TGR ON

```

A01.....00124 EEM 3 14 0000 06-0
I 00129 LIM , 07 0000 0 60
I 00134 SPC , 3700
I 00139 SET B 0008
I 00144 LOD 8 0259
I 00149 SPC , 0000
I 00154 RAD H 0261
I 00159 RAD H 01 0261 02W1
I 00164 CMP 4 01 0261 02W1
I 00169 LIP , 15 2500 2E&0
I 00174 SPC , 2500
I 00179 SET B 0008
I 00184 CMP 4 0269
I 00189 TIP , 14 6104 6A-4-----AT43
I 00194 SPC , 0000
I 00199 TRE L 0244-----
I .....I .....
I .....I .....
I 00204 TRA I 01 0244 02U4-----X
I 00209 SEL 2 0500
I 00214 WR R 0270
I 00219 TRA I 03 0229 02B9-----I
I 00224 TR 1 0244-----X
I 00229 TIP , 14 0234 0BL4-----I
I 00234 HLT J 0001.....I
I 00239 LIP , 15 3700 3G&0
I 00244 TRA I 02 0124 01K4-----B03
I 00249 TR 1 0279-----
I .....

```

SET UP EXIT FOR LIP

ACCUMULATOR ZERO & PLUS
 ASU 01 ZERO & PLUS
 STORAGE HIGH

RESET IW 250

ERROR ROUTINE

CONSTANTS & WORK AREA

```

2 006 00255      -6-
3      00259      0174 0174
2 006 00265      &J&-D
3      00269      0174 0174
2 004 00273      0001
2 001 00274      □

```

ROUTINE 2
TEST ABILITY TO STORE STATUS
OF INTERRUPT PROGRAM IN IW 250
USING LIP 2500
STATUS STORED IS ACCUMULATOR
&ASU MINUS, STORAGE LO
7080 TGR OFF

```

B02.....
I 00279 EEM 3 14 0000 06-0
I 00284 LIM , 07 0000 0 &0
I 00289 SPC , 3700
I 00294 SET B 0008
I 00299 LOD B 0429
I 00304 SET B 0032
I 00309 SPC , 0000
I 00314 RSU Q 0411
I 00319 RSU Q 01 0411 04/1
I 00324 CMP 4 01 0421 04S1
I 00329 LIP , 15 2500 2E&0
I 00334 SPC , 2500
I 00339 SET B 0008
I 00344 CMP 4 0419
I 00349 TIP , 14 6104 6A-4 AT43
I 00354 SPC , 0000
I 00359 TRE L 0404
I
I
I 00364 TRA I 01 0404 04 4-
I 00369 SEL 2 0500
I 00374 WR R 0430
I 00379 TRA I 03 0389 03H9-
I 00384 TR 1 0404-
I 00389 TIP , 14 0394 0CR4-
I 00394 HLT J 0002-
I 00399 LIP , 15 3700 3G&0
I 00404 TRA I 02 0279 02P9-
I 00409 TR 1 0439- C04

```

SET UP EXIT IN CASU 15

ACCUMULATOR MINUS & NOT ZERO
ASU MINUS & NOT ZERO
STORAGE LO
STORE STATUS IN IW 250

RESET IW 250

ERROR ROUTINE

CONSTANTS & WORK AREA

```

2 006 00415 AAK&-L
3 006 00419 0334 0334
2 006 00425 2-&-
3 006 00429 0334 0334
2 004 00433 0002
2 001 00434

```

CONSTANTS & WORK AREA

0004

CONSTANTS & WORK AREA

ROUTINE 5
TEST FOR NO AUTO INTERRUPT
ON SB 08 IN 7080 MODE

```

E05.....I 00704 EEM 3 14 0000 08-0
I 00709 LIM , 07 0000 0 80
I 00714 EIM , 06 0000 0 -0
I 00719 SB % 08 0804 0Q04
I 00724 SB % 08 0804 0Q04
I 00729 TRS 0 11 0739 0PC9
I 00734 TR 1 0749
I 00739 LIM , 07 0000 0 80
I 00744 TR 1 0789
I
I
I 00749 TRA I 01 0789 07Y9
I 00754 SEL 2 0500
I 00759 WR R 0795
I 00764 TRA I 03 0774 07G4
I 00769 TR 1 0789
I 00774 TIP , 14 0779 0GP9
I 00779 HLT J 0005
I 00784 LIP , 15 3700 3G80
+ 00789 TRA I 02 0704 07-4
- 00794 TR 1 0809 F07

```

TURN ON 901 CHK

ERROR ROUTINE

CONSTANTS & WORK AREA

```

2 004 00798 0005
2 001 00799
2 005 00804 00000

```


ROUTINE 6
TEST FOR NO INTERRUPT
ON SND/CHK MEMORY WITH A
REDUNDANT CHARACTER IN
MEMORY. 7080 MODE

CONSTANTS & WORK AREA

```
ROUTINE 7
GO INTO INTERRUPT MODE & TEST
FOR NON STOP & INTERRUPT
ON MAIN PROGRAM
USE HLT TO CAUSE INTERRUPT
```

[illegible]

SET SWITCH FOR GOOD INTERRUPT
CORRECT INTERRUPT

RESET SWITCH

ERROR ROUTINE

2 004 01033
2 001 01034

0007
□

CONSTANTS & WORK AREA

ROUTINE 8
GO INTO INTERRUPT MODE & TEST
FOR AUTO RESTART & INTERRUPT
ON MAIN PROGRAM.
USE IOF TO TYPEWRITER
TO CAUSE INTERRUPT

```

H08.....01039 EEM 3 14 0000 06-0
I 01044 LIM , 07 0000 0 60
I 01049 SEL 2 0500
I 01054 EIM , 06 0000 0 -0
I 01059 SGN 1 12 6185 6A85
I 01064 IOF 3 0000
I 01069 TR 1 1079-----
I 01074 TRS 0 09 1129 1JS9-----
I 01079 LIM , 07 0000 0 60
I 01084 ADM 6 12 6185 6A85
I
I
I
I
I 01089 TRA I 01 1129 11S9-----
I 01094 SEL 2 0500
I 01099 WR R 1135
I 01104 TRA I 03 1114 11A4-----
I 01109 TR 1 1129-----
I 01114 TIP , 14 1119 1AJ9-----
I 01119 HLT J 0008.....
I 01124 LIP , 15 2700 2G60
I 01129 TRA I 02 1039 10L9-----
I 01134 TR 1 1144-----J10

```

SET SWITCH FOR GOOD INTERRUPT
TURN ON ART & INTERRUPT

RESET SWITCH

ERROR ROUTINE

2 004 01138
2 001 01139

0008
□

CONSTANTS & WORK AREA

ROUTINE 9
GO INTO INTERRUPT MODE & TEST
FOR NON STOP & INTERRUPT ON
MAIN PROGRAM.
USE 900 CHECK TO CAUSE
INTERRUPT

```

J09.....01144 EEM 3 14 0000 06-0 0
I 01149 LIM , 07 0000 0 &0 0
I 01154 EIM , 06 0000 0 -0 0
I 01159 SGN T 12 6185 6A85 0
I 01164 TR 1 1168 0
I 01169 NOP A 0000 0
I 01174 TRS 0 10 1184 1JQ4-0-0
I 01179 TR 1 1234-0-0-0
I 01184 ADM 6 12 6185 6A85-0-0
I 01189 LIM , 07 0000 0 &0 0
I 01194 TRA I 01 1234 12T4-0-0
I 01199 SEL 2 0500 0
I 01204 WR R 1240 0
I 01209 TRA I 03 1219 12A9-0-0
I 01214 TR 1 1234-0-0-0
I 01219 TIP , 14 1224 1BK4-0-0
I 01224 HLT J 0009.....0
I 01229 LIP , 15 3700 3G&0 0
I 01234 TRA I 02 1144 11M4-0-0
I 01239 TR 1 1249-0-0-0

```

SET SWITCH FOR GOOD INTERRUPT
TURN 900 ON & INTERRUPT

RESET SWITCH

ERROR ROUTINE

CONSTANTS & WORK AREA

2 004 01243
2 001 01244

0009
0

ROUTINE 10
GO INTO INTERRUPT MODE & TEST
FOR NONSTOP & INTERRUPT ON
MAIN PROGRAM.
USE 901 CHECK TO CAUSE
INTERRUPT.

K10.....

```

01249 EEM 3 14 0000 08-0
01254 LIM , 07 0000 0 80
01259 EIM , 06 0000 0 -0
01264 SB % 08 1354 1L54
01269 SGN T 12 6185 6A85
01274 SB % 09 1354 1LV4
01279 TRS 0 11 1289 1KH9
01284 TR 1 1339
01289 ADM 6 12 6185 6A85
01294 LIM , 07 0000 0 80
01299 TRA I 01 1339 13T9
01304 SEL 2 0500
01309 WR R 1345
01314 TRA I 03 1324 13B4
01319 TR 1 1339
01324 TIP , 14 1329 1CK9
01329 HLT J 0010
01334 LIP , 15 3700 3G&0
01339 TRA I 02 1249 12M9
01344 TR 1 1359

```

SET SWITCH FOR GOOD INTERRUPT
TURN ON 901 & INTERRUPT

RESET SWITCH

ERROR ROUTINE

CONSTANTS & WORK AREA

2 004 01348
2 001 01349
2 005 01354

0010
00001

ROUTINE 11
GO INTO INTERRUPT MODE & TEST
FOR NONSTOP & INTERRUPT
ON MAIN PROGRAM.
USE 902 CHK TO CAUSE
INTERRUPT

```

L11.....01359 EEM 3 14 0000 08-0
I 01364 LIM , 07 0000 0 80
I 01369 SPC , 3700
I 01374 SET B 0008
I 01379 LOD 8 1484
I 01384 SET B 0032
I 01389 EIM , 06 0000 0 -0
I 01394 SGN T 12 6185 6A85
I 01399 LIP , 15 0009 0889
I 01404 TRS 0 12 1414 1D14
I 01409 TR 1 1464
I 01414 ADM 6 12 6185 6A85
I 01419 LIM , 07 0000 0 80
I
I
I
I
I 01424 TRA I 01 1464 14W4
I 01429 SEL 2 0500
I 01434 WR R 1470
I 01439 TRA I 03 1449 14D9
I 01444 TR 1 1464
I 01449 TIP , 14 1454 1DN4
I 01454 HLT J 0011
I 01459 LIP , 15 3700 3G80
I 01464 TRA I 02 1359 13N9
I 01469 TR 1 1489
M13

```

SET CASU 15 TO TURN ON
902 CHK

SET SWITCH FOR GOOD INTERRUPT
CORRECT INTERRUPT

RESET SWITCH

ERROR ROUTINE

CONSTANTS & WORK AREA

```

2 004 01473 0011
2 001 01474
2 006 01480 -GM-
3 01484 1404 1404

```


ROUTINE 13
GO INTO INTERRUPT MODE & TEST
FOR NONSTOP & INTERRUPT
ON MAIN PROGRAM.
USE 904 CHK TO CAUSE
INTERRUPT.

```

N13.....
I 01619 EEM 3 14 0000 06-0
I 01624 LIM , 07 0000 0 60
I 01629 SPC , 0000
I 01634 RAD H 1724
I 01639 EIM , 06 0000 0 -0
I 01644 SGN T 12 6185 6A85
I 01649 RND E 0001
I 01654 TRS O 14 1664 1FO4
I 01659 TR 1 1714
I 01664 ADM 6 12 6185 6A85
I 01669 LIM , 07 0000 0 60
I
I
I 01674 TRA I 01 1714 17/4
I 01679 SEL 2 0500
I 01684 WR R 1725
I 01689 TRA I 03 1699 1619
I 01694 TR 1 1714
I 01699 TIP , 14 1704 16-4
I 01704 HLT J 0013
I 01709 LIP , 15 3700 3G60
I 01714 TRA I 02 1619 16J9
I 01719 TR 1 1734

```

SET SWITCH FOR GOOD INTERRUPT
TURN ON 904 & INTERRUPT

RESET SWITCH

ERROR ROUTINE

2 005 01724
2 004 01728
2 001 01729

000AG
0013
□

CONSTANTS & WORK AREA


```
ROUTINE 14
GO INTO INTERRUPT MODE & TEST
FOR NONSTOP & INTERRUPT
ON MAIN PROGRAM.
USE 905 CHECK TO CAUSE
INTERRUPT.
```

SET SWITCH FOR GOOD INTERRUPT
TURN ON 905 & INTERRUPT

RESET SWITCH

ERROR ROUTINE

CONSTANTS & WORK AREA

2 004 01833
2 001 01834
2 005 01839

0014
□
00000

-Q16

[illegible]

CONSTANTS & WORK AREA

```

2 005 01999      00001
2 004 02003      0015
2 001 02004      □

```

ROUTINE 16
TEST BLOCKING OF IW 250 WHEN
EIA IS ON IN INTERRUPT MODE
USE 901 CHK WITH RWW & SND
TO DELAY INTERRUPT FOR ONE
INSTRUCTION THEN USE EIA TO
BLOCK INTERRUPT TILL END OF
IS ROUTED.

```

R16.....02009 EEM 3 14 0000 06-0
I 02014 LIM , 07 0000 0 60
I 02019 SPC , 0000
I 02024 SET B 0002
I 02029 SB % 09 2154 2JV4
I 02034 SB % 08 2150 2J50
I 02039 EIM , 06 0000 0 -0
I 02044 RWW S 19994 Z994
I 02049 SGN T 12 6185 6A85
I 02054 SB % 09 2150 2JV0
I 02059 SND / 19994 Z994
I 02064 EIA , 10 0000 0 -0
I 02069 SB % 01 2074 20X4
I 02074 NOP A 2154
I 02079 TRS 0 11 2094 2-14
I 02084 RCV U 2154
I 02089 TZB , 01 2144 21U4
I 02094 ADM 6 12 6185 6A85
I 02099 LIM , 07 0000 0 60
I .....I .....
I .....I .....
I 02104 TRA I 01 2144 21U4
I 02109 SEL 2 0500
I 02114 WR R 2155
I 02119 TRA I 03 2129 21B9
I 02124 TR 1 2144
I 02129 TIP , 14 2134 2AL4
I 02134 HLT J 0016
I 02139 LIP , 15 3700 3G60
+ 02144 TRA I 02 2009 20-9
I 02149 TR 1 2164 S18
I .....I .....

```

SAFETY FOR SEND OPERATION
CHANGE TEST CHARACTER

SET SWITCH FOR GOOD INTERRUPT

RESET TEST CHARACTER
CORRECT INTERRUPT

RESET SWITCH

ERROR ROUTINE

CONSTANTS & WORK AREA

2 005 02154
2 004 02158
2 001 02159

10006
0016
□

ROUTINE 17
GO INTO INTERRUPT MODE & TEST
FOR AUTO INTERRUPT ON
COMMA 13 OP CODE

[illegible]

TURN ART OFF

SET SWITCH FOR GOOD INTERRUPT
CORRECT INTERRUPT

RESET SWITCH

ERROR ROUTINE

2 004 02263
2 001 02264

0017
B

CONSTANTS & WORK AREA

ROUTINE 18
TEST AUTO INTERRUPT ON
ION TO TYPEWRITER IN
705 III MODE

```

T18.....
I 02269 EEM 3 14 0000 06-0
I 02274 LIM 07 0000 0 80
I 02279 EIM 06 0000 0 -0
I 02284 LEM 3 15 0000 0680
I 02289 SEL 2 0500
I 02294 SGN T 12 6185 6A85
I 02299 ION 3 0003
I 02304 TR 1 2314-----
I 02309 TRS 0 09 2369 2LW9-----
I 02314 ADM 6 12 6185 6A85
I 02319 EEM 3 14 0000 06-0
I 02324 LIM 07 0000 0 80
I
I
I 02329 TRA I 01 2369 23W9-----
I 02334 SEL 2 0500
I 02339 WR R 2375
I 02344 TRA I 03 2354 23E4-----
I 02349 TR 1 2369-----
I 02354 TIP 14 2359 2CN9-----
I 02359 HLT J 0018.....
I 02364 LIP 15 3700 3G60
I 02369 TRA I 02 2269 2209.....
I 02374 TR 1 2384-----U20
I
I

```

SET SWITCH FOR GOOD INTERRUPT
CORRECT INTERRUPT

RESET SWITCH

ERROR ROUTINE

2 004 02378
2 001 02379

0018
□

CONSTANTS & WORK AREA

CONSTANTS & WORK AREA

ROUTINE 20
TEST AUTO INTERRUPT ON
FORCED 901 CHK ON TZB
IN 705 III MODE

V20.....
02494 EEM 3 14 0000 06-0
02499 LIM , 07 0000 0 &0
02504 EIM , 06 0000 0 -0
02509 LEM 3 15 0000 0&0
02514 SB % 08 2619 2019
02519 SGN T 12 6185 6A85
02524 RCV U 2619
02529 TZB . 01 2534 25T4-
02534 TRS O 11 2549 2ND9-
02539 SB % 08 2619 2019
02544 TR 1 2609-
02549 ADM 6 12 6185 6A85-
02554 SB % 08 2619 2019
02559 EEM 3 14 0000 06-0
02564 LIM , 07 0000 0 &0
02569 TRA I 01 2609 26 9-
02574 SEL 2 0500
02579 WR R 2620
02584 TRA I 03 2594 25I4-
02589 TR 1 2609-
02594 TIP , 14 2599 2ER9-
02599 HLT J 0020
02604 LIP , 15 3700 3G&0
02609 TRA I 02 2494 24R4-
02614 TR 1 2629-
W22

SET SWITCH FOR GOOD INTERRUPT
TURN ON 901 CHK & INTERRUPT

RESET SWITCH

ERROR ROUTINE

2 005 02619 0000F
2 004 02623 0020
2 001 02624

CONSTANTS & WORK AREA

CONSTANTS & WORK AREA

2 005 02744 000AG
2 004 02748 0021
2 001 02749 □


```
ROUTINE 22
TEST AUTO INTERRUPT ON
FORCED 905 CHK ON
RSU IN 705 III MODE
```

```

X22.....I 02754 EEM 3 14 0000 0&-0 I
I 02759 LIM , 07 0000 0 &0 I
I 02764 EIM , 06 0000 0 -0 I
I 02769 LEM 3 15 0000 0&&0 I
I 02774 SGN T 12 6185 6A85 I
I 02779 RSU Q 2859 I
I 02784 TRS 0 15 2794 2GI4- I
I 02789 TR 1 2849- I
I 02794 ADM 6 12 6185 6A85 I
I 02799 EEM 3 14 0000 0&-0 I
I 02804 LIM , 07 0000 0 &0 I
I I I I I I I I I I I
I I I I I I I I I I I
I 02809 TRA I 01 2849 28U9- I
I 02814 SEL 2 0500 I
I 02819 WR R 2860 I
I 02824 TRA I 03 2834 28C4- I
I 02829 TR 1 2849- I
I 02834 TIP , 14 2839 2HL9 I
I 02839 HLT J 0022..... I
I 02844 LIP , 15 3700 3G&0 I
+---02849 TRA I 02 2754 27N4..... I
I 02854 TR 1 2869-----Y24
I I I I I I I I I I I

```

SET SWITCH FOR GOOD INTERRUPT
TURN ON 905 CHK & INTERRUPT

RESET SWITCH

ERROR ROUTINE

CONSTANTS & WORK AREA

2 005 02859
2 004 02863
2 001 02864

000G7
0022
H

2	006	03035			-GG-
3		03039	2914	2914	
2	006	03045			-G--
3		03049	2944	2944	
2	006	03055			-GG-
3		03059	2944	2944	
2	004	03063			0023
2	001	03064			□

```
ROUTINE 24
GO INTO INTERRUPT MODE & TEST
THAT WHEN AUTOMATIC INTERRUPT
OCCURS IC IS STORED IN CASU 15
USE RWD TO TYPEWRITER TO
FORCE INTERRUPT
```

```
ZZ4.....03069 TIP , 14 6139 6AL9-----AU43  
I □ 03074 EEM 3 14 0000 0&-0 □  
I □ 03079 LIM , 07 0000 0 &0 □  
I □ 03084 SET B 0004 □  
I □ 03089 LOD 8 3214 □  
I □ 03094 UNL 7 6452 □  
I □ 03099 SEL 2 0500 □  
I □ 03104 EIM , 06 0000 0 -0 □  
I □ 03109 SGN T 12 6325 6C25 □  
I □ 03114 RWD 3 0002 □  
I □ 03119 ADM 6 12 6325 6C25 □  
I □ 03124 LIM , 07 0000 0 &0 □  
I □ 03129 TRS O 09 3134 3JT4-+T  
I □ 03134 SPC , 0000.....□.  
I □ 03139 SET B 0004 □  
I □ 03144 LOD 8 6452 □  
I □ 03149 CMP 4 3209 □  
I □ 03154 TRE L 3199-----+  
  
I □ I  
I V  
I □ 03159 TRA I 01 3199 31Z9-----Y  
I □ 03164 SEL 2 0500 □ Y  
I □ 03169 WR R 3215 □ Y  
I □ 03174 TRA I 03 3184 31H4-+T Y  
I □ 03179 TR I 3199-----+ Y  
I □ 03184 TLP , 14 3189 3AQ9...+Y  
I □ 03189 HLT J 0024.....+Y  
I □ 03194 LIP , 15 3700 3G&0 +Y  
+- □ 03199 TRA i 02 3069 3009.....+  
I □ 03204 TR 1 3224-----AA26
```

SET 1W 250

RESET MEMORY FIELD

BYPASS TIMEOUT IN INT PROGRAM
CORRECT INTERRUPT
RESET BYPASS SWITCH

CHECK AREA IN CASU 15

ERROR ROUTINE

```

2 001 03205          0
3      03209      3119 3119
2 005 03214          00000
2 004 03218          0024
2 001 03219          H

```

CONSTANTS & WORK AREA

CONSTANTS & WORK AREA

[illegible]

CONSTANTS & WORK AREA

KDK&
1A&AA
0////
0026
П

ROUTINE 27 -
GO INTO INTERRUPT MODE & TEST
THAT WHEN AUTOMATIC INTERRUPT
OCCURS STATUS IS STORED IN
CASU 15, STATUS STORED IS 904
ANY & 7080 ON, STORAGE LO
ACCUMULATOR MINUS & NOT
ZERO, ASU NOT ZERO & NOT MINUS

AC27.....	03584	EEM	3	14	0000	06-0	□
I	03589	LIM	07	0000	0 60	□	
I	03594	SET	B	0004		□	
I	03599	LOD	8	3744		□	
I	03604	CMP	4	3748		□	
I	03609	UNL	7	6448		□	
I	03614	EIM	06	0000	0 -0	□	
I	03619	SGN	12	6325	6C25	□	
I	03624	RSU	Q	3739		□	
I	03629	SUB	P	3737		□	
I	03634	ADM	6	12	6325	6C25	□
I	03639	TRS	O	14	3644	3FM4	□
I	03644	TRA	I		3649		□
I	03649	TRS	O	09	3654	30V4	□
I	03654	LIM	07	0000	0 60	□	
I	03659	SPC		0000		□	
I	03664	SET	B	0004		□	
I	03669	LOD	8	6448		□	
I	03674	CMP	4	3734		□	
I	03679	TRE	L	3724		□	
I	03684	TRA	I	01	3724	37S4	□
I	03689	SEL	2	0500		□	
I	03694	WR	R	3745		□	
I	03699	TRA	I	03	3709	3769	□
I	03704	TR	1	3724		□	
I	03709	TIP	14	3714	3GJ4	□	
I	03714	HLT	J	0027		□	
I	03719	LIP	15	3700	3G60	□	
I	03724	TRA	I	02	3584	35Q4	□
I	03729	TR	1	3754		□	

RESET MEMORY FIELD

STORAGE LO

BYPASS TYPEOUT IN INT PROGRAM
ACC MINUS & NOT ZERO
TURN ON 904 & INTERRUPT
RESET BYPASS SWITCH

CHECK AREA IN CASU 15

ERROR ROUTINE

CONSTANTS & WORK AREA

2 005 03734
2 005 03739
2 005 03744
2 004 03748
2 001 03749

KE-J
A9IAA
01111
0027
□

AD29

KO-K
 000A7
 01111
 0028
 H

ROUTINE 29
GO INTO INTERRUPT MODE & TEST
THAT WHEN AUTOMATIC INTERRUPT
OCCURS STATUS IS STORED IN
CASU 15. STATUS STORED IS
901, ANY & 7080 TGRS ON
STORAGE EQUAL, ASU AND
ACCUMULATOR MINUS & NOT ZERO

```

AE29.....03929 EEM 3 14 0000 06-0
I 03934 LIM , 07 0000 0 &0
I 03939 SET B 0004
I 03944 LOD 8 4104
I 03949 CMP 4 4104
I 03954 UNL 7 6448
I 03959 SPC , 0000
I 03964 RSU Q 4099
I 03969 EIM , 06 0000 0 -0
I 03974 SB % 08 4095 4-95
I 03979 SGN T 12 6325 6C25
I 03984 RSU Q 01 4099 40Z9
I 03989 SB % 09 4095 4-Z5
I 03994 ADM 6 12 6325 6C25
I 03999 TRA I 4004
I 04004 TRS O 11 4009 4-69
I 04009 TRS O 09 4014 4-/4
I 04014 LIM , 07 0000 0 &0
I 04019 SPC , 0000
I 04024 SET B 0004
I 04029 LOD 8 6448
I 04034 CMP 4 4094
I 04039 TRE L 4084
I 04044 TRA I 01 4084 40Y4
I 04049 SEL 2 0500
I 04054 WR R 4105
I 04059 TRA I 03 4069 40F9
I 04064 TR 1 4084
I 04069 TIP , 14 4074 4&P4
I 04074 HLT J 0029
I 04079 LIP , 15 3700 3G&0
I 04084 TRA I 02 3929 39K9
I 04089 TR 1 4114
AF31
  
```

STORAGE EQUAL

ACC MINUS & NOT ZERO

BYPASS TYPEOUT IN INT PROGRA
ASU MINUS & NOT ZERO
TURN ON 901 & INTERRUPT
RESET BYPASS SWITCH

CHECK AREA IN CASU 15

ERROR ROUTINE

CONSTANTS & WORK AREA

```

2 005 04094      -DKL
2 005 04099      100AG
2 005 04104      00000
2 004 04108      0029
2 001 04109      □
  
```


ROUTINE 30
GO INTO INTERRUPT MODE & TEST
THAT WHEN AUTOMATIC INTERRUPT
OCCURS STATUS IS STORED IN
CASU 15. STATUS STORED IS
905, ANY & 7080 TGRS ON
STORAGE EQUAL, ASU AND
ACCUMULATOR MINUS & NOT ZERO

```

AF30.....04114 EEM 3 14 0000 06-0
I 04119 LIM , 07 0000 0 &0
I 04124 SET B 0004
I 04129 LOD 8 4279
I 04134 CMP 4 4279
I 04139 UNL 7 6448
I 04144 SPC , 0000
I 04149 SGN T 12 6325 6C25
I 04154 EIM , 06 0000 0 -0
I 04159 RSU Q 01 4272 42X2
I 04164 RSU Q 4274
I 04169 ADM 6 12 6325 6C25
I 04174 TRA I 4179
I 04179 TRS O 15 4184 4AH4
I 04184 TRS O 09 4189 4JY9
I 04189 LIM , 07 0000 0 &0
I 04194 SPC , 0000
I 04199 SET B 0004
I 04204 LOD 8 6448
I 04209 CMP 4 4269
I 04214 TRE L 4259
I 04219 TRA I 01 4259 42V9
I 04224 SEL 2 0500
I 04229 WR R 4280
I 04234 TRA I 03 4244 42D4
I 04239 TR I 1 4259
I 04244 TIP , 14 4249 4BM9
I 04249 HLT J 0030
I 04254 LIP , 15 3700 3G60
I 04259 TRA I 02 4114 41J4
I 04264 TR 1 4289
AG32

```

STORAGE EQUAL

BYPASS TYPEOUT IN INT PROGRAM

ASU MINUS & NOT ZERO
905 ON, ACC MINUS & NOT ZERO
RESET BYPASS SWITCH

ERROR ROUTINE

CONSTANTS & WORK AREA

2 005 04269
2 005 04274
2 005 04279
2 004 04283
2 001 04284

-F-L
0AGA7
00000
0030
□

ROUTINE 31
GO INTO INTERRUPT MODE & TEST
THAT WHEN AUTOMATIC INTERRUPT
OCCURS SPC IS STORED IN
CASU 15. USE WTM TO TYPEWRITE
TO FORCE INTERRUPT.

```

AG31.....04289 EEM 3 14 0000 06-0
I 04294 LIM 7 07 0000 0 80
I 04299 SET B 0004
I 04304 LOD 8 4429
I 04309 UNL 7 6444
I 04314 SPC 2735
I 04319 SEL 2 0500
I 04324 EIM 06 0000 0 -0
I 04329 SGN 12 6325 6C25
I 04334 WTM 3 0001
I 04339 ADM 6 12 6325 6C25
I 04344 LIM 07 0000 0 80
I 04349 TRS 0 09 4354 4LV4
I 04354 SPC 0000.....
I 04359 SET B 0004
I 04364 LOD 8 6444
I 04369 CMP 4 4434
I 04374 TRE L 4419
I
I
I 04379 TRA I 01 4419 44/9
I 04384 SEL 2 0500
I 04389 WR R 4435
I 04394 TRA I 03 4404 4464
I 04399 TR 1 4419
I 04404 TIP 14 4409 4D-9
I 04409 HLT J 0031.....
I 04414 LIP 15 3700 3G80
I 04419 TRA I 02 4289 42Q9
I 04424 TR 1 4444 AH33
I
I

```

RESET MEMORY FIELD

TEST STORAGE OF THIS ADDRESS
IN CASU 15

BYPASS TYPEOUT IN INT PROGRAM
CORRECT INTERRUPT
RESET BYPASS SWITCH

CHECK AREA IN CASU 15

ERROR ROUTINE

```

2 005 04429 00000
2 005 04434 02735
2 004 04438 0031
2 001 04439

```

CONSTANTS & WORK AREA

```
ROUTINE 32
GO INTO INTERRUPT MODE & TEST
THAT WHEN AUTOMATIC INTERRUPT
OCCURS SPC IS STORED IN
CASU-15. USE WTM TO TYPEWRITER
TO FORCE INTERRUPT
```

Address	Instruction	Op	Rs	Rt	Value	Comment
04444	EEM	3	14	0000	0E-0	
04449	LIM	07		0000	0 & 0	
04454	SET	B		0004		
04459	LOD	8		4584		
04464	UNL	7		6444		
04469	SPC			0512		
04474	SEL	2		0500		
04479	EIM	06		0000	0 -0	
04484	SGN	T	12	6325	6C25	
04489	WTM	3		0001		
04494	ADM	6	12	6325	6C25	
04499	LIM	07		0000	0 & 0	
04504	TRS	O	09	4509	4N 9	
04509	SPC			0000		
04514	SET	B		0004		
04519	LOD	8		6444		
04524	CMP	4		4589		
04529	TRE	L		4574		

04534	TRA	I	01	4574	45X4	
04539	SEL	2		0500		
04544	WR	R		4590		
04549	TRA	I	03	4559	45E9	
04554	TR	1		4574		
04559	TIP	J	14	4564	4E04	
04564	HLT			0032		
04569	LIP		15	3700	3G&0	
04574	TRA	I	02	4444	44M4	
04579	TR	1		4599		

RESET MEMORY FIELD

TEST STORAGE OF THIS ADDRESS
IN CASU 15

BYPASS TYPEOUT IN INT PROGRAM
CORRECT INTERRUPT
RESET BYPASS SWITCH

ERROR ROUTINE

2	005	04584
2	005	04589
2	004	04593
2	001	04594

00000
00512
0032
□

CONSTANTS & WORK AREA

ROUTINE 33

GO INTO INTERRUPT MODE & TEST
THAT WHEN AUTOMATIC INTERRUPT
OCCURS MAC II IS STORED IN
CASU 15. USE SKP TO TYPEWRITE
TO FORCE INTERRUPT

```

AJ33.....04599 EEM 3 14 0000 08-0
I 04604 LIM 07 0000 0 80
I 04609 SET B 0004
I 04614 LOD 8 4739
I 04619 UNL 7 6436
I 04624 SEL 2 0500
I 04629 RCV U 12 14696 U696
I 04634 SGN T 12 6325 6C25
I 04639 EIM 06 0000 0 -0
I 04644 SKP 3 0009
I 04649 ADM 6 12 6325 6C25
I 04654 LIM 07 0000 0 80
I 04659 TRS 0 09 4664 40W4
I 04664 SPC 0000
I 04669 SET B 0004
I 04674 LOD 8 6436
I 04679 CMP 4 4744
I 04684 TRE L 4729
I 04689 TRA I 01 4729 47S9
I 04694 SEL 2 0500
I 04699 WR R 4745
I 04704 TRA I 03 4714 47A4
I 04709 TR 1 4729
I 04714 TIP 14 4719 46J9
I 04719 HLT J 0033
I 04724 LIP 15 3700 3G80
I 04729 TRA I 02 4599 45R9
I 04734 TR 1 4754
  
```

RESET MEMORY FIELD

TEST STORAGE OF THIS ADDRESS
BYPASS TYPEOUT IN INT PROGRAM

CORRECT INTERRUPT
RESET BYPASS SWITCH

CHECK AREA IN CASU 15

ERROR ROUTINE

CONSTANTS & WORK AREA

```

2 005 04739 00000
2 005 04744 0U696
2 004 04748 0033
2 001 04749
  
```

ROUTINE 34
GO INTO INTERRUPT MODE & TEST
THAT WHEN AUTOMATIC INTERRUPT
OCCURS SR IS STORED IN CASU 15
USE BSP TO TYPEWRITER TO
FORCE INTERRUPT.

AK34.....

```

04754 EEM 3 14 0000 06-0
04759 LIM 07 0000 0 60
04764 SET B 0004
04769 LOD 8 4889
04774 UNL 7 6428
04779 SEL 2 0500
04784 EIM 06 0000 0 -0
04789 SGN T 12 6325 6C25
04794 BSP 3 0004
04799 ADM 6 12 6325 6C25
04804 LIM 07 0000 0 60
04809 TRS O 09 4814 4Q/4
04814 SPC 0000
04819 SET B 0004
04824 LOD 8 6428
04829 CMP 4 4894
04834 TRE L 4879
04839 TRA I 01 4879 48X9
04844 SEL 2 0500
04849 WR R 4895
04854 TRA I 03 4864 48F4
04859 TR 1 4879
04864 TIP 14 4869 4H09
04869 HLT J 0034
04874 LIP 15 3700 3G60
04879 TRA I 02 4754 47N4
04884 TR 1 4904

```

RESET MEMORY FIELD

TEST STORAGE OF THIS ADDRESS
IN CASU 15
BYPASS TYPEOUT IN INT PROGRAM
CORRECT INTERRUPT
RESET BYPASS SWITCH

ERROR ROUTINE

AL36

CONSTANTS & WORK AREA

2 005 04889
2 005 04894
2 004 04898
2 001 04899

00000
00500
0034
□

ROUTINE 25
GO INTO INTERRUPT MODE & TEST
THAT WHEN AUTOMATIC INTERRUPT
OCCURS SR IS STORED IN CASU 15
SELECT 800 & BSP TO
FORCE INTERRUPT.

```

AL35.....04904 EEM 3 14 0000 0&-0
I 04909 LIM , 07 0000 0 &0
I 04914 SET B 0004
I 04919 LOD 8 5099
I 04924 UNL 7 6428
I 04929 SEL 2 0800
I 04934 EIM , 06 0000 0 -0
I 04939 SGN T 12 6325 6C25
I 04944 BSP 3 0004
I 04949 ADM 6 12 6325 6C25
I 04954 LIM , 07 0000 0 &0
I 04959 TRS 0 09 4964 4RW4
I 04964 SPC , 0000.....
I 04969 SET B 0004
I 04974 LOD 8 6428
I 04979 CMP 4 5104
I 04984 TRE L 4994
I 04989 TR 1 5049
I 04994 SGN T 12 6325 6C25
I 04999 EIM , 06 0000 0 -0
I 05004 BSP 3 0004
I 05009 ADM 6 12 6325 6C25
I 05014 LIM , 07 0000 0 &0
I 05019 TRS 0 09 5024 5-S4
I 05024 SPC , 0000.....
I 05029 SET B 0004
I 05034 LOD 8 6428
I 05039 CMP 4 5104
I 05044 TRE L 5089
I .....
I .....
I .....
I 05049 TRA I 01 5089 50Y9
I 05054 SEL 2 0500
I 05059 WR R 5105
I 05064 TRA I 03 5074 50G4
I 05069 TR 1 5089
I 05074 TIP , 14 5079 5&P9
I 05079 HLT J 0035.....
I 05084 LIP , 15 3700 3G&0
I 05089 TRA I 02 4904 49-4
I 05094 TR 1 5114-----AM37
I .....

```

RESET MEMORY FIELD

TEST STORAGE OF THIS ADRESS
IN CASU 15
BYPASS TYPEOUT IN INT PROGRAM
CORRECT INTERRUPT
RESET BYPASS SWITCH

BYPASS TYPEOUT IN INT PROGRAM
CORRECT INTERRUPT
RESET BYPASS SWITCH

ERROR ROUTINE

CONSTANTS & WORK AREA

```

2 005 05099 00000
2 005 05104 00800
2 004 05108 0035
2 001 05109

```

ROUTINE 36
GO INTO INTERRUPT MODE & TEST
THAT WHEN AUTOMATIC INTERRUPT
OCCURS-SPC IS RESET TO 2000.
USE SDL TO TYPEWRITER TO
FORCE INTERRUPT.

AM36.....	05114	EEM	3	14	0000	08-0	
I	05119	LIM	,	07	0000	0 80	
I	05124	SPC	,		0000		
I	05129	SET	B		0004		
I	05134	LOD	8		5264		
I	05139	UNL	7		6459		
I	05144	SPC	,		2000		
I	05149	SET	B		0005		
I	05154	LOD	8		5269		
I	05159	SPC	,		0000		
I	05164	SEL	2		0500		
I	05169	EIM	,	06	0000	0 -0	
I	05174	SGN	T	12	6325	6C25	
I	05179	SDL	3		0037		
I	05184	ADM	6	12	6325	6C25	
I	05189	LIM	,	07	0000	0 80	
I	05194	TRS	0	09	5199	5JZ9	
I	05199	LOD	8		6459		
I	05204	CMP	4		5274		
I	05209	TRE	L		5254		
I	05214	TRA	I	01	5254	52V4	
I	05219	SEL	2		0500		
I	05224	WR	R		5275		
I	05229	TRA	I	03	5239	52C9	
I	05234	TR	1		5254		
I	05239	TIP	,	14	5244	5BM4	
I	05244	HLT	J		0036		
I	05249	LIP	,	15	3700	3G60	
I	05254	TRA	I	02	5114	51J4	
I	05259	TR	1		5284		AN38

RESET MEMORY FIELD

LOAD TEST FIELD

BYPASS TYPEOUT IN INT PROGRAM
CORRECT INTERRUPT
RESET BYPASS SWITCH

CHECK AREA IN CHANNEL 20

ERROR ROUTINE

CONSTANTS & WORK AREA

2	005	05264	00000
2	005	05269	A5269
2	005	05274	A5269
2	004	05278	0036
2	001	05279	

ROUTINE 37
GO INTO INTERRUPT MODE & TEST
THAT WHEN AUTOMATIC INTERRUPT
OCCURS IC,STATUS,SPC,MAC II
& SR ARE STORED IN CORRECT
PLACES IN CASU 15

```

AN37.....05284 EEM 3 14 0000 06-0
I 05289 LIM , 07 0000 0 60
I 05294 SET B 0028
I 05299 LOD 8 5462
I 05304 UNL 7 6452
I 05309 SET B 0001
I 05314 CMP 4 5486
I 05319 SPC , 3700
I 05324 RCV U 28731 Q731
I 05329 SEL 2 0500
I 05334 EIM , 06 0000 0 -0
I 05339 SGN T 12 6325 6C25
I 05344 SDL 3 0037
I 05349 ADM 6 12 6325 6C25
I 05354 LIM , 07 0000 0 60
I 05359 TRS 0 09 5364 5LW4
I 05364 SPC , 0000
I 05369 SET B 0028
I 05374 LOD 8 6452
I 05379 CMP 4 5490
I 05384 TRE L 5429
I 05389 TRA I 01 5429 54S9
I 05394 SEL 2 0500
I 05399 WR R 5495
I 05404 TRA I 03 5414 54A4
I 05409 TR 1 5429
I 05414 TIP , 14 5419 5DJ9
I 05419 HLT J 0037
I 05424 LIP , 15 3700 3G60
I 05429 TRA I 02 5284 52Q4
I 05434 TR 1 5504
  
```

STORAGE HI

BYPASS TYPEOUT IN INT PROGRAM
CORRECT INTERRUPT
RESET BYPASS SWITCH

CHECK AREA IN CASU 15

ERROR ROUTINE

CONSTANTS & WORK AREA

```

2 014 05448 00000000000000
2 014 05462 00000000000000
2 024 05486 050000000Q73100003700J6-M
3 05490 5349 5349
2 004 05494 0037
2 004 05498
2 001 05499
  
```


ROUTINE 38
GO INTO INTERRUPT MODE & TEST
THAT WHEN AUTOMATIC INTERRUPT
OCCURS MAC II IS STORED IN
CASU 15. USE SKP TO TYPEWRITER
TO FORCE INTERRUPT

AP38	05504	EEM	3	14	0000	08-0	
	05509	LIM	07	0000	0 &0		
	05514	SET	B	0004			
	05519	LOD	8	5644			
	05524	UNL	7	6436			
	05529	SEL	2	0500			
	05534	RCV	U	32056	B056		
	05539	SGN	T	12	6325	6C25	
	05544	EIM	06	0000	0 -0		
	05549	SKP	3	0009			
	05554	ADM	6	12	6325	6C25	
	05559	LIM	07	0000	0 &0		
	05564	TRS	O	09	5569	5NW9	
	05569	SPC			0000		
	05574	SET	B		0004		
	05579	LOD	8		6436		
	05584	CMP	4		5649		
	05589	TRE	L		5634		
	05594	TRA	I	01	5634	56T4	
	05599	SEL	2		0500		
	05604	WR	R		5650		
	05609	TRA	I	03	5619	56A9	
	05614	TR	1		5634		
	05619	TIP	14		5624	5FK4	
	05624	HLT	J		0038		
	05629	LIP	15		3700	3G&0	
	05634	TRA	I	02	5504	55-4	
	05639	TR	1		5659		AQ40

RESET MEMORY FIELD

BYPASS TYPEOUT IN INT PROGRAM

CORRECT INTERRUPT
RESET BYPASS SWITCH

CHECK AREA IN CASU 15

ERROR ROUTINE

CONSTANTS & WORK AREA

2	005	05644	00000
2	005	05649	0B056
2	004	05653	0038
2	001	05654	

ROUTINE 39
GO INTO INTERRUPT MODE &
PERFORM SERIES OF ARITHMATIC
OPERATIONS WITHOUT FORGING
INTERRUPTS. TYPEOUT ANY WILD
INTERRUPT

```

AQ39 ..... 05659 EEM 3 14 0000 08-0
I 05664 LIM , 07 0000 0 80
I 05669 EIM , 06 0000 0 -0
I 05674 SPC , 0000
I 05679 RAD H 5834
I 05684 SET B 0004
I 05689 ADD G 5832
I 05694 MPY V 5830
I 05699 SET B 0004
I 05704 UNL 7 5854
I 05709 SPC , 0000
I 05714 SET B 0004
I 05719 LOD 8 5854
I 05724 DIV W 5839
I 05729 SET B 0004
I 05734 UNL 7 5854
I 05739 SPC , 0000
I 05744 SET B 0004
I 05749 LOD 8 5854
I 05754 ADD G 5828
I 05759 SUB P 5826
I 05764 CMP 4 5849
I 05769 LIM , 07 0000 0 80
I 05774 TRE L 5819
I ..... I
I ..... I
I 05779 TRA I 01 5819 5879-
I 05784 SEL 2 0500
I 05789 WR R 5840
I 05794 TRA I 03 5804 5864-
I 05799 TR 1 5819-
I 05804 TIP , 14 5809 5H-9-
I 05809 HLT J 0039.....
I 05814 LIP , 15 3700 3G&0
I 05819 TRA I 02 5659 56N9-
I 05824 TR 1 5859-AR41
I ..... I

```

PUT 4 IN ACCUMULATOR
ADD 5
MULTIPLY RESULT BY 8

DIVIDE BY 12

PUT 6 IN ACCUMULATOR
ADD 3
SUBTRACT 2
COMPARE 7

ERROR ROUTINE

CONSTANTS & WORK AREA

```

2 010 05834 ABACAHAEAD
2 005 05839 00A1B
2 004 05843 0039
2 001 05844
2 005 05849 00007
2 005 05854

```

ROUTINE 40
GO INTO INTERRUPT MODE & TEST
THAT WHEN AUTOMATIC INTERRUPT
OCCURS SR IS STORED IN CASU 15
USE 904 TO FORCE INTERRUPT

AR40.....	05859	EEM	3	14	0000	06-0	
I	05864	LIM	,	07	0000	0 &0	
I	05869	SET	B		0004		
I	05874	LOD	8		6009		
I	05879	UNL	7		6428		
I	05884	SEL	2		0902		
I	05889	RAD	H		6024		
I	05894	SGN	T	12	6325	6C25	
I	05899	EIM	,	06	0000	0 -0	
I	05904	ADD	G		6022		
I	05909	ADM	6	12	6325	6C25	
I	05914	TRS	0	14	5919	5IJ9	
I	05919	TRA	I		5924		
I	05924	LIM	,	07	0000	0 &0	
I	05929	TRS	0	09	5934	5RT4	
I	05934	SPC	,		0000		
I	05939	SET	B		0004		
I	05944	LOD	8		6428		
I	05949	CMP	4		6014		
I	05954	TRE	L		5999		
I	05959	TRA	I	01	5999	59Z9	
I	05964	SEL	2		0500		
I	05969	WR	R		6015		
I	05974	TRA	I	03	5984	59H4	
I	05979	TR	I		5999		
I	05984	TIP	,	14	5989	5IQ9	
I	05989	HLT	J		0040		
I	05994	LIP	,	15	3700	3G&0	
I	05999	TRA	I	02	5859	58N9	
I	06004	TR	1		6029		AS42

RESET MEMORY FIELD

TEST STORAGE OF THIS ADDRESS
BYPASS TYPEOUT IN INT PROGRAM
TURN ON 904 & INTERRUPT
RESET BYPASS SWITCH

CHECK AREA IN CASU 15

ERROR ROUTINE

CONSTANTS & WORK AREA

2	005	06009	00000
2	005	06014	00902
2	004	06018	0040
2	001	06019	
2	005	06024	A9IAA

gscans/g0015418.png

AS41.....
 06029 SEL 2 0500
 06034 WR R 6075
 06039 SEL 2 0914
 06044 TRS 0 0004
 06049 SEL 2 0500
 06054 WR R 6080
 06059 TIP , 14 6064 6&04
 06064 HLT J 9999
 06069 LIP , 15 3700 3G&0
 06074 TR 1 18219 Y219

2 001 06075
 2 001 06076
 2 003 06079
 2 019 06098
 2 001 06099

Z
 □

TURN NON STOP OFF
 □

CONSTANTS & WORK AREA

CONSTANTS & WORK AREA

SUB ROUTINE 3
FOR ROUTINES 1 THROUGH 23
ON ALL INTERRUPTS RESET CHK
TGRS. ON GOOD INTERRUPTS STEP
IC PLUS 5. FOR BAD INTERRUPTS
TYPEOUT IC LOCATION & IN SOME
ROUTINES ALSO STEP IC PLUS 5

```

#####V#####
06174 EEM 3 14 0000 06-0
06179 SPC 3 3700
06184 SET B 0004
06189 NOP A 6239
06194 TRS 0 09 6199 6JZ9
06199 SUB P 6289
06204 UNL 7 6296
06209 TRA I 01 6224 62S4
06214 SEL 2 0500
06219 WR R 6290
06224 ADD G 6289
06229 NOP A 6239
06234 TR 1 6244
06239 ADD G 6289
06244 SPC 3 3704
06249 LFC 3 02 6284 62Q4
06254 SPC 3 0000
06259 ADM 6 12 6185 6A85
06264 ADM 6 12 6225 6B25
06269 SPC 3 2000
06274 LIM 3 07 0000 0 60
06279 LIP 3 15 0009 0669
#####

```

SWITCH TO BYPASS TYPEOUTS

SWITCH 2

ADD 5 TO ADDRESS IN CASU 15

RESET CHECK TRIGGERS

RESET SWITCH 1

RESET SWITCH 2

CONSTANTS & WORK AREA

```

2 005 06284
2 005 06289
2 009 06298
2 001 06299
2 005 06304

```

```

-6-
000AE
IC-

```

SUB ROUTINE 4
FOR ROUTINES 24 THROUGH 40
ON ALL INTERRUPTS RESET CHK
TGRS & UNLOAD CONTENTS OF
CASU 15. ON BAD INTERRUPTS
TYPEOUT IC LOCATION

06309	SET	B	0005		
06314	UNL	7	6459		
06319	SPC	,	3700		
06324	UNL	7	6452		
06329	NOP	A	6374	-----	I
06334	SPC	,	0000		I
06339	SET	B	0004		I
06344	LOD	8	6452		I
06349	SUB	P	6424		I
06354	UNL	7	6416		I
06359	TRA	I 01	6374	63X4	I
06364	SEL	2	0500		I
06369	WR	R	6410		I
06374	SPC	,	3704		I
06379	LFC	,	02	6409	64-9
06384	SPC	,	0000		
06389	ADM	6 12	6325	6C25	
06394	SPC	,	2000		
06399	LIM	,	07	0000	0 & 0
06404	LIP	,	15	0009	0&&9

UNLOAD CASU 15 IN MEMORY
SWITCH TO BYPASS TYPEOUTS

SUBTRACT 5 FROM ADDRESS

RESET CHECK TRIGGERS

CONSTANTS & WORK AREA

2	005	06409	-G--
2	009	06418	IC-
2	001	06419	000AE
2	005	06424	
2	028	06452	
2	007	06459	

gscans/g0015416.png

