RTI Inc.

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August 30, 1989

Mr. Malcolm R. Knapp, Director
ted States
clear Regulatory Commission
Region 1
475 Allendale Road
King of Prussia, PA 19406

Subject: Enforcement Conference Report No. 030-07022/89-002

Dear Mr. Knapp:

Reference is made to your letter and enclosure of August 22, 1989, in which you included a copy of the above-referenced Enforcement Conference Report. As you indicated in your letter, no reply to your letter is required. We note that the Enforcement Conference Report summarizes the Conference which took place on April 26, 1989. We understand that such reports must be in summary fashion, however, we believe that certain sections of the report, from our standpoint, require supplementation or clarification. Accordingly, we request that this letter be filed with the Enforcement Conference Report for that purpose.

I.

The third and fourth sentences on page 3, of the report, state as follows: "Once the problem was reported to the Radiation Safety Office, he took immediate action to repair it. The licensee contends that the door was never opened without the use of the required key and that no one gained access to the irradiator cell without using the required key to open the door."

RTI believes that a more complete summary of the Conference would state as follows. The first two sentences of the paragraph would remain the same. The following sentence, beginning with the phrase "The licensee contends" should be changed to read: The Licensee contended that inadvertent access through the door to the irradiator cell could not occur. The licensee noted that the door has two interlocks, the door latch and the limit switch both of which were fully functional at all times. During the routine audit of February 13, 1989, the doorknob was vigorously twisted with the use of excessive force to intentionally test the interlock system. As a result of this test the door opened, the source immediately dropped to the shielded position as required. Operations were suspended pending corrective action.

D/41

9101220384 900913
PDR FOIA
JONES90-334 PDR

AUG 31 1989

The following statement on page 3 of the Inspection Report was also discussed:

> "During the March 21 and 23, 1989, inspection, the inspector learned that, on March 9, 1989, the licensee removed the 90 second start-up time delay (cell start-up key switch) and installed a toggle switch for the purpose of continuing irradiator operations."

There is an apparent misunderstanding that the 90 second start up time delay was removed. This is in fact, incorrect, in that only the mechanism for activating this time delay was changed from the key switch to a toggle switch.

The following statement on page 4 of the Inspection Report was also discussed:

> "During the week of February 5, 1989 the operator again experienced problems with the personnel access door lock mechanism which affected the interlock. In this case, the lock mechanism malfunctioned such that it no longer provided a positive lock to prevent inadvertent personnel access to the irradiator cell. This condition was such that an individual could have opened the access door without the irradiator key. The operator notified the RSO and the Plant Superintendent of the problem."

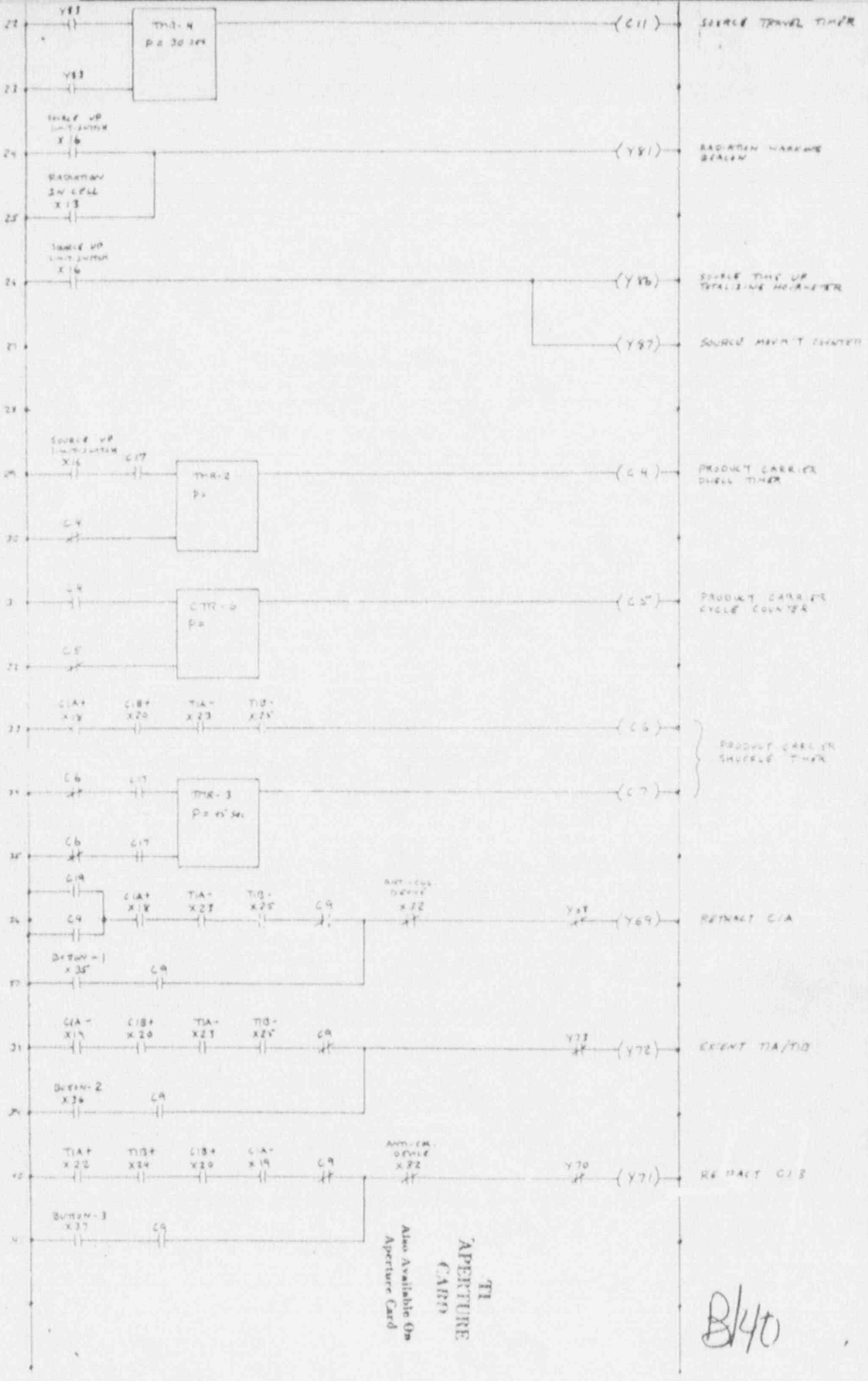
The Vice-President of Operations and Engineering stated that he had spoken with the operator in question, and that he was not sure of whether the operator was "telling him what he wanted to hear" but the operator indicated he had read the Inspection Report and disagreed with the implications found therein. Marlene Taylor, NRC Inspector, stated that although she had talked to other operators, she did not have an opportunity to talk with the other operators about the personnel access door matter.

Your cooperation with regard to this matter is appreciated.

Sincerely,

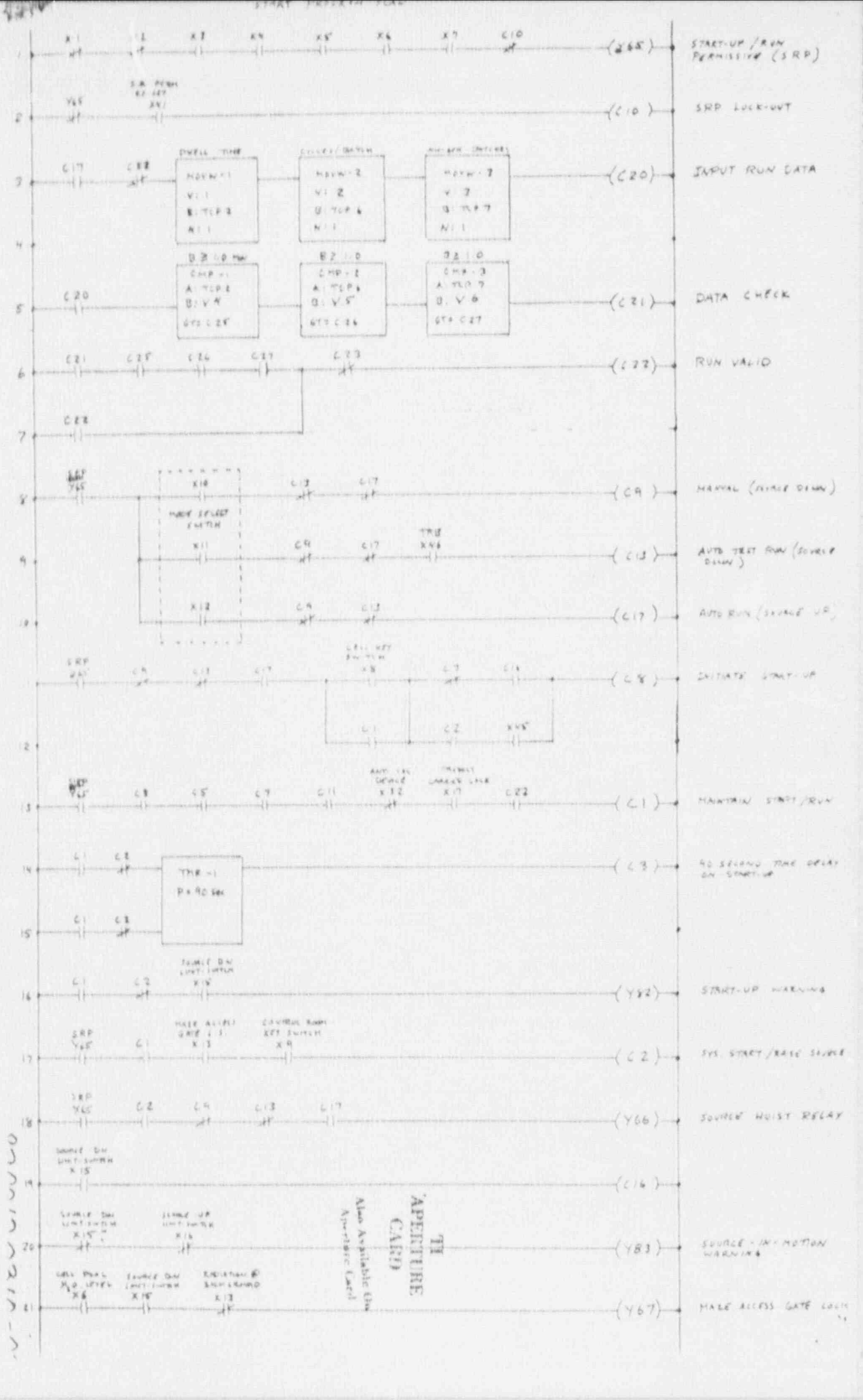
John N. Scandalios
President

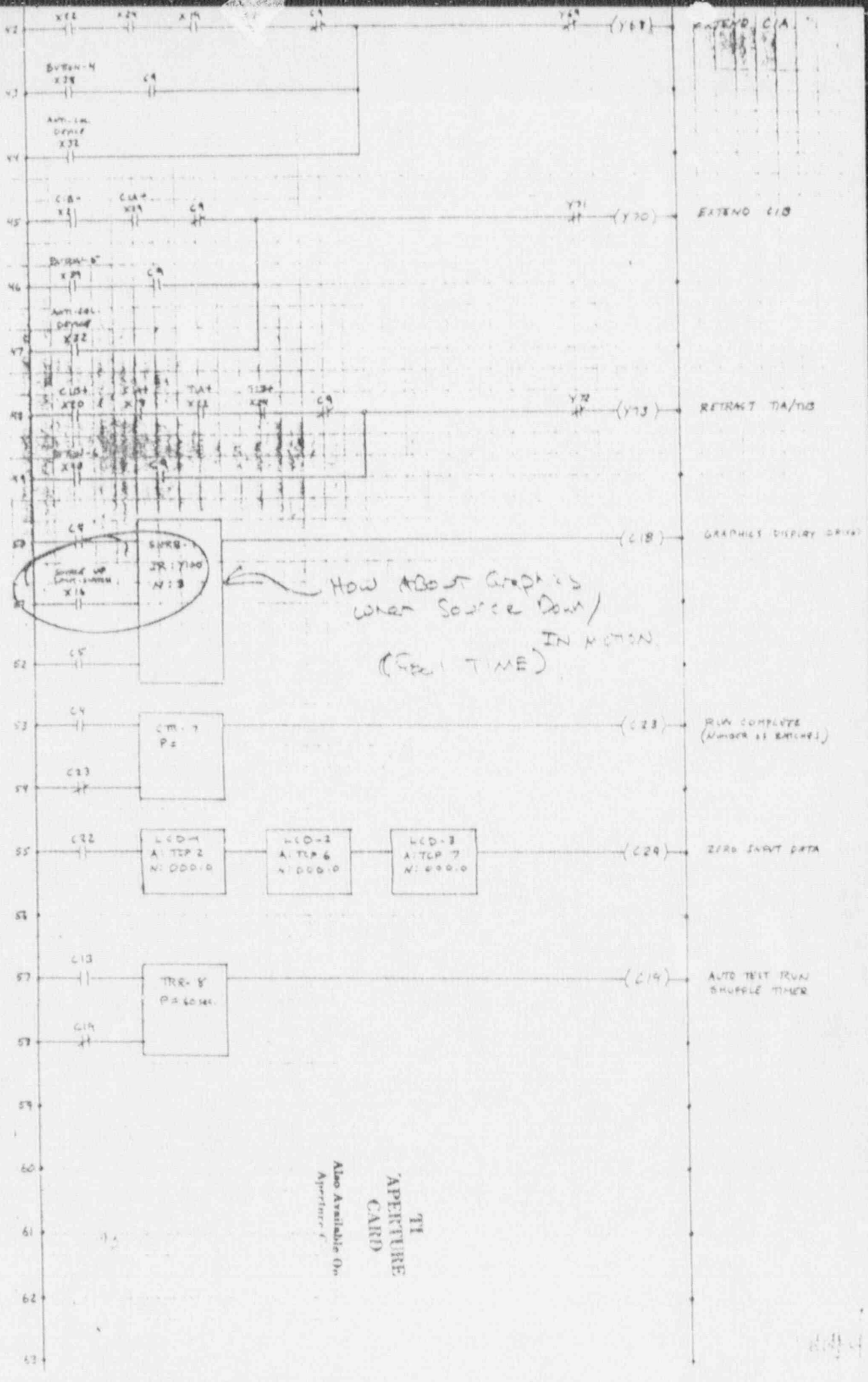
JNS:jk



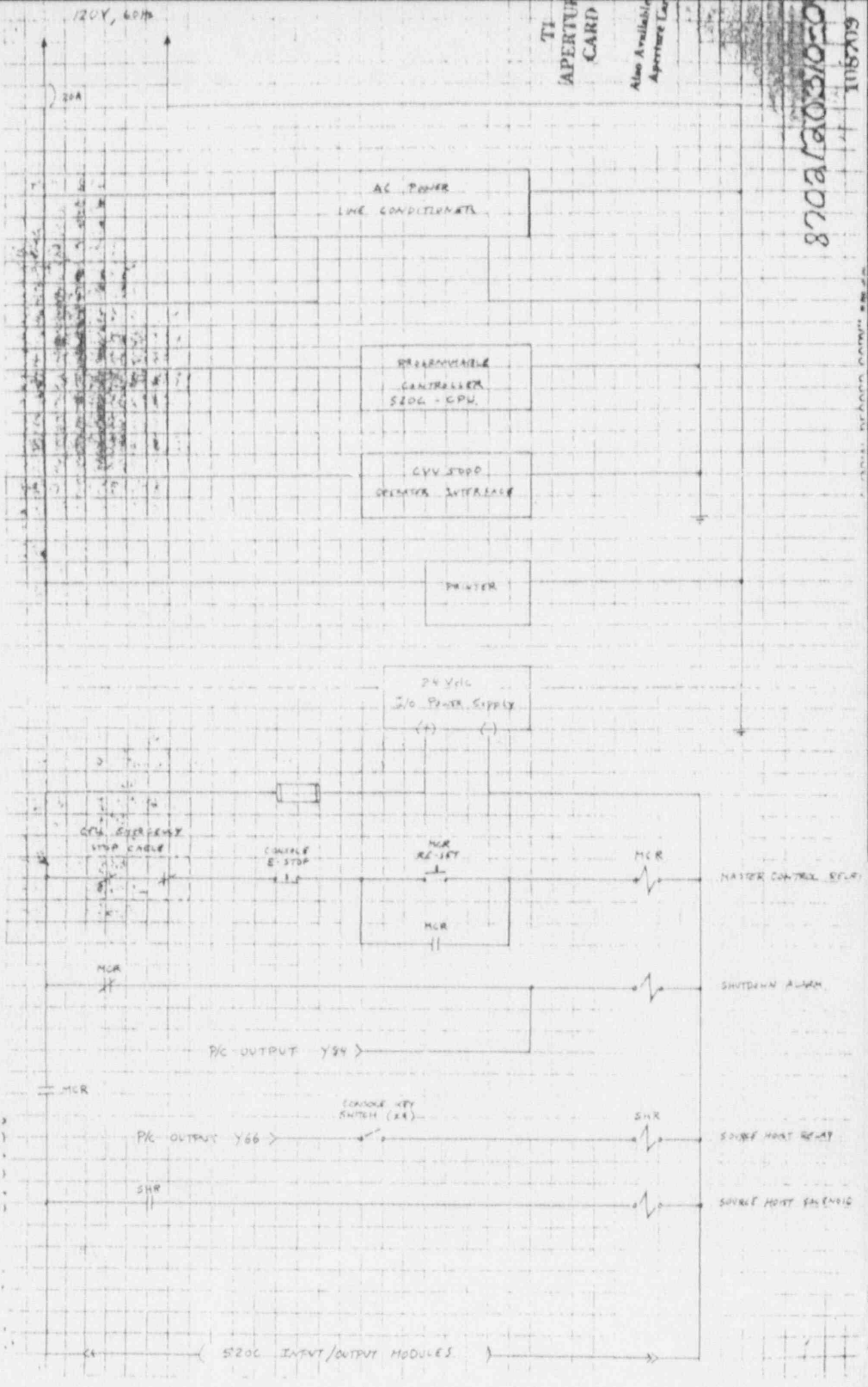
TI APERTURE CARD
Also Available On Aperture Card

B/40

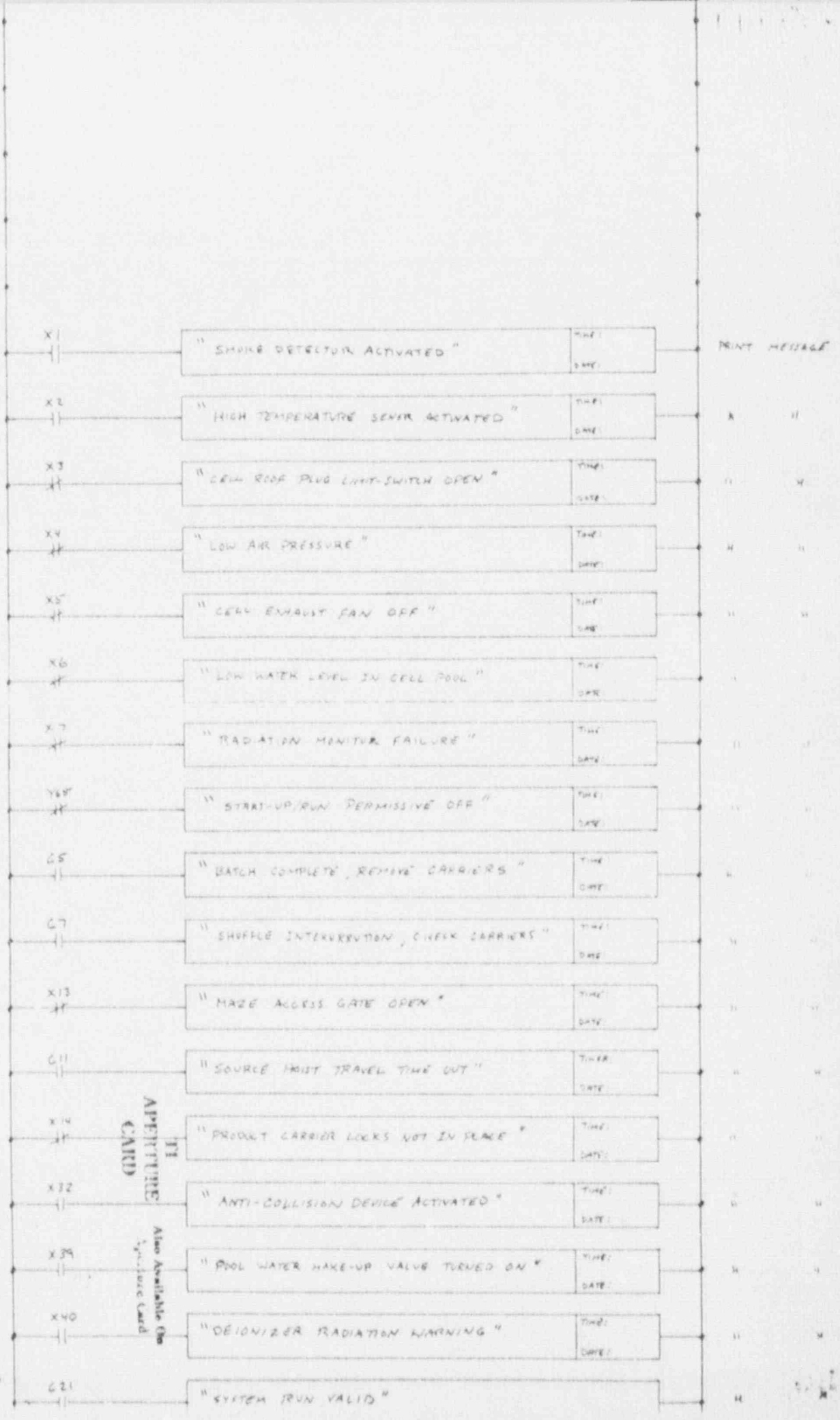

START-UP / RUN PERMISSIVE (SRP)
SRP LOCK-OUT
INPUT RUN DATA
DATA CHECK
RUN VALID
MANUAL (SOURCE DOWN)
AUTO TEST RUN (SOURCE DOWN)
AUTO RUN (SOURCE UP)
INITIATE START-UP
MAINTAIN START/RUN
40 SECOND TIME DELAY ON START-UP
START-UP WARNING
SYS. START/RAISE SOURCE
SOURCE HOIST RELAY
SOURCE-IN-MOTION WARNING
MAZE ACCESS GATE LOCK
APERTURE CARD



TI APERTURE CARD
Also Available On Aperture Card

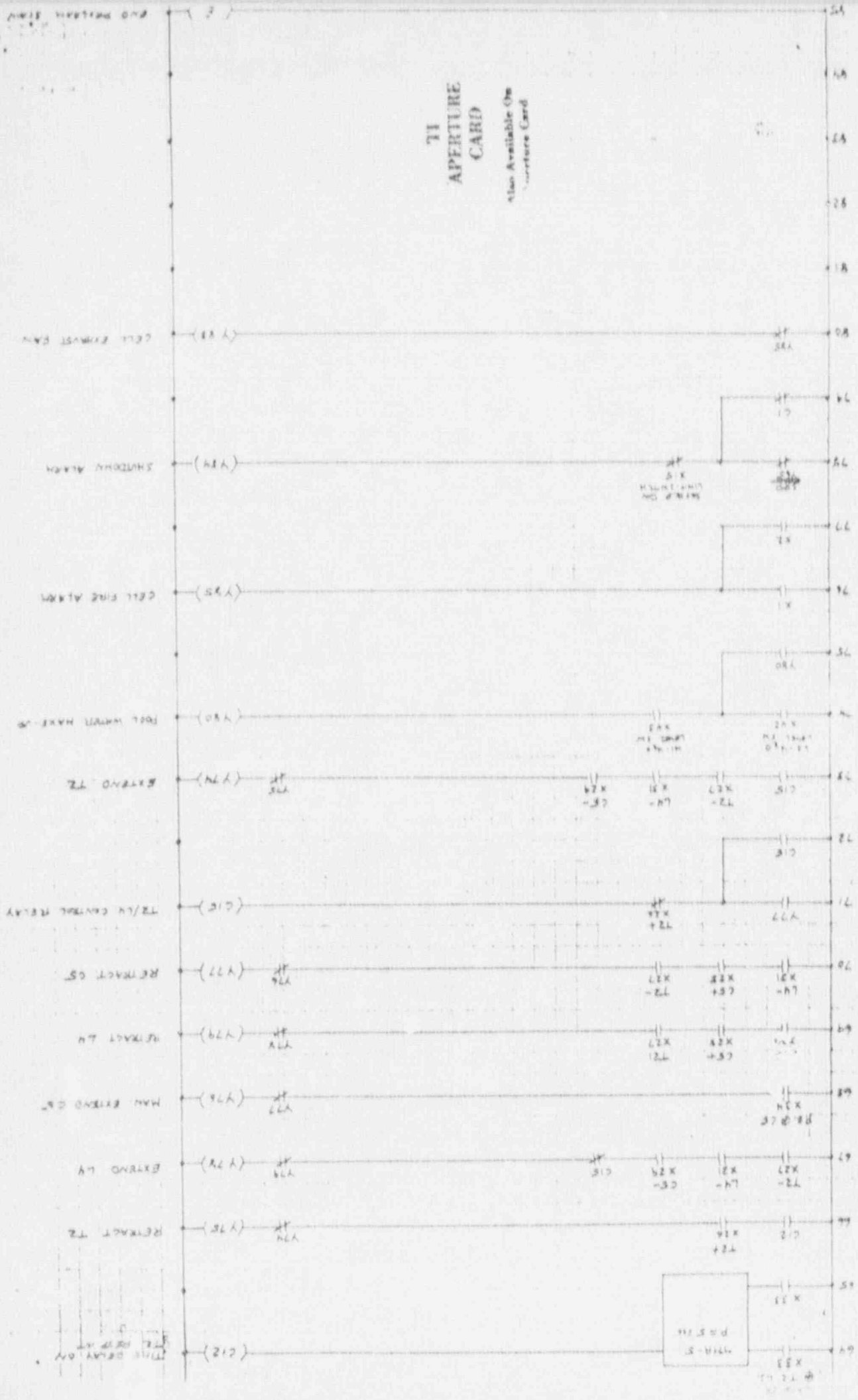


TI
APERTURE
CARD
Also Available
Aperture Card
8702120310-0
108709


X1
" SMOKE DETECTOR ACTIVATED "
TIME:
DATE:
PRINT MESSAGE
X2
" HIGH TEMPERATURE SENSOR ACTIVATED "
X3
" CELL ROOF PLUG LIMIT-SWITCH OPEN "
X4
" LOW AIR PRESSURE "
X5
" CELL EXHAUST FAN OFF "
X6
" LOW WATER LEVEL IN CELL POOL "
X7
" RADIATION MONITOR FAILURE "
Y65
" START-UP/RUN PERMISSIVE OFF "
C5
" BATCH COMPLETE, REMOVE CARRIERS "
C7
" SHUFFLE INTERRUPTION, CHECK CARRIERS "
X13
" MAZE ACCESS GATE OPEN "
C11
" SOURCE HOIST TRAVEL TIME OUT "
X14
" PRODUCT CARRIER LOCKS NOT IN PLACE "
X32
" ANTI-COLLISION DEVICE ACTIVATED "
X39
" POOL WATER MAKE-UP VALVE TURNED ON "
X40
" DEIONIZER RADIATION WARNING "
C21
" SYSTEM RUN VALID "
APERTURE CARD
Also Available On
Aperture Card

TI
APERTURE
CARD

Also Available On
Aperture Card



MEMORANDUM

TO: John Scandalios
FROM: John D.Schlecht/ Plant Manager NJPTI
SUBJECT: System Problems on 8/12/89 and 8/13/89
DATE: August 14, 1989

On August 12, 1989 I received a phone call from Dave Smith, the shift supervisor, at 8:00 PM. He informed me that he could not get the system running and that he did not know what the problem was. I arrived at 9:15 PM and assessed the situation. The computer was not allowing access through the keyboard. A message was displaying "Unable to Complete Operation". I reset the system using the MCR (Master Control Relay) over the PLC. The system rebooted. The display now indicated the system was at the seventh index rather than the fourth index as displayed before reseting. We confirmed that the new display was correct by examining the carriers in the cell.

When we attempted to restart we continued to get an alarm indicating C1A travel timed out. We attempted to fix the problem but to no avail. We now continued to get "Carrier Missing at C1A" messages. I aborted the run at 10:11 PM. The system continued to display the "Carrier Missing at C1A-" message. We tried many methods to fix the situation. I cancelled third shift at 1:30 AM.

Myself and Mr. Singleton resumed corrective action at 6:00 AM on 8-13-89. We removed all carriers from the cell and I manually stroked the cylinders to their correct positions. Startup was still not allowed due to "Carrier Missing at C1A+" alarm. We tested the microswitches at C1A and C1B using a voltmeter. All switches tested O.K.. In order to further test the system I forced out this alarm through output C143 in the Logic. This allowed us to raise the source in a static mode. This step did not compromise safety because the carrier missing switches are not applicable to static runs.

We topped off [redacted] using static dwells and manually moving the carriers after th. source dropped. All dosimetry from Osteonics was acceptable.

MEM was run the evening of 8-13-89 in a static mode.

At 6:00 AM 8-14-89 myself and Mr. Singleton continued to work on the problem. All limit switches for cylinders C1A and C1B were replaced. I removed the "force" on output C143 ("Carrier Missing at C1A+") of the program. All now appeared normal.

We ran the system in an "Auto Test" Mode to ensure proper functioning of the cylinders. All funtioned properly. We then went up on an SIT and resumed normal operations at 7:49 AM.

8/89

The changing of the limit switches appears to have solved the problem. The initial problem that Mr. Smith encountered involved C1B, so this is logical. The loss of 3 indexes in the computer printout could have occured if the printer was inadvertandly shut off.

All pertinent logs and printouts are attached for inspection.

J. D. Schlecht

John D. Schlecht
Plant Manager

cc: M. Burke
P. Shapiro

IRRADIATOR LOG

START DATE / STOP DATE	START TIME / STOP TIME	BATCH NUMBER		DWELL	RUN CLOCK	REMARKS
8/12/89	0935	1452-1-1		9 min		
8/12/89	1107			14 sec	5309.8	[illegible]
8/12/89	1122	0943-450 1271-11		15 min		
8/12/89	1352			5 sec	5311.2	[illegible]
8/12/89	1405	[illegible]		24 min		
8/12/89	1742	1419-10-1		6 sec	5313.6	[illegible]
8/12/89	1502	0943-450	SIT	15 min		
8/13/89	1204			6 sec	5312.3	[illegible]
8/13/89	1330	0943-450		2 min		
8/13/89	1412			6 sec	5319.7	[illegible]
8/13/89	1636	1042-99		1 min		
8/13/89	2114			35 sec	5320.0	[illegible]
8/14/89	0749	1419-10-2 (SIT)		24 min 6 sec	5320.8	[illegible]

Source Move Log

S: SIT (Safety Interlock Test)
SOR (Start Of Run)
EOR (End Of Run)

PS (Place Static)
TS (Turn Static)
RS (Remove Static)

	TIME UP	REASON	INITIAL	TIME DOWN	REASON	INITIAL
1/89	1405	SOR		1742	EOR	
2/89	1402	SOR		1404	missing CIB	
2/89	1407	Process			missing CIB	
13/89	1102	System test	/JDS	1107	End Safety Test	/JDS
3/89	1122	Continue Run/SIT	/JDS	1126	SIT	/JDS
13/89	1128	SIT	/JDS	1129	SIT	/JDS
13/89	1133	CONTINUE RUN	/JDS	1145	TS	/JDS
13/89	1148	CONTINUE RUN	/JDS	1204	EOR	/JDS
13/89	1330	SOR	JDS	1333	move carriers	JDS
13/89	1335	continue run	/JDS	1338	move carriers	JDS
13/89	1340	CONTINUE RUN	/JDS	1343	MOVE CARRIERS	JDS
13/89	1345	CONTINUE RUN	/JDS	1347	MOVE CARRIERS	JDS
13/89	1350	CONTINUE RUN	/JDS	1352	MOVE CARRIERS	JDS
13/89	1354	CONTINUE RUN	/JDS	1357	MOVE CARRIERS	JDS
3/17/89	1400 +3 JDS	CONTINUE RUN	/JDS	1402	MOVE CARRIERS	JDS

ES: ALL STATIC CODES MUST BE FOLLOWED BY STATIC NUMBER
ALL MALFUNCTIONS MUST INDICATE COMPONENT PROBLEM

Source Mov[illegible]nt Log

DES: SIT (Safety Interlock Test)
SOR (Start Of Run)
EOR (End Of Run)

PS (Place Static)
TS (Turn Static)
RS (Remove Static)

TE S	TIME UP	REASON	INITIAL	TIME DOWN	REASON	INITIAL
5-13-89	1405	Continue Run	[illegible] / JAL	1407	Move Carriers	[illegible] / JAL
3-13-89	1409	CONTINUE RUN	[illegible] / JAL	1412	E.O.R.	[illegible] / JAL
8/13/89	1636	Process	[illegible]	1638	TS Turn Static	[illegible]
8/13/89	1642	Process	[illegible]	1644	RS Turn Static	[illegible]
8/13/89	1651	Process	[illegible]	1653	TS	[illegible]
8/13/89	1657	Process	[illegible]	1659	RS	[illegible]
8/13/89	1704	Process	[illegible]	1706	TS	[illegible]
8/13/89	1710	Process	[illegible]	1712	RS	[illegible]
8/13/89	1720	Process	[illegible]	1723	TS	[illegible]
8/13/89	1727	Process	[illegible]	1729	RS	[illegible]
8/13/89	1734	Process	[illegible]	1636	TS	[illegible]
8/13/89	1739	Process	[illegible]	1741	RS	[illegible]
8/13/89	1857	Process	[illegible]	1859	TS	[illegible]
8/13/89	1902	Process	[illegible]	1904	RS	[illegible]
8/13/89	1909	Process	[illegible]	1911	TS	[illegible]

OTES: A L STATIC CODES MUST BE FOLLOWED BY STATIC NUMBER
ALL MALFUNCTIONS MUST INDICATE COMPONENT PROBLEM

Source Mov... ht Log

S: SIT (Safety Interlock Test)
SOR (Start Of Run)
EOR (End Of Run)

PS (Place Static)
TS (Turn Static)
RS (Remove Static)

	TIME UP	REASON	INITIAL	TIME DOWN	REASON	INITIAL
3/89	1914	Process	DS	1916	RS	DS
3/89	1926	Process	DS	1928	TS	DS
3/89	1931	Process	DS	1933	RS	DS
3/89	1938	Process	DS	1940	TS	DS
3/89	1944	Process	DS	1945	RS	DS
3/89	1952	Process	DS	1953	TS	DS
3/89	2047	Process	DS	2049	RS	DS
3/89	2054	Process	DS	2056	TS	DS
3/89	2100	Process	DS	2101	RS	DS
3/89	2108	Process	DS	2110	TS	DS
3/89	2113	Process	DS	2114	RS	DS
4/89	0749	SOR - SIT	R pd	0749	SIT	R pd
14/89	0751	SIT	R pd	0752	SIT	R pd
14/89	0757	SIT	R pd	0757	SIT	R pd
14/89	0804	Continue Run	R pd			

ES: ALL STATIC CODES MUST BE FOLLOWED BY STATIC NUMBER
ALL MALFUNCTIONS MUST INDICATE COMPONENT PROBLEM

TITLE

PROJECT NO.

BOOK NO.

8/12/89 2nd

Personnel - David Smith
Rich Stout
Paul Grelicki

Recieved Shift From mike Ayres. Cell was Running normal until aprox. 9:00 Pm when a carrier Door opened while cycleing causing System To malfunction. After clearing Jam up I noticed The Screen was Frozen on page 4, (would not Take any enteries. John Singleton and John Schlecht was Inter John Schlecht arived at 9:40 Pm For assistance. Aborted Run, but having problem with Computer Validating enteries. Still Down at 0030. Shift Turned over To Bob Keim.

STATIFIC BINDERY PRODUCTS CHICAGO

SIGNATURE David Smith DATE 8/12/89

DISCLOSED TO AND UNDERSTOOD BY | DATE | WITNESS | DATE

8-13-89 1ST Shift BOOK NO. 0700 - 1630

Personnel John Schlecht
John Singleton

Continued working on system, Replaced Microswitches at C1A, C1B, T1A + T1B + L4. Tripped C143 C1A+ forced to enable completion of run Number 0943-450 and static jobs. Performed SIT. Operations turned over to Dave Smith @ 1600. Can perform static dwells only. ~~Trouble~~ System troubleshooting will resume in A.M. 8-14-89

SIGNATURE J. Singleton DATE 8-14-89

DISCLOSED TO AND UNDERSTOOD BY M. Born DATE 8-14-89 WITNESS DATE

8/13/89 2nd

Personnel - David Smith
Rich Stout
Paul Grelicki

Recieved Shift from John Singleton
Completed Jct # 1042-99-4-15 (STATIC)
Completed Radiological Survey OF DI System
Read Harewell Dosimeters, moped Floor,
Stamped Cactus OF Glass. Shift Turned
over To Bob Keim.

SCIENTIFIC ENERGY PRODUCTS CHICAGO

SIGNATURE David A. Smith DATE 8/13/89

DISCLOSED TO AND UNDERSTOOD BY DATE WITNESS DATE

66 TITLE PROJECT NO.

14 AUG 89 3rd BOOK NO. 0001-

Personnel - Bob Kean
Joe Ciancola
Dennis Lorenzo

Received shift turnover from Dave Smith
* Late entry; Did not write entry for 8/13/89,
shift cancelled as per J. Schlitt, due to
system malfunctions w/ computer.
System still down this shift, no processing
to do. Worked on PMS, continued restamping pallets
of glass (2 oz.) Swept warehouse, cell, maze, stairwell,
control room, emptied trash cans. Woodplant door
was found unlocked during shift. Completed restamping
2 oz. pallets of glass. Reorganized warehouse &
bldg 62.

SCIENTIFIC BINDERY PRODUCTS CHICAGO

SIGNATURE Robert S. Kean DATE 8/14/89

DISCLOSED TO AND UNDERSTOOD BY M. Cox DATE 8-14-89 WITNESS DATE

Personnel: Mike Rosa
Joe Giancola untill 08
Dennis Larengo untill a
Gilbert Lorenzo
Louis Carrero
John Singleton.

Received shift turn over from Bob Keim. Mi
Singleton, Schlect, Rosa working on Cell to repa
problem see pages 63, 64, 66. Replaced (3) micro
switches in Cell. Received start up, SIT Complete
at 0749 hrs, all safety interlocks functioning as
normal, Cell up and processing @ 0749 hrs. Note
Jack Masino not in today, illness in family.
Material Handlers re-palletized Run #3 of Achor Hok
as it was palletized wrong. Several malfunctions
TIA. Shift turned over to Bob Keim.

SCIENTIFIC BINDERY PRODUCTS CHICAGO

[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
08-12-81 11:42 CONSOLE KEY-SWITCH OFF
08-12-81 11:42 CARRIER MISSING AT C1A+
08-12-81 11:44 CYL. C1A TRAVEL TIMED OUT
08-12-81 11:48 CYL. C1A TRAVEL TIMED OUT

[illegible]
[illegible]
[illegible]
08-12-81 12:00 PRODUCT RUN TIME MINUTES: 107
08-12-81 12:11 PRODUCT RUN TIME,SECONDS: 10
08-12-81 12:11 RUN ABORTED

08-12-89 22:17 CARRIER MISSING AT C1A+
08-12-89 22:19 CYL. C1A TRAVEL TIMED OUT
CVU5000 PRINTER #1 08-12-89 22:24
08-12-89 22:25 SOURCE DOWN
08-12-89 22:25 CYL. C1A TRAVEL TIMED OUT
08-12-89 22:25 CONSOLE KEY-SWITCH OFF
08-12-89 22:42 CONSOLE EMERGENCY STOP

08-12-89 22:56 CYL. C1A TRAVEL TIMED OUT
08-12-89 23:30 CARRIER MISSING AT C1A+
08-12-89 23:36 CARRIER MISSING AT C1A+
08-12-89 23:37 CARRIER MISSING AT C1A+
08-12-89 23:37 CARRIER MISSING AT C1A+
08-12-89 23:37 CARRIER MISSING AT C1A+
08-12-89 23:42 CYL. C1A TRAVEL TIMED OUT

SMOKE DETECTOR ACTIVATED
TEMPERATURE SENSOR ACTIVATED

CELL ROOF [illegible] LIMIT-SWITCH OFF
LOW AIR PRESSURE

CELL EXHAUST AIRFLOW OFF
CELL EXHAUST FAN OFF
CELL POOL WATER X-LOW
CONSOLE EMERGENCY STOP
RADIATION MONITOR FAILURE
ALARM POWER CIRCUIT BREAKER "OFF"
CARRIER HIT COLLISION DEVICE
CELL POOL WATER X-HIGH
HIGH CELL RADIATION/SOURCE DOWN
CELL PULL CABLE ACTIVATED
CYL. C1A TRAVEL TIMED OUT
CYL. C1B TRAVEL TIMED OUT
CYL. T1A TRAVEL TIMED OUT
CYL. T1B TRAVEL TIMED OUT
SOURCE-UP TRAVEL TIMED OUT
SOURCE-DOWN TRAVEL TIMED OUT

ALARM PAGE 1

MAZE DATE OPEN
SOURCE-[illegible] RELAY FAILURE
[illegible] IN DEMINERALIZER

CARRIER LOCKS NOT IN PLACE

CARRIER MISSING AT C1A+

CARRIER MISSING AT C1B+
CYLINDERS NOT IN HOME POSTION
520C CPU OVER TEMPERTURE
I/O MODULE FAILURE
ZERO DWELL TIME

```
[illegible]
TEMPERATURE SENSOR ACTIVATED
CELL ROOF PLUG LIMIT-SWITCH OPEN
LOW AIR PRESSURE
CELL EXHAUST AIRFLOW OFF
CELL EXHAUST FAN OFF
CELL POOL WATER X-LOW
CONSOLE EMERGENCY STOP
RADIATION MONITOR FAILURE
ALARM POWER CIRCUIT BREAKER (OFF)
CARRIER HIT COLLISION DEVICE
CELL POOL WATER X-HIGH
HIGH CELL RADIATION/SOURCE DOWN
CELL PULL CABLE ACTIVATED
CYL. C1A TRAVEL TIMED OUT
CYL. C1B TRAVEL TIMED OUT
CYL. T1A TRAVEL TIMED OUT
CYL. T1B TRAVEL TIMED OUT
SOURCE-UP TRAVEL TIMED OUT
SOURCE-DOWN TRAVEL TIMED OUT
```

```
[illegible]
SOURCE-HOIST RELAY FAILURE
HI-RADIATION IN DEMINEALIZER
CARRIER LOCKS NOT IN PLACE
CARRIER MISSING AT C1A-
CARRIER MISSING AT C1B-
CYLINDERS NOT IN HOME POSITION
5000 CPU OVER TEMPERTURE
I/O MODULE FAILURE
ZERO DWELL TIME
```

```
   08-12-89      23:46       2 ALARMS    0 LOOP ALARMS    P/C GOOD      PAGE A1
                                          ALARM PAGE 1

SMOKE DETECTOR ACTIVATED
TEMPERATURE SENSOR ACTIVATED
CELL ROOF PLUG LIMIT-SWITCH OPEN
LOW AIR PRESSURE
CELL EXHAUST AIRFLOW OFF
CELL EXHAUST FAN OFF
CELL POOL WATER X-LOW
CONSOLE EMERGENCY STOP
RADIATION MONITOR FAILURE
ALARM POWER CIRCUIT BREAKER (OFF)
CARRIER HIT COLLISION DEVICE
CELL POOL WATER X-HIGH
HIGH CELL RADIATION/SOURCE DOWN
CELL PULL CABLE ACTIVATED
CYL. C1A TRAVEL TIMED OUT
CYL. C1B TRAVEL TIMED OUT
CYL. T1A TRAVEL TIMED OUT
CYL. T1B TRAVEL TIMED OUT
SOURCE-UP TRAVEL TIMED OUT
SOURCE-DOWN TRAVEL TIMED OUT
```

```
   08-12-89      23:46       2 ALARMS    0 LOOP ALARMS    P/C GOOD      PAGE A1
CVU5000 PRINTER #1 08-13-89 00:01
08-13-89 00:02 SOURCE DOWN
08-13-89 00:02 CONSOLE KEY-SWITCH OFF
08-13-89 00:02 CARRIER MISSING AT C1A+
08-13-89 00:09 CARRIER MISSING AT C1A+
08-13-89 00:18 CYL. C1A TRAVEL TIMED OUT
FUNCTION F9 COMPLETE                          DWELL TIME ENTRY AND START-UP

-----------------------------------------   USE THE FOLLOWING KEYS TO INPUT THE
AUTO-TEST MODE                              NUMBER PAINTER ON EACH CARRIER.
-----------------------------------------
TO INPUT PRODUCT RUN TIME, PRESS:           F21 KEY) CARR. NUM.@ INDEX-0 ( [illegible]
F1 KEY FOR MINUTES:( 15)                    F22 KEY) CARR. NUM.@ INDEX-1 ( [illegible]
F2 KEY FOR SECONDS:(15)                     F23 KEY) CARR. NUM.@ INDEX-2 ( [illegible]
-----------------------------------------   F24 KEY) CARR. NUM.@ INDEX-3 ( [illegible]
```

[illegible]

[illegible]

[illegible]

[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible] CARRIER MISSING AT C1R-
08-13-89 09:03 CELL FULL CABLE ACTIVATED

08-13-89 09:34 CARRIER MISSING AT C1R-
08-13-89 09:42 SAFETY INTERLOCKS INTERRUPTED
CVU5000 PRINTER #1 08-13-89 10:00
08-13-89 10:01 SOURCE DOWN
08-13-89 10:21 STATIC RUN VALID
08-13-89 10:21 CONSOLE KEY-SWITCH OFF
08-13-89 10:21 CARRIER MISSING AT C1R-

CVU5000 PRINTER #1 08-13-89 10:44
08-13-89 10:45 SOURCE DOWN
08-13-89 10:45 STATIC RUN VALID
08-13-89 10:45 CONSOLE KEY-SWITCH OFF
CVU5000 PRINTER #1 08-13-89 10:59
08-13-89 11:00 SOURCE DOWN
08-13-89 11:00 STATIC RUN VALID
08-13-89 11:00 CONSOLE KEY-SWITCH OFF
08-13-89 11:01 START-UP IN PROGRESS
08-13-89 11:02 SOURCE UP
08-13-89 11:19 START-UP IN PROGRESS
08-13-89 11:19 START-UP IN PROGRESS
08-13-89 11:19 CARRIER LOCKS NOT IN PLACE
08-13-89 11:21 START-UP IN PROGRESS
08-13-89 11:23 SOURCE UP
08-13-89 11:25 SAFETY INTERLOCKS INTERRUPTED
08-13-89 11:25 CONSOLE EMERGENCY STOP
08-13-89 11:25 CONSOLE KEY-SWITCH OFF
08-13-89 11:26 SOURCE DOWN
08-13-89 11:26 CONSOLE KEY-SWITCH OFF
08-13-89 11:27 START-UP IN PROGRESS
08-13-89 11:28 SOURCE UP
08-13-89 11:28 MAZE GATE OPEN
08-13-89 11:29 SOURCE DOWN
08-13-89 11:29 CONSOLE KEY-SWITCH OFF
08-13-89 11:32 START-UP IN PROGRESS
08-13-89 11:33 SOURCE UP
08-13-89 11:44 STATIC-A , TURN/ROTATE
08-13-89 11:45 SOURCE DOWN
08-13-89 11:45 CONSOLE KEY-SWITCH OFF
08-13-89 11:47 START-UP IN PROGRESS
08-13-89 11:48 SOURCE UP
08-13-89 12:04 STATIC-A , TURN/ROTATE
08-13-89 12:04 SOURCE DOWN
08-13-89 12:04 STATIC-A RUN TIME MINUTES: 30
08-13-89 12:04 CONSOLE KEY-SWITCH OFF
08-13-89 12:04 STATIC-A COMPLETE
[illegible]

08-13-89 14:00 SOURCE UP

08-13-89 14:02 SOURCE DOWN
08-13-89 14:03 CONSOLE KEY-SWITCH OFF
08-13-89 14:04 START-UP IN PROGRESS
08-13-89 14:05 SOURCE UP

08-13-89 14:07 SOURCE DOWN

08-10-89 17:13 SOURCE DOWN
08-10-89 17:13 STATIC-A RUN TIME MINUTES: 2
08-10-89 17:13 CONSOLE KEY-SWITCH OFF
08-10-89 17:13 STATIC-A COMPLETE
08-10-89 17:15 STATIC RUN VALID
08-10-89 17:20 START-UP IN PROGRESS
08-10-89 17:21 SOURCE UP
08-10-89 17:22 STATIC-A , TURN/ROTATE
08-10-89 17:23 SOURCE DOWN
08-10-89 17:23 CONSOLE KEY-SWITCH OFF
08-10-89 17:26 START-UP IN PROGRESS
08-10-89 17:27 SOURCE UP
08-10-89 17:28 STATIC-A , TURN/ROTATE
08-10-89 17:29 SOURCE DOWN
08-10-89 17:29 STATIC-A RUN TIME MINUTES: 2
08-10-89 17:29 CONSOLE KEY-SWITCH OFF
08-10-89 17:29 STATIC-A COMPLETE
08-10-89 17:30 STATIC RUN VALID
08-10-89 17:33 START-UP IN PROGRESS

08-13-89 19:14 SOURCE UP
08-13-89 19:14 STATIC-A , TURN/ROTATE
08-13-89 19:14 STATIC-A RUN TIME MINUTES: 2
08-13-89 19:14 STATIC-A COMPLETE
08-13-89 19:14 SOURCE DOWN
08-13-89 19:14 CONSOLE KEY-SWITCH OFF
08-13-89 19:14 STATIC RUN VALID
08-13-89 19:15 START-UP IN PROGRESS
08-13-89 19:15 SOURCE UP
08-13-89 19:15 STATIC-A , TURN/ROTATE
08-13-89 19:15 STATIC-A RUN TIME MINUTES: 2
08-13-89 19:31 CONSOLE KEY-SWITCH OFF
08-13-89 19:33 STATIC-A COMPLETE
08-13-89 19:33 SOURCE DOWN
08-13-89 19:36 STATIC RUN VALID
08-13-89 19:38 START-UP IN PROGRESS \
08-13-89 19:39 SOURCE UP
08-13-89 19:40 CONSOLE KEY-SWITCH OFF
08-13-89 19:40 SOURCE DOWN
08-13-89 19:43 START-UP IN PROGRESS
08-13-89 19:44 SOURCE UP
08-13-89 19:45 STATIC-A , TURN/ROTATE
08-13-89 19:45 STATIC-A RUN TIME MINUTES: 2
08-13-89 19:45 CONSOLE KEY-SWITCH OFF
08-13-89 19:45 STATIC-A COMPLETE
08-13-89 19:45 SOURCE DOWN
08-13-89 19:49 STATIC RUN VALID
08-13-89 19:51 START-UP IN PROGRESS
08-13-89 19:52 CONSOLE KEY-SWITCH OFF
08-13-89 19:52 SOURCE UP
08-13-89 19:52 STATIC-A , TURN/ROTATE
08-13-89 19:54 SOURCE DOWN
08-13-89 19:54 CONSOLE KEY-SWITCH OFF