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**PUBLICATIONS
UPDATE**

Operating System/3 (OS/3)

Online Diagnostics

Operator Reference

UP-8512 Rev. 1-C

This Library Memo announces the release and availability of Updating Package C to "SPERRY UNIVAC Online Diagnostics Operator Reference", UP-8512 Rev. 1.

This update expands the ONWORK program to test both the model 1 (T3560) and Model 2 (T3561) workstations at the local environment level.

Copies of Updating Package C are now available for requisitioning. Either the updating package only or the complete manual with the updating package may be requisitioned by your local Sperry Univac representative. To receive only the updating package, order UP-8512 Rev. 1-C. To receive the complete manual, order UP-8512 Rev. 1.

LIBRARY MEMO ONLY	LIBRARY MEMO AND ATTACHMENTS	THIS SHEET IS
Mailing Lists BZ, CZ and MZ	Mailing Lists A00, A01, 18, 19, 20, 21, 75, and 76 (Package C to UP-8512 Rev. 1 13 pages plus Memo)	Library Memo for UP-8512 Rev. 1-C RELEASE DATE: September, 1982

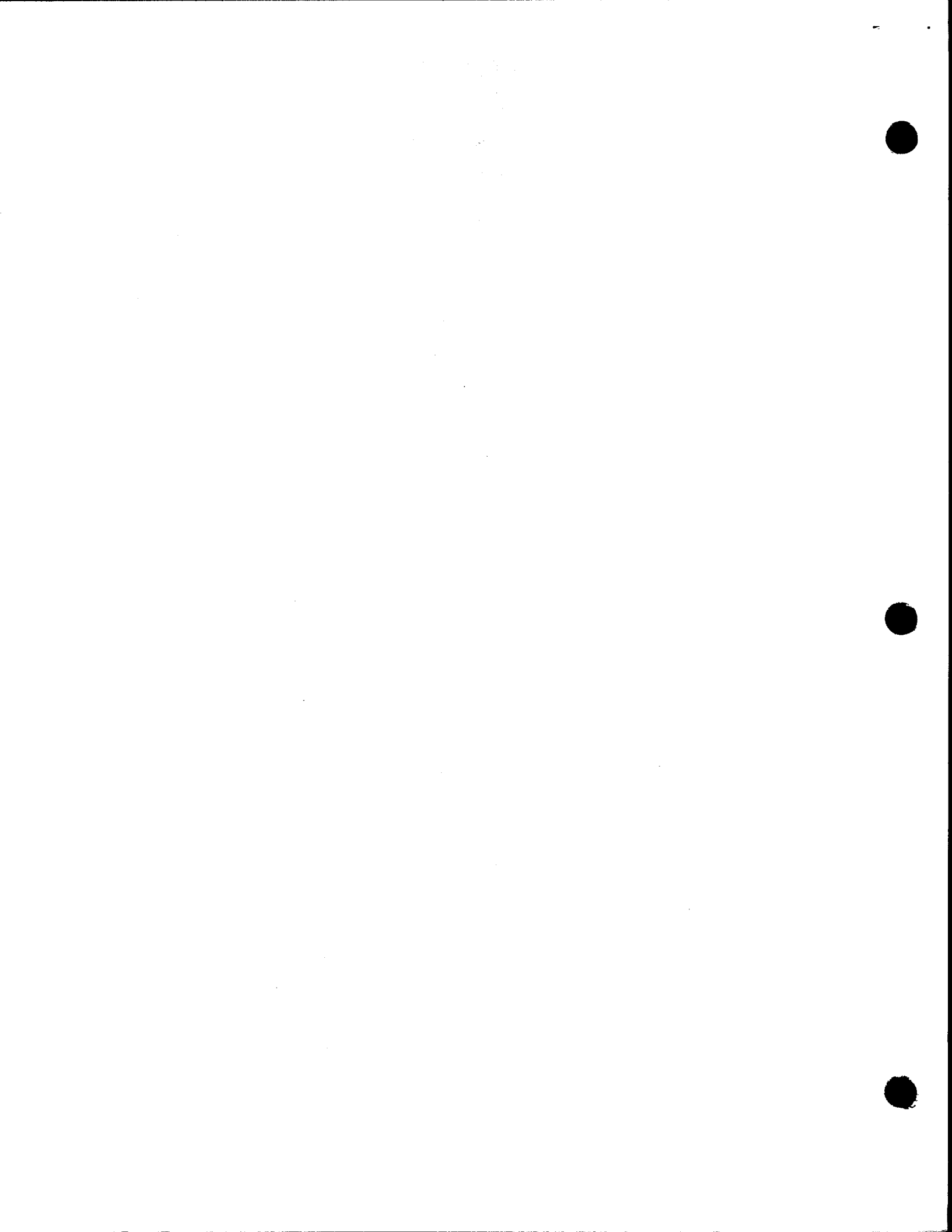


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All the technical changes are denoted by an arrow (→) in the margin. A downward pointing arrow (↓) next to a line indicates that technical changes begin at this line and continue until an upward pointing arrow (↑) is found. A horizontal arrow (→) pointing to a line indicates a technical change in only that line. A horizontal arrow located between two consecutive lines indicates technical changes in both lines or deletions.



11. Workstation Subsystem Tests

11.1. ONWORK PROGRAM

The ONWORK program tests workstations that may be used in a SPERRY UNIVAC system running under OS/3. It causes the workstations to perform basic functional operations and then monitors their responses to determine their operational status. The ONWORK program can test up to eight Model 1 (T3560) or Model 2 (T3561) workstations at a time in any combination. The test, however, is applicable only to workstations used in a local environment. ↓

The ONWORK program is run under the job name ONWORK. ↑

11.2. PROCEDURE FOR TESTING WORKSTATION SUBSYSTEMS

To test any of the workstation subsystems, proceed as follows:

1. Using the SET IO command, set the workstations to be tested *DOWN*, to prevent them from being allocated to another job while under test.
2. Using the RUN command, initiate the running of ONWORK. When the system is ready to execute the job, the following messages are displayed on the system console:

```
ji JC08 USING DEV=did TYPE=PRNTR
```

```
ji JC01 JOB ONWORK EXECUTING JOB STEP ONWORK00 #001
```

```
ji jobnumber ONWORK REV. revision/level
```

```
ji jobnumber ONWORK PARAMETERS PRESELECTED BY ONWORK
```

```
ji A T2-7,15,16,18,19,21, V7/20
```

```
ji jobnumber ONWORK PARAMETERS FROM CONTROL STREAM
```

```
ji{NONE}  
{V7/nn}
```

```
ji? ONWORK ENTER PARAMETERS:
```

NOTE:

If test response messages other than those presented in this procedure appear on the system console, refer to 11.6.



The first two messages are standard job control messages that identify the printer that will be used by the job (device identification-did), and the name of the job step that is being processed. If a printer is not available, the first message is omitted, and the system console is used to display all output messages. The third message identifies the job number assigned to the job and the revision level of the program being executed. The fourth through seventh messages identify the test parameters and variable option entries preselected for the job. These parameters determine what tests will be run and the environment they will be run in. If a printer or a spoolout file was allocated for the job, the V7 parameter is displayed on the seventh message; otherwise, NONE is displayed. All test parameters, action designators, variable options, and features associated with the workstation subsystem tests are described in 11.3 through 11.5.

The last message, which must be answered before any workstation testing can begin, allows you to:

- obtain a hard-copy listing of both preselected and available parameters associated with the test;
- identify the workstation units to be tested;
- enter additional test parameters; or
- delete any preselected parameters you don't want.

Generally, however, test parameters are changed only under the guidance of a Sperry Univac customer engineer.

If you don't want a hard-copy listing, skip to step 4; if you do want a listing, proceed to step 3.

3. This step produces a hard-copy listing of the parameters associated with the test program. This is the only point in the program where you can obtain this listing because the parameters are overwritten following the next step.

NOTE:

A hard-copy listing should be requested the first time you run the program. Once obtained, it may be saved for future reference.

If you want a hard-copy listing, reply to the ENTER PARAMETERS message with the following keyin:

ji PRINT

NOTE:

If OLM commands are keyed in incorrectly, the test program is suspended, and an error message is displayed on the system console. See C.4 for a description of the error messages that are displayed in such an instance and the operator actions required to continue the test.

After this message reply is processed, the ENTER PARAMETERS message reappears, allowing you to key in additional test parameters, variable options, and features.

4. Identify the workstations to be tested and initiate testing with the following keyin:

ji A did₁[,...did_n].B



where:

A

Is the action designator meaning add.

did_1, \dots, did_n

Are the 3-digit device identification numbers of the workstations to be tested.

B

Is the action designator meaning begin testing.

After testing begins, the following message is displayed each time the ONWORK program begins a test on a workstation:

ji ENTERING TEST n test name

NOTE:

The test numbers and names are listed in Table 11-1.

When all tests are completed on all of the workstations that you specified, the following messages are displayed on the system console for each workstation:

ji DEVICE did TERMINATION SUMMARY

ji TOTAL WRITES=n

ji TOTAL WRITE ERRORS=n

ji TOTAL READS=n

ji TOTAL READ ERRORS=n

ji TOTAL READS BACKWARD=n

ji TOTAL READ BACKWARD ERRORS=n

ji TOTAL BYTES TRANSFERRED=n

After the last device termination summary message is displayed, the following job control message is displayed on the system console:

ji JC02 JOB ONWORK TERMINATED NORMALLY

This message is displayed even if errors were detected during the tests. If errors are detected, the test program lists them on the printer (if one was assigned to the job) or on the system console (if a printer or spoolout file was not available). Each error listing identifies the type of error encountered, the unit on which it was encountered, and the number of the test that detected the error, plus any other test data that may be meaningful to a Sperry Univac customer engineer. All error listings should be reported to your Sperry Univac customer engineer for his analysis. He will advise you on the course of action that should follow. If no errors are detected, the units can be considered operational, and no further action is required.

The types of errors that may be detected by the ONWORK program are listed and described in Table 11-2.

11.3. WORKSTATION SUBSYSTEM TEST PARAMETERS AND FEATURES

The test parameters and features used in the ONWORK program are listed and described in Table 11-1. The action designators and variable options are discussed in subsequent subsections.

Table 11-1. ONWORK Test Parameters and Features (Part 1 of 2)

Test	Name	Function																																																		
2	NO-OP Test	A NO-OP command is issued to the workstation controller. This is the lowest level at which the subsystem communicates with the host. Expected status is channel end and device end. This test loops 10 times.																																																		
3	Sense Test and Read Event Test (AER)	<p>This test is designed to test the proper operation of the sense command and the read event command.</p> <p>a. The input buffer is filled with hexadecimal FF, and the sense command is issued with byte counts ranging from 1 to 8. The data in the input buffer is then checked to insure that the required number of sense bytes was transferred. The presence of hexadecimal FF in the expected data indicates that no data byte was expected. The presence of hexadecimal FF in the received data indicates that no data byte was received. A sense command with a byte count of 10 is issued. The program checks that only eight sense bytes were transferred and there is a remaining byte count of 2. The sense command is also issued with a maximum byte count; the input buffer is checked to insure that the sense bytes are transferred. More detailed sense testing is accomplished in other independent valid command tests.</p> <p>b. The asynchronous event register (AER) is read three times with byte counts ranging from 1 to 3. The remaining byte counts should be 0, 0, and 1, respectively. If an error occurs, an AER data compare error message is displayed.</p>																																																		
4	Invalid Command Test	There are 10 commands that the subsystem recognizes as valid. Command bytes using all invalid hexadecimal combinations are issued. The status and sense bytes that are returned are tested for the presence of unit check and command reject.																																																		
5	Valid Command	<p>This test is designed to test the ability of the subsystem to accept the following valid commands:</p> <table border="1"> <thead> <tr> <th>Command Hex. Code</th> <th>Command Description/Mnemonic</th> </tr> </thead> <tbody> <tr><td>01</td><td>System message write (SMW)</td></tr> <tr><td>02</td><td>System message read (SR)</td></tr> <tr><td>03</td><td>No-op (NOP)</td></tr> <tr><td>04</td><td>Sense (SNS)</td></tr> <tr><td>05</td><td>Load RAM (LDRM)</td></tr> <tr><td>07</td><td>Message waiting (MSGWT)</td></tr> <tr><td>09</td><td>User write (UW)</td></tr> <tr><td>0A</td><td>User read (UR)</td></tr> <tr><td>0B</td><td>Workstation reset (WSRST)</td></tr> <tr><td>11</td><td>System message write - screen 2 (SMW2)</td></tr> <tr><td>12</td><td>System message read - screen 2 (SR2)</td></tr> <tr><td>13</td><td>Halt IPCA</td></tr> <tr><td>17</td><td>Message waiting - screen 2 (MSGWT2)</td></tr> <tr><td>19</td><td>User write - screen 2 (UW2)</td></tr> <tr><td>1A</td><td>User read - screen 2 (UR2)</td></tr> <tr><td>23</td><td>Enter workarea mode (EWA)</td></tr> <tr><td>32</td><td>Read event (RE)</td></tr> <tr><td>33</td><td>Enter workarea mode - screen 2 (EWA2)</td></tr> <tr><td>43</td><td>Enter system response mode (ESR)</td></tr> <tr><td>53</td><td>Enter system response mode - screen 2 (ESR2)</td></tr> <tr><td>72</td><td>Diagnostic write IPCA</td></tr> <tr><td>73</td><td>Diagnostic read IPCA</td></tr> <tr><td>81</td><td>Diagnostic write (DW)</td></tr> <tr><td>82</td><td>Diagnostic read (DR)</td></tr> </tbody> </table> <p>User read/write and diagnostic read/write are issued three times. The ending status will be checked for channel end and device end. The remaining count will be 0 for any read and write commands and 2 for other commands. Sense byte 0 is checked to insure that the command reject bit is not set. Sense bytes 1-5 are ignored.</p>	Command Hex. Code	Command Description/Mnemonic	01	System message write (SMW)	02	System message read (SR)	03	No-op (NOP)	04	Sense (SNS)	05	Load RAM (LDRM)	07	Message waiting (MSGWT)	09	User write (UW)	0A	User read (UR)	0B	Workstation reset (WSRST)	11	System message write - screen 2 (SMW2)	12	System message read - screen 2 (SR2)	13	Halt IPCA	17	Message waiting - screen 2 (MSGWT2)	19	User write - screen 2 (UW2)	1A	User read - screen 2 (UR2)	23	Enter workarea mode (EWA)	32	Read event (RE)	33	Enter workarea mode - screen 2 (EWA2)	43	Enter system response mode (ESR)	53	Enter system response mode - screen 2 (ESR2)	72	Diagnostic write IPCA	73	Diagnostic read IPCA	81	Diagnostic write (DW)	82	Diagnostic read (DR)
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Table 11—1. ONWORK Test Parameters and Features (Part 2 of 2)

Test	Name	Function
6	IPCA Buffer Test	Subtest 1 issues the diagnostic read IPCA and diagnostic write IPCA commands with a byte count of 50. Ending status is checked for successful completion. Subtest 2 issues the same sequence with a byte count of 250. The remaining byte count is then checked to see if it is hex. 7A. Subtest 3 issues all hex. values from 00 through FF. The write and read sequence includes a compare after every read to be sure that what was written is the same as what was read. Ending status is checked for successful completion after each I/O.
7	Workstation Buffer Test	Subtest 1 issues the diagnostic read and diagnostic write commands with a byte count of 50. Ending status is checked for successful completion. Subtest 2 issues the same sequence with a byte count of 250. The remaining byte count is then checked to see if it is hex. 7A. Subtest 3 issues all hex. values from 00 through FF. The write and read sequence includes a compare after every read to be sure that what was written is the same as what was read. Ending status is for successful completion after each I/O.
15	Mode Select and Invalid Mode Test	<p>a. WS mode is selected and sense checked to see if the mode bit is set to 0 and the AER mode bit is set to 0. A system message read is issued and unit check is expected. Sense contains command reject and program alert.</p> <p>b. System mode is selected and sense checked to see if the mode bit is set to 1 and the AER mode is set to 1. A user read is issued and unit check is expected. Sense contains command reject, program alert, and mode bit set. A user write is issued and unit check is expected. Sense contains program alert, invalid command at workstation, and mode bit set. A message waiting command is issued and channel end, device end, and unit check are expected. Sense contains program alert, invalid command at workstation, and mode bit set.</p>
16	Workstation Reset Test	This test places the workstation in the workarea mode and issues a workstation reset command (OB). Channel end and device end status is expected. Sense should contain 0's. The workstation is then placed in the system response mode. The workstation reset command is issued again and device end status is expected. Sense should contain 0's, indicating that the workstation was placed back in the workarea mode.
17	System Message Read/Write Test	The workstation is placed in the system response mode and a system message write command is issued. Channel end and device end status and a sense containing mode bit set are expected. Then, a system message read command is issued expecting the same status and sense. The test loops 82 times, incrementing the byte count by 1 each time from 0-81. Status for the 81st command should result in unit check and a sense with data check set for the last read command.
18	User Read/Write Test	This test insures that the subsystem performs the user read and user write commands properly. It also tests the ability of every character to write to the screen. User read and user write commands are issued with the expected status of channel end and device end. This test loops 2 times and prints 48 characters per loop.
19	Write Display Test	This test should write every displayable character in every position on the screen. Each character will be written to the full screen of 1920 bytes until all 96 characters have been displayed.
20	Protect/Unprotect Test	Protected and unprotected lines of data are displayed on the screen alternately. Then, a user write command is issued to the protected fields one at a time. This is followed by a user write command to the same line to insure that the protected line was not written over.
21	Duplicate/Insert Test	A message is written on line 3 with a user write command. A user read command is issued and a duplicate copy of line 3 is displayed on line 4. An insert line function is then issued to line 3, with messages starting in columns 1, 31, and 61, respectively.

NOTE:

There are no feature entries for the ONWORK program.

11.4. WORKSTATION SUBSYSTEM ACTION DESIGNATORS

Test program ONWORK may include the use of all action designators listed and described in Table 1-2.

11.5. WORKSTATION SUBSYSTEM VARIABLE OPTIONS

All the variable options used by OLM programs are listed and described in Table 1-5. Those options used by the ONWORK program are:

<u>Option</u>	<u>Description</u>																						
V1	Allow error reporting																						
V2/xxxx	Delay operation (in milliseconds)																						
V3/n	Retry failing I/O (n=number of times)																						
V4	Stop on error. All error messages are displayed on the system console or terminal. After the message is displayed, the program waits for a reply. The valid replies are as follows:																						
	<table><thead><tr><th><u>Reply</u></th><th><u>Meaning</u></th></tr></thead><tbody><tr><td>B</td><td>Begin with first selected test</td></tr><tr><td>C</td><td>Continue testing</td></tr><tr><td>E</td><td>End the program</td></tr><tr><td>NT</td><td>Go to the next test</td></tr><tr><td>R</td><td>Retry the failing I/O</td></tr><tr><td>RST</td><td>Restart the program</td></tr><tr><td>RM</td><td>Repeat the error message</td></tr><tr><td>RML</td><td>Repeat the error message with the long format</td></tr><tr><td>RML-ALL</td><td>Repeat the error message, using the long format, including the test description</td></tr><tr><td>?</td><td>Give explanation for all valid replies</td></tr></tbody></table>	<u>Reply</u>	<u>Meaning</u>	B	Begin with first selected test	C	Continue testing	E	End the program	NT	Go to the next test	R	Retry the failing I/O	RST	Restart the program	RM	Repeat the error message	RML	Repeat the error message with the long format	RML-ALL	Repeat the error message, using the long format, including the test description	?	Give explanation for all valid replies
<u>Reply</u>	<u>Meaning</u>																						
B	Begin with first selected test																						
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E	End the program																						
NT	Go to the next test																						
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RML	Repeat the error message with the long format																						
RML-ALL	Repeat the error message, using the long format, including the test description																						
?	Give explanation for all valid replies																						
V7/xxxx	Report errors on high speed printer (xxxx=number of allowable error messages printed per device before program is ended)																						
V9/nn	Loop operation (nn=number of times)																						
V10	Display current status (current test and subtest)																						
V11	Long message format (detail error message)																						
V13/nn	Loop subtest (nn=number of times)																						
V14/nn	Loop test (nn=number of times)																						

V28 Display every I/O status (BCW and ending status)

NOTE:

Error messages are automatically routed to the system console if the V4 or V7 options are not selected. The program continues after messages are displayed.

11.6. WORKSTATION SUBSYSTEM TEST RESPONSE MESSAGES

The ONWORK test program originates three groups of test response messages:

1. Parameter error messages (Table C-1), which are detected when insufficient or erroneous parameters are entered.
2. Subsystem error messages, which inform the operator of an abnormal or unexpected condition that was detected during the execution of the test. These include I/O error messages and data error messages.
3. Information/action messages, which inform the operator of the test output expected or procedures to follow during execution of a test program.

Table 11-2 lists the test response messages that may be displayed by the ONWORK program. The test response messages are grouped into categories relating to the type of message displayed. Reference should be made to Table C-2 for meanings of mnemonics, and to the I/O sense data byte definitions in the hardware and software summary, UP-8203 (current version) for interpretations of sense bits used in the test response messages.

Table 11-2. ONWORK Test Response Messages (Part 1 of 3)

Message	Meaning																																																																											
I/O Error Messages																																																																												
<p>UNIT xxx TEST n SUBTEST n testname</p> <p>ERROR IN I/O ENDING CONDITIONS</p> <p>ERRORS=</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">*0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">SB</td> <td style="text-align: center;">SB</td> <td style="text-align: center;">SB</td> <td style="text-align: center;">SB</td> <td style="text-align: center;">SB</td> <td style="text-align: center;">SB</td> <td style="text-align: center;">SB</td> <td style="text-align: center;">SB</td> <td style="text-align: center;">SB</td> <td style="text-align: center;">SB</td> <td style="text-align: center;">SB</td> <td style="text-align: center;">SB</td> <td style="text-align: center;">SB</td> </tr> <tr> <td style="text-align: center;">CS</td> <td style="text-align: center;">DS</td> <td style="text-align: center;">00</td> <td style="text-align: center;">01</td> <td style="text-align: center;">02</td> <td style="text-align: center;">03</td> <td style="text-align: center;">04</td> <td style="text-align: center;">05</td> <td style="text-align: center;">06</td> <td style="text-align: center;">07</td> <td style="text-align: center;">08</td> <td style="text-align: center;">09</td> <td style="text-align: center;">RBC</td> <td></td> <td></td> </tr> <tr> <td>EXPECTED</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xxxx</td> <td></td> </tr> <tr> <td>RECEIVED</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xx</td> <td>xxxx</td> <td></td> </tr> </table> <p>BCW CHAIN</p> <p>xxxxxxxx xxxxxxxx xxxxxxxx</p> <p>xxxxxxxx xxxxxxxx xxxxxxxx</p> <p>*0-RECEIVED AND EXPECTED BYTES SHOULD BE EQUAL</p>					*0													SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	CS	DS	00	01	02	03	04	05	06	07	08	09	RBC			EXPECTED	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xxxx		RECEIVED	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xxxx		<p>Indicates an abnormal result that is repeated during I/O operation. Record the message and refer to Sperry Univac customer engineer.</p>
				*0																																																																								
		SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB																																																														
CS	DS	00	01	02	03	04	05	06	07	08	09	RBC																																																																
EXPECTED	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xxxx																																																															
RECEIVED	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xxxx																																																															

Table 11-2. ONWORK Test Response Messages (Part 2 of 3)

Message	Meaning
Data Error Messages	
<p>UNIT xxx TEST n SUBTEST n testname DATA COMPARE ERROR</p> <p>FIRST BYTE=0</p> <p style="text-align: center;">v v v v v v v v</p> <p>EXPECTED DATA xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx</p> <p>RECEIVED DATA xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx</p> <p style="text-align: center;">.</p> <p style="text-align: center;">.</p> <p>FIRST BYTE=n</p> <p style="text-align: center;">v v v v v v v v v v v v v v</p> <p>EXPECTED DATA xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx</p> <p>RECEIVED DATA xxxxxxxx xxxxxxxx xxxxxxxx xxxxxxxx</p> <p>TOTAL DATA BYTES COMPARED=n</p>	<p>Indicates an error was detected, as compared with expected data. Record the message and refer to Sperry Univac engineer.</p>
Information Messages	
<p>ENTERING TEST n testname</p>	<p>Displayed whenever a test is begun.</p>
<p>DEVICE did TERMINATION SUMMARY</p> <p>TOTAL WRITES=n TOTAL WRITE ERRORS=n TOTAL READS=n TOTAL READ ERRORS=n TOTAL BYTES TRANSFERRED=n</p>	<p>Self-explanatory.</p>
Action Messages	
<p>SUSPENDED--AWAITING UNSOLICITED REPLY</p> <p>(B,C,E,RST,?)</p>	<p>Program was halted. To resume testing, enter valid response.</p>
<p>UNABLE TO INITIALIZE xxx</p> <p>DEVICE xxx DELETED</p>	<p>xxx=device ID. Device not set for test, invalid device ID, or device not set DOWN. Check for correct device ID, and set the device DOWN prior to test initiation.</p>

Table C-2. Mnemonics Used in OLM Messages (Part 3 of 4)

Mnemonic	Meaning
OLM	Online maintenance tests
ONCAP	Communications adapter program module name
ONCAT	Communications adapter test module name
ONCCA	Channel adapter module name
ONCOMM	Communications module name
ONCRDR	Card reader module name
ONDISC	Disk module name
ONIDA	Integrated disk module name
ONIDSK	Diskette module name
ONMEST	Main storage/disk exerciser program module name
ONIPCH	Integrated card reader module name
ONIPNT	Integrated printer module name
ONIRDR	Integrated card reader module name
ONODR	Optical document reader module name
ONPNCH	Card punch module name
ONPRNT	Printer module name
ONPTRP	Paper tape module name
ONRTTY	Remote teletype module name
ONTAPE	Magnetic tape module name
ONTERM	Communications terminal module name
ONWORK	Workstation program module name
PAT	Pattern code
PRM	Parameter message routine
PRT	Print function
PUB	Physical unit block
R	Retry, reply
r	Run number
RBC	Residual byte count
REC	Received
REMRBT	Remote batch terminal module name
rdr	Card reader device number
RID	Remote identifier
RO	Record
RREQ	Reply request
SB	Sense byte
SB1	Hardware sense byte 0
SB2	Hardware sense byte 1
SBTST	Subtest
SCS	Subchannel status
SID	Subsystem input device or station identifier
SIO	Start input/output
SMF	Set file mask
SNS	Sense byte
SOD	System output device
SPL	Status poll
ss	Second (00-59)
STA	Synchronous timing assembly
SW	Switch
SYNC	Synchronous

Table C-2. Mnemonics Used in OLM Messages (Part 4 of 4)

Mnemonic	Meaning
T	Test
TB	Transmission byte
TBC	Total bad columns
TD	Track descriptor
TERM	Data communications jobname
TF	Transmit function
TIDA	Disk adapter jobname
Tn	Test number
TPL	Traffic poll
TRK	Track
TST	Test
Vn	Variable number
WABT	Busy (wait before transmission)
yy	Year (00-99)

C.5. PROCEDURE FOR RUNNING OLM PROGRAMS FOR DIAGNOSTIC AND MAINTENANCE PURPOSES

To run an OLM program for diagnostic or maintenance purposes, proceed as follows:

1. Initiate the running of the appropriate job for the device being tested, as per the standard test procedures presented in Sections 2 through 10, as applicable.
2. When the **ENTER PARAMETERS** message appears on the system console, key in the OLM commands required to configure the parameter table for the OLM program, in accordance with the Sperry Univac customer engineer's request.
3. Key in the action designator B to begin program execution.

Once the job is in progress, additional OLM commands can be transmitted to it as unsolicited messages. This capability permits you to:

- Restart an OLM test program from the beginning
- Prematurely terminate a test program
- Temporarily suspend processing of a test program
- Obtain a listing of the parameters being used to run an OLM program

The error messages that may be produced when testing each of the various subsystems are described in the sections covering each of the various subsystems.

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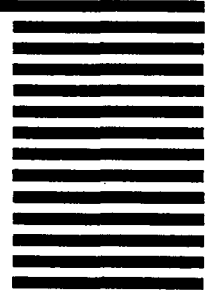
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