

FISHER-ROSEMOUNT

RS3™

**Alarm
Messages**

Performance Series 1, Release 4.0

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Fisher-Rosemount Systems, Inc.
12000 Portland Avenue South
Burnsville, Minnesota 55337 U.S.A.

Telephone: (612) 895-2000
TWX/Telex: 192177
FAX: (612) 895-2044

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Alarm Messages

About This Manual

The Alarm Messages manual describes RS3 Alarm and Event message format and content. It is sectionally divided as indicated below and includes lists of alarm messages sorted both alphabetically and numerically.

- | | |
|-----------|---|
| Section 1 | Describes the format of Alarm and Event messages. |
| Section 2 | Describes the format of Smart Device Alarm messages |
| Section 3 | Lists the Alarm and Event messages in alphabetical order by message text. |
| Section 4 | Lists the Alarm and Event messages in numerical order by message number. |

Changes for This Release

- A number of additions and corrections have been made to the listings of alarm messages.

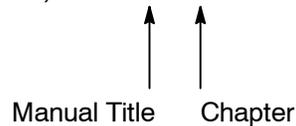
Revision Level for This Manual

For This Software Version:	Refer to This Document:		
	Title	Date	Part Number
P1R4.0	Alarm Messages	March 1999	
P1	Alarm Messages	May 1996	1984-2657-19x1
18R2	Alarm Messages	August 1994	1984-2657-18x1
18R1	Alarm Messages	October 1993	1984-2657-18x1
17	Alarm Messages	July, 1992	1984-2657-17x1
16, 15, 14, 12	Chapter 10: Alarm Messages Service Manual, Volume 2	January, 1991	1984-2648-15x2

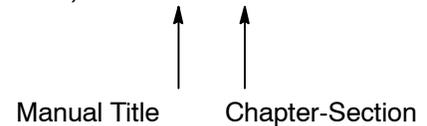
References to Other Manuals

References to other RS3 user manuals list the manual, chapter, and sometimes the section as shown below.

Sample Entries:
For ..., see CC: 3.



For ..., see CC: 1-1.



Abbreviations of Manual Titles

- AL** = Alarm Messages
- BA** = ABC Batch
- CB** = ControlBlock Configuration
- CC** = Console Configuration
- DT** = Disk and Tape Functions
- IO** = I/O Block Configuration
- OP** = Operator's Guide
- OV** = System Overview and Glossary
- PW** = PeerWay Interfaces
- RB** = Rosemount Basic Language
- RI** = RNI Release Notes and Installation Guide
- RP** = RNI Programmer's Reference Manual
- SP** = Site Preparation and Installation
- SV** = Service

Reference Documents

Prerequisite Documents

You should be familiar with the information in the following documents before using this manual:

<i>System Overview Manual and Glossary</i>	1984-2640-19x1
<i>Software Release Notes, Performance Series 1</i>	1984-2819-01xx
<i>Software Loading and Upgrade Procedure, Including Batch</i>	1984-2819-02x1

Related Documents

You may find the following documents helpful when using this manual:

<i>ABC Batch Quick Reference Guide</i>	1984-2814-12xx
<i>ABC Batch Software Manual</i>	1984-2654-19x1
<i>Alarm Messages Manual</i>	1984-2657-19x1
<i>Configuration Quick Reference Guide</i>	1984-2812-09xx
<i>Console Configuration Manual</i>	1984-2643-19x1
<i>ControlBlock Configuration Manual</i>	1984-2646-19x1
<i>Disk and Tape Functions Manual</i>	1984-2644-19x1
<i>I/O Block Configuration Manual</i>	1984-2645-19x1
<i>Operator's Guide</i>	1984-2647-19x1
<i>PeerWay Interfaces Manual</i>	1984-2650-19x1
<i>Rosemount Basic Language Manual</i>	1984-2653-19x1
<i>RNI Programmer's Reference Manual</i>	1984-3356-02x1
<i>RNI Release Notes and Installation Guide</i>	1984-3357-02x1
<i>Service Manual, Volume 1</i>	1984-2648-19x1
<i>Service Manual, Volume 2</i>	1984-2648-19x2
<i>Site Preparation and Installation Manual</i>	1984-2642-19x1
<i>Software Discrepancies for Performance Series 1</i>	1984-2819-03xx
<i>User Manual Master Index</i>	1984-2641-19x1

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Section 1: Reading Alarm and Event Messages

This section explains how to read RS3 alarm and event messages as they appear on the console alarm banner, console alarm lists, and alarm logs. Alarm and event messages are classified as:

- Process Alarms
- Hardware Alarms
- Batch Alarms
- System Alarms
- Events
- Disk Events

Alarm Banner

Alarms and events are annunciated with a colored alarm banner at the bottom of the screen. The alarm banner always appears in the “primary” format. The “alternate” format is displayed by moving the cursor to the banner and pressing [EXCH]. The primary format will be restored when the cursor is moved from the banner or [EXCH] is pressed again. The alternate format makes additional alarm information visible. Figure 1.1 shows a sample alarm banner in both primary and alternate formats.

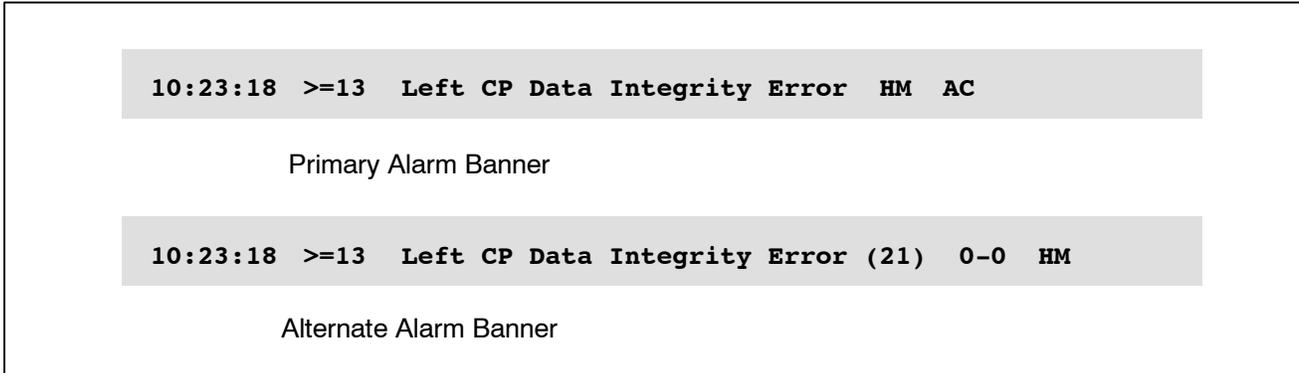


Figure 1.1. Sample Alarm Banner in Both Primary and Alternate Formats

The contents of the alarm banner text fields vary with the alarm or event source and with the display format chosen. Figure 1.2 shows the components of the primary and alternate banner formats.

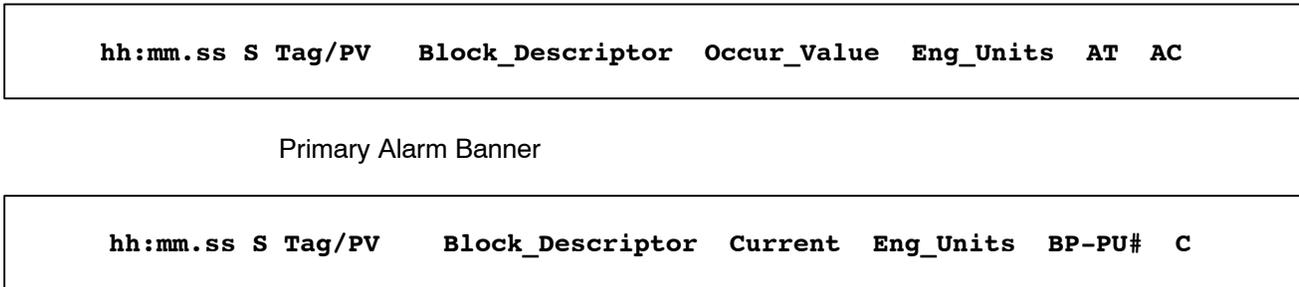


Figure 1.2. Primary and Alternate Alarm Banner Components

NOTE: The Associated_Text_40 fields on the bottom banner line and the list banner get clipped at 21 characters on batch and RBL generated alarms and events.

The Alarm Banner and Methods of Alarm Generation

An alarm can be generated by two methods but not all information that appears in the alarm list will be the same. Alarms can be generated from specifications on the CB Continuous Diagram page. The first alarm listed in Figure 1.3 is an example of a banner created by this method. When the CB Discrete Diagram (see Figure 1.4) is used to create logic step generated alarms, the alarm banner does not have enough space to show units. The second alarm listed in Figure 1.3 is an example of a banner created by this method.

CLEARED PROCESS ALARMS			8-Oct-98	12:30:38		
Occur	Source	Description	OCCUR	PRINT	Summ	
	08-Oct-98					
12:23:18.065	:Agitator 155/A	Block_Descriptor	100.14	UNITS	AOK	
12:12:09.070	:Agitator 155/a	Block_Descriptor	FORWARD	100.14	AOK	
		* END *				
	Active 0	Unack 0	Unprint 2			
12:56:08	:=1DA103	NONE Hardware: Comm Timeout			HM	U

Figure 1.3. Alarm Banner List

CB DISCRETE DIAGRAM			08-Oct-98	12:14:31		
Tag Agitator 155	Descriptor	Block_Descriptor				
Addr -1A-01	Function DISC	Discrete Block	Plnt>0			
	Free Space: Stat = 91 %	Dyn = 88 %	Priority>0			
	+-----CONDITIONS-----+				Step>a	
>Level 1	@c *				Mode>Auto	
Off OFF	* a= >				MsgPr	
	*				>*14	
>Level 2/c	@e * Set >@c & @e				Off	
Off OFF	*					
	*Clear>@b					
>Tank 4	@b *				> FORWARD	
on off	*					
	-----ACTIONS-----				Event	
>Tank 25	B * Rise>				Type>244	
.65 gal	*				Rpt>Adv	
	* ON >B=.65				When>Rise	
	*				Log >A	
	* Fall>					
	*					
	* OFF >B=0					
	*					
	+-----					
Steps in Manual		Block Mode> AUTO				
1DA103		NONE Hardware: Comm Timeout			HM	U

Figure 1.4. CB Discrete Diagram

Alarm Messages

Alarm and event messages are collected in the console alarm lists and alarm logs. Alarm and event messages always appear in the “occur” format. The “current” format is displayed by moving the cursor to the message and pressing [EXCH]. The occur format will be restored when the cursor is moved from the message or [EXCH] is pressed again. The current format makes additional alarm information visible.

Figure 1.5 shows a sample alarm message in both the occur and current formats.

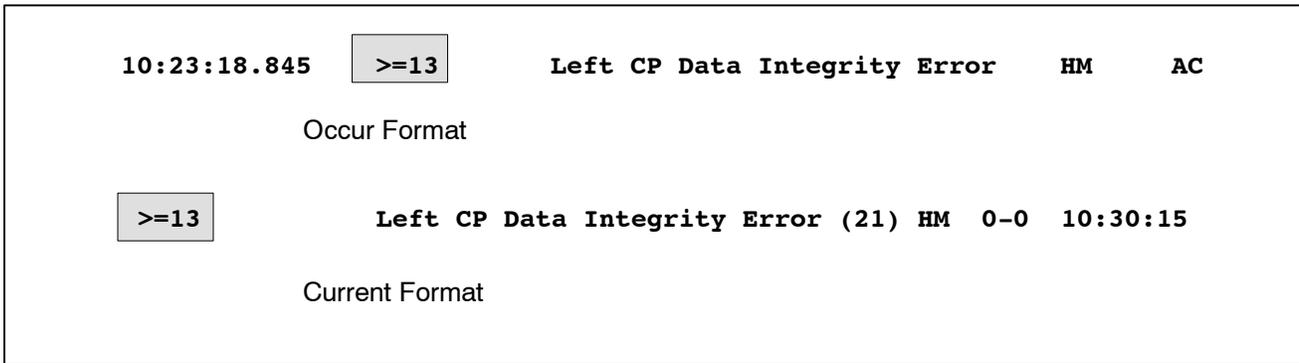


Figure 1.5. Sample Alarm Message in Both Occur and Current Formats

The contents of the message text field vary with the alarm or event source and with the display format chosen. Figure 1.6 shows the components of the occur and current formats.

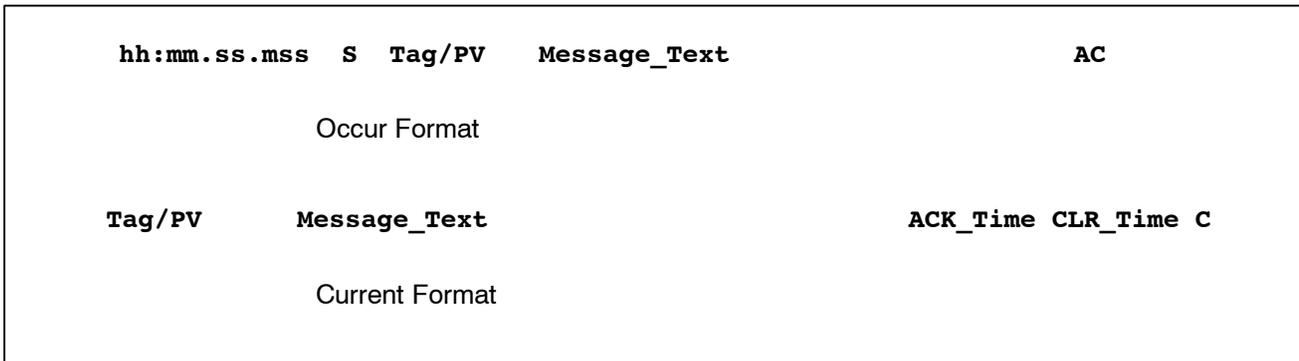


Figure 1.6. Alarm Message in the Occur and Current Formats

Figure 1.7 shows the format used to print alarm and event logs. The alarm number is shown in the printer format. This may be used to find the alarm message in the numerically sorted table.

hh:mm:ss.mss	S	Tag/PV	Block_Descriptor	Message_Text	BP-PU#	AT	ACK_Time	CLR_Time	C	AL#
--------------	---	--------	------------------	--------------	--------	----	----------	----------	---	-----

Figure 1.7. Alarm Message in the Printer Format (132 Characters)

Table 1.1 describes the field components used in alarm banners and messages.

Table 1.1. Alarm Banner and Message Field Definitions

Field	Meaning
hh:mm:ss (Alarm Banner)	Time the alarm was generated. Shown as: hours:minutes.seconds
hh:mm:ss.mss (Alarm Message)	Time the alarm was generated. Shown as: hours:minutes.seconds.milliseconds
S	The state of the block when the alarm occurred was: D part of a disabled area S suppressed * alarm is late <blank> neither disabled nor suppressed
Tag/PV	16-character source tag and point-specific information (if applicable). The tag will be highlighted in the configured alarm color. The tag blinks if the alarm is unacknowledged. The standard colors are: Red Critical Process Yellow Advisory Process Magenta Hardware White System Status Green Events
Message_Text	Description of the alarm or event. These 40 characters contain different information, depending on the type and source of the alarm or event.
Occur_Value	The value that caused the alarm message.
Current	Current value of the point generating the alarm. NOTE: Only one alarm can display the current value at any one time and only while the cursor is on the alarm.

(continued on next page)

Table 1.1. Alarm Banner and Message Field Definitions (continued)

Field	Meaning
Value	The value configured in the "Logged Value" field of the ControlBlock. Established by the system configurator.
Eng_Units	Engineering units associated with the displayed variable.
AC	The ACK and Clear summary shows the state of the alarm: A acknowledged but not cleared UOK cleared but not acknowledged AOK cleared and acknowledged U neither cleared nor acknowledged
ACK_Time	Time the alarm was acknowledged.
CLR_Time	Time the alarm was cleared.
C	The state of the block when the alarm cleared was: D part of a disabled area S suppressed <blank> neither disabled nor suppressed
Block_Descriptor	Description entered by the configurator of the block.
BP-PU#	Block priority and plant unit number of the block issuing the alarm.
AT	Alarm Type: AD Advisory Deviation AH Advisory High AL Advisory Low AR Advisory Rate AS Advisory Step CD Critical Deviation CH Critical High CL Critical Low CR Critical Rate CS Critical Step
AL#	Numeric identifier of the alarm or event message_text. This number may be used to locate the alarm message in the numerical order table.

Process Alarms

Process alarms can come from a ControlBlock, a discrete logic step, a Batch script, an RBL block, a PLC block, or the system. Figure 1.8, Figure 1.9, and Figure 1.10 show the variations in the message text field. Table 1.2 describes the components of the message text field.

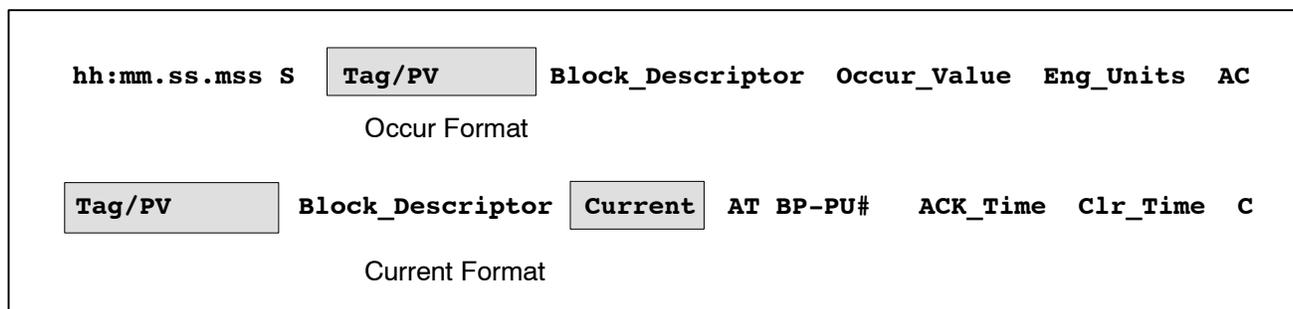


Figure 1.8. Process Alarm Messages from a ControlBlock

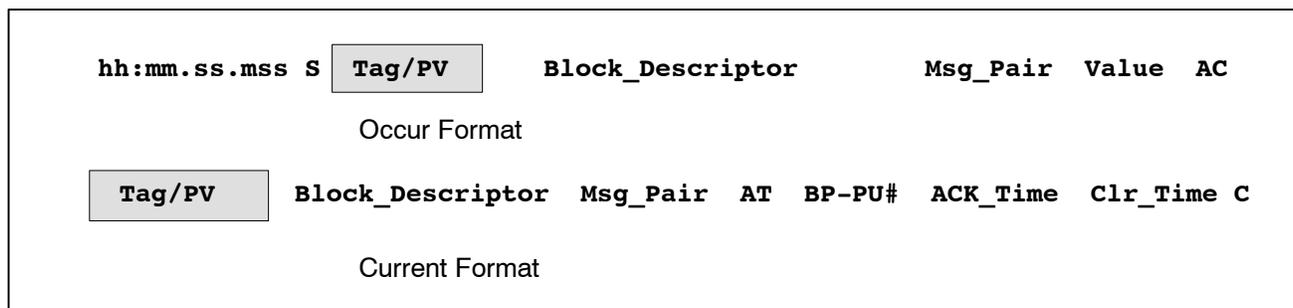


Figure 1.9. Process Alarm Messages from a Discrete Step

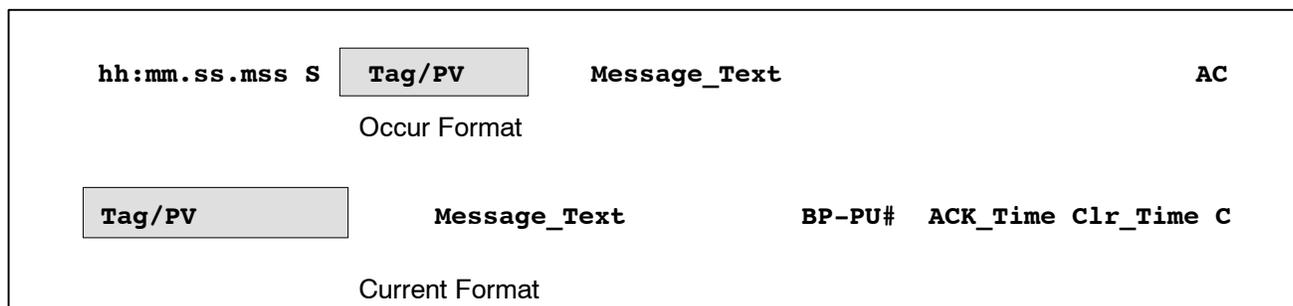


Figure 1.10. Process Alarm Messages from Batch, RBL, PLC, or the System

Table 1.2. Process Alarm Message Text Fields

Field	Meaning
hh:mm.ss.mss	Time the alarm was generated. Shown as: hours:minutes.seconds.milliseconds
S	The state of the originating block was: D part of a disabled area S suppressed * alarm is late <blank> neither disabled nor suppressed
Tag/PV	16-character source tag and point-specific information (if applicable). The tag will be highlighted in the configured alarm color. The tag blinks if the alarm is unacknowledged. The standard colors are: Red Critical Process Yellow Advisory Process Magenta Hardware White System Status Green Events
Block_Descriptor	Description entered by the configurator of the block.
Occur_Value	The value that caused the alarm message.
Eng_Units	Engineering units associated with the displayed variable.
AC	The ACK and Clear summary shows the state of the alarm: A acknowledged but not cleared UOK cleared but not acknowledged AOK cleared and acknowledged U neither cleared nor acknowledged
Current	Current value of the point generating the alarm. NOTE: Only one alarm can display the current value at any one time and only while the cursor is on the alarm.
AT	Alarm Type: AD Advisory Deviation AH Advisory High AL Advisory Low AR Advisory Rate AS Advisory Step CD Critical Deviation CH Critical High CL Critical Low CR Critical Rate CS Critical Step
BP-PU#	Block priority and plant unit number of the block issuing the alarm.
ACK_Time	Time the alarm was acknowledged.

(continued on next page)

Table 1.2. Process Alarm Message Text Fields (continued)

Field	Meaning
CLR_Time	Time the alarm was cleared.
C	The state of the block when the alarm cleared was: D part of a disabled area S suppressed <blank> neither disabled nor suppressed
Msg_Pair	Message pair displayed by the discrete step that caused the alarm message.
Value	The value configured in the "Logged Value" field of the ControlBlock. Established by the system configurator.
Message_Text	Description of the alarm or event. Contains different information, depending on the type and source of the alarm or event. The message is as written in the Batch script, RBL block, PLC block, or from the system.
AL#	Numeric identifier of the alarm or event message. This number may be used to locate the alarm message in the numerical order table. Shown in the printer format only.

Hardware Alarms

Hardware alarms can come from a discrete logic step, a value outside a high or low limit, a Batch script, an RBL block, a PLC block, or the system. Figure 1.11, Figure 1.12, and Figure 1.13 show the variations in the message text field. Table 1.3 describes the components of the message text field.

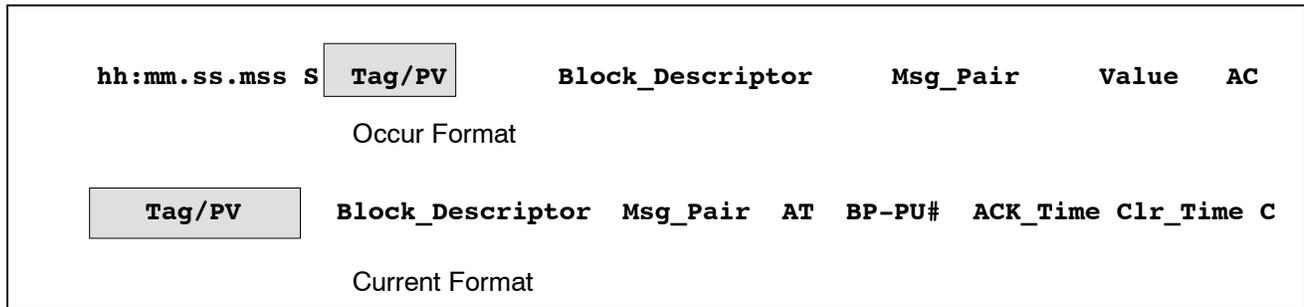


Figure 1.11. Hardware Alarm Messages from a Discrete Step

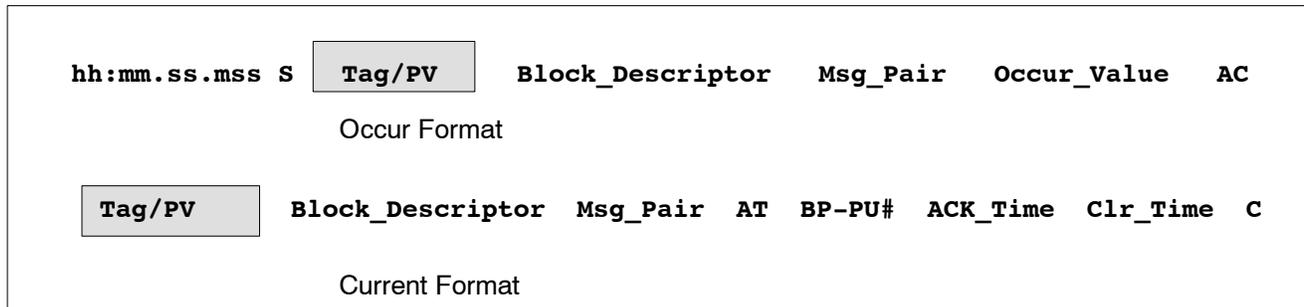


Figure 1.12. Hardware Alarm Messages from High/Low Limit

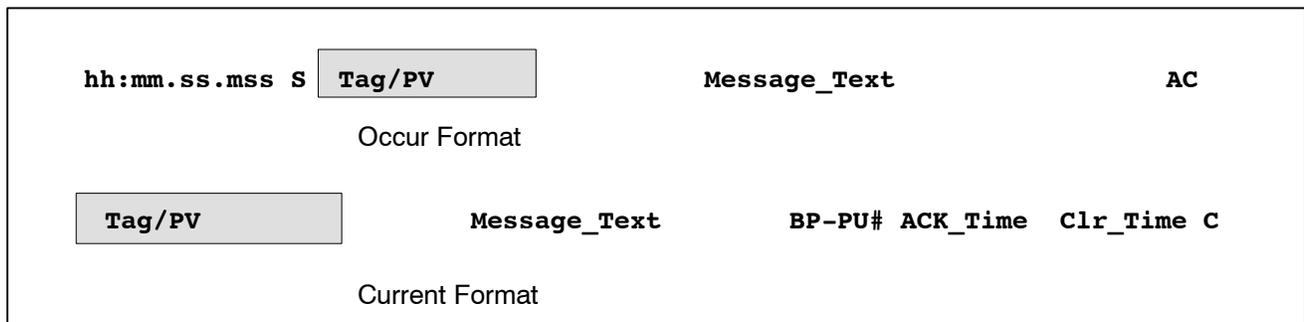


Figure 1.13. Hardware Alarm Messages from Batch, RBL, PLC, or the System

Table 1.3. Hardware Alarm Message Text Fields

Field	Meaning
hh:mm.ss.mss	Time the alarm was generated. Shown as: hours:minutes.seconds.milliseconds
S	The state of the originating block was: D part of a disabled area S suppressed * alarm is late <blank> neither disabled nor suppressed
Tag/PV	16-character source tag and point-specific information (if applicable). The tag will be highlighted in the configured alarm color. The tag blinks if the alarm is unacknowledged. The standard colors are: Red Critical Process Yellow Advisory Process Magenta Hardware White System Status Green Events
Block_Descriptor	Description entered by the configurator of the block.
Msg_Pair	Message pair displayed by the discrete step that caused the alarm message.
Value	The value configured in the "Logged Value" field of the ControlBlock. Established by the system configurator.
AC	The ACK and Clear summary shows the state of the alarm: A acknowledged but not cleared UOK cleared but not acknowledged AOK cleared and acknowledged U neither cleared nor acknowledged
AT	Alarm Type: HH Hardware High HL Hardware Low HM Hardware Miscellaneous HS Hardware Step
BP-PU#	Block priority and plant unit number of the block issuing the alarm.
ACK_Time	Time the alarm was acknowledged.
CLR_Time	Time the alarm was cleared.
C	The state of the block when the alarm cleared was: D part of a disabled area S suppressed <blank> neither disabled nor suppressed
Occur_Value	The value that caused the alarm message.
Message_Text	Description of the alarm or event. Contains different information depending on the type and source of the alarm or event.
AL#	Numeric identifier of the alarm or event message. This number may be used to locate the alarm message in the numerical order table. Shown in the printer format only.

Batch Alarms

Batch alarms may come from a ControlBlock, a discrete logic step, a Batch script, an RBL block, or a PLC block. Figure 1.14, Figure 1.15, and Figure 1.16 show the variations in the message text field. Table 1.4 describes the components of the message text field.

NOTE: Batch alarms are often associated with entries in the Batch Log File. A check of these log entries may identify the cause of a batch alarm.

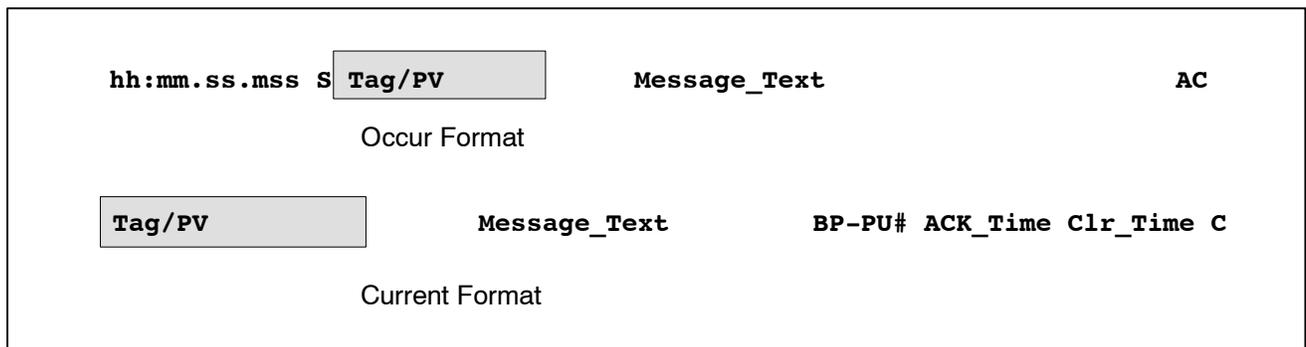


Figure 1.14. Batch Alarm Messages from a ControlBlock

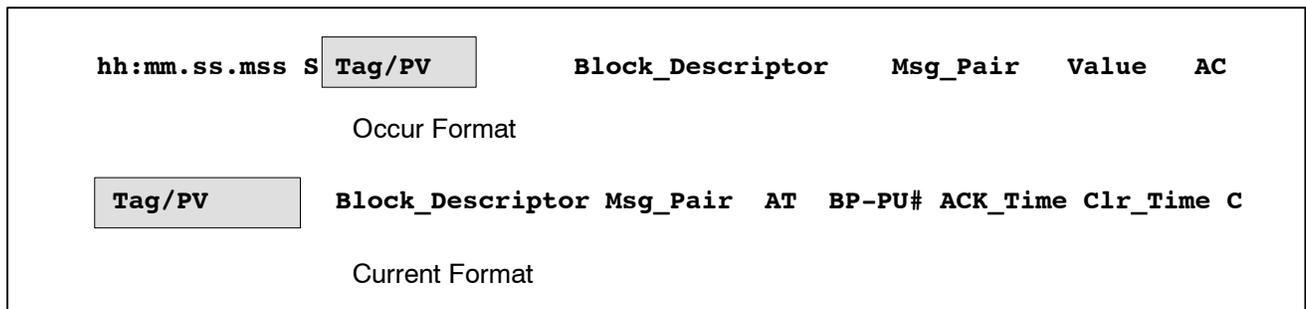


Figure 1.15. Batch Alarm Messages from a Discrete Step

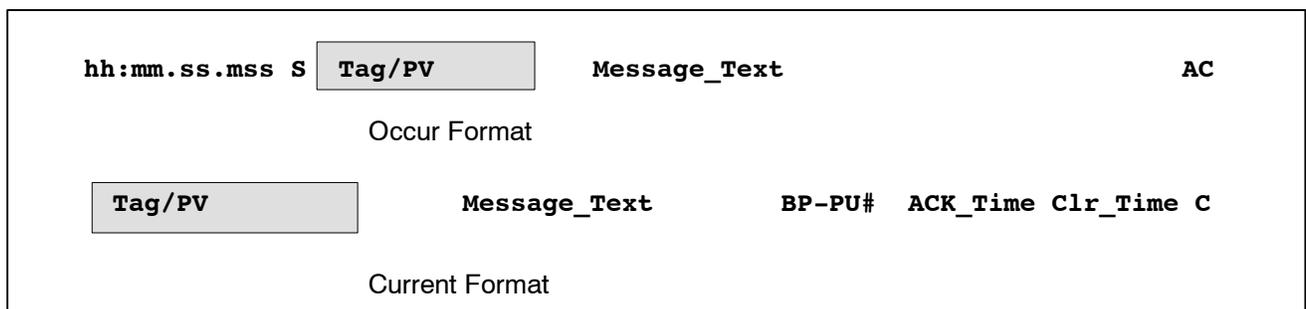


Figure 1.16. Batch Alarm Messages from Batch, RBL, or PLC

Table 1.4. Batch Alarm Message Text Fields

Field	Meaning
hh:mm.ss.mss	Time the alarm was generated. Shown as: hours:minutes.seconds.milliseconds
S	The state of the originating block was: D part of a disabled area S suppressed * alarm is late <blank> neither disabled nor suppressed
Tag/PV	16-character source tag and point-specific information (if applicable). The tag will be highlighted in the configured alarm color. The tag blinks if the alarm is unacknowledged. The standard colors are: Red Critical Process Yellow Advisory Process Magenta Hardware White System Status Green Events
Message_Text	Description of the alarm or event. Contains different information, depending on the type and source of the alarm or event. The message is as written in the Batch script, RBL block, PLC block, or from the system.
AC	The ACK and Clear summary shows the state of the alarm: A acknowledged but not cleared UOK cleared but not acknowledged AOK cleared and acknowledged U neither cleared nor acknowledged
BP-PU#	Block priority and plant unit number of the block issuing the alarm.
ACK_Time	Time the alarm was acknowledged.
CLR_Time	Time the alarm was cleared.
C	The state of the block when the alarm cleared was: D part of a disabled area S suppressed <blank> neither disabled nor suppressed
Block_Descriptor	Description entered by the configurator of the block.
Msg_Pair	Message pair displayed by the discrete step that caused the alarm message.
Value	The value configured in the "Logged Value" field of the ControlBlock. Established by the system configurator.

(continued on next page)

Table 1.4. Batch Alarm Message Text Fields (continued)

Field	Meaning
AT	Alarm Type: AD Advisory Deviation AH Advisory High AL Advisory Low AR Advisory Rate AS Advisory Step CD Critical Deviation CH Critical High CL Critical Low CR Critical Rate CS Critical Step
AL#	Numeric identifier of the alarm or event message. This number may be used to locate the alarm message in the numerical order table. Shown in the printer format only.

System Alarms

System alarms may come from system code, a Batch script, an RBL block, or a PLC block. Figure 1.17 and Figure 1.18 show the variations in the message text field. Table 1.5 describes the components of the message text field.

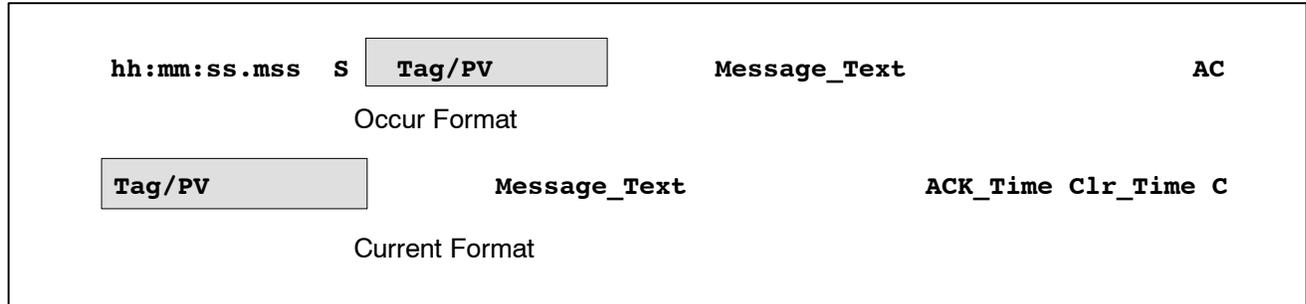


Figure 1.17. System Alarm Messages from the System

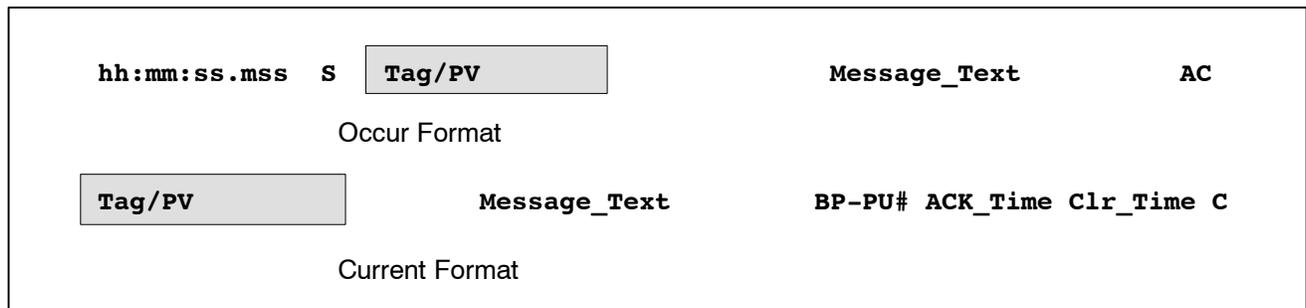


Figure 1.18. System Alarm Messages from Batch or RBL

Table 1.5. System Alarm Message Text Fields

Field	Meaning
hh:mm.ss.mss	Time the alarm was generated. Shown as: hours:minutes.seconds.milliseconds
S	The state of the originating block was: D part of a disabled area S suppressed * alarm is late <blank> neither disabled nor suppressed
Tag/PV	16-character source tag and point-specific information (if applicable). The tag will be highlighted in the configured alarm color. The tag blinks if the alarm is unacknowledged. The standard colors are: Red Critical Process Yellow Advisory Process Magenta Hardware White System Status Green Events
Message_Text	Description of the alarm or event. Contains different information, depending on the type and source of the alarm or event. The message is as written in the Batch script, RBL block, PLC block, or from the system.
AC	The ACK and Clear summary shows the state of the alarm: A acknowledged but not cleared UOK cleared but not acknowledged AOK cleared and acknowledged U neither cleared nor acknowledged
ACK_Time	Time the alarm was acknowledged.
CLR_Time	Time the alarm was cleared.
C	The state of the block when the alarm cleared was: D part of a disabled area S suppressed <blank> neither disabled nor suppressed
BP-PU#	Block priority and plant unit number of the block issuing the alarm.
AL#	Numeric identifier of the alarm or event message. This number may be used to locate the alarm message in the numerical order table. Shown in the printer format only.

Events

Event messages may come from a discrete I/O block, a discrete logic step, a Batch script, an RBL block, or a PLC block. Figure 1.19, Figure 1.20, and Figure 1.21 show the variations in the message text field. Table 1.6 describes the components of the message text field.

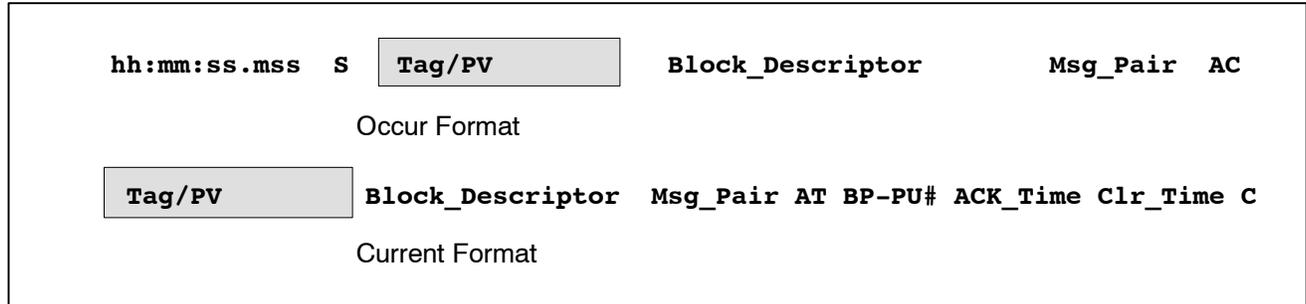


Figure 1.19. Event Messages from a Discrete I/O Block

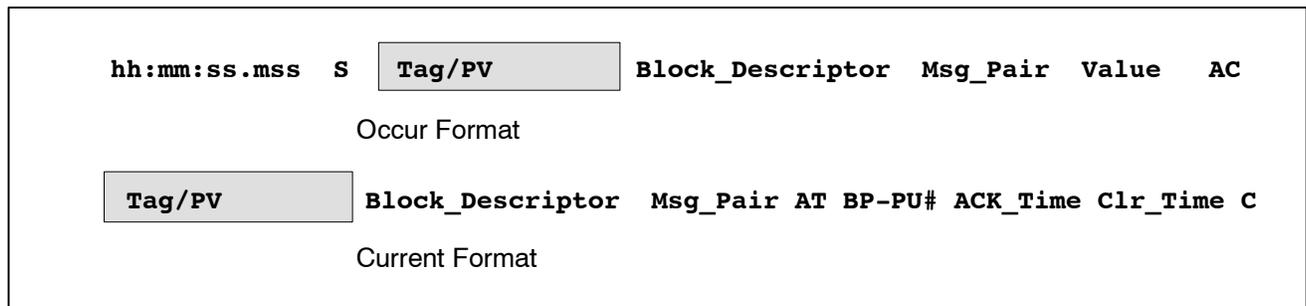


Figure 1.20. Event Messages from a Discrete Step

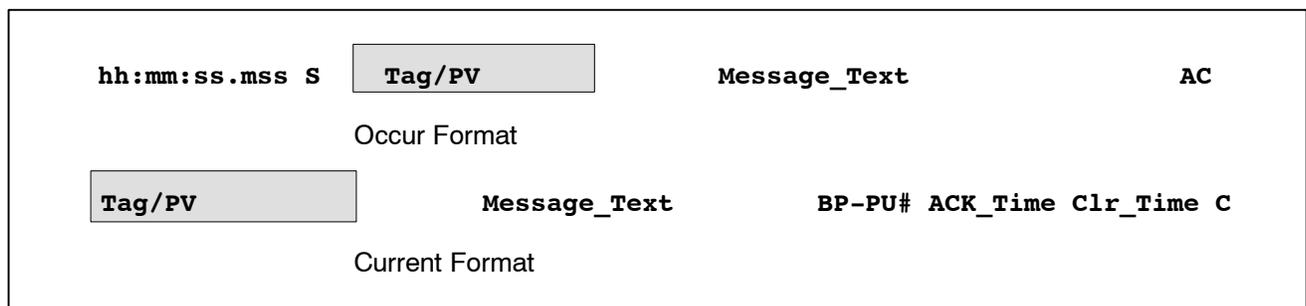


Figure 1.21. Event Messages from Batch, RBL, or PLC

Table 1.6. Event Message Text Fields

Field	Meaning
hh:mm.ss.mss	Time the alarm was generated. Shown as: hours:minutes.seconds.milliseconds
S	The state of the originating block was: D part of a disabled area S suppressed * alarm is late <blank> neither disabled nor suppressed
Tag/PV	16-character source tag and point-specific information (if applicable). The tag will be highlighted in the configured alarm color. The tag blinks if the alarm is unacknowledged. The standard colors are: Red Critical Process Yellow Advisory Process Magenta Hardware White System Status Green Events
Block_Descriptor	Description entered by the configurator of the block.
Msg_Pair	Message pair displayed by the discrete step that caused the alarm message.
AC	The ACK and Clear summary shows the state of the alarm: A acknowledged but not cleared UOK cleared but not acknowledged AOK cleared and acknowledged U neither cleared nor acknowledged
AT	Alarm Type: AD Advisory Deviation AH Advisory High AL Advisory Low AR Advisory Rate AS Advisory Step CD Critical Deviation CH Critical High CL Critical Low CR Critical Rate CS Critical Step
BP-PU#	Block priority and plant unit number of the block issuing the alarm.
ACK_Time	Time the alarm was acknowledged.
CLR_Time	Time the alarm was cleared.

(continued on next page)

Table 1.6. Event Message Text Fields (continued)

Field	Meaning
C	The state of the block when the alarm cleared was: D part of a disabled area S suppressed <blank> neither disabled nor suppressed
Value	The value configured in the “Logged Value” field of the ControlBlock. Established by the system configurator.
Message_Text	Description of the alarm or event. Contains different information, depending on the type and source of the alarm or event. The message is as written in the Batch script, RBL block, PLC block, or from the system.
AL#	Numeric identifier of the alarm or event message. This number may be used to locate the alarm message in the numerical order table. Shown in the printer format only.

Disk Events

Disk event messages may come from the system, a Batch script, or an RBL block. Figure 1.22 and Figure 1.23 show the variations in the message text field. Table 1.7 describes the components of the message text field.

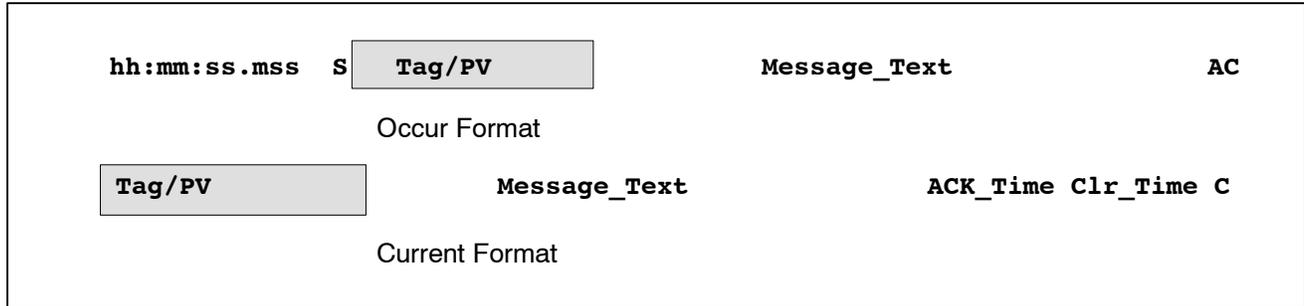


Figure 1.22. Disk Event Messages from the System



Figure 1.23. Disk Event Messages from Batch or RBL

Table 1.7. Disk Event Message Text Fields

Field	Meaning
hh:mm:ss.mss	Time the alarm was generated. Shown as: hours:minutes.seconds.milliseconds
S	The state of the originating block was: D part of a disabled area S suppressed * alarm is late <blank> neither disabled nor suppressed
Tag/PV	16-character source tag and point-specific information (if applicable). The tag will be highlighted in the configured alarm color. The tag blinks if the alarm is unacknowledged. The standard colors are: Red Critical Process Yellow Advisory Process Magenta Hardware White System Status Green Events
Message_Text	Description of the alarm or event. Contains different information, depending on the type and source of the alarm or event. The message is as written in the Batch script, RBL block, PLC block, or from the system.
AC	The ACK and Clear summary shows the state of the alarm: A acknowledged but not cleared UOK cleared but not acknowledged AOK cleared and acknowledged U neither cleared nor acknowledged
ACK_Time	Time the alarm was acknowledged.
CLR_Time	Time the alarm was cleared.
C	The state of the block when the alarm cleared was: D part of a disabled area S suppressed <blank> neither disabled nor suppressed
BP-PU#	Block priority and plant unit number of the block issuing the alarm.
AL#	Numeric identifier of the alarm or event message. This number may be used to locate the alarm message in the numerical order table. Shown in the printer format only.

Hardware Alarm Code

The alarm message number will be shown on I/O screens as the "Hardware Alarm Code" located at the lower left-hand side of the I/O device screen. This number can be used to access the list of alarm messages that are arranged in order by alarm message number. See Figure 1.24 for the location of the Hardware Alarm Code on an I/O screen.

I/O BLOCK CONFIGURATION		25-Mar-92	10:42:34
Address =1AA103	Device Type AIB		
Block Tag =>	Block Type =>AIB	Mode >MANUAL	Auto Lock >no
Field Value 6.18 6.18%	Filt Time >None	Block Out -.00	
	Sig Char None	Output Value >.00	
Eng Units >	Lo Cutoff .00	Nom Out >None	
Eng Zero >.00		Inst Bias .00	
Eng Max >100.00			
Descriptor >			
ALARMS			
Inst High >None	Crit high >None	Adv High >None	
Inst Low >None	Crit Low >None	Adv Low >None	
Hardware Alarm Code 8	Priority >0	Plant Unit >175	Al Deadband >1.00

Figure 1.24. Hardware Alarm Code on a Typical I/O Block Configuration Screen

Section 2: Smart Device Alarm Messages

When smart devices are used, error messages may appear on the Transmitter Status screen, Transmitter Configuration screen, SIB Block Configuration screen, or HART Output Device Status screen when using device commands.

Controller Processor Error Messages

Table 2.1 lists the Controller Processor error messages that might appear on the Transmitter Status screen, Transmitter Configuration screen, or the SIB Block Configuration screen when using the transmitter commands.

Table 2.1. Controller Comm Error Messages Generated by the Controller

Message	Description
Cont Comm Error 129	Error in FIC reply.
Cont Comm Error 130	Timeout, no transmitter response.
Cont Comm Error 132	Error in reply from transmitter. See Table 2.2.
Cont Comm Error 133	Error in FIC message length.
Cont Comm Error 134	Transmitter returns communication error. See Table 2.3.
Cont Comm Error 135	Error in transmitter message length.
Cont Comm Error 137	Transmitter busy.
Cont Comm Error 139	Error in message length.

FIC Error Messages

Table 2.2 lists the FIC or FIM error messages that might appear on the Transmitter Status screen, Transmitter Configuration screen, SIB Block Configuration screen, or HART Output Device Status screen when using device commands. It shows error messages that may occur in communication between the FIC or FIM, and a field device.

Table 2.2. FIC/Device Comm Error Messages Generated by the FIC

Code	Description
FIC/Device Comm Err 1000 0001	The device modem signal was lost. NOTE: This error message will not be generated with a FIM connection.
FIC/Device Comm Err 1000 0010	Buffer overrun error. Too many characters were received.
FIC/Device Comm Err 1000 0100	Smart transmitter parity byte error. The calculated checksum did not match the checksum at the end of the message.
FIC/Device Comm Err 1000 1000	Character/message timeout error. The message was not received within the required time.
FIC/Device Comm Err 1001 0000	Framing error. The Stop Bit of one or more bytes received was not detected.
FIC/Device Comm Err 1010 0000	Overrun error. At least one byte of data in the receive buffer was overwritten before it was read.
FIC/Device Comm Err 1100 0000	Character parity error. The parity of one or more of the bytes received was incorrect.

Smart Transmitter Status Error Messages

Table 2.3 and Table 2.4 list the transmitter status error messages that might appear on the Transmitter Status screen, Transmitter Configuration screen, or the SIB Block Configuration screen when using the transmitter commands.

Table 2.3. Transmitter Communication Error Generated by the Transmitter

Message	Description
Xmtr Comm Err 1000 0001	Undefined
Xmtr Comm Err 1000 0010	Buffer overflow. The message was too long for the receive buffer of the device.
Xmtr Comm Err 1000 0x00	Bit 2 is reserved. It is set to zero by the transmitter.
Xmtr Comm Err 1000 1000	Message Checksum Error. The parity byte calculated by the device did not match the parity byte at the end of the message.
Xmtr Comm Err 100 10000	Framing Error. The stop bit of one or more bytes received by the device was not detected by the UART.
Xmtr Comm Err 10 100000	Overrun Error. At least one byte of data in the receive buffer of the UART was overwritten before it was read.
Xmtr Comm Err 1100 0000	Byte Parity Error. The parity of one or more of the bytes received by the device was incorrect.

Table 2.4. Transmitter Status Error Messages Generated by the Transmitter

Message	Description
Xmtr Failure 1000 0000	A hardware error or failure has been detected. See the Diagnostic Status field on the Transmitter Status screen.
Xmtr Config Changed 0100 0000	A write or set command has been executed.
Cold Start 0010 0000	Power has been turned off and then on, reinstalling the setup information.
More Status Available 0001 0000	More status information is available than can be returned in an Upload Xmtr Config command. See the Diagnostic Status field on the Transmitter Status screen.
Fixed Current Mode 0000 1000	Primary variable current readings are held at the requested value. The digital PV is still valid.
Output Current Saturated 0000 0100	Primary variable is reading above 20 mA or below 4 mA.
Non PV out of Limits 0000 0010	A Non-Primary variable value is out of the transmitter limits.
PV Out of Xmtr Limits 0000 0001	Primary variable is out of the transmitter operating limits.

Output Device Status Field

The Output Device Status field returns binary information to the HOB on both the I/O Block Configuration screen and the HART Output Device Status screen. Table 2.5 provides a description of the possible field displays.

Table 2.5. Output Device Status Message Descriptions

Code		Description
Field Device Malfunction	1000 0000	Field device malfunction; Cleared by field device self-test.
Field Device Configuration Changed	0100 0000	Configuration has been changed by the user. Cleared by user command and RESET.
Cold Start	0010 0000	Reset sequence executed; on power-up
More Status Available	0001 0000	More status information is available than can be returned in an Upload Xmtr Config command. See the Diagnostic Status field on the Transmitter Status screen.
No Response to Analog Input	0000 1000	Rev 5 device and higher gets set when device doesn't respond to analog current.
Analog Input Current Saturated	0000 0100	Analog input saturated. Indicates the 4–20mA variable exceeds the user-configured lower or upper limit or cutoff values. This error clears automatically when variable is within operating limits.
Internal Sensor Out of Limits	0000 0010	A field device internal sensor exceeds its operating limits. This error is cleared automatically when all sensors are within operating limits.
Variable Out of Range	0000 0001	An active measured variable exceeds its user-configured range.

Section 3: Alarm Messages in Alphabetical Order

This section shows the alarm and event messages sorted in alphabetical order by the message text. Section 4 shows the messages in numerical order.

The columns at the top of the table have the following meanings:

Message	Shows the alarm message as it appears on the alarm line of the console CRT. The characters <> indicate a part of the message that can change. For example, the table lists the message “Block <address> Missing in Controller”. If this message appeared on the CRT screen, <address> would be replaced by the actual address of the block.
Description	Attempts to explain the message.
List	Shows the list in which the message will be recorded: B = Batch D = Disk Event Event = Event H = Hardware P = Process R = Report Status S = System Status VAX = Displays on VAX system
Alarm Area	Shows the area affected by the alarm condition: ATC Autotune Controller Console ControlFile Disk Disk Subsystem HIA Highway Interface Adapter MicroVAX I/F Pway I/F PeerWay Interface Device Trend Trend Subsystem
No.	Shows the Alarm Number.

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Message	Description	List	Alarm Area	No.
95% files used in <x> folder	The folder has almost the maximum number of filenames.	S	Console	683
95% space used in <x> folder	The folder is nearing the maximum allowed size.	S	Console	684
<msg pair> A break was caught	An illegal break was received from the PLC slave device.	H	ControlFile	80
<msg pair> A framing error occurred	A message framing error in the PLC communications occurred.	H	ControlFile	81
<msg pair> A parity error occurred	A parity error in the PLC communications occurred.	H	ControlFile	82
A/D Converter Out Of Spec	One of the Controller Processor, FIC, or Discrete I/O FIM analog to digital converters has failed. The readings will continue to update, with an error.	H	ControlFile	36
ABORT Deviation Large at End LOC1	Evaluation Aborted. The evaluation aborted because the FV-SP deviation was too large. Another disturbance may have occurred during the evaluation.	Event	ATC	506
ABORT Faulty Peak Time Combination	Evaluation Aborted. The evaluation aborted because the process response to the disturbance did not meet the ATPID requirements.	Event	ATC	512
ABORT Illegal Combination Ti & Td	Evaluation Aborted. The evaluation aborted because the initial time value was not greater than four times the derivative time value.	Event	ATC	505
ABORT Kalman Crossed Zero Cnt < 6	Evaluation Aborted. The evaluation aborted because the process response to the disturbance was too fast for the ATPID requirements.	Event	ATC	500
ABORT Kalman Slope Large	Evaluation Aborted. The evaluation aborted because the process response to the disturbance was too fast for the ATPID requirements.	Event	ATC	503
ABORT Kalman Slope Negative	Evaluation Aborted. The evaluation aborted because the initial process response to the disturbance did not meet the ATPID requirements.	Event	ATC	502
ABORT Kalman Slope Ratio Change > 2	The ATC stopped evaluation because the Kalman slope ration change was greater than two.	Event	ATC	536
ABORT Kalman State Unknown	Evaluation Aborted. The evaluation aborted because the initial process response to the disturbance did not meet the ATPID requirements.	Event	ATC	504
ABORT Newton Raphson Failure	Evaluation Aborted. The evaluation aborted because the ATOID evaluation was unable to predict the closed loop bandwidth of the loop. Another disturbance may have occurred during the evaluation.	Event	ATC	514
ABORT OmegaN1 Out Range Kalman Slope	Evaluation Aborted. The evaluation aborted because the process response to the disturbance did not meet the ATPID requirements.	Event	ATC	513

Message	Description	List	Alarm Area	No.
ABORT Output Hit Limits	Controller output reached the high limit.	Event	ATC	508
ABORT Period Out Range Kalman Slope	Evaluation Aborted. The evaluation aborted because the process response to the disturbance did not meet the ATPID requirements.	Event	ATC	510
ABORT Setpoint Retrigger	Evaluation Aborted. The evaluation aborted because another setpoint or load trigger occurred during the evaluation.	Event	ATC	519
ABORT Third Peak Larger Than First Peak	Evaluation Aborted. The evaluation aborted because the process response to the disturbance did not meet the ATPID requirements.	Event	ATC	511
Alarm log internal fault, logging disabled	There is a problem within the logging system software. Logging has been disabled.	S	Console	639
Alarm logging Disabled	Logging of alarms has stopped.			632
Alarm logging Enabled	Logging of alarms has started.			631
Alarms and Events Inhibited	All alarms and events from the indicated Controller Processor were disabled at the ControlFile Status screen.	P	ControlFile	30
Alarms suppressed	Records the change in alarm suppression.			629
Alarms unsuppress on <xx> by system	Alarms are no longer suppressed for node <xx>. The alarm was pushed off the bottom of the Suppressed Alarm List or Automatic Alarm Deletion has removed the last alarm from the suppressed block <xx>.	S	Console	549
Alarms un-suppressed on <xx>	Records the change in alarm suppression for node <xx>.			627
<msg pair> An overrun error occurred	Extra characters were received from a PLC device after an end-of-message character (EOM).	H	ControlFile	83
ATC value = <x>	The Auto Tuning Controller reports a value of <x>.	H	ControlFile	98
Auto Plant Config Backup File Not Found	The \$\$BACKUP file was not found at the time a backup was to be performed.	D	Console	801
Backup Complete 0 file(s) copied	No files were copied in the backup operation.		Disk	657
Backup of <xx> folder started	Backup of the named folder has been started		Disk	651
Backup of file <xx> started	Backup of the named file has been started.		Disk	650
<msg pair> Bad CRC/Checksum on Message	The calculated CRC or Checksum for a message from a PLC device was wrong.	H	ControlFile	85

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Message	Description	List	Alarm Area	No.
Bad Evaluation	The conditions for ATC routines were not satisfied.	S	ATC	543
Bad FIC Card	The Field Interface Card (FIC) on-line diagnostics detected a fault.	H	ControlFile	57
Bad file deleted by file system check	A file was detected as corrupt and was deleted from the disk during a power-up diagnostic file check. Files can be corrupted if the console is powered down while a file write is in progress.	D	Disk	343
Bad Message Data	A message in the Controller Processor/Field Interface Card communications protocol did not make sense.	H	ControlFile	15
<msg pair> Bad Message Received	A message was received from a PLC device that did not meet any of the expected formats.	H	ControlFile	84
Bad PLC FIC Card	Communication with a PLC FIC went bad. The PLC did not respond to a diagnostic message. Could be caused by a problem anywhere in the communication path between PLC controller and PLC. Check cables, connectors, FIC, and the PLC.	H	PLC	622
Bad Trend Read Count	Trending data cannot be retrieved because of corrupted information on the disk.	H	Trend	357
Batch config load successful	The requested Batch configuration file was successfully loaded to the node requested.	D	Console	443
Batch config load unsuccessful	The requested Batch configuration file was not successfully loaded to the node requested.	D	Console	444
Batch config write successful	The requested Batch configuration file was successfully written to the disk.	D	Console	445
Batch config write unsuccessful	The requested Batch configuration file was not saved to the disk because of a problem during the attempted write.	D	Console	446
Batch Configuration Checksum Bad	The batch configuration checksum was bad when the CP restarted. It must be reloaded.	H	ControlFile	138
Batch Download failure, retrying	The console was unable to successfully download a task to a node. The script may not be found, or in use by another console. Check the Batch Log screen.	B	ControlFile	472
Batch Dynamic Version Incompatible	When the CP was rebooted, the runtime status stored in the NV memory was found to be different than the current program requires. The runtime information has been initialized and all tasks stopped.	B	ControlFile	499
Batch FATAL runtime error	A problem in the script file prevented the task from completing normally. Check the Batch Monitor screen and the Batch Log for details.	B	ControlFile	474
Batch File Already Up to Date	The static version of batch is currently up-to-date, and no conversion occurred. This alarm should only be seen when updating software to a new revision level.	D	Console	466

Message	Description	List	Alarm Area	No.
Batch File Convert Successful <node>	The static batch file conversion was successful. This alarm should only be seen when updating software to a new revision level.	D	Disk	467
Batch forced NV Mem backup	A batch backup was forced over waiting tasks or alarms. The most likely cause is a slow link from a controller. Check for use of a "while alias" or "until alias" statement in a batch program. Use of a "sleep" statement after the "while" or "until" statement may correct the problem.	S	ControlFile	497
Batch Graphic waiting for operator input	The Batch Graphic is waiting for input from the operator.	B	ControlFile	484
Batch input not requested	No input is being requested from a Batch CP for the Batch Input screen.	D	Console	465
Batch Link Error <message>	<p>An error occurred in linking a batch program. The <message> explains the problem.</p> <p>Bad Highway Number: The node is not visible. May be a PeerWay access problem or HIA problem.</p> <p>Bad Node: The node number was not found.</p> <p>Bad Socket: There is no task in this node to receive the message.</p> <p>Block Not Configured: The block is not configured.</p> <p>BUSY On Link Level: The receiving PeerWay buffers are full.</p> <p>Communication Error With Controller: The Controller got a bad message.</p> <p>Controller Memory Overflow: The Controller memory is full. There is no room for the block.</p> <p>Controller Time Out: Controller did not respond within the time limit.</p> <p>Controller Got Bad Message: Received a message with a bad format.</p> <p>Invalid Entry: Possible bad configuration.</p> <p>Link Level Communication Error: Unable to write a message across the PeerWay.</p> <p>Message Reply Timeout: The message reply was lost.</p> <p>Network Communication Error: Unable to complete a message/reply transaction with another node.</p> <p>No Controller Present: No controller in slot A-H.</p> <p>No Write Permit: The node or the plant is not owned.</p> <p>PeerWay Transport Level Error: Unable to complete a low-level message ACK to another node.</p> <p>BUSY on Link Level: The receiver PeerWay buffers are full. The server may be busy or hung.</p> <p>Tag Not Found: The block is not configured.</p> <p>Update Code Conflict: There were two or more updates to the same block at the same time.</p>	B	ControlFile	481
Batch low on NV Mem	The Batch CP in the node where the Batch task is executing is close to using all available data storage space in nonvolatile memory. The amount of available space is shown on the Batch Run screen for the task.	S	ControlFile	486

Message	Description	List	Alarm Area	No.
Batch low on volatile memory	The Batch CP in the node where the Batch task is executing is close to using all available data storage space in volatile memory (RAM).	S	ControlFile	490
Batch node: task <xx> not owned	The console does not own the batch task, so the requested disk function (i.e. BATCH LOAD TRANSFER) did not execute.	D	Console	203
Batch node:task <xx> Load Unsuccessful	A batch task failed to load from disk. First, make sure the script you specified exists on the correct disk. Second, select on the script from the Batch Run screen to avoid typing errors. Finally, ensure that you do not have another task running. Retry the restore operation after each of these suggestions.	D	Disk	692
Batch NV Mem backup failure	Software problem caused the backup of Batch tasks to be delayed.	S	ControlFile	496
Batch NV Mem was initialized	The nonvolatile memory in the node indicated was cleared by a Batch Wipe command.	S	ControlFile	494
Batch NV Mem was reorganized	The nonvolatile memory in the node where the indicated Batch task is executing was automatically reorganized to make more efficient use of the nonvolatile memory.	B	ControlFile	489
Batch NV Mem wipe UNSUCCESSFUL	The Batch Wipe function was unsuccessful. It should be retried. It may be necessary to perform the Batch Wipe immediately after the CP LEDs indicate the CP has started operating (after rebooting the CP and before it accesses the nonvolatile memory again).	S	ControlFile	495
Batch NV Mem corrupted	The nonvolatile memory in the node where the indicated Batch task is executing failed the background memory self-check. A Batch Wipe function may need to be used to get the tasks restarted. Task configuration must be reloaded.	B	ControlFile	488
Batch Recipe encountered blocked step	The Batch Recipe is blocked due to a blocked step.	B	ControlFile	483
Batch Recipe in static mode	An ABC batch recipe has changed from Normal to Static Mode.	B	ControlFile	482
Batch Recipe step has been modified	The Batch recipe step has been changed since the recipe was validated.	B	ControlFile	485
Batch Report System Disabled	The Batch task attempted to write to the Report system, but Reports were disabled.	B	ControlFile	479
Batch SOFT runtime problem	The CP executing a Batch Task was unable to complete valid program line due to an invalid, unavailable, or improperly configured alias.	B	ControlFile	475
Batch Single Node Batch CP shut down	A CP controlling Single node Batch has been shut down.	B	ControlFile	480

Message	Description	List	Alarm Area	No.
Batch Static Write Bad for Node <node>	An error occurred while trying to change Batch task static configuration data, such as the task tag, file name, script names, and task ID. May be caused by having a Batch Task configured at a different software revision level than currently loaded into the ControlFile.	D	Console	468
Batch Subsystem Disabled	The Batch subsystem was disabled.	D	Disk	621
Batch Subsystem Enabled	The Batch subsystem was enabled.	D	Disk	620
Batch Task Too Old To Update	The batch task configuration file is too old to be updated.	B	Console	469
Batch Task is HALTED	The Batch task was halted at the line indicated on the Batch Run screen for this task. Either a halt statement was executed by the task, or the halt command was used on the Batch Monitor screen for this task.	B	ControlFile	476
Batch Task is HOLDING	The Batch task was halted at the line indicated on the Batch Run screen for this task. Either a hold statement was executed by the task, or the hold command was used on the Batch Monitor screen for this task.	B	ControlFile	477
Batch Task was ABORTED	The Batch task was aborted by command on the Batch Run screen or from a Process Graphics Batch faceplate.	S	ControlFile	471
Batch Task was KILLED	The Batch task was killed by command on the BATCH RUN screen or from a Process Graphics Batch faceplate.	S	ControlFile	470
Batch alarms suppressed on <xx>	Records the change in batch alarm suppression for node <xx>.	B	ControlFile	628
Batch alarms unsuppressed on <xx>	Records the change in batch alarm suppression for node <xx>.	B	ControlFile	626
Batch out of NV Mem	The nonvolatile memory in the node where the Batch task is executing has no more data storage space available. Variables, arrays, and strings on the existing script will need to be reduced or the number of tasks in this node reduced.	S	ControlFile	487
Batch out of volatile memory	The Batch CP in the node where the Batch task is executing has no more data storage space available in its onboard RAM. Script size must be reduced or number of tasks running in the node must be reduced.	B	ControlFile	491
Batch script copied <xx> file	A batch script copied the file <xx>. The file may be a virtual array, a virtual string array, or a report file.	D	Disk	765
Batch script deleted <xx> file	A file, <xx>, has been deleted by a batch script. The file may be a virtual array, virtual string array, or a report file.	D	Disk	699

Message	Description	List	Alarm Area	No.
Batch script renamed <xx> file	A batch script renamed a file, originally called <xx>. The file may be a virtual array, a virtual string array, or a report file.	B	ControlFile	764
Batch task CRASHED	The Batch task failed due to a hardware or software problem. Check the Batch Log for details. The Task must be filled and restarted.	B	ControlFile	473
Batch volatile mem was reorganized	The Batch CP in the node where the Batch task is executing was automatically reorganized to make more efficient use of the NV memory.	S	ControlFile	493
Batch volatile memory corrupted	The Batch CP in the node where the Batch task is executing failed the background memory self-check. A Batch Wipe function may be needed to get tasks to restart. Task configuration must be reloaded.	B	ControlFile	492
Batch waiting for operator input	A task is waiting for an operator to respond to a prompt on the Batch Input screen.	B	ControlFile	478
Block <address> additional in controller	Address of the block that was in the Controller Processor, but not the disk file, during the Plant Configuration Verify operation.	D	ControlFile	345
Block <address> missing in controller	Address of the block that was not in the Controller Processor but was in the disk file during the Plant Configuration Verify operation.	D	ControlFile	344
Block Requires <xx> Inputs	The ControlBlock did not have enough inputs for the ControlBlock function algorithm.	H	ControlFile	25
Block appeared	The Block or Loop began responding to the MicroVAX.	VAX	MicroVAX I/F	598
Block in Manual	The I/O block is not in AUTO mode.	H	ControlFile	8
Block in Override	The I/O block is in OVERRIDE mode.	H	ControlFile	111
Block static configuration changed	Only appears on RS3 alarm lists read from the MicroVAX. This message is intended as a message to the RPQNA operating software.		MicroVAX I/F	599
Block vanished	The Block or Loop is not responding to the MicroVAX.	VAX	MicroVAX I/F	597
<xx> block(s) additional in controller	The number of blocks that were in the Controller Processor compared to the disk file during the Controller Block Verify operation.	D	ControlFile	348
<xx> block(s) missing in controller	The number of blocks that were not in the Controller Processor configuration compared to the disk file during the Controller Block Verify operation.	D	ControlFile	347
<xx> block(s) verified identical	The number of blocks in the disk file that were the same as the Controller Processor configuration during the Controller Block Verify operation.	D	ControlFile	349
<xx> Blocks have been modified	The number of blocks that have configuration differences between the Controller Processor configuration and the disk file during the Controller Block Verify operation.	D	Disk	241

Message	Description	List	Alarm Area	No.
Board: Key <p:kkk> is bad	The console software received a keyboard switch closed signal for more than 20 seconds for a MTCC, or 60 seconds for an ECC. <p:kkk> represents the panel and key. The values for p are: 1 Configuration (alphanumeric) 2 Trackball 3 Operator 4 Callup Option #1 (left) 5 Callup Option #2 (middle) 6 Callup Option #3 (right)	H	ControlFile	90
Buffer Overrun	The communications hardware in the Controller found that there was not enough room in the memory buffer for the complete message from the Field Interface Card.	H	ControlFile	58
Bypass	Evaluation finished - SUCCESSFUL. The evaluation finished and the process response was within the user specified parameters. No new PID values have been calculated.	S	ATC	541
BYPASS: Phase Margin Within Deadband	Evaluation finished - SUCCESSFUL. The evaluation finished, and the process response was within the user specified parameters. No new PID values may have been calculated.	Event	ATC	526
BYPASS: Unstable, D_Active cpm > .90	Evaluation finished - SUCCESSFUL. The evaluation finished, and the process response was within the user specified parameters. No new PID values may have been calculated.	Event	ATC	525
BYPASS: Unstable, Ovrmdp, Ldeval	Evaluation finished - SUCCESSFUL. The evaluation finished and the process response was within the user specified parameters. No new PID values have been calculated.	Event	ATC	535
BYPASS: Unstable, cpm> .75, pmerr Neg	Evaluation finished - SUCCESSFUL. The evaluation finished, and the process response was within the user specified parameters. No new PID values may have been calculated.	Event	ATC	530
CF Data Transfer Error (<xx>)	An error occurred during the transfer of data between the Controller Processor and the Coordinator Processor. <xx> may be: 30 Alarm message checksum sent from the controller to the coordinator processor did not match, and the alarm was dropped. 400 Checksum on the link area does not match.	H	ControlFile	102
CP Funct Reduced: No Enhance Module	When attempting to load a Coordinator Processor enhancement module from the NV memory, the program image was found to be missing or corrupt. This alarm also appears after a Coordinator Processor PeerWay boot. The CP image in the NV memory should be downloaded again and the CP rebooted.	H	ControlFile	137

Message	Description	List	Alarm Area	No.
CP Switch Complete <xx>	The secondary CP successfully completed the switchover to primary operation. The CP indicated as the source is the CP that took over as primary. <xx> may be: 001 Redundant CP detected a crash of the primary CP. 002 Primary CP detected a data integrity error. 101 Operator requested a switchover. 290 Redundant CP can see controllers that the primary cannot. 291 Primary CP encountered errors on the PeerWay and the secondary did not see the errors. 292 Primary CP has a ROM checksum error, so it switched to the secondary. 293 Primary CP detected a weak RAM chip. 294 Primary CP detected a watchdog error. 295 A batch program found a corrupt batch NV memory image. Batch tasks have been restarted and have reloaded the last saved image.	H	ControlFile	145
CP, Weak RAM Chip, Bit <xx>	A hardware error on one of the 22 RAM chips was detected by the Error Detection and Correction (EDAC) circuit on the Coordinator Processor. The Coordinator Processor may operate properly for a period of time; however, it should be replaced at the earliest opportunity.	H	ControlFile	131
CP/CP COMM: Error Detected	On the 16-bit communications port between the two redundant Coordinator Processor boards in a ControlFile, an error occurred in the message checksum between the two boards.	H	ControlFile	127
CP/Controller Addressing Fault	Indicates the Coordinator Processor and the Controller Processor have conflicting slot-address.	H	ControlFile	32
Calibration Error: Value Out of Range	The value used for calibration of the AIB or AOB is outside a reasonable range.	H	ControlFile	39
Can't Load Old Script	The script level is not high enough. The script level must be updated on the RBLF or BAF display.	S	RBLC	426
Cannot Read \$\$PASSWD from Node <xx>	Password file could not be found on disk during logon.	D	Console	666
Cannot Unlock File <name>	This file cannot be unlocked—another console or disk operation is currently writing to this file.	D	Disk	257
Controller Image Checksum Test Failed	The MPC5 controller image checksum test failed. The controller will be reset and the image reloaded from NV memory.	H	ControlFile	811

Message	Description	List	Alarm Area	No.
Comm Checksum	The checksum in the message from the field interface card or analog panel station was incorrect. If the message includes “=xx Redun Hardware:” there may be a communication problem between the redundant controller and an Analog Card Cage. Check the cables between the redundant controllers, and those between the controllers and the card cage. Also check the Comm Connect card. Try reloading the FIC program from the Plant Program folder.	H	ControlFile	18
Comm Error	A communication error was detected by the communications hardware in the Controller Processor.	H	ControlFile	20
Comm Inquiry Phase	The Controller Processor is in the process of establishing the type of device being communicated with. To communicate with a field interface card or analog panel station, the Controller Processor will first inquire about the type of hardware on the comm line.	H	ControlFile	22
Comm Neg Acknowledge	The Controller Processor did not get the correct message acknowledgment from the FIC. The FIC or controller could be faulty.	H	ControlFile	17
Comm New Data	Data needed to evaluate an Analog Panel Station was not available at the time of evaluation. This problem is caused by an internal software synchronization problem.	H	ControlFile	21
Comm Protocol	A message in the Controller/Field Interface Card communications protocol was in the wrong format, or was not the message type expected. If the message includes “=xx Redun Hardware:” there may be a communication problem between the redundant controller and an Analog Card Cage. Check the cables between the redundant controllers, and those between the controllers and the card cage. Also check the Comm Connect card. Try reloading the FIC program from the Plant Program folder.	H	ControlFile	16
Comm Timeout	The Controller has lost communications with the Field Interface Card in the FlexTerm.	H	ControlFile	19
Communication Error	The Field Interface Card (FIC) could not update after the block was evaluated.	H	ControlFile	10
Communication Error with PWIF node	Function was aborted because of communications problems on the PeerWay. The PeerWay Overview screen should be checked for error indications.	H	Disk	294
Communication Link Failure	The communication link between the Supervisory Computer Interface and the host computer has failed.	H	ControlFile	423
Compression Ratio Below Cutoff	Critical alarm that the compression ratio has fallen below the point you designated in the “CR Cutoff” field. This alarm is optional: it is only created if you selected “Yes” in the “Cutoff Crit Alarm” field. To clear this alarm, you must have a logic step or discrete input configured in the “Reset Input” field on the DCB Continuous Faceplate.	P	ControlFile	771

Message	Description	List	Alarm Area	No.
Compression Ratio Low	The compression ratio has fallen below the point you designated in the "CR Advisory Alarm" field. The alarm is cleared when the compression ratio rises above the designated point.	P	ControlFile	770
Computed Derivative Time	The ATPID calculated a new derivative time parameter.	Event	ATC	524
Computed Gain	The ATPID calculated a new controller gain parameter.	Event	ATC	522
Computed Integral Time	The ATPID calculated a new integral time parameter.	Event	ATC	523
<xx> Configurations Restored from Disk	The number of configuration types loaded into console memory. Configuration types include message pairs, group configurations, trend configurations, etc.	D	Disk	234
<xx> Configurations Saved to Disk	The number of configuration types saved to disk from console memory. Configuration types would include message pairs, group configurations, trend configurations, etc.	D	Disk	235
Console EPROM Checksum Error	Indicates that the Boot ROMs on the Console encountered a checksum error during the background diagnostic test. The OI processor card should be replaced as soon as possible. The card should continue to function; however, if there is a restart required the console may not start up.	H	Console	317
Console, Weak RAM chip Bit <xx>	Indicates that a hardware error in one of the 22 RAM chips has been detected by the Error Detection And Correction (EDAC) circuit on the console processor board. The console may operate satisfactorily for a period of time, but the card should be replaced at the earliest possible time.	H	Console	309
ControlFile Restarted	The ControlFile restarted and is on the PeerWay. This message is generated by the Coordinator Processor.	H	ControlFile	141
Controller Config Reload Required	Controller Processor configuration was corrupted and should be reloaded from the Plant Configuration disk file.	H	ControlFile	114
Controller Copy Aborted (<xx>)	1061 The Coordinator Processor failed to copy the primary controller configuration to the redundant controller. Controller Processor idle time should be checked.	H	ControlFile	105

Message	Description	List	Alarm Area	No.
Controller Fault (<xx>)[1 of 2]	<p>The Coordinator Processor lost communications with the Controller Processor. This alarm can be generated by simply disabling the Controller Processor. The number given in the alarm text indicates where the Coordinator Processor was when it detected it could not communicate with the controller.</p> <p><xx> may be:</p> <p>10 False DTACK received while reading alarm queue.</p> <p>40 A controller fault has occurred and the CP was too busy at the time to handle the fault. The original fault code was not retained.</p> <p>100 Coordinator processor is being locked out of Controller Status information area in the controller RAM. This occurs if the controller has been disabled by the front panel switch. It might also be caused by a controller fault.</p> <p>110 False DTACK received while reading Controller Status information area.</p> <p>200 False DTACK received while reading controller configuration.</p> <p>210 The pointers in the controller RAM were corrupted because the controller failed during an NV memory update cycle.</p> <p>230 False DTACK received while reading controller configuration for NV memory backup.</p> <p>405 Coordinator Processor was not able to read controller link area.</p> <p>410 False DTACK received while reading controller link area.</p> <p>430 False DTACK received while writing controller link area.</p> <p>450 False DTACK received while write TIC synchronization information.</p> <p>510 False DTACK was received while requesting Controller Processor configuration backup.</p> <p>520 The Controller Processor did not allow the Coordinator Processor to back up the configuration to the NV memory because the controller did not have sufficient idle time. This could be due to over configuration or to a controller problem.</p> <p>600 The Coordinator Processor entered messages into a buffer area of RAM in the Controller Processor. The Controller Processor fell too far behind and no room is available in the buffer for any more messages from the Controller Processor. This is probably due to a Controller Processor fault.</p> <p>1024 The Controller Processor crashed. No dump screen is available. - CONTINUED -</p>	H	ControlFile	100

Message	Description	List	Alarm Area	No.
Controller Fault (<xx>)[2 of 2]	<p>-CONTINUED-</p> <p>1025 The Controller Processor can no longer communicate with the Coordinator Processor. This can be caused by the switch on the Controller Processor being shut off or some fault on the Controller Processor has caused it to halt. A dump screen may be available.</p> <p>1043 The CP started up, checked the ControlFile status, and found a Controller Processor that went down since the last time the ControlFile status was checked. This message usually occurs when a Controller Processor goes down while the CPs were switching or while the CP was down.</p> <p>1048 The CP restarted and found a Controller Processor down since the last CP shutdown.</p> <p>2100 False DTACK received while reading redundant controller backup configuration.</p> <p>2110 The pointers into the redundant controller RAM were corrupted because the controller failed during a controller image backup cycle to the redundant controller.</p>	H	ControlFile	100
Controller Memory Soft Error (<xx>)	<p>Multiple retries were necessary to pass a message successfully between the Coordinator Processor and a Controller Processor.</p> <p><xx> may be:</p> <p>420 Retry was necessary to read controller link area.</p> <p>440 Retry was necessary to write controller link area.</p> <p>620 Retry was necessary to write a message to the controller.</p>	H	ControlFile	103
Controller Not Backed Up	The Controller Processor did not allow the Coordinator Processor to access to the configuration area in the Controller Processor for a long enough period of time to complete the configuration backup to NV memory for one cycle. Too little idle time may be left in the configuration. Controller Processor idle time should be at least 18% or higher.	S	ControlFile	115
Controller ROM Test Failure	A periodic check of the Controller Processor Boot programs stored in EPROM failed. The Controller Processor may not be able to restart if disabled.	H	ControlFile	34
Controller Reload Requested	The Controller Processor finished the Boot ROM start-up and is requesting that the operating program be downloaded from the NV memory.	H	ControlFile	104
Controller Switch Aborted (<xx>)	<p>The switchover from the primary to the secondary controller was aborted.</p> <p><xx> may be:</p> <p>1066 The switchover from the primary to the secondary controller was aborted because the secondary controller is not active.</p>	H	ControlFile	106

Message	Description	List	Alarm Area	No.
Controller Switch Complete <xx>	The secondary Controller Processor successfully completed the switchover to primary operation. The Controller Processor indicated as the source is the Controller Processor that took over as primary. <xx> may be: 1064 Controller Switch has been detected from the interrupt level. 1065 Controller Switch has been manually requested.	H	ControlFile	144
Controller is in Standby	The Controller is in the Standby mode. All inputs will continue to be evaluated and displayed. No changes to the output blocks are possible.	P	ControlFile	61
Controller: Weak RAM Chip, Bit <xx>	A hardware error was detected on one of the 22 RAM chips by the Controller Processor Error Detection and Correction (EDAC) circuit. The Controller Processor may operate satisfactorily for a period of time but should be replaced as soon as possible.	H	ControlFile	33
Controllers Incompatible <xx>	One Controller Processor indicated that it is redundant, and the other Controller Processor has indicated that it is not reading the redundancy indication. <xx> may be: 1042 One Controller Processor has indicated that it is redundant, and the other Controller Processor has indicated that it is not reading the redundancy indication. A short on two pins from the Controller Processor to the FlexTerm cable is read by the Controller Processor. The Controller Processor should be firmly pressed into the ControlFile and the connectors on the back of the ControlFile should be checked. If this fails to clear the fault, the Controller Processor reporting the fault should be replaced. 1053 Controller Processors running in a redundant mode are not of the same card type. For example, one is a MultiPurpose and the other is a contact. The incorrect card type should be replaced.	H	ControlFile	109
DC: Controller High <address>	The high Controller Processor address used in a configuration copy or update. All addresses between this address and the low address were copied or updated.	D	Disk	243
DC: Controller Low <address>	The low controller address used in a configuration copy or update. All addresses between this address and the high address were copied or updated.	D	Disk	242
DC: Copied <xx> Config Blk(s)	The number of blocks successfully copied from one file to another in a Disk File Copy function.	D	Disk	249
DCU: Copy/Update <xx> Blk(s)	The number of blocks successfully updated to the new block size and copied from one file to another in a Disk File Update Copy function.	D	Disk	250

Message	Description	List	Alarm Area	No.
Deadtime Negative	ATC has aborted due to a negative deadtime value.	S	ControlFile	509
Default Calibration Used	Calibration factors in the EPROM were all zero or were too far out of allowable range; default values will be used. The default values are normally within one percent of the corrected calibration. If this tolerance is acceptable to the process, it can be used in the alarm condition until the block can be calibrated properly.	H	ControlFile	59
Derivative Time Delta Limit	Evaluation finished - UNSUCCESSFUL. The evaluation finished, but the process response was not within the user specified parameters because the "Max Td Mult" field value was reached. New PID values may have been calculated.	Event	ATC	529
Derivative Time Limit	Evaluation finished - UNSUCCESSFUL. The evaluation finished, but the process response was not within the user specified parameters because the "Max Deriv Tm" field value was reached. New PID values may have been calculated.	Event	ATC	518
Deviation <type> Alarm	Deviation from setpoint has exceeded alarm value. May be either high or low.	P	ControlFile	4
DI: Comm Error Disk Node = <node>	During a Disk Initialize function a communications error was encountered on the PeerWay system. All disk functions go through the PeerWay system even though the disk function is at the same node. The function should be retried, and if this fails the PeerWay Overview screen should be checked for errors.	D	Disk	216
DI: Fail with Node: Drive = <xx>	The disk initialization function failed at the drive indicated. The disk initialization should be retried, and if it fails again the disk should be replaced. If this fails also, a second drive should be tried.	D	Disk	208
DI: Init Complete Node: Drive = <xx>	The Disk Initialize function performed to the drive indicated was successfully completed.	D	Disk	221
Discrete Event Buffer Full to Node <x>	The buffer for discrete data type events to be sent to node <x> is full.	S	ControlFile	774
Disk Backup Complete Node:Drive = <node:drive>	The disk backup of the named drive is completed.		Disk	655
Disk Backup Continue Node: Drive = <node:drive>	The disk backup of the named drive is continuing on the new tape.		Disk	656

Message	Description	List	Alarm Area	No.
Disk Copy Aborted after <xx> Sector(s)	The disk copy was aborted because of an error on the source disk. The number of sectors successfully copied to the destination disk is indicated also. The function should be retried and if the error message is repeated, a new source disk should be used. If no other source disk is available the individual files may be copied (with the exception of the Console Configuration files) until the corrupted file is located. If the individual Controller Processor address that is corrupted is located, the rest of that file may be copied by using a configuration copy function. The corrupted block must be reconstructed manually. Only Plant Configuration files may be copied in this manner.	D	Disk	273
Disk Copy Successful <xx> Sector (s)	Disk copy successful. <xx> represents the number of sectors copied.	D	Disk	271
Disk Create Boot Program Done	Indicates successful boot image creation.	D	Console, Disk	278
Disk File Backup Completed, <xx> Sector(s)	The Disk File Backup to tape function has been successful and the number of sectors used is also indicated.	D	Disk	275
Disk File Backup Did Not Complete	Because of a disk error the Disk File Backup to tape was aborted. The function should be retried and if this fails, another disk should be used. If this fails also, another disk drive or tape drive should be used.	D	Disk	276
Disk File Copy Aborted, <xx> Sector(s)	The disk file copy was aborted because of an error on the source disk. The number of sectors successfully copied to the destination disk is also indicated. The function should be retried and if the error message is repeated, a new source disk should be used. If no other source disk is available a plant configuration file may be copied in sections using the Configuration Copy function until the corrupted address is located. When the individual Controller Processor address that is corrupted is located, the rest of that file may be copied by using a configuration copy function. The corrupted block must be reconstructed manually. Only Plant Configuration files may be copied in this manner.	D	Disk	274
Disk File Copy Done, <xx> Sector(s) Copied	The number of sectors copied during the successful disk file copy.	D	Disk	266
Disk File Restore Aborted	Disk file restore function was aborted because of an error on the tape, disk, or one of the consoles involved. Check Console Disk Event List, as well as Hardware Alarm List of other alarms indicating the cause.	D	Disk	231
Disk File Restore Completed, <xx> Sectors(s)	The Disk file restore from tape was successfully completed. <xx>= the number of disk sectors restored.	D	Disk	230
Disk Folder Delete Done	Folder Delete function was successful. All files in the folder were deleted.	D	Disk	279

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Message	Description	List	Alarm Area	No.
Disk Reconfiguration Completed	The Disk Configuration was successfully completed.	D	Disk	336
Disk at <node:drive> Write Protected	Indicates the disk is write protected at the node indicated. If you wish to write to the disk, you must remove the write protect tab.	D	Disk	272
Disk backup started Node: Drive = <node:drive>	Disk backup has been started for the named drive.		Disk	652
Disk file name: <name>	Disk file name used for the disk function. Note that only the first four characters of the file name are used in the disk alarm.	D	Disk	255
DL: ATMLC Program Loaded to node <node>	The image for ATMLC controllers was successfully loaded to the NV memory at the node indicated.	D	ControlFile	463
DL: CP Programs Loaded to Node <node>	The coordinator processor images were successfully loaded to the ControlFile memory card.	D	Disk	225
DL: Cont Program Loaded to Node <node>	The controller image was successfully loaded to the ControlFile memory card.	D	Disk	224
DL: Program File Empty or Bad	The program in the file accessed was empty, corrupted, or deleted. Another disk should be used.	D	Disk	226
DL: RBL Program Loaded to node <node>	The controller image for RBL controllers was successfully loaded to the NV memory at the node indicated.	D	ControlFile	462
DL: CP4 Program Loaded to node <node>	The disk load of the CP4 program was successful.			668
DL: MPC Program Loaded to node <node>	The \$\$MPC image was downloaded successfully to the NV memory at the node indicated.	D	ControlFile	428
DL: MPC Program Loaded to node <node>	The disk load of the MPC2 program was successful.			669
DL: MPCAP Program Loaded to node <node>	Disk load of MPCAP program was successful.			442
DL: MPCAS Program Loaded to node <address>	The \$\$MPCAS controller image was successfully loaded to the NV memory at the node indicated.	D	Disk	437
DL: MPCAT Program Loaded to node <address>	The disk load of the MPCAT image was successful.			417

Message	Description	List	Alarm Area	No.
DL: MPTUN Program Loaded to node <node>	The controller image for Auto Tuning Multi-Purpose controllers was successfully loaded to the NV memory at the node indicated.	D	ControlFile	464
DL: PLC Program Loaded to node <node>	The controller image for PLC controllers was successfully loaded to the NV memory at the node indicated.	D	ControlFile	438
DL: SMART Program Loaded to node <node>	The controller image for smart controllers was successfully loaded to the NV memory at the node indicated.	D	ControlFile	420
DR: <xx> blk(s) Restored	Acknowledges the number of blocks successfully restored on a Disk Restore command.	D	Disk	205
DR: Controller Error, Link <link>	A problem occurred with the link indicated in the address in the alarm. The Controller Processor won't let the link load. There may be too many links or there is some other link violation. It may be necessary to use the Disk Virtual Controller function in order to check the links.	D	Disk	214
DR: High Address <address>	The high address loaded to the Controller Processor in the Plant Configuration file. All blocks between this address and the Low Address also indicated in the Disk Event List were loaded. The total number of blocks included is also indicated.	D	Disk	239
DR: Low Address <address>	The low address loaded to the Controller Processor in the Plant Configuration file. All blocks between this address and the High Address also indicated in the Disk Event List were loaded. The total number of blocks included is also indicated.	D	Disk	238
DS: <xx> blk(s) Saved	Acknowledges the number of blocks successfully saved on a Disk Save command.	D	Disk	204
DS: Blk <address> Not Configured	The block indicated for the disk save function is not configured. Unconfigured blocks cannot be saved to disk.	D	Disk	209
DS: Comm Error Node = <node>	During a Disk Save function a communications error was encountered on the PeerWay system. All disk functions go through the PeerWay system even though the disk function is at the same node. The function should be retried and if this fails the PeerWay overview screen should be checked for errors.	D	Disk	217
DS: High Address <address>	The high address saved to disk in the Plant Configuration file. All blocks between this address and the Low Address also indicated in the Disk Event List were saved to disk. The total number of blocks included is also indicated.	D	Disk	237
DS: Low Address <address>	The low address saved to disk in the Plant Configuration file. All blocks between this address and the High Address also indicated in the Disk Event List were saved to disk. The total number of blocks included is also indicated.	D	Disk	236

Message	Description	List	Alarm Area	No.
DTR: Trans/Restore to <address>	The destination Controller Processor or ControlFile address to which the disk plant configuration was successfully transferred.	D	Disk	246
Duart Status Word <xx>	One of the communications chips failed the power-up test. The Controller Processor should be replaced.	H	ControlFile	31
Duplicate Block Tag	On Remote Host startup, duplicate Block Tags were found among the controllers scanned by the MicroVAX QBI.	VAX	MicroVAX I/F	596
Duplicate Master Node: <xx>	This alarm occurs as the result of a SCSI bus timeout. Reboot the console or consoles together.	D	Console, Disk	800
DX: Bad File Type for Cmd <command>	The file type found in a disk operation did not match the folder type specified.	D	Disk	244
DX: Badly Formed Block Address	The disk system found a corrupted block address on the disk and has stopped the disk function. Try the disk in another drive and, if this fails, it may be necessary to use an alternate disk. If no other disks are available it is possible to load all other blocks from that disk. These must be found experimentally by loading small groups of blocks until the faulty block is found and then loading all blocks after the corrupted block. The corrupted block will then have to be reconstructed manually.	D	Disk	211
DX: Blk <address> Not on Disk	Disk function cannot be completed because the block address listed in the alarm is not in the disk file.	D	Disk	212
DX: CRC Error	The CRC (Cyclical Redundancy Check) error check failed for the sector of the media being checked. If the media is a floppy disk, it is most likely bad. Recover all data that you can and throw the disk away. This error may occur with tape drives and hard disks as well. It generally indicates a problem with the media.	D	Disk	213
DX: Comm Error Node = <node>	During some disk function a communications error was encountered on the PeerWay system. All disk functions go through the PeerWay system even though the disk function is at the same node. The function should be retried and if this fails the PeerWay overview screen should be checked for errors.	D	Disk	218
DX: Comm Error Node = <node>	During some disk function a communications error was encountered on the PeerWay system. All disk functions go through the PeerWay system even though the disk function is at the same node. The function should be retried and if this fails the PeerWay overview screen should be checked for errors.	D	Disk	222
DX: Controller Error = <address>	During a disk operation with a Controller Processor (or any other device such as a NV memory) the console encountered errors and the disk function was aborted. The function should be retried, and if this fails, troubleshooting procedures should be followed to isolate the bad card at the destination node.	D	Disk	210

Message	Description	List	Alarm Area	No.
DX: Delay Disk Write Err = <node>	The information on the Disk Interface card RAM could not be loaded to the disk or loaded to the Controller Processor.	D	Disk	220
DX: Disk Folder Full	The disk is full and no more data may be stored on the disk. Either a new disk must be used or existing data on the disk must be deleted. NOTE: Deleting a Console Program does not create any new disk space.	D	Disk	256
DX: Disk Timeout Node = <node>	The disk system is trying to issue a command to the drive and the drive did not respond in a predetermined time. This may indicate a drive or Disk Interface card fault.	D	Disk	219
DX: No Controller at <address>	No Controller Processor is present at this node in this slot.	D	Disk	261
DX: Req Ignored Cmd <xx> Pending	The disk function requested has not been done because there is another disk function currently in operation to the disk drive specified.	D	Disk	247
DX: Uninitialized Disk in Drive <xx>	The disk in the drive indicated is uninitialized. All disks must be initialized before they can be used on the RS3 system.	D	Disk	207
DX: <message>	This is from the disk system. The <message> text indicates the problem or result. Several alarms can occur with or without the DX: prefix. Check the Alphabetical list of Alarm Messages under the <message>.	D	Disk	213
DX: Batch Table Backup volume unavailable	The Batch Operations Table backup disk volume has problems and is unavailable.		Disk	671
DX: Batch Table Primary volume unavailable	The Batch Operating Table primary disk volume has problems and is not available.	D	Disk	670
DX: CSB Not Loaded Due to Size Mismatch	CSB is the Controller Status Block (block 0). This error often occurs when attempting to load entire controllers. If the operation is a Disk Load Transfer, load Comp Blocks and I/O Blocks separately to avoid this error.	D	Disk	213
DX: Could Not Read/Write Block (<xx> Attempts)	The attempt to Read or Write to a Block has failed. One possible explanation is a corrupted file, or an attempt to load a tape with a bad sector.	D	Disk	213
DX: Failed to Win SCSI Bus	The master device detects a "Bus Free" state, but is unable to control the bus when it tries to connect to another device during power-up.	D	Disk	213
DX: No Response to Arb for SCSI Bus	A master device on the SCSI Bus is unable to arbitrate for the bus's time. Re-booting the console might be necessary.	D	Disk	213
DX: Not enough room in NV Mem	The CP or controller is out of memory. Try deleting files or upgrading to a larger NV Memory board.	D	Disk	213

Message	Description	List	Alarm Area	No.
DX: Seek Complete Signal Missing	When a read of a disk sector is made, the read/write head seeks the proper sector and track of the disk. It then generates a "seek complete" signal. If the signal does not appear within a specified time frame (approximately 500 mS) then this alarm is generated.	D	Disk	213
DX: Static Section Mismatch	This error occurs during an attempted read to a Comp Block (either ControlBlock or I/O Block) through a Disk Load Transfer, Disk Block Verify, or other read operations. It can indicate: corrupt file bad disk disk anomaly You can verify which file may be corrupt by checking the Disk Event List for this DX: event following the operation on any single block.	D	Disk	213
DX: Target Timeout Error	This is a low-level communication error that can be the result of a missed message between consoles. It is not necessarily a direct effect of any user commands, and is a low-probability, low-impact error. The consoles will automatically attempt to re-send any message that times out.	D	Disk	213
DXD: Disk File Delete Done	The disk file delete function was successful.	D	Disk	267
DXR: Disk File Rename Done	The disk file rename function was successful.	D	Disk	268
Enabled node <x> for alarm broadcast	A batch program, containing an ON trap for node x, has altered the Configure Alarm Broadcast (CAB) screen of node x to allow node x to send alarm messages to the batch program. The change to the CAB screen remains until the CAB is reloaded.	B	ControlFile	101
Excessive Comm Errors to Keyboards	Communications between the MTCC keyboards and the console card cage were reporting errors. The printer interface, the keyboard interface, or one of the keyboards is bad and should be replaced.	H	Console	201
Excessive Errors in RTC RAM	Bad RTC RAM on the printer interface board.	H	Disk	215
Falling Edge <type>	An alarm was generated by a falling edge on a contact input block.	P	ControlFile	7
Fast Event Buffer Full to Node <x>	The buffer for fast data type events to be sent to node <x> is full.	S	ControlFile	773
Fatal A/D Error	One of the Controller Processor, FIC, or Discrete I/O FIM analog to digital converters failed. All readings from this A/D will be locked at the last known valid reading before the fault was detected.	H	ControlFile	35
Fatal Recipe Start Error	A start script associated with a recipe has failed. You should wipe the batch task associated with the failed unit icon and start the recipe using the start/validate menu option.	B	ControlFile	732

Message	Description	List	Alarm Area	No.
Fault Cleared	An "alarm cleared" message was received on a console, but the original active alarm no longer exists in that console. Either the original alarm was forced off the active alarm list (possibly to a printer) because of a large number of active alarms, or else the console was reset and the alarm list cleared. This alarm will display a clear time but no occur time.	P, H, S, & D	ControlFile	0
Feedback Check Failed	Analog Output: The analog output return current compared to the source current has a difference greater than 5%. Try FIC recalibration. Contact Output: The contact output could not sense current flowing through the output module.	H	ControlFile	24
FIC Comm Error	Communication with Smart Transmitter was lost at the FIC. The FIC or Smart Transmitter could be at fault, as well as the cable.	H	ControlFile	14
FIC Program Load to <address> Successful	An operator-initiated FIC download successfully completed.	D	Disk	251
FIC Program Load to <address> Unsuccessful	An operator-initiated FIC download was unsuccessful. The FIC card probably is not returning valid process values.	D	Disk	252
File <x> bad. Cannot Read File	File <x> cannot be read. There is a problem with the file format or contents.	D	Disk	545
File <x> in use. Cannot Read File	File <x> is in use by some other process.	D	Disk	308
File Cannot Be Used With This Node	The file is of the wrong configuration for the PeerWay interface.	S	PWay IF	425
File Compare Done, resulting in <filenamea> xx <filenameb>	The file compare function found that <filenamea> and <filenameb> were: == Files identical != Files different		ABC	679
File deleted from <xx> Folder	The system has deleted a file from the ABC Log folder. When the Auto-Delete field is set on the Batch Configuration screen, the system will automatically delete finished recipe files from the ABC Log folder on a first-in, first-out basis.	D	Disk	698
File Found on Node: Drive = <node:drive>	Tell the node and drive number where the file was found for the function requested.	D	Disk	248
File Load Permission Change Successful	The requested file load permission change has been completed.	D	Disk	449

Message	Description	List	Alarm Area	No.
File error during Redundant check of file	This alarm is related to 766. In this case, the redundancy check is unable to access a file. It may be inaccessible for a number of reasons. You should ensure the file is not currently being viewed on another node. Once you are sure the file is not in use, you may want to re-activate the redundant check. From the Batch Configuration Screen, unpart and then re-part the two nodes. Be sure that a check is not currently in progress. Status is visible on the Batch Configuration screen. If this procedure does not work, the file is more than likely corrupt and should be deleted.	D	Disk	767
File error, skipping report <name>	Indicates that the report will not print. Check the Report Status List for the specific report and reason for the problem. (1) "Print file in process": Change the report name and generate. (2) Error reading the file header: The configuration file will have to be deleted. (3) Printer problem: There is a problem with the designated printer.	S	Console	337
<xx> Files Successfully Backed Up	Indicates a completed Folder Backup operation and shows the number of files that were restored.	D	Disk	223
<xx> Files Successfully Restored	Folder Restore successful.	D	Disk	227
FIM 30 Volt Power Failure	One or both of the FIM 30-Volt power inputs has failed.	H	ControlFile	179
FIM Loop Power Module Failure	This alarm occurs when a loop power module fails, or if one of the loop power modules is missing or bad in a redundant configuration.	H	ControlFile	107
Finish Memory Dump cont: <nn>	The manually initiated memory dump of Controller Processor <nn> has been completed. The memory dump takes about twenty minutes.	D	Disk	776
Finish Memory Dump node: <nn>	A memory dump has finished from node <nn>.	D	Console, ControlFile	538
First channel missing blk	Alarm appears when the first point of a DIB or DOB is unconfigured. This causes all other DIB/DOB points to lose their switch voltages. Make sure the first point is configured.	H	ControlFile	146
Floppy Drive Error: <xx>	Floppy drive system error. <xx> indicates the error type.		Disk	260
Folder backup complete, <xx> file(s) copied	A folder successfully backed up to tape during the Folder backup operation.	D	Disk	341
Folder currently in use by node <node>	The disk folder function requested cannot be completed because the folder is currently in use by the node indicated.	D	Disk	340

Message	Description	List	Alarm Area	No.
Folder file chk done, <xx> file(s) deleted	The number of files that were deleted during the manually initiated Folder File Check. Files can be corrupted if the console is powered down while a file write is in progress.	D	Disk	342
Folder Used: <xx>	The folder used in the disk folder operations.	D	Disk	202
Folder clean complete, <xx> files(s) deleted	Indicates a completed Folder Clean operation and shows the number of files that were deleted.	D	Disk	240
Front Panel Disconnected	The ribbon cable connecting the MiniConsole motherboard to the front panel is disconnected at either end, or is damaged.	H	Console	319
Gain Delta Limit	Evaluation finished - UNSUCCESSFUL. The evaluation finished, but the process response was not within the user specified parameters because the "Max G Delta" field value was reached. New PID values may have been calculated.	Event	ATC	527
Gain Limit	Evaluation finished - UNSUCCESSFUL. The evaluation finished, but the process response was not within the user specified parameters because the "Max Gain" field value was reached. New PID values may have been calculated.	Event	ATC	516
Giving up waiting for new master	The logging system has given up trying to find a logfile.	S	Console	694
HIA Comm Link Failure	No messages went through the HIA pair in the last 10 seconds. HIA communication has failed and no messages are being passed.	H	HIA	551
HIA Comm Link Problem	Abnormally high error rate in the communications between an HIA pair, messages are still getting through, though at a reduced rate.	H	HIA	550
High <type> <Scaled Value>	High alarm on a process variable (e.g., "High Adv. 400.00 GPM"). The value given is the value of the variable in alarm at the time the alarm occurred, not a current value.	P	ControlFile	2
Illegal PIO Configuration	A Pulse I/O block was configured incorrectly.	S	ControlFile	623
Illegal Port Configuration	A PLC block was configured for port B when FIC redundancy was configured.	S	PLC	625
Illegal file name	The file name entered is incorrect.			441
Image Backup Failed Node: Drive = <node:drive>	The Disk Image Backup to tape function was aborted because of media or tape drive errors. The function should be retried and, if this fails, another tape should be used. If this fails also, a second tape drive should be used.	D	Disk	288
Image Backup Successful, <xx> Sector(s)	The Disk Image Backup function was completed. The tape successfully stored the full hard disk image.	D	Disk	287

Message	Description	List	Alarm Area	No.
Image Restore Failed Node: Drive = <node:drive>	The Disk Image Restore from tape to hard disk tape function was aborted because of media or tape drive errors. The function should be retried and, if this fails, an alternate tape should be used. If this fails also, a second tape drive should be used. If no alternate tape is available, the tape must be reconstructed using existing configurations, if possible.	D	Disk	290
Image Restore Successful Node: Drive = <node:drive>	The disk Image was successfully restored to the hard disk drive from tape.	D	Disk	289
Incompatible	Hardware does not match configuration. An attempt has been made to configure a type of I/O block that is not compatible with the associated hardware. Smart output device mode does not match HART Output Block "use analog/use digital" selection (perhaps changed by a handheld device).	H	ControlFile	9
Incompatible AOFIC Action	The Output Field Interface Card's direct/reverse acting jumper conflicts with the configuration of the Analog Output Block (AOB).	H	ControlFile	23
Incompatible Config. Area	The configuration loaded in the Controller Processor is incompatible with the configuration stored in NV memory; either the configuration changed, or the Controller Processor image type changed.	P	ControlFile	95
Incompatible FIC program for FIC <xx>	The version number of the FIC is incorrect.		ControlFile	254
Incorrect Controller Program or CSB	The Controller Processor status block is incompatible with the current Controller Processor type. Either the controller image doesn't match the hardware, or a PLC was booted with standard blocks, or a non-PLC was booted with a PLC configuration. Problem 1 is fixed by loading the correct image or changing the hardware. Problem 2 is fixed by issuing a Kill Controller.	P	ControlFile	38
Input Configuration Error	The input configuration has been corrupted for this block. The block should be replaced or reconfigured.	H	ControlFile	60
Insert next Tape and Continue backup	A folder or disk backup operation has filled the tape. Another tape is required.		Disk	654
Installation Disabled	ATC completed evaluation, but did not install parameters. User may install parameters.	S	ATC	542
Integral Time Delta Limit	Evaluation finished - UNSUCCESSFUL. The evaluation finished, but the process response was not within the user specified parameters because the "Max Ti Mult" field value was reached. New PID values may have been calculated.	Event	ATC	528

Message	Description	List	Alarm Area	No.
Integral Time Limit	Evaluation finished - UNSUCCESSFUL. The evaluation finished, but the process response was not within the user specified parameters because the "Max Integ Tm" field value was reached. New PID values may have been calculated.	Event	ATC	517
Invalid CompBlock Function	A CompBlock has been configured that is not supported on the Controller Processor. For example, an ATC has been configured on a Controller Processor without an ATC image.	H	ControlFile	96
Invalid Link Input	A link was not received where expected. This could be caused by a link from a block not being configured, or a disabled Controller Processor or ControlFile. The missing link can be determined by looking at the tag/address and the input indicated in the alarm on the Block Links screen.	S	ControlFile	29
Invalid Track Count <xx>	An improper count in the back tracking function.	H	ControlFile	28
KC: <xx> Controllers Cleared	The number of Controller Processor configurations cleared in a Kill Controller function. (Only one Controller Processor may be cleared for each command.)	D	Disk	253
Keyboard Bad	The alphanumeric keyboard has been detected as bad by the processor. The cable connections should be checked or the keyboard replaced.	H	Console	306
Kicked Off an AUTO-PRINT	A report generation has been triggered by logic or time, as configured in the report configuration.	R	Console	407
Kill Memory Dump cont: <nn>	The manually initiated memory dump of Controller Processor <nn> has been killed.	D	Disk	777
Kill Memory Dump node: <nn>	The memory dump from node <nn> has been killed.	D	Console, ControlFile	539
LE: Address Modified in <x>	The Link Editor has modified addresses in <x>.	D	Disk	245

Message	Description	List	Alarm Area	No.
Left CP Data integrity error (xxx)	<p>The current CP cannot reliably communicate with the NV memory or the controllers. May be caused by pulling an NV memory or CP without first disabling it. The redundant CP is switched in to use the alternate backplane bus.</p> <p>(xxx) indicates the reason for the switch:</p> <p>1 Address line failure occurring during the controller signature check of address lines A1 through A16.</p> <p>20 - 27 Controller address line failures found during slot address check of lines A17 through A20 by the PRIMARY CP. The numbers 20 through 27 are mapped to controller slots A through H</p> <p>30 - 37 Controller address line failures found during slot address and data pattern check of lines A17 through A20 by the REDUNDANT CP. The numbers 30 through 37 are mapped to controller slots A through H.</p> <p>40 A data line failure occurred while testing the data lines to the NV memory board static RAM just before doing a NV memory read, write, or initialize operation. The NV memory operation was aborted.</p> <p>50 - 51 Data line failures found during testing of CP to CP common communication areas in the NV memory RAM. Error 50 indicates a failure in the PRIMARY CP. Error 51 indicates an error in the REDUNDANT CP.</p> <p>99 The data checksum generated by the CP and by the RAM NV memory do not agree. Data transfer between these boards is not secure.</p> <p>100 The alarm queue pointers for the CP were found to be out of bounds. The queue pointers have been reset within bounds. Some alarms may have been lost.</p> <p>101 The alarm queue pointers for the REDUNDANT CP were found to be out of bounds. The queue pointers have been reset within bounds. Some alarms from the redundant CP may have been lost.</p> <p>102 There is a checksum error in the alarm queue for the redundant CP. Some alarms may have been lost.</p>		ControlFile	163
Left Power Reg: <xx> Volts Bad	A fault occurred on the ControlFile Power Regulator in the left slot. The alarm also indicates which voltage has failed. The Power Regulator should be replaced if the +5, +12, or -12 volt supply has failed. If the +30 volt supply is in the alarm, this indicates that one of the two 30 volt dc buses has failed.	H	ControlFile	129
Load Config Alarm Broadcast Successful	The CAB (Configure Alarm Broadcast) data was loaded correctly.	S	Console	685

Message	Description	List	Alarm Area	No.
Load Config Alarm Broadcast Unsuccessful	The attempt to load CAB (Configure Alarm Broadcast) data failed.	S	Console	686
Load PeerWay I/F Config Successful	The SCI, Diogenes I/F, HIA, RFI or other PeerWay I/F configuration load was successfully loaded to the node.	D	Disk	295
Load PeerWay I/F Config Unsuccessful	The SCI, Diogenes I/F, HIA, RFI or other PeerWay I/F configuration load was aborted due to faulty media. An alternate disk should be used. If this fails, a second drive should be used. If no alternate disk is available, the configuration should be entered manually.	D	Disk	291
Load PeerWay I/F Program Successful	The SCI, Diogenes I/F, HIA, RFI or other PeerWay I/F Program was successfully loaded to the node.	D	Disk	297
Load PeerWay I/F Program Unsuccessful	The SCI, Diogenes I/F, HIA, RFI or other PeerWay I/F Program load was aborted due to faulty media. An alternate disk should be used. If this fails a second drive should be used.	D	Disk	296
Log file entry size error, msg lost	The last transmitter log message received was not in the format expected. The log entry was lost.	S	ControlFile	422
Log file input queue full, msg lost	The smart transmitter message queue has been filled and was not able to receive the last message sent.	S	ControlFile	421
Lost Controller Alarm <xx>	The alarm buffer pointers in the Controller Processor memory were corrupted and the alarms were flushed from the memory.	H	ControlFile	142
Lost Controller Message <xx>	The message buffer pointers in the Controller Processor memory were corrupted and the messages were flushed from the memory.	H	ControlFile	143
Lost Input Data	Data needed to evaluate an input block was not available at the time of evaluation. This problem is caused by an internal software synchronization problem.	H	ControlFile	13
Low <type> <scaled value>	Low alarm on a process variable. For example, "Low Crit. 100.00 GPM". The value given is the value of the variable in alarm at the time the alarm occurred, not a current value.	P	ControlFile	1
Mux CRC Diagnostic	An error was detected in the hardware on the Multiplexer Communications Controller card.	H	ControlFile	69
Mux Calibration Checksum	The calibration values stored in memory on the Multiplexer Communications Controller card were corrupted.	H	ControlFile	72

Message	Description	List	Alarm Area	No.
Mux Comm Line Err <xx>	Multiple communication errors were detected between the Multiplexer Controller Processor and the Communications Controller card in the Multiplexer FlexTerm. NOTE: <xx> may be one of code (0 - 9) 0-General DUART Error 5-Bad Acknowledge 1-Break 6-Bad Character 2-Framing Error 7-Buffer Overrun 3-Parity Error 8-Size Error in Message 4-Overrun Error in DUART 9-Extra Message	H	ControlFile	73
Mux Comm. Not Initialized (<xx>)	A communication error occurred between the Multiplexer Controller Processor and the Communications Controller in the Multiplexer FlexTerm. <xx> represents a numeric code indicating the status of the device when communications were interrupted.	H	ControlFile	63
Mux Point No FEM Present	No FEM was present in the Multiplexer FlexTerm for the configured MIB point.	H	ControlFile	67
Mux Point Overrange	A Multiplexer reading from a Front End Module (FEM) was higher than the input block (MIB) will allow.	H	ControlFile	64
Mux Point Skipped	The SKIP function was enabled for the MIB. No readings were updated from this point.	H	ControlFile	66
Mux Point Underrange	A Multiplexer reading from a Front End Module (FEM) was lower than the input block (MIB) will allow.	H	ControlFile	65
Mux Point mod10 Checksum	A checksum error occurred on the data in the communications between the Multiplexer Controller Processor and the Communications Controller in the Multiplexer FlexTerm.	H	ControlFile	68
Mux RAM Diagnostic	Multiplexer CPU RAM has been detected as faulty.	H	ControlFile	70
Mux ROM Diagnostic	An error was detected in the ROM on the Multiplexer Communications Controller card.	H	ControlFile	71
No Host Activity in <xx> Seconds	No message activity occurred between the Supervisory Computer Interface and the host computer for the indicated number of seconds.	H	ControlFile	424
No Mux Communication (<xx>)	The Multiplexer Controller processor card could not communicate with the Multiplexer FlexTerm. <xx> represents a numeric code indicating the status of the device when communications were interrupted.	H	ControlFile	62
No NV Mem Board Present	No nonvolatile memory board was physically present or the nonvolatile memory board switch was shut off and the Coordinator Processor did not read from the board.	H	ControlFile	125

Message	Description	List	Alarm Area	No.
<msg pair> No PLC Communication	An unsuccessful attempt was made to communicate with a PLC device. This alarm is generated after the configured number of retries have been attempted and the message timeout has expired. Subsequent attempts to establish communications occur after 5 seconds.	H	ControlFile	88
No Room On Disk For Requested Operation	The disk function requested could not be completed because there was insufficient room on the target disk.	D	Disk	233
No Tape or Floppy Disk Drive Found	Occurs when the RS3 cannot detect the presence of a tape or floppy drive. You should check your cable connections. This error may also occur when a disk-only (040) console is the only storage media present. In this case, the error is merely a verification of that hardware.	S	Disk	419
No trending room, node <node>	The Controller Processor at the node indicated was full and did not have any space to trend.	S	ControlFile	440
Node <node> Cannot Print Operator Logs	An attempt was made to print a report at a node not capable of printing reports.	H	Console	429
Node <node> Config. Reload Required	The MAXCF configuration was corrupt. The Controller Processor configuration should be reloaded.	H	ControlFile	139
Node <node> is not set up to Print Reports	The console address configured to print the report could not print reports.	D	Disk	232
Node <x> not set up for batch prints	Print node <x> software is not compatible with batch.	B	ControlFile	693
Node Appeared	The node started to communicate on the PeerWay.	H	Console	304
Node Restarted	The console or PeerWay I/F node has been restarted by a power-up operation, reset by a "Control C" command, or reset because of a hardware or software problem.	H	Console	300
Node Vanished	The node is not communicating on the PeerWay.	H	Console	305
Non-Boot FIC	The FIC NVRAM has no image. It has either been lost or corrupted. Reload the FIC image. Replace the FIC if the error reappears.			124
Nonvolatile memory request failed	There is insufficient nonvolatile memory available for the Batch Task.	S	ControlFile	703
Not Enough NV Mem Space to Load Config	There is not enough memory space in the NV memory to load the configuration.	S	ControlFile	113
Not enough free space on Tape	The tape does not have enough room to hold the requested material.		Disk	653

Message	Description	List	Alarm Area	No.
NV Mem 0 CP Config for Different Node	The MaxCF configuration contained in the NV memory card is configured for a different node. Either the correct NV memory card should be installed in the ControlFile, or the controller configuration should be reloaded from disk. 0 indicates left slot.	H	ControlFile	162
NV Mem 0 Card is Missing	Indicates that NV memory card 0 (left slot) has been removed without the switch being shut off first.	H	ControlFile	156
NV Mem 0 Config Checksum Bad	Each time a controller configuration is copied from the Controller Processor to the ControlFile NV memory card, the data is checksummed to verify that the image transferred is correct. This alarm indicates that the checksum test failed. The previous image is maintained in the NV memory and the image transfer is retried. For repeated alarms the fault may be in the Controller, CP, or NV memory card. The ControlFile Motherboard and Terminators should also be checked. 0 indicates left slot.	H	ControlFile	161
NV Mem 0 Configuration Update Failure	The attempt to update NV Memory 0 failed. 0 indicates the left hand slot.	S	ControlFile	155
NV Mem 0 FIFO Reset Failed <xx>	Indicates that the NV memory FIFO buffer in the 0 (left slot) could not be reset. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code. If the alarm recurs often, replace the NV Memory board. NOTE: <xx> may be: 02 Power failure 08 Uncorrectable error in last page of a transfer 24 Command failed due to uncorrectable errors 25 Invalid page number received 26 Transfer count failure 27 Transfer count failure 2c Uncorrectable error 30 Timing error 34 Backup FIFO values disagree with primary FIFO 35 Bad command received 36 Bad command received 37 Invalid page number received 40 Successful completion 44 Uncorrectable error in last page transferred 48 Correctable errors occurred 4c Uncorrectable error in last page transferred 80 NV Memory circuit is busy	H	ControlFile	151
NV Mem 0 Header Table Invalid	The pointers to the program images and configuration data in NV memory 0 (left slot) are corrupt or missing.	H	ControlFile	154

Message	Description	List	Alarm Area	No.
NV Mem 0 Hdr Table Retry Executed <x>	NV memory 0 (left slot) has been unable to: 0 Write to a configuration. The write is retried. 1 Read a configuration. The configuration is initialized and the read is retried.	H	ControlFile	158
NV Mem 0 Initialize Failed <xx>	Indicates that the NV memory board in the 0 (left slot) would not start up. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code. If the alarm recurs often, replace the NV Memory board. NOTE: <xx> may be: 02 Power failure 08 Uncorrectable error in last page of a transfer 24 Command failed due to uncorrectable errors 25 Invalid page number received 26 Transfer count failure 27 Transfer count failure 2c Uncorrectable error 30 Timing error 34 Backup FIFO values disagree with primary FIFO 35 Bad command received 36 Bad command received 37 Invalid page number received 40 Successful completion 44 Uncorrectable error in last page transferred 48 Correctable errors occurred 4c Uncorrectable error in last page transferred 80 NV Memory circuit is busy	H	ControlFile	150
NV Mem 0 Opt. Controller Image <xx> Bad	A periodic check of the additional images stored in the ControlFile NV memory 0 (left slot) found them to be corrupt or missing. The ability to restart the applicable controller is unlikely.	H	ControlFile	160
NV Mem 0 Program Images Bad	A periodic check of the program images stored in the ControlFile NV memory 0 (left slot) found them to be corrupt or missing. The ability to restart a controller or coordinator processor is unlikely. The plant program must be reloaded from disk.	H	ControlFile	159

Message	Description	List	Alarm Area	No.
NV Mem 0 Read Failed <xx>	Indicates that the read from NV memory 0 (left slot) failed. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code. If the alarm recurs often, replace the NV Memory board. NOTE: <xx> may be: 02 Power failure 08 Uncorrectable error in last page of a transfer 24 Command failed due to uncorrectable errors 25 Invalid page number received 26 Transfer count failure 27 Transfer count failure 2c Uncorrectable error 30 Timing error 34 Backup FIFO values disagree with primary FIFO 35 Bad command received 36 Bad command received 37 Invalid page number received 40 Successful completion 44 Uncorrectable error in last page transferred 48 Correctable errors occurred 4c Uncorrectable error in last page transferred 80 NV Memory circuit is busy	H	ControlFile	152
NV Mem 0 Removal Requested <xx>	The NV memory card 0 (left slot) has had the switch turned off indicating that it is to be removed. NOTE: <xx> is 300 for a Bubble NV memory card. For a RAM NV memory card it is a number indicating the current draw of the memory chips. The high current thresholds are: 1 Meg card: 49 2 Meg card: 108 4 Meg card: 168	H	ControlFile	157

Message	Description	List	Alarm Area	No.
NV Mem 0 Write Failed <xx>	<p>Indicates that the write to NV memory 0 (left slot) failed. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code.</p> <p>If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <p>02 Power failure</p> <p>08 Uncorrectable error in last page of a transfer</p> <p>24 Command failed due to uncorrectable errors</p> <p>25 Invalid page number received</p> <p>26 Transfer count failure</p> <p>27 Transfer count failure</p> <p>2c Uncorrectable error</p> <p>30 Timing error</p> <p>34 Backup FIFO values disagree with primary FIFO</p> <p>35 Bad command received</p> <p>36 Bad command received</p> <p>37 Invalid page number received</p> <p>40 Successful completion</p> <p>44 Uncorrectable error in last page transferred</p> <p>48 Correctable errors occurred</p> <p>4c Uncorrectable error in last page transferred</p> <p>80 NV Memory circuit is busy</p>	H	ControlFile	153
NV Mem 1 CP Config for Different Node	The CP configuration storage in NV memory 1 (right slot) was for a different node.	S	ControlFile	178
NV Mem 1 Card is Missing	The NV memory card 1 (right slot) was either not present or was switched off.	H	ControlFile	172
NV Mem 1 Config Checksum Bad	When the Controller Processor configuration area is stored in the NV memory, a checksum is performed. The configuration is then re-read, and another checksum is performed. The two checksums did not match. NV memory 1 (right slot).	H	ControlFile	177
NV Mem 1 Configuration Update Failure	The attempt to update NV Memory 1 failed. 1 indicates the right hand slot.	S	ControlFile	171

Message	Description	List	Alarm Area	No.
NV Mem 1 FIFO Reset Failed <xx>	<p>Indicates that the NV memory board in the right slot (1) FIFO buffer could not be reset. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code.</p> <p>If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <p>02 Power failure</p> <p>08 Uncorrectable error in last page of a transfer</p> <p>24 Command failed due to uncorrectable errors</p> <p>25 Invalid page number received</p> <p>26 Transfer count failure</p> <p>27 Transfer count failure</p> <p>2c Uncorrectable error</p> <p>30 Timing error</p> <p>34 Backup FIFO values disagree with primary FIFO</p> <p>35 Bad command received</p> <p>36 Bad command received</p> <p>37 Invalid page number received</p> <p>40 Successful completion</p> <p>44 Uncorrectable error in last page transferred</p> <p>48 Correctable errors occurred</p> <p>4c Uncorrectable error in last page transferred</p> <p>80 NV Memory circuit is busy</p>	H	ControlFile	167
NV Mem 1 Header Table Invalid	The header table in the NV memory 1 (right slot) was invalid.	H	ControlFile	170
NV Mem 1 Hdr Table Retry Executed <x>	<p>NV memory 1 (right slot) has been unable to:</p> <p>0 Write to a configuration. The write is retried.</p> <p>1 Read a configuration. The configuration is initialized and the read is retried.</p>	H	ControlFile	174

Message	Description	List	Alarm Area	No.
NV Mem 1 Initialize Failed <xx>	Indicates that the NV memory board in the right slot (1) would not start up. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code. If the alarm recurs often, replace the NV Memory board. NOTE: <xx> may be: 02 Power failure 08 Uncorrectable error in last page of a transfer 24 Command failed due to uncorrectable errors 25 Invalid page number received 26 Transfer count failure 27 Transfer count failure 2c Uncorrectable error 30 Timing error 34 Backup FIFO values disagree with primary FIFO 35 Bad command received 36 Bad command received 37 Invalid page number received 40 Successful completion 44 Uncorrectable error in last page transferred 48 Correctable errors occurred 4c Uncorrectable error in last page transferred 80 NV Memory circuit is busy	H	ControlFile	166
NV Mem 1 Opt. Controller Image # <x> Bad	An NV memory 1 (right slot) controller image was bad. <x> is the image number.	H	ControlFile	176
NV Mem 1 Program Images Bad	The program images within the NV memory 1 (right slot) were not valid.	H	ControlFile	175

Message	Description	List	Alarm Area	No.
NV Mem 1 Read Failed <xx>	<p>Indicates that the read from the right slot (1) NV memory failed. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code. If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <p>02 Power failure</p> <p>08 Uncorrectable error in last page of a transfer</p> <p>24 Command failed due to uncorrectable errors</p> <p>25 Invalid page number received</p> <p>26 Transfer count failure</p> <p>27 Transfer count failure</p> <p>2c Uncorrectable error</p> <p>30 Timing error</p> <p>34 Backup FIFO values disagree with primary FIFO</p> <p>35 Bad command received</p> <p>36 Bad command received</p> <p>37 Invalid page number received</p> <p>40 Successful completion</p> <p>44 Uncorrectable error in last page transferred</p> <p>48 Correctable errors occurred</p> <p>4c Uncorrectable error in last page transferred</p> <p>80 NV Memory circuit is busy</p>	H	ControlFile	168
NV Mem 1 Removal Requested <xx>	<p>The NV memory card 1 (right slot) has had the switch turned off, which indicates it is to be removed.</p> <p>NOTE: <xx> is 300 for a Bubble NV memory card. For a RAM NV memory card it is a number that indicates the current draw of the memory chips.</p> <p>The high current thresholds are:</p> <p>1 Meg card: 49</p> <p>2 Meg card: 108</p> <p>4 Meg card: 168</p>	H	ControlFile	173

Message	Description	List	Alarm Area	No.
NV Mem 1 Write Failed <xx>	<p>Indicates that the write to the right slot (1) NV memory failed. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code.</p> <p>If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <p>02 Power failure</p> <p>08 Uncorrectable error in last page of a transfer</p> <p>24 Command failed due to uncorrectable errors</p> <p>25 Invalid page number received</p> <p>26 Transfer count failure</p> <p>27 Transfer count failure</p> <p>2c Uncorrectable error</p> <p>30 Timing error</p> <p>34 Backup FIFO values disagree with primary FIFO</p> <p>35 Bad command received</p> <p>36 Bad command received</p> <p>37 Invalid page number received</p> <p>40 Successful completion</p> <p>44 Uncorrectable error in last page transferred</p> <p>48 Correctable errors occurred</p> <p>4c Uncorrectable error in last page transferred</p> <p>80 NV Memory circuit is busy</p>	H	ControlFile	169
NV Mem Backup Reset	The CP program was restarted to overcome the problem where the backup was stuck on one Controller Processor.	S	ControlFile	112
NV Mem Battery #1 Low Voltage	Battery #1 of the battery backed RAM NV Memory card has low voltage. Both batteries should be replaced. Replace the weakest battery first.	H	ControlFile	116
NV Mem Battery #2 Low Voltage	Battery #2 of the battery backed RAM NV Memory card has low voltage. Both batteries should be replaced. Replace the weakest battery first.	H	ControlFile	117
NV Mem Excessively High Current	The RAM chips on the NV Memory card are drawing much more current than they should. The batteries will not be able to maintain the memory status for the expected time should power be removed. The NV Memory card should be replaced.	H	ControlFile	119

Message	Description	List	Alarm Area	No.
NV Mem FIFO Reset Failed <xx>	<p>The PeerWay interface could not successfully reset the FIFO buffers on its NV memory card. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code. If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <p>02 Power failure</p> <p>08 Uncorrectable error in last page of a transfer</p> <p>24 Command failed due to uncorrectable errors</p> <p>25 Invalid page number received</p> <p>26 Transfer count failure</p> <p>27 Transfer count failure</p> <p>2c Uncorrectable error</p> <p>30 Timing error</p> <p>34 Backup FIFO values disagree with primary FIFO</p> <p>35 Bad command received</p> <p>36 Bad command received</p> <p>37 Invalid page number received</p> <p>40 Successful completion</p> <p>44 Uncorrectable error in last page transferred</p> <p>48 Correctable errors occurred</p> <p>4c Uncorrectable error in last page transferred</p> <p>80 NV Memory circuit is busy</p>	H	PWay I/F	322
NV Mem High Current	The RAM chips on the NV Memory card are drawing more current than they should. The batteries will not be able to maintain the memory status for the expected time should power be removed. The NV Memory card should be replaced.	H	ControlFile	118
NV Mem High Retention Current <xx>	The RAM chips on the NV Memory card are drawing an excessive amount of current. The card should be replaced as soon as practical because the batteries will not be able to maintain memory for as long as expected if power is lost.	H	ControlFile	147

Message	Description	List	Alarm Area	No.
NV Mem Initialize Failed <xx>	<p>The PeerWay interface could not successfully initialize its NV memory card. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code.</p> <p>If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <p>02 Power failure</p> <p>08 Uncorrectable error in last page of a transfer</p> <p>24 Command failed due to uncorrectable errors</p> <p>25 Invalid page number received</p> <p>26 Transfer count failure</p> <p>27 Transfer count failure</p> <p>2c Uncorrectable error</p> <p>30 Timing error</p> <p>34 Backup FIFO values disagree with primary FIFO</p> <p>35 Bad command received</p> <p>36 Bad command received</p> <p>37 Invalid page number received</p> <p>40 Successful completion</p> <p>44 Uncorrectable error in last page transferred</p> <p>48 Correctable errors occurred</p> <p>4c Uncorrectable error in last page transferred</p> <p>80 NV Memory circuit is busy</p>	H	PWay I/F	321
NV Mem Program Image Bad	<p>A periodic check of the programs stored in the PeerWay interface NV memory found the programs missing or corrupt. It is normal to see this alarm while downloading programs into the NV memory.</p>	H	PWay I/F	325

Message	Description	List	Alarm Area	No.
NV Mem Read Failed <xx>	<p>The PeerWay interface could not successfully read from its NV memory. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code.</p> <p>If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <p>02 Power failure</p> <p>08 Uncorrectable error in last page of a transfer</p> <p>24 Command failed due to uncorrectable errors</p> <p>25 Invalid page number received</p> <p>26 Transfer count failure</p> <p>27 Transfer count failure</p> <p>2c Uncorrectable error</p> <p>30 Timing error</p> <p>34 Backup FIFO values disagree with primary FIFO</p> <p>35 Bad command received</p> <p>36 Bad command received</p> <p>37 Invalid page number received</p> <p>40 Successful completion</p> <p>44 Uncorrectable error in last page transferred</p> <p>48 Correctable errors occurred</p> <p>4c Uncorrectable error in last page transferred</p> <p>80 NV Memory circuit is busy</p>	H	PWay I/F	324
NV Mem Using Spare Mem Chips <xx>	The indicated NV Memory card has mapped out a pair of bad chips and is using a spare pair of chips. The NV Memory card should be replaced as soon as practical.	H	ControlFile	148
NV Mem Wiped for Controller <address>	Indicates that the wipe NV memory function was successful and the configuration was erased. <address> represents the node ControlBlock address.	S	ControlFile	270

Message	Description	List	Alarm Area	No.
NV Mem Write Failed <xx>	<p>The PeerWay interface could not successfully write to its NV memory card. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code.</p> <p>If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <p>02 Power failure</p> <p>08 Uncorrectable error in last page of a transfer</p> <p>24 Command failed due to uncorrectable errors</p> <p>25 Invalid page number received</p> <p>26 Transfer count failure</p> <p>27 Transfer count failure</p> <p>2c Uncorrectable error</p> <p>30 Timing error</p> <p>34 Backup FIFO values disagree with primary FIFO</p> <p>35 Bad command received</p> <p>36 Bad command received</p> <p>37 Invalid page number received</p> <p>40 Successful completion</p> <p>44 Uncorrectable error in last page transferred</p> <p>48 Correctable errors occurred</p> <p>4c Uncorrectable error in last page transferred</p> <p>80 NV Memory circuit is busy</p>	H	PWay I/F	323
NVRAM Write Error	The Controller Processor could not write to the nonvolatile RAM that stores the calibration constants for the analog I/O blocks. Default calibration constants were used.	H	ControlFile	37
OmegaN2 Low	Evaluation finished - SUCCESSFUL. The evaluation finished, but the process response was not as fast as desired. New PID values may have been calculated.	Event	ATC	515
OSCILLATION DETECTED	The ATPID Watchdog detected oscillations. As a result, PID timing parameters were adjusted to suppress oscillations.	Event	ATC	507
Oscillation Detected	An oscillation was detected. Process parameters will be changed.	S	ATC	544
Oscillation Detected: Actual Derivative	Oscillations in the process triggered the ATPID oscillation watchdog. The oscillation watchdog has changed the derivative time to the value shown in this message.	Event	ATC	533
Oscillation Detected: Actual Gain	Oscillations in the process triggered the ATPID oscillation watchdog. The oscillation watchdog has changed the controller gain to the value shown in this message.	Event	ATC	531

Message	Description	List	Alarm Area	No.
Oscillation Detected: Actual Integral	Oscillations in the process triggered the ATPID oscillation watchdog. The oscillation watchdog has changed the integral time to the value shown in this message.	Event	ATC	532
<msg pair> Out of Comm Bandwidth	Not enough communication time was allowed to complete all the communications with a PLC device.	H	ControlFile	86
Outside Block Range	The operator tried to configure an analog input block above block 16, or an output block above 8, or a contact input or output block above 96.	H	ControlFile	11
Overdamped Open Loop Unstable	ATC has determined that an overdamped open loop is unstable.	S	ControlFile	521
PeerWay <number> A Problem	A fault was detected on PeerWay A. The PeerWay Overview screen should be used to determine the origin of the fault.	H	Console	310
PeerWay <number> B Problem	A fault was detected on PeerWay B. The PeerWay Overview screen should be used to determine the origin of the fault.	H	Console	311
PeerWay Boot of CP Node <node> Successful	Console PeerWay boot was successful. A valid CP image must now be downloaded to the NV memory.	D	Disk	263
PeerWay Boot of CP Node <node> Unsuccessful	Console PeerWay boot was unsuccessful.	D	Disk	262
PeerWay Boot of Node <x> Unsuccessful	The PeerWay boot of node <x> failed.	D	Disk	697
PeerWay Boot of PWIF Node <node> Successful	The boot operation was successful.		PWay I/F	682
PeerWay Boot of PWIF Node <node> Unsuccessful	The boot image download operation from a console was unsuccessful.		PWay I/F	681
PeerWay Duplicate Node	The node detected another node on the PeerWay with the same node address.	H	Console	313
PeerWay Jumpers Bad	The node jumpers of the ControlFile were detected as indicating different nodes. Both sets of jumpers must be set the same.	H	Console	314
PeerWay <number> Margin Forced	The PeerWay margin was forced to some value other than the normal automatic setting.	H	Console	315

Message	Description	List	Alarm Area	No.
PeerWay Node Problem	The node is not communicating properly on the PeerWay. This alarm is more generic than other PeerWay alarms, and can indicate a variety of problems. Some common solutions: Check the PeerWay Tap Box connection; Check the PeerWay Node screen for red or yellow numbers indicating alarm conditions. The PeerWay may be overloaded with messages. Possible PeerWay Node screen fields that might indicate the cause of this alarm include a combination of relationships between: Badecho, noecho, timeout, coupler, and #sent fields.	H	Console	312
PLC Address Out of Range	The address of the PLC device was not within the legal address range.	H	ControlFile	79
PLC Read Exception # <xx>	An error code was returned to the system from the PLC device. These codes <xx> can be referenced in the appropriate PLC manual.	H	ControlFile	89
PLC Write Exception # <xx>	An error code was returned to the system from the PLC device. These codes <xx> can be referenced in the appropriate PLC manual.	H	ControlFile	93
Power Reg: <xx> Volts Bad	The console or PeerWay interface power regulator detected a fault with the indicated voltage.	H	PWay I/F	327
Power Supply Failure <xx>	The voltage indicated in the alarm was out of tolerance on the console power regulator.	H	Console	307
Premature end of msg	The PLC communications detected an End Of Message (EOM) before it was expected.	H	ControlFile	91
Printer Not Ready	A print command was pending for more than 60 seconds without printing. It usually indicates that the printer is off line or shut off, or a fault with the printer is preventing the printout.	H	Console	301
Problems initializing reports	The Report pointer to configuration files is corrupted on the disk. Check the Report Status screen. May have to delete the report configuration file or directory.	S	Console	334
PW Boot of Console Node <node> Successful	Console PeerWay boot was successful.	D	Disk	696
PW Boot of Console Node <node> Unsuccessful	Console PeerWay boot was unsuccessful.	D	Disk	695
PW can not reply to msg <xx>	CP can not find PeerWay request (usually timed-out or restarted) to send controller reply to node xx (hex).	S	ControlFile	149

Message	Description	List	Alarm Area	No.
PWIF: Weak RAM Chip, Bit <xx>	A hardware error has been detected in one of the 22 memory chips on the PeerWay interface processor. The PeerWay interface may operate properly for a period of time; however, the processor should be changed at the earliest opportunity.	H	PWay I/F	328
Queue Full - Alarms Lost	The alarm print buffer was full and did not print alarm lists. Some of the alarms generated may not be printed.	H	PWay I/F	320
Rate <type> <scaled value>	Rate-of-change alarm on a process variable. For example, "Rate Crit. 100 GPM/S". The value given is the value of the variable in alarm at the time the alarm occurred, not a current value.	P	ControlFile	3
Reached End of Tape Node: Drive = <node:drive>	The end of tape was reached for the tape function at the node indicated.	D	Disk	280
Real Time Lost On Power Up	Upon power-up, the internal console clock time indicated a date before January 1, 1980.	H	Console	302
<msg pair> Receive Buffer Overflowed	The communications hardware in the controller did not find enough room in the memory buffer for a complete message from a PLC device.	H	ControlFile	87
Redun Jumper Conflict	The redundancy jumpers are not set the same as they are on the normal FIC.	H	ControlFile	122
Redundant CP Can't See All Slots <hh>	The secondary CP is not able to communicate with all of the Controller Processors in the ControlFile that the primary CP is communicating with. NOTE: <hh> is a hexadecimal addition of one or more of the following numbers: 01 = Slot A 08 = Slot D 40 = Slot G 02 = Slot B 10 = Slot E 80 = Slot H 04 = Slot C 20 = Slot F	H	ControlFile	134
Redundant CP Did Not Check Cage	The redundant Coordinator Processor (CP) was interrupted before it could complete a cage/slot test. If the alarm appears infrequently and then clears, the primary CP may be busy.	H	ControlFile	135
Redundant CP Failed	A hardware problem has been detected in the redundant Coordinator Processor. The ability of the redundant Coordinator Processor to perform as a backup to the primary is reduced. If the primary Coordinator Processor does fail, the severity of the two failures is weighed, and the most reliable Coordinator Processor attempts to control the process.	H	ControlFile	133
Redundant CP Has PeerWay Problems	The secondary CP was sensing PeerWay problems that the primary was not. This can be checked on the ControlFile PeerWay Backup Node screen.	H	ControlFile	136
Redundant CP is Jumpered Incompatibly	The jumper positions on the redundant CP that determine what image to run were different than the jumpers on the primary CP.	H	ControlFile	126
Redundant Card Active	Redundant FIC was connected to the field in place of the normal FIC.	H	ControlFile	121

Message	Description	List	Alarm Area	No.
Redundant Controller is Sick <xx>	<p>A hardware problem was detected in the redundant Controller Processor, the communication path between the processor and the FIC, or in the FIC. There may be no field I/O connected to the FIC. Check all of these before replacing the controller card.</p> <p>The ability of the redundant Controller Processor to perform as a backup to the primary is reduced. If the primary Controller Processor does fail, the severity of the two failures is weighed, and the most reliable Controller Processor attempts to control the process. <xx> may be:</p> <p>1026 The redundant Controller Processor has indicated a fault and cannot be trusted to back up the primary. However, if the priority of the fault in the primary is worse than the fault in the secondary, the secondary takes over.</p>	H	ControlFile	110
Redundant HSBY Unit Offline	Indicates that the redundant Modicon PLC is off line.	H	PLC	624
Redundant size check failed for file	When the system starts up, a size check is automatically performed on redundant files. This message indicates that two files do not match. This alarm can occur when a node goes down and subsequently returns online. You should check the files (listed by name in the Disk Event List below the actual message) on both the main and redundant disks to locate which file size is correct. You should then delete the bad file and replace it by copying the good one in its place.	D	Disk	766
Remote Printout Failed	A print request sent to another node for printing failed.	H	Console	316
Report <name>, failed include	The report that was to be included in the indicated report was not printed as a part of the complete report. Either the report did not satisfy the criteria, or there were problems reading the report.	S	Console	335
Report file generation completed	The report system successfully completed a report generation.	R	Console	412
Report generation ACTIVE	Reports were enabled when the Report system started on boot-up after initialization of the report queue.	R	Console	401
Report generation INITIALIZING	The report system was initialized.	R	Console	400
Report made ACTIVE	The active flag on the report was changed from no to yes. This is seen on the Report Status Screen.	R	Console	408
Report made INACTIVE	A report's active status was changed from yes to no. This message is displayed on the REPORT STATUS screen.	R	Console	409
Report print problem, see report status	A problem occurred in Reports. For further information see the Reports Status screen.	S	Console	338

Message	Description	List	Alarm Area	No.
Report skipped	Because of problems in the report generation, the report was skipped.	R	Console	404
Report config problems, see report status	A problem occurred in Report configuration. For further information, see Report Status screen.	S	Console	332
Reports: Print failed	The printer was not in operation at the time the report was scheduled, or the printer was configured in error, or was very busy.	H	Console	411
Restore of <xx> folder started	A restore operation has been started on the named folder.		Disk	658
Right CP Data Integrity Error <xxx>	<p>The current CP cannot reliably communicate with the NV memory or the controllers. May be caused by pulling an NV memory or CP without first disabling it. The redundant CP is switched in to use the alternate backplane bus.</p> <p>(xxx) indicates the reason for the switch:</p> <p>1 Address line failure occurring during the controller signature check of address lines A1 through A16.</p> <p>20 - 27 Controller address line failures found during slot address check of lines A17 through A20 by the PRIMARY CP. The numbers 20 through 27 are mapped to controller slots A through H.</p> <p>30 - 37 Controller address line failures found during slot address and data pattern check of lines A17 through A20 by the REDUNDANT CP. The numbers 30 through 37 are mapped to controller slots A through H.</p> <p>40 A data line failure occurred while testing the data lines to the NV memory board static RAM just before doing a NV memory read, write, or initialize operation. The NV memory operation was aborted.</p> <p>50 - 51 Data line failures found during testing of CP to CP common communication areas in the NV memory RAM. Error 50 indicates a failure in the PRIMARY CP. Error 51 indicates an error in the REDUNDANT CP.</p> <p>99 The data checksum generated by the CP and by the RAM NV memory do not agree. Data transfer between these boards is not secure.</p> <p>100 The alarm queue pointers for the CP were found to be out of bounds. The queue pointers have been reset within bounds. Some alarms may have been lost.</p> <p>101 The alarm queue pointers for the REDUNDANT CP were found to be out of bounds. The queue pointers have been reset within bounds. Some alarms from the redundant CP may have been lost.</p> <p>102 There is a checksum error in the alarm queue for the redundant CP. Some alarms may have been lost.</p>		ControlFile	165

Message	Description	List	Alarm Area	No.
Right Power Reg: <xx> Volts Bad	A fault occurred on the ControlFile Power Regulator in the right slot. The alarm also indicates which voltage has failed. The Power Regulator should be replaced if the +5, +12, or -12 volt supply has failed. If the 30 volt supply is in the alarm, this indicates that one of the two 30 volt dc buses has failed.	H	ControlFile	130
Rising Edge <type>	An alarm was generated by a rising edge on a contact input block; for example, "Rising Edge Crit".	P	ControlFile	6
RIOB configured	Attempt to duplicate an RIOB. There already is an RIOB configured for that point.			123
RNI <xx> Config Save to Primary Failed	Appears when the RS3 attempts to save a value to an RNI (Rosemount Network Interface) Primary Configuration Server from the Configure RNI screen. The Configuration Server may be improperly installed or configured. Check the Configure RNI screen to ensure you entered a valid RNI node number or user message pair. <xx> refers to the name the user has assigned to the configuration.	S	Pway I/F	790
RNI: <xx> Config Save to Backup Failed	Appears when the RS3 attempts to save a value to an RNI (Rosemount Network Interface) Configuration Backup Configuration Server from the Configure RNI screen. The Configuration Server may be improperly installed or configured. Check the Configure RNI screen to ensure you entered a valid RNI node number or user message pair. <xx> refers to the name the user has assigned to the configuration.	S	PWay I/F	791
ROM Checksum Failed	A periodic check of the Coordinator Processor Boot programs stored in EPROM failed. The Coordinator Processor may not be able to be restarted if disabled.	H	ControlFile	132
ROM Checksum Failed	A periodic check of the PeerWay Interface boot programs stored in EPROM failed. The PeerWay interface may not be able to restart if turned off.	H	PWay I/F	329
Save Config Alarm Broadcast Successful	The CAB (Configure Alarm Broadcast) data was saved without problem.	S	Console	687
Save Config Alarm Broadcast Unsuccessful	The attempt to save CAB (Configure Alarm Broadcast) data failed.	S	Console	688
Save PeerWay I/F Config Successful	The SCI, Diogenes I/F, HIA, RFI or other PeerWay I/F configuration save to disk was successful.	D	Disk	292

Message	Description	List	Alarm Area	No.
Save PeerWay I/F Config Unsuccessful	The SCI, Diogenes I/F, HIA, RFI or other PeerWay I/F configuration save was aborted. A second disk should be used. If this fails, a second drive should be used.	D	Disk	293
Save PeerWay I/F Program Successful	The SCI, Diogenes I/F, HIA, RFI or other PeerWay I/F Program save to disk was successfully completed.	D	Disk	299
Save PeerWay I/F Program Unsuccessful	The SCI, Diogenes I/F, HIA, RFI or other PeerWay I/F save to disk was aborted. A second disk should be used. If this fails, a second drive should be used.	D	Disk	298
Saved Configuration for Different Node	The Controller Processor configuration stored in the NV memory was for a different node number. The CP does not allow the Controller Processor to start up with the incorrect configuration for that node.	H	ControlFile	108
SCI Failed Periodic Read of <tag>	Four database refreshes failed for the specified block.	S	Console	259
SCI Periodic Data Lost <xx>	A database refresh started before another refresh has ended. As a result, late replies are incorrectly time-stamped.	S	Console	258
SCI Using Default Configuration	The PeerWay Interface could not find a configuration, or found a corrupt configuration. All configuration items use default values.	H	PWay I/F	330
Selftest failed for Board <xx>	A keyboard on the MTCC failed its selftest. <xx> represents keyboard numbers: 1 - Keyboard Interface 4 - Options Panel #1 2 - Operators Keyboard 5 - Options Panel #2 3 - Trackball 6 - Options Panel #3	H	Console	200
Slow Event Buffer Full to Node <x>	The buffer for slow data type events to be sent to node <x> is full.	S	ControlFile	772
Source Floppy is Write Protected	The system is trying to write onto a floppy disk that is write protected.	D	Disk	458
Start Memory Dump cont: <nn>	A manually initiated memory dump of Controller processor <nn> has been started.	D	Disk	775
Start Memory Dump node: <nn>	A memory dump has been started from node <nn>.	D	Console, ControlFile	537
Starting a report generation	A report generation successfully initiated.	R	Console	405
Static section difference: block <address>	A block in the Controller Processor showed a difference in configuration of the static section compared to the disk file during the Controller Block Verify operation.	D	ControlFile	346
Step <xx>: Wrong Input Type	A contact output block was configured on a Multi-Loop Controller, or an analog output block was configured at address 9 through 16 of a Multi-Loop Controller, or when an analog panel station was addressed lower than 17.	H	ControlFile	26

Message	Description	List	Alarm Area	No.
Step <xx>: Configuration Error	A configuration error occurred in the logic prologue of a ControlBlock.	S	ControlFile	27
Successful Installation	ATC completed evaluation and installed new parameters.	S	ATC	540
Switched to Backup Disk for General Reads	General disk reads are now being taken from the backup disk as configured on the CCC screen. These include graphics files.		Disk	677
Switched to Backup Disk for Overlay Reads	Overlays are now being read from the backup overlay disk as configured on the CCC screen.	D	Disk	675
Switched to Local Disk for General Reads	General disk reads are now being taken from the console's own disk. This includes graphics files.		Disk	678
Switched to Local Disk for Overlay Reads	Overlay reads were configured to use the backup disk but now will use the console's own disk.		Disk	676
Tape Init Complete Node: Drive = <node:drive>	The Tape Initialize function successfully completed at the node and drive indicated.	D	Disk	281
Tape Init Failed Node: Drive = <node:drive>	The Tape Initialize function was aborted because of media or tape drive errors. The function should be retried and, if this fails, another tape should be used. If this fails also, a second tape drive should be used.	D	Disk	282
Tape Load Complete Node: Drive = <node:drive>	A tape load at the indicated node address was successfully completed.	D	Disk	283
Tape Load Failed Node: Drive = <node:drive>	The Tape Load function was aborted because of media or tape drive errors. The function should be retried and, if this fails, another tape should be used. If this fails also, a second tape drive should be used.	D	Disk	284
Tape Restore started Node: Drive = <node:drive>	A tape restore has been started for the named drive.		Disk	659
Tape Unload Complete Node: Drive = <node:drive>	A tape unload at the indicated node address was successfully completed.	D	Disk	285
Tape Unload Failed Node: Drive = <node:drive>	The Tape Unload function was aborted because of media or tape drive errors. The function should be retried and, if this fails, another tape should be used. If this fails also, a second tape drive should be used.	D	Disk	286
Time Adjustment: <xx> Seconds	The system time has been adjusted "xx" seconds due to the time correction feature on the Console Configuration screen.	H	Console	303

Message	Description	List	Alarm Area	No.
Too Many PLCs Configured	An attempt was made to communicate with more than 32 PLC devices from one Controller Processor.	P	ControlFile	92
Too many reports, see report status	Too many reports were scheduled. The Report Status List should be checked to identify the report. It is possible that an alarm or time event is scheduling the report.	S	Console	333
Transfer Card Failure	Replace transfer card. Hardware problem detected.	H	ControlFile	120
Trend File 1 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost); or a new disk used. The system automatically creates a new Trend File.	S	Trend	360
Trend File 1 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend	370
Trend File 1 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend	380
Trend File 2 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost), or a new disk used. The system automatically creates a new Trend File.	S	Trend	361
Trend File 2 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend	371
Trend File 2 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend	381
Trend File 3 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost), or a new disk used. The system automatically creates a new Trend File.	S	Trend	362
Trend File 3 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend	372
Trend File 3 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend	382
Trend File 4 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost), or a new disk used. The system automatically creates a new Trend File.	S	Trend	363

Message	Description	List	Alarm Area	No.
Trend File 4 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend	373
Trend File 4 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend	383
Trend File 5 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost), or a new disk used. The system automatically creates a new Trend File.	S	Trend	364
Trend File 5 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend	374
Trend File 5 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend	384
Trend File 6 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost), or a new disk used. The system automatically creates a new Trend File.	S	Trend	365
Trend File 6 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend	375
Trend File 6 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend	385
Trend File 7 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost), or a new disk used. The system automatically creates a new Trend File.	S	Trend	366
Trend File 7 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend	376
Trend File 7 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend	386
Trend File 8 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost), or a new disk used. The system automatically creates a new Trend File.	S	Trend	367
Trend File 8 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend	377

Message	Description	List	Alarm Area	No.
Trend File 8 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend	387
Trend File 9 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost), or a new disk used. The system automatically creates a new Trend File.	S	Trend	368
Trend File 9 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend	378
Trend File 9 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend	388
Trend File Header Error	Trending data could not be retrieved because of corrupted information on the disk.	H	Trend	355
Trend File Overflow Warning	The trend volume will be full when time set on the Trend File Setup screen has elapsed, and will then begin writing over the oldest data. Save data to tape or disk.	S	Trend	353
Trend file trf1b ready for backup	Trend file name "trf1" has been changed to "trf1b" and trf1b can now be backed up to tape or disk.	S	Trend	390
Trend file trf2b ready for backup	Trend file name "trf2" has been changed to "trf2b" and trf2b can now be backed up to tape or disk.	S	Trend	391
Trend file trf3b ready for backup	Trend file name "trf3" has been changed to "trf3b" and trf3b can now be backed up to tape or disk.	S	Trend	392
Trend file trf4b ready for backup	Trend file name "trf4" has been changed to "trf4b" and trf4b can now be backed up to tape or disk.	S	Trend	393
Trend file trf5b ready for backup	Trend file name "trf5" has been changed to "trf5b" and trf5b can now be backed up to tape or disk.	S	Trend	394
Trend file trf6b ready for backup	Trend file name "trf6" has been changed to "trf6b" and trf6b can now be backed up to tape or disk.	S	Trend	395
Trend file trf7b ready for backup	Trend file name "trf7" has been changed to "trf7b" and trf7b can now be backed up to tape or disk.	S	Trend	396
Trend file trf8b ready for backup	Trend file name "trf8" has been changed to "trf8b" and trf8b can now be backed up to tape or disk.	S	Trend	397
Trend file trf9b ready for backup	Trend file name "trf9" has been changed to "trf9b" and trf9b can now be backed up to tape or disk.	S	Trend	398
Trend Fswitch Error, file <xx>	A media error to the file indicated was encountered on the Command Console hard disk drive when the console tried to change the trend file name from "trf1" (or to the file indicated) to "trf1b" to allow backup to tape. The hard disk drive should be checked out thoroughly.	H	Trend	389

Message	Description	List	Alarm Area	No.
Trend History Data Not Found	The trending information (time and date as requested) was not on the History Volume entered on the Trend File Setup screen.	S	Trend	354
Trend Queue <xx> Overflow	The trending queues were full because the disk has been too busy to process all the data. Trending information was lost. (<xx> = File number.)	S	Trend	399
Trend Read Error, File <xx>	Trending data from the file indicated could not be retrieved because of corrupted information on the disk.	H	Trend	358
Trend Record Header Error	Trending data could not be retrieved because of corrupted information on the disk.	H	Trend	356
Trend Recording Disabled	Trend recording was disabled for the console indicated.	S	Trend	351
Trend Recording Enabled	Trend recording was enabled for the console indicated.	S	Trend	352
Trend Time Write Error, file <xx>	Trending time data could not be written to the file indicated on the disk because of media error. The console hard disk should be checked out thoroughly.	H	Trend	379
Trend Volume Not Found	The volume name indicated on the Trend File Setup screen could not be found in the console.	S	Trend	350
Trend Write Error, file <xx>	A media error was encountered while transferring the trending data to the file indicated on the disk. The console hard disk should be checked out thoroughly.	H	Trend	369
Trending Time Sync. Error	A trending process did not receive all of the requested trend data within the five second time limit. Some data may have been lost. This may be caused by message delays due to high priority messages or routing delays over an HIA.	H	Trend	359
Unable to delete log print file <x>	The named log print file cannot be deleted for some reason. Refer to the Disk Event List for the reason.	S	Console	546
Unable to lock logfile <x>	The named logfile cannot be locked. Refer to the Disk Event List for the reason.	S	Console	689
Unable to open log conversion file <x>	The named log conversion file is unavailable for some reason. Refer to the Disk Event List for the reason.	S	Console	548
Unable to open log print file <xx>	The log print file cannot be opened. This is usually due to insufficient disk space. See the Disk Event List for details.			634
Unable to open logfile <xx>	The named logfile could not be opened. Refer to the Disk Event List for the reason.			630
Unable to print log file at node <node>	The log file at node <xx> cannot be printed for some reason.			636
Unable to read from logfile <x>	The named log print file is unavailable for some reason. Refer to the Disk Event List for the reason.	S	Console	547

Message	Description	List	Alarm Area	No.
Unable to read log print file <xx>	The log print file at node <xx> cannot be read for some reason.			637
Unable to unlock logfile <x>	The named logfile cannot be unlocked. Refer to the Disk Event List for the reason.	S	Console	690
Unable to write log print file <xx>	The named log print file is unavailable for some reason.			635
Unable to write to logfile <xx>	The log file at node <xx> cannot be written to for some reason.			638
Undefined Folder Type	During the last disk operation the folder used was the folder indicated. There is an error in the disk system, or the software is incompatible if the folder type is undefined.	D	Disk	180
Uninitialized or Wrong Tape at Node <xx>	The tape function was aborted because the tape at the node indicated is incompatible or has not been initialized. The tape should first be initialized using the procedure in the Disk and Tape Manual and the function restarted.	D	Disk	277
Unsorted/ duplicate address_table block	The address lookup table for blocks and loops has been corrupted.	VAX	MicroVAX I/F	593
Unstable: b_s11 > wn1	The normal ATC open loop unstable algorithm is bypassed and another algorithm used.	Event	ATC	534
Unsuccessful Alarm Regeneration	The attempt to regenerate alarm lists failed.	S	Console	691
VAX Broadcast Queue Full - Data Lost	A message queue maintained for all PeerWay Alarms, Events, and Operator Change Log messages was full. The VAX may not be processing the queue quickly enough. This is an internal software problem; contact your local Fisher-Rosemount representative.	S	Micro VAX I/F	585
VAX Control Queue Full - Data Lost	An internal message queue maintained between the RPQNA interface and the MicroVAX was full. The VAX may not be processing the queue quickly enough. This is an internal software problem; contact your local Fisher-Rosemount Representative.	S	Micro VAX I/F	583
VAX Data Queue Full - Data Lost	A message queue maintained for receiving RS3 system replies to MicroVAX read/write requests was full. The VAX may not be processing the queue quickly enough. This is an internal software problem; contact your local Fisher-Rosemount representative.	S	Micro VAX I/F	584
VAX Program Checksum Failed	The operating program on the MicroVAX disk or tape for the RPQNA interface did not load into memory successfully. This may be caused by a failure in the memory circuitry of board 1 or by bad media or by a bad program image.	H	Micro VAX I/F	582

Message	Description	List	Alarm Area	No.
VAX ROM Checksum Failed	The Micro VAX I/F diagnostics detected an error in the start up ROM of the RPQNA interface. Board 1 of the interface circuit board pair must be replaced.	H	Micro VAX I/F	581
VAX Weak RAM Chip <xx>	A hardware error was detected in a RAM chip on board 1 (the RPQNA Processor board) of the RPQNA circuit board pair. RPQNA is the Rosemount PeerWay QBus Network Access interface. The interface may work satisfactorily for a period of time but should be replaced as soon as possible.	H	Micro VAX I/F	580
VAX: Please start Host Mode <xx>	Requests that the VAX operator start the Host Mode session.	S	MicroVAX I/F	594
Virtual Controller Turned OFF	The Disk Virtual Controller function was turned off.	D	Disk	228
Virtual Controller Turned ON	The Disk Virtual Controller function was turned on. All ControlFile access is suspended until the Disk Virtual controller is turned off or the operator key is removed and reinserted to turn it off.	D	Disk	229
Vol Name Change Node <node>. Update DDP Scrn	The volume name of a disk was changed and the Disk Directory PeerWay screen must be updated to indicate the new disk name correctly for any further disk functions.	D	Disk	206
Volatile memory request failed	There is insufficient volatile (RAM) memory available for the Batch Task.	S	ControlFile	702
WARNING: Some alarms have been ignored	A flood of alarms has occurred and some alarms may have been lost.			331
Watchdog Timer Failure	A test of the interrupt handling ability of the Controller Processor or Coordinator Processor found the Controller Processor or Coordinator Processor not capable of responding to a Watchdog reset.	H	ControlFile	97
Watchdog Timer Failure	A test of the interrupt handling capability of the Coordinator Processor found the Coordinator Processor could not respond to a Watchdog reset.	H	ControlFile	128
Write error in report <name>	An error occurred in the report indicated. The Report does not generate until the error is corrected. The alarm may also indicate a disk error. Report configuration should be recopied from backup tape.	H	Console	339
Writing to a Read Only Address	An attempt was made to write to a read only address within the PLC.	P	ControlFile	94
Wrong CP Enhancement Module	The Plant Program image loaded in the ControlFile did not match the Coordinator Processor jumper settings.	H	ControlFile	140
Wrong Type of Boot Image for Operation	The image in the NV memory does not match Controller Processor image jumper settings.	D	Disk	269
Wrong logfile type for alarmlog	The alarm log file is of the wrong type. Correct the type to allow the file to open.			633

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Message	Description	List	Alarm Area	No.
Xmtr Comm Error	Smart Transmitter indicated communications errors with the FIC. Problem may be incompatible software levels between the FIC and transmitter, or faulty hardware.	H	ControlFile	74
Xmtr Status: Failure (xx)	Smart Transmitter Diagnostics indicated an internal fault. Self-test should be run on the transmitter.	H	ControlFile	75
Xmtr Status: Output Mode	The Smart Transmitter was placed in a manual current hold mode. The value being sent to the Field Interface card was not the current value being sensed by the transmitter.	H	ControlFile	77
Xmtr Status: Warning (xx)	Smart Transmitter diagnostics indicated an internal fault. Self-test should be run on the transmitter.	H	ControlFile	76

Section 4: Alarm Messages in Numerical Order

This section shows the alarm and event messages sorted in numerical order. Section 3 shows the messages in alphabetical order.

The columns at the top of the table have the following meanings:

No.	Shows the Alarm Number.
Message	Shows the alarm message as it appears on the alarm line of the console CRT. The characters <> indicate a part of the message that can change. For example, the table lists the message "Block <address> Missing in Controller". If this message appeared on the CRT screen, <address> would be replaced by the actual address of the block.
Description	Attempts to explain the message.
List	Shows the list in which the message will be recorded: B = Batch D = Disk Event Event = Event H = Hardware P = Process R = Report Status S = System Status VAX = Displays on VAX system
Alarm Area	Shows the area affected by the alarm condition: ATC Autotuning Controller Console ControlFile Disk Disk Subsystem HIA Highway Interface Adapter MicroVAX I/F PWay I/F PeerWay Interface Device Trend Trend Subsystem

No.	Message	Description	List	Alarm Area
0	Fault Cleared	An "alarm cleared" message was received on a console, but the original active alarm no longer exists in that console. Either the original alarm was forced off the active alarm list (possibly to a printer) because of a large number of active alarms, or else the console was reset and the alarm list cleared. This alarm will display a clear time but no occur time.	P, H, S, & D	ControlFile
1	Low <type> <scaled value>	Low alarm on a process variable. For example, "Low Crit. 100.00 GPM". The value given is the value of the variable in alarm at the time the alarm occurred, not a current value.	P	ControlFile
2	High <type> <Scaled Value>	High alarm on a process variable (e.g., "High Adv. 400.00 GPM"). The value given is the value of the variable in alarm at the time the alarm occurred, not a current value.	P	ControlFile
3	Rate <type> <scaled value>	Rate-of-change alarm on a process variable. For example, "Rate Crit. 100 GPM/S". The value given is the value of the variable in alarm at the time the alarm occurred, not a current value.	P	ControlFile
4	Deviation <type> Alarm	Deviation from setpoint has exceeded alarm value. May be either high or low.	P	ControlFile
5	<msg pair> <type>	An input was configured to create an alarm by a specific logic state from a contact input block. For example, "ON Crit" CIB turned on + alarm type Discrete Alarm.	P	ControlFile
6	Rising Edge <type>	An alarm was generated by a rising edge on a contact input block; for example, "Rising Edge Crit".	P	ControlFile
7	Falling Edge <type>	An alarm was generated by a falling edge on a contact input block.	P	ControlFile
8	Block in Manual	The I/O block is not in AUTO mode.	H	ControlFile
9	Incompatible	Hardware does not match configuration. An attempt has been made to configure a type of I/O block that is not compatible with the associated hardware. Smart output device mode does not match HART Output Block "use analog/use digital" selection (perhaps changed by a handheld device).	H	ControlFile
10	Communication Error	The Field Interface Card (FIC) could not update after the block was evaluated.	H	ControlFile
11	Outside Block Range	The operator tried to configure an analog input block above block 16, or an output block above 8, or a contact input or output block above 96.	H	ControlFile
12	<msg pair> <type>	An input was configured to create an alarm by a specific logic state from a contact input block. For example, "Off Crit" CIB turned off + alarm type Discrete Alarm - formatted as above. CIB Generated alarm.	P	ControlFile

No.	Message	Description	List	Alarm Area
13	Lost Input Data	Data needed to evaluate an input block was not available at the time of evaluation. This problem is caused by an internal software synchronization problem.	H	ControlFile
14	FIC Comm Error	Communication with Smart Transmitter was lost at the FIC. The FIC or Smart Transmitter could be at fault, as well as the cable.	H	ControlFile
15	Bad Message Data	A message in the Controller Processor/Field Interface Card communications protocol did not make sense.	H	ControlFile
16	Comm Protocol	A message in the Controller/Field Interface Card communications protocol was in the wrong format, or was not the message type expected. If the message includes "=xx Redun Hardware:" there may be a communication problem between the redundant controller and an Analog Card Cage. Check the cables between the redundant controllers, and those between the controllers and the card cage. Also check the Comm Connect card. Try reloading the FIC program from the Plant Program folder.	H	ControlFile
17	Comm Neg Acknowledge	The Controller Processor did not get the correct message acknowledgment from the FIC. The FIC or controller could be faulty.	H	ControlFile
18	Comm Checksum	The checksum in the message from the field interface card or analog panel station was incorrect. If the message includes "=xx Redun Hardware:" there may be a communication problem between the redundant controller and an Analog Card Cage. Check the cables between the redundant controllers, and those between the controllers and the card cage. Also check the Comm Connect card. Try reloading the FIC program from the Plant Program folder.	H	ControlFile
19	Comm Timeout	The Controller has lost communications with the Field Interface Card in the FlexTerm.	H	ControlFile
20	Comm Error	A communication error was detected by the communications hardware in the Controller Processor.	H	ControlFile
21	Comm New Data	Data needed to evaluate an Analog Panel Station was not available at the time of evaluation. This problem is caused by an internal software synchronization problem.	H	ControlFile
22	Comm Inquiry Phase	The Controller Processor is in the process of establishing the type of device being communicated with. To communicate with a field interface card or analog panel station, the Controller Processor will first inquire about the type of hardware on the comm line.	H	ControlFile
23	Incompatible AOFIC Action	The Output Field Interface Card's direct/reverse acting jumper conflicts with the configuration of the Analog Output Block (AOB).	H	ControlFile

No.	Message	Description	List	Alarm Area
24	Feedback Check Failed	Analog Output: The analog output return current compared to the source current has a difference greater than 5%. Try FIC recalibration. Contact Output: The contact output could not sense current flowing through the output module.	H	ControlFile
25	Block Requires <xx> Inputs	The ControlBlock did not have enough inputs for the ControlBlock function algorithm.	H	ControlFile
26	Step <xx>: Wrong Input Type	A contact output block was configured on a Multi-Loop Controller, or an analog output block was configured at address 9 through 16 of a Multi-Loop Controller, or when an analog panel station was addressed lower than 17.	H	ControlFile
27	Step <xx>: Configuration Error	A configuration error occurred in the logic prologue of a ControlBlock.	S	ControlFile
28	Invalid Track Count <xx>	An improper count in the back tracking function.	H	ControlFile
29	Invalid Link Input	A link was not received where expected. This could be caused by a link from a block not being configured, or a disabled Controller Processor or ControlFile. The missing link can be determined by looking at the tag/address and the input indicated in the alarm on the Block Links screen.	S	ControlFile
30	Alarms and Events Inhibited	All alarms and events from the indicated Controller Processor were disabled at the ControlFile Status screen.	P	ControlFile
31	Duart Status Word <xx>	One of the communications chips failed the power-up test. The Controller Processor should be replaced.	H	ControlFile
32	CP/Controller Addressing Fault	Indicates the Coordinator Processor and the Controller Processor have conflicting slot-address.	H	ControlFile
33	Controller: Weak RAM Chip, Bit <xx>	A hardware error was detected on one of the 22 RAM chips by the Controller Processor Error Detection and Correction (EDAC) circuit. The Controller Processor may operate satisfactorily for a period of time but should be replaced as soon as possible.	H	ControlFile
34	Controller ROM Test Failure	A periodic check of the Controller Processor Boot programs stored in EPROM failed. The Controller Processor may not be able to restart if disabled.	H	ControlFile
35	Fatal A/D Error	One of the Controller Processor, FIC, or Discrete I/O FIM analog to digital converters failed. All readings from this A/D will be locked at the last known valid reading before the fault was detected.	H	ControlFile
36	A/D Converter Out Of Spec	One of the Controller Processor, FIC, or Discrete I/O FIM analog to digital converters has failed. The readings will continue to update, with an error.	H	ControlFile
37	NVRAM Write Error	The Controller Processor could not write to the nonvolatile RAM that stores the calibration constants for the analog I/O blocks. Default calibration constants were used.	H	ControlFile

No.	Message	Description	List	Alarm Area
38	Incorrect Controller Program or CSB	The Controller Processor status block is incompatible with the current Controller Processor type. Either the controller image doesn't match the hardware, or a PLC was booted with standard blocks, or a non-PLC was booted with a PLC configuration. Problem 1 is fixed by loading the correct image or changing the hardware. Problem 2 is fixed by issuing a Kill Controller.	P	ControlFile
39	Calibration Error: Value Out of Range	The value used for calibration of the AIB or AOB is outside a reasonable range.	H	ControlFile
40	<message pair> <scaled value>	Logic generated alarm in step 1		
41	<message pair> <scaled value>	Logic generated alarm in step 2		
42	<message pair> <scaled value>	Logic generated alarm in step 3		
43	<message pair> <scaled value>	Logic generated alarm in step 4		
44	<message pair> <scaled value>	Logic generated alarm in step 5		
45	<message pair> <scaled value>	Logic generated alarm in step 6		
46	<message pair> <scaled value>	Logic generated alarm in step 7		
47	<message pair> <scaled value>	Logic generated alarm in step 8		
48	<message pair> <scaled value>	Logic generated alarm in step 9		
49	<message pair> <scaled value>	Logic generated alarm in step 10		
50	<message pair> <scaled value>	Logic generated alarm in step 11		
51	<message pair> <scaled value>	Logic generated alarm in step 12		
52	<message pair> <scaled value>	Logic generated alarm in step 13		
53	<message pair> <scaled value>	Logic generated alarm in step 14		
54	<message pair> <scaled value>	Logic generated alarm in step 15		
55	<message pair> <scaled value>	Logic generated alarm in step 16		

No.	Message	Description	List	Alarm Area
56	<xx> Hardware: <yy>	This alarm is used to build alarm messages for I/O blocks. For example, the message "AOB Hardware: Feedback Check Failed" combines the block type "AOB" with message 24. <xx> represents the block type AOB. <yy> represents another alarm message.	H	ControlFile
57	Bad FIC Card	The Field Interface Card (FIC) on-line diagnostics detected a fault.	H	ControlFile
58	Buffer Overrun	The communications hardware in the Controller found that there was not enough room in the memory buffer for the complete message from the Field Interface Card.	H	ControlFile
59	Default Calibration Used	Calibration factors in the EPROM were all zero or were too far out of allowable range; default values will be used. The default values are normally within one percent of the corrected calibration. If this tolerance is acceptable to the process, it can be used in the alarm condition until the block can be calibrated properly.	H	ControlFile
60	Input Configuration Error	The input configuration has been corrupted for this block. The block should be replaced or reconfigured.	H	ControlFile
61	Controller is in Standby	The Controller is in the Standby mode. All inputs will continue to be evaluated and displayed. No changes to the output blocks are possible.	P	ControlFile
62	No Mux Communication (<xx>)	The Multiplexer Controller processor card could not communicate with the Multiplexer FlexTerm. <xx> represents a numeric code indicating the status of the device when communications were interrupted.	H	ControlFile
63	Mux Comm. Not Initialized (<xx>)	A communication error occurred between the Multiplexer Controller Processor and the Communications Controller in the Multiplexer FlexTerm. <xx> represents a numeric code indicating the status of the device when communications were interrupted.	H	ControlFile
64	Mux Point Overrange	A Multiplexer reading from a Front End Module (FEM) was higher than the input block (MIB) will allow.	H	ControlFile
65	Mux Point Underrange	A Multiplexer reading from a Front End Module (FEM) was lower than the input block (MIB) will allow.	H	ControlFile
66	Mux Point Skipped	The SKIP function was enabled for the MIB. No readings were updated from this point.	H	ControlFile
67	Mux Point No FEM Present	No FEM was present in the Multiplexer FlexTerm for the configured MIB point.	H	ControlFile
68	Mux Point mod10 Checksum	A checksum error occurred on the data in the communications between the Multiplexer Controller Processor and the Communications Controller in the Multiplexer FlexTerm.	H	ControlFile
69	Mux CRC Diagnostic	An error was detected in the hardware on the Multiplexer Communications Controller card.	H	ControlFile

No.	Message	Description	List	Alarm Area
70	Mux RAM Diagnostic	Multiplexer CPU RAM has been detected as faulty.	H	ControlFile
71	Mux ROM Diagnostic	An error was detected in the ROM on the Multiplexer Communications Controller card.	H	ControlFile
72	Mux Calibration Checksum	The calibration values stored in memory on the Multiplexer Communications Controller card were corrupted.	H	ControlFile
73	Mux Comm Line Err <xx>	Multiple communication errors were detected between the Multiplexer Controller Processor and the Communications Controller card in the Multiplexer FlexTerm. NOTE: <xx> may be one of code (0 - 9) 0-General DUART Error 5-Bad Acknowledge 1-Break 6-Bad Character 2-Framing Error 7-Buffer Overrun 3-Parity Error 8-Size Error in Message 4-Overrun Error in DUART 9-Extra Message	H	ControlFile
74	Xmtr Comm Error	Smart Transmitter indicated communications errors with the FIC. Problem may be incompatible software levels between the FIC and transmitter, or faulty hardware.	H	ControlFile
75	Xmtr Status: Failure (xx)	Smart Transmitter Diagnostics indicated an internal fault. Self-test should be run on the transmitter.	H	ControlFile
76	Xmtr Status: Warning (xx)	Smart Transmitter diagnostics indicated an internal fault. Self-test should be run on the transmitter.	H	ControlFile
77	Xmtr Status: Output Mode	The Smart Transmitter was placed in a manual current hold mode. The value being sent to the Field Interface card was not the current value being sensed by the transmitter.	H	ControlFile
79	PLC Address Out of Range	The address of the PLC device was not within the legal address range.	H	ControlFile
80	<msg pair> A break was caught	An illegal break was received from the PLC slave device.	H	ControlFile
81	<msg pair> A framing error occurred	A message framing error in the PLC communications occurred.	H	ControlFile
82	<msg pair> A parity error occurred	A parity error in the PLC communications occurred.	H	ControlFile
83	<msg pair> An overrun error occurred	Extra characters were received from a PLC device after an end-of-message (EOM) character.	H	ControlFile
84	<msg pair> Bad Message Received	A message was received from a PLC device that did not meet any of the expected formats.	H	ControlFile

No.	Message	Description	List	Alarm Area
85	<msg pair> Bad CRC/Checksum on Message	The calculated CRC or Checksum for a message from a PLC device was wrong.	H	ControlFile
86	<msg pair> Out of Comm Bandwidth	Not enough communication time was allowed to complete all the communications with a PLC device.	H	ControlFile
87	<msg pair> Receive Buffer Overflowed	The communications hardware in the controller did not find enough room in the memory buffer for a complete message from a PLC device.	H	ControlFile
88	<msg pair> No PLC Communication	An unsuccessful attempt was made to communicate with a PLC device. This alarm is generated after the configured number of retries have been attempted and the message timeout has expired. Subsequent attempts to establish communications occur after 5 seconds.	H	ControlFile
89	PLC Read Exception # <xx>	An error code was returned to the system from the PLC device. These codes <xx> can be referenced in the appropriate PLC manual.	H	ControlFile
90	Board: Key <p:kkk> is bad	The console software received a keyboard switch closed signal for more than 20 seconds for a MTCC, or 60 seconds for an ECC. <p:kkk> represents the panel and key. The values for p are: 1 Configuration (alphanumeric) 2 Trackball 3 Operator 4 Callup Option #1 (left) 5 Callup Option #2 (middle) 6 Callup Option #3 (right)	H	ControlFile
91	Premature end of msg	The PLC communications detected an End Of Message (EOM) before it was expected.	H	ControlFile
92	Too Many PLCs Configured	An attempt was made to communicate with more than 32 PLC devices from one Controller Processor.	P	ControlFile
93	PLC Write Exception # <xx>	An error code was returned to the system from the PLC device. These codes <xx> can be referenced in the appropriate PLC manual.	H	ControlFile
94	Writing to a Read Only Address	An attempt was made to write to a read only address within the PLC.	P	ControlFile
95	Incompatible Config. Area	The configuration loaded in the Controller Processor is incompatible with the configuration stored in NV memory; either the configuration changed, or the Controller Processor image type changed.	P	ControlFile
96	Invalid CompBlock Function	A CompBlock has been configured that is not supported on the Controller Processor. For example, an ATC has been configured on a Controller Processor without an ATC image.	H	ControlFile
97	Watchdog Timer Failure	A test of the interrupt handling ability of the Controller Processor or Coordinator Processor found the Controller Processor or Coordinator Processor not capable of responding to a Watchdog reset.	H	ControlFile

No.	Message	Description	List	Alarm Area
98	ATC value = <x>	The Autotuning Controller reports a value of <x>.	H	ControlFile
100	Controller Fault (<xx>)[1 of 2]	<p>The Coordinator Processor lost communications with the Controller Processor. This alarm can be generated by simply disabling the Controller Processor. The number given in the alarm text indicates where the Coordinator Processor was when it detected it could not communicate with the controller.</p> <p><xx> may be:</p> <p>10 False DTACK received while reading alarm queue.</p> <p>40 A controller fault has occurred and the CP was too busy at the time to handle the fault. The original fault code was not retained.</p> <p>100 Coordinator processor is being locked out of Controller Status information area in the controller RAM. This occurs if the controller has been disabled by the front panel switch. It might also be caused by a controller fault.</p> <p>110 False DTACK received while reading Controller Status information area.</p> <p>200 False DTACK received while reading controller configuration.</p> <p>210 The pointers in the controller RAM were corrupted because the controller failed during an NV memory update cycle.</p> <p>230 False DTACK received while reading controller configuration for NV memory backup.</p> <p>405 Coordinator Processor was not able to read controller link area.</p> <p>410 False DTACK received while reading controller link area.</p> <p>430 False DTACK received while writing controller link area.</p> <p>450 False DTACK received while write TIC synchronization information.</p> <p>510 False DTACK was received while requesting Controller Processor configuration backup.</p> <p>520 The Controller Processor did not allow the Coordinator Processor to back up the configuration to the NV memory because the controller did not have sufficient idle time. This could be due to over configuration or to a controller problem.</p> <p>600 The Coordinator Processor entered messages into a buffer area of RAM in the Controller Processor. The Controller Processor fell too far behind and no room is available in the buffer for any more messages from the Controller Processor. This is probably due to a Controller Processor fault.</p> <p>- CONTINUED -</p>	H	ControlFile

No.	Message	Description	List	Alarm Area
100	Controller Fault (<xx>)[2 of 2]	<p>- CONTINUED -</p> <p>1024 The Controller Processor crashed. No dump screen is available.</p> <p>1025 The Controller Processor can no longer communicate with the Coordinator Processor. This can be caused by the switch on the Controller Processor being shut off or some fault on the Controller Processor has caused it to halt. A dump screen may be available.</p> <p>1043 The CP started up, checked the ControlFile status, and found a Controller Processor that went down since the last time the ControlFile status was checked. This message usually occurs when a Controller Processor goes down while the CPs were switching or while the CP was down.</p> <p>1048 The CP restarted and found a Controller Processor down since the last CP shutdown.</p> <p>2100 False DTACK received while reading redundant controller backup configuration.</p> <p>2110 The pointers into the redundant controller RAM were corrupted because the controller failed during a controller image backup cycle to the redundant controller.</p>	H	ControlFile
101	Enabled node <x> for alarm broadcast	A batch program, containing an ON trap for node x, has altered the Configure Alarm Broadcast (CAB) screen of node x to allow node x to send alarm messages to the batch program. The change to the CAB screen remains until the CAB is reloaded.	B	ControlFile
102	CF Data Transfer Error (<xx>)	<p>An error occurred during the transfer of data between the Controller Processor and the Coordinator Processor. <xx> may be:</p> <p>30 Alarm message checksum sent from the controller to the coordinator processor did not match, and the alarm was dropped.</p> <p>400 Checksum on the link area does not match.</p>	H	ControlFile
103	Controller Memory Soft Error (<xx>)	<p>Multiple retries were necessary to pass a message successfully between the Coordinator Processor and a Controller Processor.</p> <p><xx> may be:</p> <p>420 Retry was necessary to read controller link area.</p> <p>440 Retry was necessary to write controller link area.</p> <p>620 Retry was necessary to write a message to the controller.</p>	H	ControlFile
104	Controller Reload Requested	The Controller Processor finished the Boot ROM start-up and is requesting that the operating program be downloaded from the NV memory.	H	ControlFile
105	Controller Copy Aborted (<xx>)	1061 The Coordinator Processor failed to copy the primary controller configuration to the redundant controller. Controller Processor idle time should be checked.	H	ControlFile

No.	Message	Description	List	Alarm Area
106	Controller Switch Aborted (<xx>)	The switchover from the primary to the secondary controller was aborted. <xx> may be: 1066 The switchover from the primary to the secondary controller was aborted because the secondary controller is not active.	H	ControlFile
107	FIM Loop Power Module Failure	This alarm occurs when a loop power module fails, or if one of the loop power modules is missing or bad in a redundant configuration.	H	ControlFile
108	Saved Configuration for Different Node	The Controller Processor configuration stored in the NV memory was for a different node number. The CP does not allow the Controller Processor to start up with the incorrect configuration for that node.	H	ControlFile
109	Controllers Incompatible <xx>	One Controller Processor indicated that it is redundant, and the other Controller Processor has indicated that it is not reading the redundancy indication. <xx> may be: 1042 One Controller Processor has indicated that it is redundant, and the other Controller Processor has indicated that it is not reading the redundancy indication. A short on two pins from the Controller Processor to the FlexTerm cable is read by the Controller Processor. The Controller Processor should be firmly pressed into the ControlFile and the connectors on the back of the ControlFile should be checked. If this fails to clear the fault, the Controller Processor reporting the fault should be replaced. 1053 Controller Processors running in a redundant mode are not of the same card type. For example, one is a MultiPurpose and the other is a contact. The incorrect card type should be replaced.	H	ControlFile
110	Redundant Controller is Sick <xx>	A hardware problem was detected in the redundant Controller Processor, the communication path between the processor and the FIC, or in the FIC. There may be no field I/O connected to the FIC. Check all of these before replacing the controller card. The ability of the redundant Controller Processor to perform as a backup to the primary is reduced. If the primary Controller Processor does fail, the severity of the two failures is weighed, and the most reliable Controller Processor attempts to control the process. <xx> may be: 1026 The redundant Controller Processor has indicated a fault and cannot be trusted to back up the primary. However, if the priority of the fault in the primary is worse than the fault in the secondary, the secondary takes over.	H	ControlFile
111	Block in Override	The I/O block is in OVERRIDE mode.	H	ControlFile
112	NV Mem Backup Reset	The CP program was restarted to overcome the problem where the backup was stuck on one Controller Processor.	S	ControlFile

No.	Message	Description	List	Alarm Area
113	Not Enough NV Mem Space to Load Config	There is not enough memory space in the NV memory to load the configuration.	S	ControlFile
114	Controller Config Reload Required	Controller Processor configuration was corrupted and should be reloaded from the Plant Configuration disk file.	H	ControlFile
115	Controller Not Backed Up	The Controller Processor did not allow the Coordinator Processor to access to the configuration area in the Controller Processor for a long enough period of time to complete the configuration backup to NV memory for one cycle. Too little idle time may be left in the configuration. Controller Processor idle time should be at least 18% or higher.	S	ControlFile
116	NV Mem Battery #1 Low Voltage	Battery #1 of the battery backed RAM NV Memory card has low voltage. Both batteries should be replaced. Replace the weakest battery first.	H	ControlFile
117	NV Mem Battery #2 Low Voltage	Battery #2 of the battery backed RAM NV Memory card has low voltage. Both batteries should be replaced. Replace the weakest battery first.	H	ControlFile
118	NV Mem High Current	The RAM chips on the NV Memory card are drawing more current than they should. The batteries will not be able to maintain the memory status for the expected time should power be removed. The NV Memory card should be replaced.	H	ControlFile
119	NV Mem Excessively High Current	The RAM chips on the NV Memory card are drawing much more current than they should. The batteries will not be able to maintain the memory status for the expected time should power be removed. The NV Memory card should be replaced.	H	ControlFile
120	Transfer Card Failure	Replace transfer card. Hardware problem detected.	H	ControlFile
121	Redundant Card Active	Redundant FIC was connected to the field in place of the normal FIC.	H	ControlFile
122	Redun Jumper Conflict	The redundancy jumpers are not set the same as they are on the normal FIC.	H	ControlFile
123	RIOB configured	Attempt to duplicate an RIOB. There already is an RIOB configured for that point.		
124	Non-Boot FIC	The FIC NVRAM has no image. It has either been lost or corrupted. Reload the FIC image. Replace the FIC if the error reappears.		
125	No NV Mem Board Present	No nonvolatile memory board was physically present or the nonvolatile memory board switch was shut off and the Coordinator Processor did not read from the board.	H	ControlFile
126	Redundant CP is Jumpered Incompatibly	The jumper positions on the redundant CP that determine what image to run were different than the jumpers on the primary CP.	H	ControlFile

No.	Message	Description	List	Alarm Area
127	CP/CP Comm: Error Detected	On the 16-bit communications port between the two redundant Coordinator Processor boards in a ControlFile, an error occurred in the message checksum between the two boards.	H	ControlFile
128	Watchdog Timer Failure	A test of the interrupt handling capability of the Coordinator Processor found the Coordinator Processor could not respond to a Watchdog reset.	H	ControlFile
129	Left Power Reg: <xx> Volts Bad	A fault occurred on the ControlFile Power Regulator in the left slot. The alarm also indicates which voltage has failed. The Power Regulator should be replaced if the +5, +12, or -12 volt supply has failed. If the +30 volt supply is in the alarm, this indicates that one of the two 30 volt DC buses has failed.	H	ControlFile
130	Right Power Reg: <xx> Volts Bad	A fault occurred on the ControlFile Power Regulator in the right slot. The alarm also indicates which voltage has failed. The Power Regulator should be replaced if the +5, +12, or -12 volt supply has failed. If the 30 volt supply is in the alarm, this indicates that one of the two 30 volt DC buses has failed.	H	ControlFile
131	CP: Weak RAM Chip, Bit <xx>	A hardware error on one of the 22 RAM chips was detected by the Error Detection and Correction (EDAC) circuit on the Coordinator Processor. The Coordinator Processor may operate properly for a period of time; however, it should be replaced at the earliest opportunity.	H	ControlFile
132	ROM Checksum Failed	A periodic check of the Coordinator Processor Boot programs stored in EPROM failed. The Coordinator Processor may not be able to be restarted if disabled.	H	ControlFile
133	Redundant CP Failed	A hardware problem has been detected in the redundant Coordinator Processor. The ability of the redundant Coordinator Processor to perform as a backup to the primary is reduced. If the primary Coordinator Processor does fail, the severity of the two failures is weighed, and the most reliable Coordinator Processor attempts to control the process.	H	ControlFile
134	Redundant CP Can't See All Slots <hh>	The secondary CP is not able to communicate with all of the Controller Processors in the ControlFile that the primary CP is communicating with. NOTE: <hh> is a hexadecimal addition of one or more of the following numbers: 01 = Slot A 04 = Slot D 40 = Slot G 02 = Slot B 10 = Slot E 80 = Slot H 03 = Slot C 20 = Slot F	H	ControlFile
135	Redundant CP Did Not Check Cage	The redundant Coordinator Processor (CP) was interrupted before it could complete a cage/slot test. If the alarm appears infrequently and then clears, the primary CP may be busy.	H	ControlFile
136	Redundant CP Has PeerWay Problems	The secondary CP was sensing PeerWay problems that the primary was not. This can be checked on the ControlFile PeerWay Backup Node screen.	H	ControlFile

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No.	Message	Description	List	Alarm Area
137	CP Funct Reduced: No Enhance Module	When attempting to load a Coordinator Processor enhancement module from the NV memory, the program image was found to be missing or corrupt. This alarm also appears after a Coordinator Processor PeerWay boot. The CP image in the NV memory should be downloaded again and the CP rebooted.	H	ControlFile
138	Batch Configuration Checksum Bad	The batch configuration checksum was bad when the CP restarted. It must be reloaded.	H	ControlFile
139	Node <node> Config. Reload Required	The MaxCF configuration was corrupt. The Controller Processor configuration should be reloaded.	H	ControlFile
140	Wrong CP Enhancement Module	The Plant Program image loaded in the ControlFile did not match the Coordinator Processor jumper settings.	H	ControlFile
141	ControlFile Restarted	The ControlFile restarted and is on the PeerWay. This message is generated by the Coordinator Processor.	H	ControlFile
142	Lost Controller Alarm <xx>	The alarm buffer pointers in the Controller Processor memory were corrupted and the alarms were flushed from the memory.	H	ControlFile
143	Lost Controller Message <xx>	The message buffer pointers in the Controller Processor memory were corrupted and the messages were flushed from the memory.	H	ControlFile
144	Controller Switch Complete <xx>	The secondary Controller Processor successfully completed the switchover to primary operation. The Controller Processor indicated as the source is the Controller Processor that took over as primary. <xx> may be: 1064 Controller Switch has been detected from the interrupt level. 1065 Controller Switch has been manually requested.	H	ControlFile

No.	Message	Description	List	Alarm Area
145	CP Switch Complete <xx>	<p>The secondary CP successfully completed the switchover to primary operation. The CP indicated as the source is the CP that took over as primary. <xx> may be:</p> <p>001 Redundant CP detected a crash of the primary CP.</p> <p>002 Primary CP detected a data integrity error.</p> <p>101 Operator requested a switchover.</p> <p>290 Redundant CP can see controllers that the primary cannot.</p> <p>291 Primary CP encountered errors on the PeerWay and the secondary did not see the errors.</p> <p>292 Primary CP has a ROM checksum error, so it switched to the secondary.</p> <p>293 Primary CP detected a weak RAM chip.</p> <p>294 Primary CP detected a watchdog error.</p> <p>295 A batch program found a corrupt batch NV memory image. Batch tasks have been restarted and have reloaded the last saved image.</p>	H	ControlFile
146	First channel missing blk	Alarm appears when the first point of a DIB or DOB is unconfigured. This causes all other DIB/DOB points to lose their switch voltages. Make sure the first point is configured.	H	ControlFile
147	NV Mem High Retention Current <xx>	The RAM chips on the NV Memory card are drawing an excessive amount of current. The card should be replaced as soon as practical because the batteries will not be able to maintain memory for as long as expected if power is lost.	H	ControlFile
148	NV Mem Using Spare Mem Chips <xx>	The indicated NV Memory card has mapped out a pair of bad chips and is using a spare pair of chips. The NV Memory card should be replaced as soon as practical.	H	ControlFile
149	PW can not reply to msg <xx>	CP can not find PeerWay request (usually timed-out or restarted) to send controller reply to node xx (hex).	S	ControlFile

No.	Message	Description	List	Alarm Area
150	NV Mem 0 Initialize Failed <xx>	<p>Indicates that the NV memory board in the 0 (left slot) would not start up. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code. If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <ul style="list-style-type: none"> 02 Power failure 08 Uncorrectable error in last page of a transfer 24 Command failed due to uncorrectable errors 25 Invalid page number received 26 Transfer count failure 27 Transfer count failure 2c Uncorrectable error 30 Timing error 34 Backup FIFO values disagree with primary FIFO 35 Bad command received 36 Bad command received 37 Invalid page number received 40 Successful completion 44 Uncorrectable error in last page transferred 48 Correctable errors occurred 4c Uncorrectable error in last page transferred 80 NV Memory circuit is busy 	H	ControlFile
151	NV Mem 0 FIFO Reset Failed <xx>	<p>Indicates that the NV memory FIFO buffer in the 0 (left slot) could not be reset. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code. If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <ul style="list-style-type: none"> 02 Power failure 08 Uncorrectable error in last page of a transfer 24 Command failed due to uncorrectable errors 25 Invalid page number received 26 Transfer count failure 27 Transfer count failure 2c Uncorrectable error 30 Timing error 34 Backup FIFO values disagree with primary FIFO 35 Bad command received 36 Bad command received 37 Invalid page number received 40 Successful completion 44 Uncorrectable error in last page transferred 48 Correctable errors occurred 4c Uncorrectable error in last page transferred 80 NV Memory circuit is busy 	H	ControlFile

No.	Message	Description	List	Alarm Area
152	NV Mem 0 Read Failed <xx>	<p>Indicates that the read from NV memory 0 (left slot) failed. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code. If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <ul style="list-style-type: none"> 02 Power failure 08 Uncorrectable error in last page of a transfer 24 Command failed due to uncorrectable errors 25 Invalid page number received 26 Transfer count failure 27 Transfer count failure 2c Uncorrectable error 30 Timing error 34 Backup FIFO values disagree with primary FIFO 35 Bad command received 36 Bad command received 37 Invalid page number received 40 Successful completion 44 Uncorrectable error in last page transferred 48 Correctable errors occurred 4c Uncorrectable error in last page transferred 80 NV Memory circuit is busy 	H	ControlFile
153	NV Mem 0 Write Failed <xx>	<p>Indicates that the write to NV memory 0 (left slot) failed. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code. If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <ul style="list-style-type: none"> 02 Power failure 08 Uncorrectable error in last page of a transfer 24 Command failed due to uncorrectable errors 25 Invalid page number received 26 Transfer count failure 27 Transfer count failure 2c Uncorrectable error 30 Timing error 34 Backup FIFO values disagree with primary FIFO 35 Bad command received 36 Bad command received 37 Invalid page number received 40 Successful completion 44 Uncorrectable error in last page transferred 48 Correctable errors occurred 4c Uncorrectable error in last page transferred 80 NV Memory circuit is busy 	H	ControlFile

No.	Message	Description	List	Alarm Area
154	NV Mem 0 Header Table Invalid	The pointers to the program images and configuration data in NV memory 0 (left slot) are corrupt or missing.	H	ControlFile
155	NV Mem 0 Configuration Update Failure	The attempt to update NV Memory 0 failed. 0 indicates the left hand slot.	S	ControlFile
156	NV Mem 0 Card is Missing	Indicates that NV memory card 0 (left slot) has been removed without the switch being shut off first.	H	ControlFile
157	NV Mem 0 Removal Requested <xx>	The NV memory card 0 (left slot) has had the switch turned off indicating that it is to be removed. NOTE: <xx> is 300 for a Bubble NV memory card. For a RAM NV memory card it is a number indicating the current draw of the memory chips. The high current thresholds are: 1 Meg card: 49 2 Meg card: 108 4 Meg card: 168	H	ControlFile
158	NV Mem 0 Hdr Table Retry Executed <x>	NV memory 0 (left slot) has been unable to: 0 Write to a configuration. The write is retried. 1 Read a configuration. The configuration is initialized and the read is retried.	H	ControlFile
159	NV Mem 0 Program Images Bad	A periodic check of the program images stored in the ControlFile NV memory 0 (left slot) found them to be corrupt or missing. The ability to restart a controller or coordinator processor is unlikely. The plant program must be reloaded from disk.	H	ControlFile
160	NV Mem 0 Opt. Controller Image #<xx> Bad	A periodic check of the additional images stored in the ControlFile NV memory 0 (left slot) found them to be corrupt or missing. The ability to restart the applicable controller is unlikely.	H	ControlFile
161	NV Mem 0 Config Checksum Bad	Each time a controller configuration is copied from the Controller Processor to the ControlFile NV memory card, the data is checksummed to verify that the image transferred is correct. This alarm indicates that the checksum test failed. The previous image is maintained in the NV memory and the image transfer is retried. For repeated alarms the fault may be in the Controller, CP, or NV memory card. The ControlFile Motherboard and Terminators should also be checked. 0 indicates left slot.	H	ControlFile
162	NV Mem 0 CP Config for Different Node	The MaxCF configuration contained in the NV memory card is configured for a different node. Either the correct NV memory card should be installed in the ControlFile, or the controller configuration should be reloaded from disk. 0 indicates left slot.	H	ControlFile

No.	Message	Description	List	Alarm Area
163	Left CP Data integrity error (xxx)	<p>The current CP cannot reliably communicate with the NV memory or the controllers. May be caused by pulling an NV memory or CP without first disabling it. The redundant CP is switched in to use the alternate backplane bus.</p> <p>(xxx) indicates the reason for the switch:</p> <p>1 Address line failure occurring during the controller signature check of address lines A1 through A16.</p> <p>20 - 27 Controller address line failures found during slot address check of lines A17 through A20 by the PRIMARY CP. The numbers 20 through 27 are mapped to controller slots A through H</p> <p>30 - 37 Controller address line failures found during slot address and data pattern check of lines A17 through A20 by the REDUNDANT CP. The numbers 30 through 37 are mapped to controller slots A through H.</p> <p>40 A data line failure occurred while testing the data lines to the NV memory board static RAM just before doing a NV memory read, write, or initialize operation. The NV memory operation was aborted.</p> <p>50 - 51 Data line failures found during testing of CP to CP common communication areas in the NV memory RAM. Error 50 indicates a failure in the PRIMARY CP. Error 51 indicates an error in the REDUNDANT CP.</p> <p>99 The data checksum generated by the CP and by the RAM NV memory do not agree. Data transfer between these boards is not secure.</p> <p>100 The alarm queue pointers for the CP were found to be out of bounds. The queue pointers have been reset within bounds. Some alarms may have been lost.</p> <p>101 The alarm queue pointers for the REDUNDANT CP were found to be out of bounds. The queue pointers have been reset within bounds. Some alarms from the redundant CP may have been lost.</p> <p>102 There is a checksum error in the alarm queue for the redundant CP. Some alarms may have been lost.</p>		ControlFile

No.	Message	Description	List	Alarm Area
165	Right CP Data Integrity Error (xxx)	<p>The current CP cannot reliably communicate with the NV memory or the controllers. May be caused by pulling an NV memory or CP without first disabling it. The redundant CP is switched in to use the alternate backplane bus.</p> <p>(xxx) indicates the reason for the switch:</p> <p>1 Address line failure occurring during the controller signature check of address lines A1 through A16.</p> <p>20 - 27 Controller address line failures found during slot address check of lines A17 through A20 by the PRIMARY CP. The numbers 20 through 27 are mapped to controller slots A through H.</p> <p>30 - 37 Controller address line failures found during slot address and data pattern check of lines A17 through A20 by the REDUNDANT CP. The numbers 30 through 37 are mapped to controller slots A through H.</p> <p>40 A data line failure occurred while testing the data lines to the NV memory board static RAM just before doing a NV memory read, write, or initialize operation. The NV memory operation was aborted.</p> <p>50 - 51 Data line failures found during testing of CP to CP common communication areas in the NV memory RAM. Error 50 indicates a failure in the PRIMARY CP. Error 51 indicates an error in the REDUNDANT CP.</p> <p>99 The data checksum generated by the CP and by the RAM NV memory do not agree. Data transfer between these boards is not secure.</p> <p>100 The alarm queue pointers for the CP were found to be out of bounds. The queue pointers have been reset within bounds. Some alarms may have been lost.</p> <p>101 The alarm queue pointers for the REDUNDANT CP were found to be out of bounds. The queue pointers have been reset within bounds. Some alarms from the redundant CP may have been lost.</p> <p>102 There is a checksum error in the alarm queue for the redundant CP. Some alarms may have been lost.</p>		ControlFile

No.	Message	Description	List	Alarm Area
166	NV Mem 1 Initialize Failed <xx>	<p>Indicates that the NV memory board in the right slot (1) would not start up. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code. If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <ul style="list-style-type: none"> 02 Power failure 08 Uncorrectable error in last page of a transfer 24 Command failed due to uncorrectable errors 25 Invalid page number received 26 Transfer count failure 27 Transfer count failure 2c Uncorrectable error 30 Timing error 34 Backup FIFO values disagree with primary FIFO 35 Bad command received 36 Bad command received 37 Invalid page number received 40 Successful completion 44 Uncorrectable error in last page transferred 48 Correctable errors occurred 4c Uncorrectable error in last page transferred 80 NV Memory circuit is busy 	H	ControlFile
167	NV Mem 1 FIFO Reset Failed <xx>	<p>Indicates that the NV memory board in the right slot (1) FIFO buffer could not be reset. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code. If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <ul style="list-style-type: none"> 02 Power failure 08 Uncorrectable error in last page of a transfer 24 Command failed due to uncorrectable errors 25 Invalid page number received 26 Transfer count failure 27 Transfer count failure 2c Uncorrectable error 30 Timing error 34 Backup FIFO values disagree with primary FIFO 35 Bad command received 36 Bad command received 37 Invalid page number received 40 Successful completion 44 Uncorrectable error in last page transferred 48 Correctable errors occurred 4c Uncorrectable error in last page transferred 80 NV Memory circuit is busy 	H	ControlFile

No.	Message	Description	List	Alarm Area
168	NV Mem 1 Read Failed <xx>	<p>Indicates that the read from the right slot (1) NV memory failed. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code. If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <ul style="list-style-type: none"> 02 Power failure 08 Uncorrectable error in last page of a transfer 24 Command failed due to uncorrectable errors 25 Invalid page number received 26 Transfer count failure 27 Transfer count failure 2c Uncorrectable error 30 Timing error 34 Backup FIFO values disagree with primary FIFO 35 Bad command received 36 Bad command received 37 Invalid page number received 40 Successful completion 44 Uncorrectable error in last page transferred 48 Correctable errors occurred 4c Uncorrectable error in last page transferred 80 NV Memory circuit is busy 	H	ControlFile
169	NV Mem 1 Write Failed <xx>	<p>Indicates that the write to the right slot (1) NV memory failed. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code. If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <ul style="list-style-type: none"> 02 Power failure 08 Uncorrectable error in last page of a transfer 24 Command failed due to uncorrectable errors 25 Invalid page number received 26 Transfer count failure 27 Transfer count failure 2c Uncorrectable error 30 Timing error 34 Backup FIFO values disagree with primary FIFO 35 Bad command received 36 Bad command received 37 Invalid page number received 40 Successful completion 44 Uncorrectable error in last page transferred 48 Correctable errors occurred 4c Uncorrectable error in last page transferred 80 NV Memory circuit is busy 	H	ControlFile

No.	Message	Description	List	Alarm Area
170	NV Mem 1 Header Table Invalid	The header table in the NV memory 1 (right slot) was invalid.	H	ControlFile
171	NV Mem 1 Configuration Update Failure	The attempt to update NV Memory 1 failed. 1 indicates the right hand slot.	S	ControlFile
172	NV Mem 1 Card is Missing	The NV memory card 1 (right slot) was either not present or was switched off.	H	ControlFile
173	NV Mem 1 Removal Requested <xx>	The NV memory card 1 (right slot) has had the switch turned off, which indicates it is to be removed. NOTE: <xx> is 300 for a Bubble NV memory card. For a RAM NV memory card it is a number that indicates the current draw of the memory chips. The high current thresholds are: 1 Meg card: 49 2 Meg card: 108 4 Meg card: 168	H	ControlFile
174	NV Mem 1 Hdr Table Retry Executed <x>	NV memory 1 (right slot) has been unable to: 0 Write to a configuration. The write is retried. 1 Read a configuration. The configuration is initialized and the read is retried.	H	ControlFile
175	NV Mem 1 Program Images Bad	The program images within the NV memory 1 (right slot) were not valid.	H	ControlFile
176	NV Mem 1 Opt. Controller Image # <x> Bad	An NV memory 1 (right slot) controller image was bad. <x> is the image number.	H	ControlFile
177	NV Mem 1 Config Checksum Bad	When the Controller Processor configuration area is stored in the NV memory, a checksum is performed. The configuration is then re-read, and another checksum is performed. The two checksums did not match. NV memory 1 (right slot).	H	ControlFile
178	NV Mem 1 CP Config for Different Node	The CP configuration storage in NV memory 1 (right slot) was for a different node.	S	ControlFile
179	FIM 30 Volt Power Failure	One or both of the FIM 30-Volt power inputs has failed.	H	ControlFile
180	Undefined Folder Type	During the last disk operation the folder used was the folder indicated. There is an error in the disk system, or the software is incompatible if the folder type is undefined.	D	Disk
200	Selftest failed for Board <xx>	A keyboard on the MTCC failed its selftest. <xx> represents keyboard numbers: 1 - Keyboard Interface 4 - Options Panel #1 2 - Operators Keyboard 5 - Options Panel #2 3 - Trackball 6 - Options Panel #3	H	Console

No.	Message	Description	List	Alarm Area
201	Excessive Comm Errors to Keyboards	Communications between the MTCC keyboards and the console card cage were reporting errors. The printer interface, the keyboard interface, or one of the keyboards is bad and should be replaced.	H	Console
202	Folder Used: <xx>	The folder used in the disk folder operations.	D	Disk
203	Batch node: task <xx> not owned	The console does not own the batch task, so the requested disk function (i.e. BATCH LOAD TRANSFER) did not execute.	D	Console
204	DS: <xx> blk(s) Saved	Acknowledges the number of blocks successfully saved on a Disk Save command.	D	Disk
205	DR: <xx> blk(s) Restored	Acknowledges the number of blocks successfully restored on a Disk Restore command.	D	Disk
206	Vol Name Change Node <node>. Update DDP Scrn	The volume name of a disk was changed and the Disk Directory PeerWay screen must be updated to indicate the new disk name correctly for any further disk functions.	D	Disk
207	DX: Uninitialized Disk in Drive <xx>	The disk in the drive indicated is uninitialized. All disks must be initialized before they can be used on the RS3 system.	D	Disk
208	DI: Fail with Node: Drive = <xx>	The disk initialization function failed at the drive indicated. The disk initialization should be retried, and if it fails again the disk should be replaced. If this fails also, a second drive should be tried.	D	Disk
209	DS: Blk <address> Not Configured	The block indicated for the disk save function is not configured. Unconfigured blocks cannot be saved to disk.	D	Disk
210	DX: Controller Error = <address>	During a disk operation with a Controller Processor (or any other device such as a NV memory) the console encountered errors and the disk function was aborted. The function should be retried, and if this fails, troubleshooting procedures should be followed to isolate the bad card at the destination node.	D	Disk
211	DX: Badly Formed Block Address	The disk system found a corrupted block address on the disk and has stopped the disk function. Try the disk in another drive and, if this fails, it may be necessary to use an alternate disk. If no other disks are available it is possible to load all other blocks from that disk. These must be found experimentally by loading small groups of blocks until the faulty block is found and then loading all blocks after the corrupted block. The corrupted block will then have to be reconstructed manually.	D	Disk
212	DX: Blk <address> Not on Disk	Disk function cannot be completed because the block address listed in the alarm is not in the disk file.	D	Disk

No.	Message	Description	List	Alarm Area
213	DX: CRC Error	The CRC (Cyclical Redundancy Check) error check failed for the sector of the media being checked. If the media is a floppy disk, it is most likely bad. Recover all data that you can and throw the disk away. This error may occur with tape drives and hard disks as well. It generally indicates a problem with the media.	D	Disk
213	DX: Static Section Mismatch	This error occurs during an attempted read to a Comp Block (either ControlBlock or I/O Block) through a Disk Load Transfer, Disk Block Verify, or other read operations. It can indicate: corrupt file bad disk disk anomaly You can verify which file may be corrupt by checking the Disk Event List for this DX: event following the operation on any single block.	D	Disk
213	DX: Not enough room in NV Mem	The CP or controller is out of memory. Try deleting files or upgrading to a larger NV Memory board.	D	Disk
213	DX: CSB Not Loaded Due to Size Mismatch	CSB is the Controller Status Block (block 0). This error often occurs when attempting to load entire controllers. If the operation is a Disk Load Transfer, load Comp Blocks and I/O Blocks separately to avoid this error.	D	Disk
213	DX: Could Not Read/Write Block (<xx> Attempts)	The attempt to Read or Write to a Block has failed. One possible explanation is a corrupted file, or an attempt to load a tape with a bad sector.	D	Disk
213	DX: Failed to Win SCSI Bus	The master device detects a "Bus Free" state, but is unable to control the bus when it tries to connect to another device during power-up.	D	Disk
213	DX: No Response to Arb for SCSI Bus	A master device on the SCSI Bus is unable to arbitrate for the bus's time. Re-booting the console might be necessary.	D	Disk
213	DX: Seek Complete Signal Missing	When a read of a disk sector is made, the read/write head seeks the proper sector and track of the disk. It then generates a "seek complete" signal. If the signal does not appear within a specified time frame (approximately 500 mS) then this alarm is generated.	D	Disk
213	DX: <message>	This is from the disk system. The <message> text indicates the problem or result. Several alarms can occur with or without the DX: prefix. Check the Alphabetical list of Alarm Messages under the heading DX:.	D	Disk
213	DX: Target Timeout Error	This is a low-level communication error that can be the result of a missed message between consoles. It is not necessarily a direct effect of any user commands, and is a low-probability, low-impact error. The consoles will automatically attempt to re-send any message that times out.	D	Disk

No.	Message	Description	List	Alarm Area
214	DR: Controller Error, Link <link>	A problem occurred with the link indicated in the address in the alarm. The Controller Processor won't let the link load. There may be too many links or there is some other link violation. It may be necessary to use the Disk Virtual Controller function in order to check the links.	D	Disk
215	Excessive Errors in RTC RAM	Bad RTC RAM on the printer interface board.	H	Disk
216	DI: Comm Error Disk Node = <node>	During a Disk Initialize function a communications error was encountered on the PeerWay system. All disk functions go through the PeerWay system even though the disk function is at the same node. The function should be retried, and if this fails the PeerWay Overview screen should be checked for errors.	D	Disk
217	DS: Comm Error Node = <node>	During a Disk Save function a communications error was encountered on the PeerWay system. All disk functions go through the PeerWay system even though the disk function is at the same node. The function should be retried and if this fails the PeerWay overview screen should be checked for errors.	D	Disk
218	DX: Comm Error Node = <node>	During some disk function a communications error was encountered on the PeerWay system. All disk functions go through the PeerWay system even though the disk function is at the same node. The function should be retried and if this fails the PeerWay overview screen should be checked for errors.	D	Disk
219	DX: Disk Timeout Node = <node>	The disk system is trying to issue a command to the drive and the drive did not respond in a predetermined time. This may indicate a drive or Disk Interface card fault.	D	Disk
220	DX: Delay Disk Write Err = <node>	The information on the Disk Interface card RAM could not be loaded to the disk or loaded to the Controller Processor.	D	Disk
221	DI: Init Complete Node: Drive = <xx>	The Disk Initialize function performed to the drive indicated was successfully completed.	D	Disk
222	DX: Comm Error Node = <node>	During some disk function a communications error was encountered on the PeerWay system. All disk functions go through the PeerWay system even though the disk function is at the same node. The function should be retried and if this fails the PeerWay overview screen should be checked for errors.	D	Disk
223	<xx> Files Successfully Backed Up	Indicates a completed Folder Backup operation and shows the number of files that were restored.	D	Disk
224	DL: Cont Program Loaded to Node <node>	The controller image was successfully loaded to the ControlFile memory card.	D	Disk

No.	Message	Description	List	Alarm Area
225	DL: CP Programs Loaded to Node <node>	The coordinator processor images were successfully loaded to the ControlFile memory card.	D	Disk
226	DL: Program File Empty or Bad	The program in the file accessed was empty, corrupted, or deleted. Another disk should be used.	D	Disk
227	<xx> Files Successfully Restored	Folder Restore successful.	D	Disk
228	Virtual Controller Turned OFF	The Disk Virtual Controller function was turned off.	D	Disk
229	Virtual Controller Turned ON	The Disk Virtual Controller function was turned on. All ControlFile access is suspended until the Disk Virtual controller is turned off or the operator key is removed and reinserted to turn it off.	D	Disk
230	Disk File Restore Completed, <xx> Sector(s)	The Disk file restore from tape was successfully completed. <xx>= the number of disk sectors restored.	D	Disk
231	Disk File Restore Aborted	Disk file restore function was aborted because of an error on the tape, disk, or one of the consoles involved. Check Console Disk Event List, as well as Hardware Alarm List of other alarms indicating the cause.	D	Disk
232	Node <node> is not set up to print reports	The console address configured to print the report could not print reports.	D	Disk
233	No Room On Disk For Requested Operation	The disk function requested could not be completed because there was insufficient room on the target disk.	D	Disk
234	<xx> Configurations Restored from Disk	The number of configuration types loaded into console memory. Configuration types include message pairs, group configurations, trend configurations, etc.	D	Disk
235	<xx> Configurations Saved to Disk	The number of configuration types saved to disk from console memory. Configuration types would include message pairs, group configurations, trend configurations, etc.	D	Disk
236	DS: Low Address <address>	The low address saved to disk in the Plant Configuration file. All blocks between this address and the High Address also indicated in the Disk Event List were saved to disk. The total number of blocks included is also indicated.	D	Disk
237	DS: High Address <address>	The high address saved to disk in the Plant Configuration file. All blocks between this address and the Low Address also indicated in the Disk Event List were saved to disk. The total number of blocks included is also indicated.	D	Disk

No.	Message	Description	List	Alarm Area
238	DR: Low Address <address>	The low address loaded to the Controller Processor in the Plant Configuration file. All blocks between this address and the High Address also indicated in the Disk Event List were loaded. The total number of blocks included is also indicated.	D	Disk
239	DR: High Address <address>	The high address loaded to the Controller Processor in the Plant Configuration file. All blocks between this address and the Low Address also indicated in the Disk Event List were loaded. The total number of blocks included is also indicated.	D	Disk
240	Folder clean complete, <xx> files(s) deleted	Indicates a completed Folder Clean operation and shows the number of files that were deleted.	D	Disk
241	<xx> Blocks have been modified	The number of blocks that have configuration differences between the Controller Processor configuration and the disk file during the Controller Block Verify operation.	D	Disk
242	DC: Controller Low <address>	The low controller address used in a configuration copy or update. All addresses between this address and the high address were copied or updated.	D	Disk
243	DC: Controller High <address>	The high Controller Processor address used in a configuration copy or update. All addresses between this address and the low address were copied or updated.	D	Disk
244	DX: Bad File Type for Cmd <command>	The file type found in a disk operation did not match the folder type specified.	D	Disk
245	LE: Address Modified in <x>	The Link Editor has modified addresses in <x>.	D	Disk
246	DTR: Trans/Restore to <address>	The destination Controller Processor or ControlFile address to which the disk plant configuration was successfully transferred.	D	Disk
247	DX: Req Ignored Cmd <xx> Pending	The disk function requested has not been done because there is another disk function currently in operation to the disk drive specified.	D	Disk
248	File Found on Node: Drive = <node:drive>	Tell the node and drive number where the file was found for the function requested.	D	Disk
249	DC: Copied <xx> Config Blk(s)	The number of blocks successfully copied from one file to another in a Disk File Copy function.	D	Disk
250	DCU: Copy/Update <xx> Blk(s)	The number of blocks successfully updated to the new block size and copied from one file to another in a Disk File Update Copy function.	D	Disk
251	FIC Program Load to <address> Successful	An operator-initiated FIC download successfully completed.	D	Disk

No.	Message	Description	List	Alarm Area
252	FIC Program Load to <address> Unsuccessful	An operator-initiated FIC download was unsuccessful. The FIC card probably is not returning valid process values.	D	Disk
253	KC: <xx> Controllers Cleared	The number of Controller Processor configurations cleared in a Kill Controller function. (Only one Controller Processor may be cleared for each command.)	D	Disk
254	Incompatible FIC program for FIC <xx>	The version number of the FIC is incorrect.		ControlFile
255	Disk file name: <name>	Disk file name used for the disk function. Note that only the first four characters of the file name are used in the disk alarm.	D	Disk
256	DX: Disk Folder Full	The disk is full and no more data may be stored on the disk. Either a new disk must be used or existing data on the disk must be deleted. NOTE: Deleting a Console Program does not create any new disk space.	D	Disk
257	Cannot Unlock File <name>	This file cannot be unlocked—another console or disk operation is currently writing to this file.	D	Disk
258	SCI Periodic Data Lost <xx>	A database refresh started before another refresh has ended. As a result, late replies are incorrectly time-stamped.	S	Console
259	SCI Failed Periodic Read of <tag>	Four database refreshes failed for the specified block.	S	Console
260	Floppy Drive Error: <xx>	Floppy drive system error. <xx> indicates the error type.		Disk
261	DX: No Controller at <address>	No Controller Processor is present at this node in this slot.	D	Disk
262	PeerWay Boot of CP Node <node> Unsuccessful	Console PeerWay boot was unsuccessful.	D	Disk
263	PeerWay Boot of CP Node <node> Successful	Console PeerWay boot was successful. A valid CP image must now be downloaded to the NV memory.	D	Disk
266	Disk File Copy Done, <xx> Sector(s) Copied	The number of sectors copied during the successful disk file copy.	D	Disk
267	DXD: Disk File Delete Done	The disk file delete function was successful.	D	Disk
268	DXR: Disk File Rename Done	The disk file rename function was successful.	D	Disk
269	Wrong Type of Boot Image for Operation	The image in the NV memory does not match Controller Processor image jumper settings.	D	Disk

No.	Message	Description	List	Alarm Area
270	NV Mem Wiped for Controller <address>	Indicates that the wipe NV memory function was successful and the configuration was erased. <address> represents the node ControlBlock address.	S	ControlFile
271	Disk Copy Successful <xx> Sector (s)	Disk copy successful. <xx> represents the number of sectors copied.	D	Disk
272	Disk at <node:drive> Write Protected	Indicates the disk is write protected at the node indicated. If you wish to write to the disk, you must remove the write protect tab.	D	Disk
273	Disk Copy Aborted after <xx> Sector(s)	The disk copy was aborted because of an error on the source disk. The number of sectors successfully copied to the destination disk is indicated also. The function should be retried and if the error message is repeated, a new source disk should be used. If no other source disk is available the individual files may be copied (with the exception of the Console Configuration files) until the corrupted file is located. If the individual Controller Processor address that is corrupted is located, the rest of that file may be copied by using a configuration copy function. The corrupted block must be reconstructed manually. Only Plant Configuration files may be copied in this manner.	D	Disk
274	Disk File Copy Aborted, <xx> Sector(s)	The disk file copy was aborted because of an error on the source disk. The number of sectors successfully copied to the destination disk is also indicated. The function should be retried and if the error message is repeated, a new source disk should be used. If no other source disk is available a plant configuration file may be copied in sections using the Configuration Copy function until the corrupted address is located. When the individual Controller Processor address that is corrupted is located, the rest of that file may be copied by using a configuration copy function. The corrupted block must be reconstructed manually. Only Plant Configuration files may be copied in this manner.	D	Disk
275	Disk File Backup Completed, <xx> Sector(s)	The Disk File Backup to tape function has been successful and the number of sectors used is also indicated.	D	Disk
276	Disk File Backup Did Not Complete	Because of a disk error the Disk File Backup to tape was aborted. The function should be retried and if this fails, another disk should be used. If this fails also, another disk drive or tape drive should be used.	D	Disk
277	Uninitialized or Wrong Tape at Node <xx>	The tape function was aborted because the tape at the node indicated is incompatible or has not been initialized. The tape should first be initialized using the procedure in the Disk and Tape Manual and the function restarted.	D	Disk
278	Disk Create Boot Program Done	Indicates successful boot image creation.	D	Console, Disk
279	Disk Folder Delete Done	Folder Delete function was successful. All files in the folder were deleted.	D	Disk

No.	Message	Description	List	Alarm Area
280	Reached End of Tape Node: Drive = <node:drive>	The end of tape was reached for the tape function at the node indicated.	D	Disk
281	Tape Init Complete Node: Drive = <node:drive>	The Tape Initialize function successfully completed at the node and drive indicated.	D	Disk
282	Tape Init Failed Node: Drive = <node:drive>	The Tape Initialize function was aborted because of media or tape drive errors. The function should be retried and, if this fails, another tape should be used. If this fails also, a second tape drive should be used.	D	Disk
283	Tape Load Complete Node: Drive = <node:drive>	A tape load at the indicated node address was successfully completed.	D	Disk
284	Tape Load Failed Node: Drive = <node:drive>	The Tape Load function was aborted because of media or tape drive errors. The function should be retried and, if this fails, another tape should be used. If this fails also, a second tape drive should be used.	D	Disk
285	Tape Unload Complete Node: Drive = <node:drive>	A tape unload at the indicated node address was successfully completed.	D	Disk
286	Tape Unload Failed Node: Drive = <node:drive>	The Tape Unload function was aborted because of media or tape drive errors. The function should be retried and, if this fails, another tape should be used. If this fails also, a second tape drive should be used.	D	Disk
287	Image Backup Successful, <xx> Sector(s)	The Disk Image Backup function was completed. The tape successfully stored the full hard disk image.	D	Disk
288	Image Backup Failed Node: Drive = <node:drive>	The Disk Image Backup to tape function was aborted because of media or tape drive errors. The function should be retried and, if this fails, another tape should be used. If this fails also, a second tape drive should be used.	D	Disk
289	Image Restore Successful Node: Drive = <node:drive>	The disk Image was successfully restored to the hard disk drive from tape.	D	Disk
290	Image Restore Failed Node: Drive = <node:drive>	The Disk Image Restore from tape to hard disk tape function was aborted because of media or tape drive errors. The function should be retried and, if this fails, an alternate tape should be used. If this fails also, a second tape drive should be used. If no alternate tape is available, the tape must be reconstructed using existing configurations, if possible.	D	Disk

No.	Message	Description	List	Alarm Area
291	Load PeerWay I/F Config Unsuccessful	The SCI, Diogenes I/F, HIA, RFI or other PeerWay I/F configuration load was aborted due to faulty media. An alternate disk should be used. If this fails, a second drive should be used. If no alternate disk is available, the configuration should be entered manually.	D	Disk
292	Save PeerWay I/F Config Successful	The SCI, Diogenes I/F, HIA, RFI or other PeerWay I/F configuration save to disk was successful.	D	Disk
293	Save PeerWay I/F Config Unsuccessful	The SCI, Diogenes I/F, HIA, RFI or other PeerWay I/F configuration save was aborted. A second disk should be used. If this fails, a second drive should be used.	D	Disk
294	Communication Error with PWIF node	Function was aborted because of communications problems on the PeerWay. The PeerWay Overview screen should be checked for error indications.	H	Disk
295	Load PeerWay I/F Config Successful	The SCI, Diogenes I/F, HIA, RFI or other PeerWay I/F configuration load was successfully loaded to the node.	D	Disk
296	Load PeerWay I/F Program Unsuccessful	The SCI, Diogenes I/F, HIA, RFI or other PeerWay I/F Program load was aborted due to faulty media. An alternate disk should be used. If this fails a second drive should be used.	D	Disk
297	Load PeerWay I/F Program Successful	The SCI, Diogenes I/F, HIA, RFI or other PeerWay I/F Program was successfully loaded to the node.	D	Disk
298	Save PeerWay I/F Program Unsuccessful	The SCI, Diogenes I/F, HIA, RFI or other PeerWay I/F save to disk was aborted. A second disk should be used. If this fails, a second drive should be used.	D	Disk
299	Save PeerWay I/F Program Successful	The SCI, Diogenes I/F, HIA, RFI or other PeerWay I/F Program save to disk was successfully completed.	D	Disk
300	Node Restarted	The console or PeerWay I/F node has been restarted by a power-up operation, reset by a "Control C" command, or reset because of a hardware or software problem.	H	Console
301	Printer Not Ready	A print command was pending for more than 60 seconds without printing. It usually indicates that the printer is off line or shut off, or a fault with the printer is preventing the printout.	H	Console
302	Real Time Lost On Power Up	Upon power-up, the internal console clock time indicated a date before January 1, 1980.	H	Console
303	Time Adjustment: <xx> Seconds	The system time has been adjusted "xx" seconds due to the time correction feature on the Console Configuration screen.	H	Console
304	Node Appeared	The node started to communicate on the PeerWay.	H	Console
305	Node Vanished	The node is not communicating on the PeerWay.	H	Console

No.	Message	Description	List	Alarm Area
306	Keyboard Bad	The alphanumeric keyboard has been detected as bad by the processor. The cable connections should be checked or the keyboard replaced.	H	Console
307	Power Supply Failure <xx>	The voltage indicated in the alarm was out of tolerance on the console power regulator.	H	Console
308	File <x> in use. Cannot Read File	File <x> is in use by some other process.	D	Disk
309	Console, Weak RAM chip Bit <xx>	Indicates that a hardware error in one of the 22 RAM chips has been detected by the Error Detection And Correction (EDAC) circuit on the console processor board. The console may operate satisfactorily for a period of time, but the card should be replaced at the earliest possible time.	H	Console
310	PeerWay <number> A Problem	A fault was detected on PeerWay A. The PeerWay Overview screen should be used to determine the origin of the fault.	H	Console
311	PeerWay <number> B Problem	A fault was detected on PeerWay B. The PeerWay Overview screen should be used to determine the origin of the fault.	H	Console
312	PeerWay Node Problem	The node is not communicating properly on the PeerWay. This alarm is more generic than other PeerWay alarms, and can indicate a variety of problems. Some common solutions: Check the PeerWay Tap Box connection; Check the PeerWay Node screen for red or yellow numbers indicating alarm conditions. The PeerWay may be overloaded with messages. Possible PeerWay Node screen fields that might indicate the cause of this alarm include a combination of relationships between: Badecho, noecho, timeout, coupler, and #sent fields.	H	Console
313	PeerWay Duplicate Node	The node detected another node on the PeerWay with the same node address.	H	Console
314	PeerWay Jumpers Bad	The node jumpers of the ControlFile were detected as indicating different nodes. Both sets of jumpers must be set the same.	H	Console
315	PeerWay <number> Margin Forced	The PeerWay margin was forced to some value other than the normal automatic setting.	H	Console
316	Remote Printout Failed	A print request sent to another node for printing failed.	H	Console
317	Console EPROM Checksum Error	Indicates that the Boot ROMs on the Console encountered a checksum error during the background diagnostic test. The OI processor card should be replaced as soon as possible. The card should continue to function; however, if there is a restart required the console may not start up.	H	Console

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No.	Message	Description	List	Alarm Area
319	Front Panel Disconnected	The ribbon cable connecting the MiniConsole motherboard to the front panel is disconnected at either end, or is damaged.	H	Console
320	Queue Full - Alarms Lost	The alarm print buffer was full and did not print alarm lists. Some of the alarms generated may not be printed.	H	PWay I/F
321	NV Mem Initialize Failed <xx>	<p>The PeerWay interface could not successfully initialize its NV memory card. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code.</p> <p>If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <ul style="list-style-type: none"> 02 Power failure 08 Uncorrectable error in last page of a transfer 24 Command failed due to uncorrectable errors 25 Invalid page number received 26 Transfer count failure 27 Transfer count failure 2c Uncorrectable error 30 Timing error 34 Backup FIFO values disagree with primary FIFO 35 Bad command received 36 Bad command received 37 Invalid page number received 40 Successful completion 44 Uncorrectable error in last page transferred 48 Correctable errors occurred 4c Uncorrectable error in last page transferred 80 NV Memory circuit is busy 	H	PWay I/F

No.	Message	Description	List	Alarm Area
322	NV Mem FIFO Reset Failed <xx>	<p>The PeerWay interface could not successfully reset the FIFO buffers on its NV memory card. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code. If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <ul style="list-style-type: none"> 02 Power failure 08 Uncorrectable error in last page of a transfer 24 Command failed due to uncorrectable errors 25 Invalid page number received 26 Transfer count failure 27 Transfer count failure 2c Uncorrectable error 30 Timing error 34 Backup FIFO values disagree with primary FIFO 35 Bad command received 36 Bad command received 37 Invalid page number received 40 Successful completion 44 Uncorrectable error in last page transferred 48 Correctable errors occurred 4c Uncorrectable error in last page transferred 80 NV Memory circuit is busy 	H	PWay I/F
323	NV Mem Write Failed <xx>	<p>The PeerWay interface could not successfully write to its NV memory card. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code. If the alarm recurs often, replace the NV Memory board.</p> <p>NOTE: <xx> may be:</p> <ul style="list-style-type: none"> 02 Power failure 08 Uncorrectable error in last page of a transfer 24 Command failed due to uncorrectable errors 25 Invalid page number received 26 Transfer count failure 27 Transfer count failure 2c Uncorrectable error 30 Timing error 34 Backup FIFO values disagree with primary FIFO 35 Bad command received 36 Bad command received 37 Invalid page number received 40 Successful completion 44 Uncorrectable error in last page transferred 48 Correctable errors occurred 4c Uncorrectable error in last page transferred 80 NV Memory circuit is busy 	H	PWay I/F

No.	Message	Description	List	Alarm Area
324	NV Mem Read Failed <xx>	The PeerWay interface could not successfully read from its NV memory. The code in the alarm is generated by the NV memory board circuitry and is passed along as an error code. If the alarm recurs often, replace the NV Memory board. NOTE: <xx> may be: 02 Power failure 08 Uncorrectable error in last page of a transfer 24 Command failed due to uncorrectable errors 25 Invalid page number received 26 Transfer count failure 27 Transfer count failure 2c Uncorrectable error 30 Timing error 34 Backup FIFO values disagree with primary FIFO 35 Bad command received 36 Bad command received 37 Invalid page number received 40 Successful completion 44 Uncorrectable error in last page transferred 48 Correctable errors occurred 4c Uncorrectable error in last page transferred 80 NV Memory circuit is busy	H	PWay I/F
325	NV Mem Program Image Bad	A periodic check of the programs stored in the PeerWay interface NV memory found the programs missing or corrupt. It is normal to see this alarm while downloading programs into the NV memory.	H	PWay I/F
327	Power Reg: <xx> Volts Bad	The console or PeerWay interface power regulator detected a fault with the indicated voltage.	H	PWay I/F
328	PWIF: Weak RAM Chip, Bit <xx>	A hardware error has been detected in one of the 22 memory chips on the PeerWay interface processor. The PeerWay interface may operate properly for a period of time; however, the processor should be changed at the earliest opportunity.	H	PWay I/F
329	ROM Checksum Failed	A periodic check of the PeerWay Interface boot programs stored in EPROM failed. The PeerWay interface may not be able to restart if turned off.	H	PWay I/F
330	SCI Using Default Configuration	The PeerWay Interface could not find a configuration, or found a corrupt configuration. All configuration items use default values.	H	PWay I/F
331	WARNING: Some alarms have been ignored	A flood of alarms has occurred and some alarms may have been lost.		
332	Report config problems, see report status	A problem occurred in Report configuration. For further information, see Report Status screen.	S	Console

No.	Message	Description	List	Alarm Area
333	Too many reports, see report status	Too many reports were scheduled. The Report Status List should be checked to identify the report. It is possible that an alarm or time event is scheduling the report.	S	Console
334	Problems initializing reports	The Report pointer to configuration files is corrupted on the disk. Check the Report Status screen. May have to delete the report configuration file or directory.	S	Console
335	Report <name>, failed include	The report that was to be included in the indicated report was not printed as a part of the complete report. Either the report did not satisfy the criteria, or there were problems reading the report.	S	Console
336	Disk Reconfiguration Completed	The Disk Configuration was successfully completed.	D	Disk
337	File error, skipping report <name>	Indicates that the report will not print. Check the Report Status List for the specific report and reason for the problem. (1) "Print file in process": Change the report name and generate. (2) Error reading the file header: The configuration file will have to be deleted. (3) Printer problem: There is a problem with the designated printer.	S	Console
338	Report print problem, see report status	A problem occurred in Reports. For further information see the Reports Status screen.	S	Console
339	Write error in report <name>	An error occurred in the report indicated. The Report does not generate until the error is corrected. The alarm may also indicate a disk error. Report configuration should be recopied from backup tape.	H	Console
340	Folder currently in use by node <node>	The disk folder function requested cannot be completed because the folder is currently in use by the node indicated.	D	Disk
341	Folder backup complete, <xx> file(s) copied	A folder successfully backed up to tape during the Folder backup operation.	D	Disk
342	Folder file chk done, <xx> file(s) deleted	The number of files that were deleted during the manually initiated Folder File Check. Files can be corrupted if the console is powered down while a file write is in progress.	D	Disk
343	Bad file deleted by file system check	A file was detected as corrupt and was deleted from the disk during a power-up diagnostic file check. Files can be corrupted if the console is powered down while a file write is in progress.	D	Disk
344	Block <address> missing in controller	Address of the block that was not in the Controller Processor but was in the disk file during the Plant Configuration Verify operation.	D	ControlFile

No.	Message	Description	List	Alarm Area
345	Block <address> additional in controller	Address of the block that was in the Controller Processor, but not the disk file, during the Plant Configuration Verify operation.	D	ControlFile
346	Static section difference: block <address>	A block in the Controller Processor showed a difference in configuration of the static section compared to the disk file during the Controller Block Verify operation.	D	ControlFile
347	<xx> block(s) missing in controller	The number of blocks that were not in the Controller Processor configuration compared to the disk file during the Controller Block Verify operation.	D	ControlFile
348	<xx> block(s) additional in controller	The number of blocks that were in the Controller Processor compared to the disk file during the Controller Block Verify operation.	D	ControlFile
349	<xx> block(s) verified identical	The number of blocks in the disk file that were the same as the Controller Processor configuration during the Controller Block Verify operation.	D	ControlFile
350	Trend Volume Not Found	The volume name indicated on the Trend File Setup screen could not be found in the console.	S	Trend
351	Trend Recording Disabled	Trend recording was disabled for the console indicated.	S	Trend
352	Trend Recording Enabled	Trend recording was enabled for the console indicated.	S	Trend
353	Trend File Overflow Warning	The trend volume will be full when time set on the Trend File Setup screen has elapsed, and will then begin writing over the oldest data. Save data to tape or disk.	S	Trend
354	Trend History Data Not Found	The trending information (time and date as requested) was not on the History Volume entered on the Trend File Setup screen.	S	Trend
355	Trend File Header Error	Trending data could not be retrieved because of corrupted information on the disk.	H	Trend
356	Trend Record Header Error	Trending data could not be retrieved because of corrupted information on the disk.	H	Trend
357	Bad Trend Read Count	Trending data cannot be retrieved because of corrupted information on the disk.	H	Trend
358	Trend Read Error, File <xx>	Trending data from the file indicated could not be retrieved because of corrupted information on the disk.	H	Trend
359	Trending Time Sync. Error	A trending process did not receive all of the requested trend data within the five second time limit. Some data may have been lost. This may be caused by message delays due to high priority messages or routing delays over an HIA.	H	Trend

No.	Message	Description	List	Alarm Area
360	Trend File 1 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost); or a new disk used. The system automatically creates a new Trend File.	S	Trend
361	Trend File 2 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost), or a new disk used. The system automatically creates a new Trend File.	S	Trend
362	Trend File 3 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost), or a new disk used. The system automatically creates a new Trend File.	S	Trend
363	Trend File 4 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost), or a new disk used. The system automatically creates a new Trend File.	S	Trend
364	Trend File 5 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost), or a new disk used. The system automatically creates a new Trend File.	S	Trend
365	Trend File 6 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost), or a new disk used. The system automatically creates a new Trend File.	S	Trend
366	Trend File 7 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost), or a new disk used. The system automatically creates a new Trend File.	S	Trend
367	Trend File 8 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost), or a new disk used. The system automatically creates a new Trend File.	S	Trend

No.	Message	Description	List	Alarm Area
368	Trend File 9 Incompatible Config.	The Trend File Configuration was changed and the new configuration is not compatible with the old configuration. The Trend File must be: renamed, deleted (the information in the file will be lost), or a new disk used. The system automatically creates a new Trend File.	S	Trend
369	Trend Write Error, file <xx>	A media error was encountered while transferring the trending data to the file indicated on the disk. The console hard disk should be checked out thoroughly.	H	Trend
370	Trend File 1 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend
371	Trend File 2 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend
372	Trend File 3 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend
373	Trend File 4 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend
374	Trend File 5 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend
375	Trend File 6 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend
376	Trend File 7 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend
377	Trend File 8 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend
378	Trend File 9 Not Mounted	The console is trying to access a trend file that is in use by another console sharing the same disk.	D	Trend
379	Trend Time Write Error, file <xx>	Trending time data could not be written to the file indicated on the disk because of media error. The console hard disk should be checked out thoroughly.	H	Trend
380	Trend File 1 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend
381	Trend File 2 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend
382	Trend File 3 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend
383	Trend File 4 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend
384	Trend File 5 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend

No.	Message	Description	List	Alarm Area
385	Trend File 6 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend
386	Trend File 7 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend
387	Trend File 8 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend
388	Trend File 9 Overflow	The trend system deleted the secondary file and has created a new primary file for the file number indicated.	S	Trend
389	Trend Fswitch Error, file <xx>	A media error to the file indicated was encountered on the Command Console hard disk drive when the console tried to change the trend file name from "trf1" (or to the file indicated) to "trf1b" to allow backup to tape. The hard disk drive should be checked out thoroughly.	H	Trend
390	Trend file trf1b ready for backup	Trend file name "trf1" has been changed to "trf1b" and trf1b can now be backed up to tape or disk.	S	Trend
391	Trend file trf2b ready for backup	Trend file name "trf2" has been changed to "trf2b" and trf2b can now be backed up to tape or disk.	S	Trend
392	Trend file trf3b ready for backup	Trend file name "trf3" has been changed to "trf3b" and trf3b can now be backed up to tape or disk.	S	Trend
393	Trend file trf4b ready for backup	Trend file name "trf4" has been changed to "trf4b" and trf4b can now be backed up to tape or disk.	S	Trend
394	Trend file trf5b ready for backup	Trend file name "trf5" has been changed to "trf5b" and trf5b can now be backed up to tape or disk.	S	Trend
395	Trend file trf6b ready for backup	Trend file name "trf6" has been changed to "trf6b" and trf6b can now be backed up to tape or disk.	S	Trend
396	Trend file trf7b ready for backup	Trend file name "trf7" has been changed to "trf7b" and trf7b can now be backed up to tape or disk.	S	Trend
397	Trend file trf8b ready for backup	Trend file name "trf8" has been changed to "trf8b" and trf8b can now be backed up to tape or disk.	S	Trend
398	Trend file trf9b ready for backup	Trend file name "trf9" has been changed to "trf9b" and trf9b can now be backed up to tape or disk.	S	Trend
399	Trend Queue <xx> Overflow	The trending queues were full because the disk has been too busy to process all the data. Trending information was lost. (<xx> = File number.)	S	Trend
400	Report generation INITIALIZING	The report system was initialized.	R	Console
401	Report generation ACTIVE	Reports were enabled when the Report system started on boot-up after initialization of the report queue.	R	Console
404	Report skipped	Because of problems in the report generation, the report was skipped.	R	Console

No.	Message	Description	List	Alarm Area
405	Starting a report generation	A report generation successfully initiated.	R	Console
407	Kicked off an AUTO-PRINT	A report generation has been triggered by logic or time, as configured in the report configuration.	R	Console
408	Report made ACTIVE	The active flag on the report was changed from no to yes. This is seen on the Report Status Screen.	R	Console
409	Report made INACTIVE	A report's active status was changed from yes to no. This message is displayed on the REPORT STATUS screen.	R	Console
411	Reports: Print failed	The printer was not in operation at the time the report was scheduled, or the printer was configured in error, or was very busy.	H	Console
412	Report file generation completed	The report system successfully completed a report generation.	R	Console
417	DL: MPCAT Program Loaded to node <address>	The disk load of the MPCAT image was successful.		
419	No Tape or Floppy Disk Drive Found	Occurs when the RS3 cannot detect the presence of a tape or floppy drive. You should check your cable connections. This error may also occur when a disk-only (040) console is the only storage media present. In this case, the error is merely a verification of that hardware.	S	Disk
420	DL: SMART Program Loaded to node <node>	The controller image for smart controllers was successfully loaded to the NV memory at the node indicated.	D	ControlFile
421	Log file input queue full, msg lost	The smart transmitter message queue has been filled and was not able to receive the last message sent.	S	ControlFile
422	Log file entry size error, msg lost	The last transmitter log message received was not in the format expected. The log entry was lost.	S	ControlFile
423	Communication Link Failure	The communication link between the Supervisory Computer Interface and the host computer has failed.	H	ControlFile
424	No Host Activity in <xx> Seconds	No message activity occurred between the Supervisory Computer Interface and the host computer for the indicated number of seconds.	H	ControlFile
425	File Cannot Be Used With This Node	The file is of the wrong configuration for the PeerWay interface.	S	PWay IF
426	Can't Load Old Script	The script level is not high enough. The script level must be updated on the RBLF or BAF display.	S	RBLC
428	DL: MPC Program Loaded to node <node>	The \$\$MPC image was downloaded successfully to the NV memory at the node indicated.	D	ControlFile

No.	Message	Description	List	Alarm Area
429	Node <node> Cannot Print Operator Logs	An attempt was made to print a report at a node not capable of printing reports.	H	Console
437	DL: MPCAS Program Loaded to node <address>	The \$\$MPCAS controller image was successfully loaded to the NV memory at the node indicated.	D	Disk
438	DL: PLC Program Loaded to node <node>	The controller image for PLC controllers was successfully loaded to the NV memory at the node indicated.	D	ControlFile
440	No trending room, node <node>	The Controller Processor at the node indicated was full and did not have any space to trend.	S	ControlFile
441	Illegal file name	The file name entered is incorrect.		
442	DL: MPCAP Program Loaded to node <node>	Disk load of MPCAP program was successful.		
443	Batch config load successful	The requested Batch configuration file was successfully loaded to the node requested.	D	Console
444	Batch config load unsuccessful	The requested Batch configuration file was not successfully loaded to the node requested.	D	Console
445	Batch config write successful	The requested Batch configuration file was successfully written to the disk.	D	Console
446	Batch config write unsuccessful	The requested Batch configuration file was not saved to the disk because of a problem during the attempted write.	D	Console
447	<message>	This is a user configured message from an RBLC script.	B	ControlFile
448	<message>	This is a user configured message from a batch script.	B	ControlFile
449	File Load Permission Change Successful	The requested file load permission change has been completed.	D	Disk
458	Source Floppy is Write Protected	The system is trying to write onto a floppy disk that is write protected.	D	Disk
462	DL: RBL Program Loaded to node <node>	The controller image for RBL controllers was successfully loaded to the NV memory at the node indicated.	D	ControlFile
463	DL: ATMLC Program Loaded to node <node>	The image for ATMLC controllers was successfully loaded to the NV memory at the node indicated.	D	ControlFile
464	DL: MPTUN Program Loaded to node <node>	The controller image for Auto Tuning Multi-Purpose controllers was successfully loaded to the NV memory at the node indicated.	D	ControlFile
465	Batch input not requested	No input is being requested from a Batch CP for the Batch Input screen.	D	Console

No.	Message	Description	List	Alarm Area
466	Batch File Already Up to Date	The static version of batch is currently up-to-date, and no conversion occurred. This alarm should only be seen when updating software to a new revision level.	D	Console
467	Batch File Convert Successful <node>	The static batch file conversion was successful. This alarm should only be seen when updating software to a new revision level.	D	Disk
468	Batch Static Write Bad for Node <node>	An error occurred while trying to change Batch task static configuration data, such as the task tag, file name, script names, and task ID. May be caused by having a Batch Task configured at a different software revision level than currently loaded into the ControlFile.	D	Console
469	Batch Task Too Old To Update	The batch task configuration file is too old to be updated.	B	Console
470	Batch Task was KILLED	The Batch task was killed by command on the BATCH RUN screen or from a Process Graphics Batch faceplate.	S	ControlFile
471	Batch Task was ABORTED	The Batch task was aborted by command on the Batch Run screen or from a Process Graphics Batch faceplate.	S	ControlFile
472	Batch Download failure, retrying	The console was unable to successfully download a task to a node. The script may not be found, or in use by another console. Check the Batch Log screen.	B	ControlFile
473	Batch task CRASHED	The Batch task failed due to a hardware or software problem. Check the Batch Log for details. The Task must be filled and restarted.	B	ControlFile
474	Batch FATAL runtime error	A problem in the script file prevented the task from completing normally. Check the Batch Monitor screen and the Batch Log for details.	B	ControlFile
475	Batch SOFT runtime problem	The CP executing a Batch Task was unable to complete valid program line due to an invalid, unavailable, or improperly configured alias.	B	ControlFile
476	Batch Task is HALTED	The Batch task was halted at the line indicated on the Batch Run screen for this task. Either a halt statement was executed by the task, or the halt command was used on the Batch Monitor screen for this task.	B	ControlFile
477	Batch Task is HOLDING	The Batch task was halted at the line indicated on the Batch Run screen for this task. Either a hold statement was executed by the task, or the hold command was used on the Batch Monitor screen for this task.	B	ControlFile
478	Batch waiting for operator input	A task is waiting for an operator to respond to a prompt on the Batch Input screen.	B	ControlFile
479	Batch Report System Disabled	The Batch task attempted to write to the Report system, but Reports were disabled.	B	ControlFile
480	Batch Single Node Batch CP shut down	A CP controlling Single node Batch has been shut down.	B	ControlFile

No.	Message	Description	List	Alarm Area
481	Batch Link Error <message>	<p>An error occurred in linking a batch program. The <message> explains the problem.</p> <p>Bad Highway Number: The node is not visible. May be a PeerWay access problem or HIA problem.</p> <p>Bad Node: The node number was not found.</p> <p>Bad Socket: There is no task in this node to receive the message.</p> <p>Block Not Configured: The block is not configured.</p> <p>BUSY On Link Level: The receiving PeerWay buffers are full.</p> <p>Communication Error With Controller: The Controller got a bad message.</p> <p>Controller Memory Overflow: The Controller memory is full. There is no room for the block.</p> <p>Controller Time Out: Controller did not respond within the time limit.</p> <p>Controller Got Bad Message: Received a message with a bad format.</p> <p>Invalid Entry: Possible bad configuration.</p> <p>Link Level Communication Error: Unable to write a message across the PeerWay.</p> <p>Message Reply Timeout: The message reply was lost.</p> <p>Network Communication Error: Unable to complete a message/reply transaction with another node.</p> <p>No Controller Present: No controller in slot A-H.</p> <p>No Write Permit: The node or the plant is not owned.</p> <p>PeerWay Transport Level Error: Unable to complete a low-level message ACK to another node.</p> <p>BUSY on Link Level: The receiver PeerWay buffers are full. The server may be busy or hung.</p> <p>Tag Not Found: The block is not configured.</p> <p>Update Code Conflict: There were two or more updates to the same block at the same time.</p>	B	ControlFile
482	Batch Recipe in static mode	An ABC batch recipe has changed from Normal to Static Mode.	B	ControlFile
483	Batch Recipe encountered blocked step	The Batch Recipe is blocked due to a blocked step.	B	ControlFile
484	Batch Graphic waiting for operator input	The Batch Graphic is waiting for input from the operator.	B	ControlFile
485	Batch Recipe step has been modified	The Batch recipe step has been changed since the recipe was validated.	B	ControlFile
486	Batch low on NV Mem	The Batch CP in the node where the Batch task is executing is close to using all available data storage space in nonvolatile memory. The amount of available space is shown on the Batch Run screen for the task.	S	ControlFile

No.	Message	Description	List	Alarm Area
487	Batch out of NV Mem	The nonvolatile memory in the node where the Batch task is executing has no more data storage space available. Variables, arrays, and strings on the existing script will need to be reduced or the number of tasks in this node reduced.	S	ControlFile
488	Batch NV Mem corrupted	The nonvolatile memory in the node where the indicated Batch task is executing failed the background memory self-check. A Batch Wipe function may need to be used to get the tasks restarted. Task configuration must be reloaded.	B	ControlFile
489	Batch NV Mem was reorganized	The nonvolatile memory in the node where the indicated Batch task is executing was automatically reorganized to make more efficient use of the nonvolatile memory.	B	ControlFile
490	Batch low on volatile memory	The Batch CP in the node where the Batch task is executing is close to using all available data storage space in volatile memory (RAM).	S	ControlFile
491	Batch out of volatile memory	The Batch CP in the node where the Batch task is executing has no more data storage space available in its onboard RAM. Script size must be reduced or number of tasks running in the node must be reduced.	B	ControlFile
492	Batch volatile memory corrupted	The Batch CP in the node where the Batch task is executing failed the background memory self-check. A Batch Wipe function may be needed to get tasks to restart. Task configuration must be reloaded.	B	ControlFile
493	Batch volatile mem was reorganized	The Batch CP in the node where the Batch task is executing was automatically reorganized to make more efficient use of the NV memory.	S	ControlFile
494	Batch NV Mem was initialized	The nonvolatile memory in the node indicated was cleared by a Batch Wipe command.	S	ControlFile
495	Batch NV Mem wipe UNSUCCESSFUL	The Batch Wipe function was unsuccessful. It should be retried. It may be necessary to perform the Batch Wipe immediately after the CP LEDs indicate the CP has started operating (after rebooting the CP and before it accesses the nonvolatile memory again).	S	ControlFile
496	Batch NV Mem backup failure	Software problem caused the backup of Batch tasks to be delayed.	S	ControlFile
497	Batch forced NV Mem backup	A batch backup was forced over waiting tasks or alarms. The most likely cause is a slow link from a controller. Check for use of a "while alias" or "until alias" statement in a batch program. Use of a "sleep" statement after the "while" or "until" statement may correct the problem.	S	ControlFile
499	Batch Dynamic Version Incompatible	When the CP was rebooted, the runtime status stored in the NV memory was found to be different than the current program requires. The runtime information has been initialized and all tasks stopped.	B	ControlFile

No.	Message	Description	List	Alarm Area
500	ABORT Kalmn Crossed Zero Cnt < 6	Evaluation Aborted. The evaluation aborted because the process response to the disturbance was too fast for the ATPID requirements.	Event	ATC
502	ABORT Kalman Slope Negative	Evaluation Aborted. The evaluation aborted because the initial process response to the disturbance did not meet the ATPID requirements.	Event	ATC
503	ABORT Kalman Slope Large	Evaluation Aborted. The evaluation aborted because the process response to the disturbance was too fast for the ATPID requirements.	Event	ATC
504	ABORT Kalman State Unknown	Evaluation Aborted. The evaluation aborted because the initial process response to the disturbance did not meet the ATPID requirements.	Event	ATC
505	ABORT Illegal Combination Ti & Td	Evaluation Aborted. The evaluation aborted because the initial time value was not greater than four times the derivative time value.	Event	ATC
506	ABORT Deviation Large at End LOC1	Evaluation Aborted. The evaluation aborted because the FV-SP deviation was too large. Another disturbance may have occurred during the evaluation.	Event	ATC
507	OSCILLATION DETECTED	The ATPID Watchdog detected oscillations. As a result, PID timing parameters were adjusted to suppress oscillations.	Event	ATC
508	ABORT Output Hit Limits	Controller output reached the high limit.	Event	ATC
509	Deadtime Negative	ATC has aborted due to a negative deadtime value.	S	ControlFile
510	ABORT Period Out Range Kalman Slope	Evaluation Aborted. The evaluation aborted because the process response to the disturbance did not meet the ATPID requirements.	Event	ATC
511	ABORT Third Peak Larger First Peak	Evaluation Aborted. The evaluation aborted because the process response to the disturbance did not meet the ATPID requirements.	Event	ATC
512	ABORT Faulty Peak Time Combination	Evaluation Aborted. The evaluation aborted because the process response to the disturbance did not meet the ATPID requirements.	Event	ATC
513	ABORT OmegaN1 Out Range Kalman Slope	Evaluation Aborted. The evaluation aborted because the process response to the disturbance did not meet the ATPID requirements.	Event	ATC
514	ABORT Newton Raphson Failure	Evaluation Aborted. The evaluation aborted because the ATOID evaluation was unable to predict the closed loop bandwidth of the loop. Another disturbance may have occurred during the evaluation.	Event	ATC
515	OmegaN2 Low	Evaluation finished - SUCCESSFUL. The evaluation finished, but the process response was not as fast as desired. New PID values may have been calculated.	Event	ATC

No.	Message	Description	List	Alarm Area
516	Gain Limit	Evaluation finished - UNSUCCESSFUL. The evaluation finished, but the process response was not within the user specified parameters because the "Max Gain" field value was reached. New PID values may have been calculated.	Event	ATC
517	Integral Time Limit	Evaluation finished - UNSUCCESSFUL. The evaluation finished, but the process response was not within the user specified parameters because the "Max Integ Tm" field value was reached. New PID values may have been calculated.	Event	ATC
518	Derivative Time Limit	Evaluation finished - UNSUCCESSFUL. The evaluation finished, but the process response was not within the user specified parameters because the "Max Deriv Tm" field value was reached. New PID values may have been calculated.	Event	ATC
519	ABORT Setpoint Retrigger	Evaluation Aborted. The evaluation aborted because another setpoint or load trigger occurred during the evaluation.	Event	ATC
521	Overdamped Open Loop Unstable	ATC has determined that an overdamped open loop is unstable.	S	ControlFile
522	Computed Gain	The ATPID calculated a new controller gain parameter.	Event	ATC
523	Computed Integral Time	The ATPID calculated a new integral time parameter.	Event	ATC
524	Computed Derivative Time	The ATPID calculated a new derivative time parameter.	Event	ATC
525	BYPASS: Unstable, D_Active cpm > .90	Evaluation finished - SUCCESSFUL. The evaluation finished, and the process response was within the user specified parameters. No new PID values may have been calculated.	Event	ATC
526	BYPASS: Phase Margin Within Deadband	Evaluation finished - SUCCESSFUL. The evaluation finished, and the process response was within the user specified parameters. No new PID values may have been calculated.	Event	ATC
527	Gain Delta Limit	Evaluation finished - UNSUCCESSFUL. The evaluation finished, but the process response was not within the user specified parameters because the "Max G Delta" field value was reached. New PID values may have been calculated.	Event	ATC
528	Integral Time Delta Limit	Evaluation finished - UNSUCCESSFUL. The evaluation finished, but the process response was not within the user specified parameters because the "Max Ti Mult" field value was reached. New PID values may have been calculated.	Event	ATC
529	Derivative Time Delta Limit	Evaluation finished - UNSUCCESSFUL. The evaluation finished, but the process response was not within the user specified parameters because the "Max Td Mult" field value was reached. New PID values may have been calculated.	Event	ATC

No.	Message	Description	List	Alarm Area
530	BYPASS: Unstable, cpm> .75, pmerr Neg	Evaluation finished - SUCCESSFUL. The evaluation finished, and the process response was within the user specified parameters. No new PID values may have been calculated.	Event	ATC
531	Oscillation Detected: Actual Gain	Oscillations in the process triggered the ATPID oscillation watchdog. The oscillation watchdog has changed the controller gain to the value shown in this message.	Event	ATC
532	Oscillation Detected: Actual Integral	Oscillations in the process triggered the ATPID oscillation watchdog. The oscillation watchdog has changed the integral time to the value shown in this message.	Event	ATC
533	Oscillation Detected: Actual Derivative	Oscillations in the process triggered the ATPID oscillation watchdog. The oscillation watchdog has changed the derivative time to the value shown in this message.	Event	ATC
534	Unstable: b_s11 > wn1	The normal ATC open loop unstable algorithm is bypassed and another algorithm used.	Event	ATC
535	BYPASS: Unstable, Ovrmdp, Ldeval	Evaluation finished - SUCCESSFUL. The evaluation finished and the process response was within the user specified parameters. No new PID values have been calculated.	Event	ATC
536	ABORT Kalman Slope Ratio Change > 2	The ATC stopped evaluation because the Kalman slope ration change was greater than two.	Event	ATC
537	Start Memory Dump node: <nn>	A memory dump has been started from node <nn>.	D	Console, ControlFile
538	Finish Memory Dump node: <nn>	A memory dump has finished from node <nn>.	D	Console, ControlFile
539	Kill Memory Dump node: <nn>	The memory dump from node <nn> has been killed.	D	Console, ControlFile
540	Successful Installation	ATC completed evaluation and installed new parameters.	S	ATC
541	Bypass	Evaluation finished - SUCCESSFUL. The evaluation finished and the process response was within the user specified parameters. No new PID values have been calculated.	S	ATC
542	Installation Disabled	ATC completed evaluation, but did not install parameters. User may install parameters.	S	ATC
543	Bad Evaluation	The conditions for ATC routines were not satisfied.	S	ATC
544	Oscillation Detected	An oscillation was detected. Process parameters will be changed.	S	ATC
545	File <x> bad. Cannot Read File	File <x> cannot be read. There is a problem with the file format or contents.	D	Disk
546	Unable to delete log print file <x>	The named log print file cannot be deleted for some reason. Refer to the Disk Event List for the reason.	S	Console

No.	Message	Description	List	Alarm Area
547	Unable to read from logfile <x>	The named log print file is unavailable for some reason. Refer to the Disk Event List for the reason.	S	Console
548	Unable to open log conversion file <x>	The named log conversion file is unavailable for some reason. Refer to the Disk Event List for the reason.	S	Console
549	Alarms unsupp on <xx> by system	Alarms are no longer suppressed for node <xx>. The alarm was pushed off the bottom of the Suppressed Alarm List or Automatic Alarm Deletion has removed the last alarm from the suppressed block <xx>.	S	Console
550	HIA Comm Link Problem	Abnormally high error rate in the communications between an HIA pair, messages are still getting through, though at a reduced rate.	H	HIA
551	HIA Comm Link Failure	No messages went through the HIA pair in the last 10 seconds. HIA communication has failed and no messages are being passed.	H	HIA
580	VAX Weak RAM Chip <xx>	A hardware error was detected in a RAM chip on board 1 (the RPQNA Processor board) of the RPQNA circuit board pair. RPQNA is the Rosemount PeerWay QBus Network Access interface. The interface may work satisfactorily for a period of time but should be replaced as soon as possible.	H	Micro VAX I/F
581	VAX ROM Checksum Failed	The Micro VAX I/F diagnostics detected an error in the start up ROM of the RPQNA interface. Board 1 of the interface circuit board pair must be replaced.	H	Micro VAX I/F
582	VAX Program Checksum Failed	The operating program on the MicroVAX disk or tape for the RPQNA interface did not load into memory successfully. This may be caused by a failure in the memory circuitry of board 1 or by bad media or by a bad program image.	H	Micro VAX I/F
583	VAX Control Queue Full - Data Lost	An internal message queue maintained between the RPQNA interface and the MicroVAX was full. The VAX may not be processing the queue quickly enough. This is an internal software problem; contact your local Fisher-Rosemount Representative.	S	Micro VAX I/F
584	VAX Data Queue Full - Data Lost	A message queue maintained for receiving RS3 system replies to MicroVAX read/write requests was full. The VAX may not be processing the queue quickly enough. This is an internal software problem; contact your local Fisher-Rosemount representative.	S	Micro VAX I/F
585	VAX Broadcast Queue Full - Data Lost	A message queue maintained for all PeerWay Alarms, Events, and Operator Change Log messages was full. The VAX may not be processing the queue quickly enough. This is an internal software problem; contact your local Fisher-Rosemount representative.	S	Micro VAX I/F
593	Unsorted/ duplicate address_table block	The address lookup table for blocks and loops has been corrupted.	VAX	MicroVAX I/F

No.	Message	Description	List	Alarm Area
594	VAX: Please start Host Mode <xx>	Requests that the VAX operator start the Host Mode session.	S	MicroVAX I/F
596	Duplicate Block Tag	On Remote Host startup, duplicate Block Tags were found among the controllers scanned by the MicroVAX QBI.	VAX	MicroVAX I/F
597	Block vanished	The Block or Loop is not responding to the MicroVAX.	VAX	MicroVAX I/F
598	Block appeared	The Block or Loop began responding to the MicroVAX.	VAX	MicroVAX I/F
599	Block static configuration changed	Only appears on RS3 alarm lists read from the MicroVAX. This message is intended as a message to the RPQNA operating software.		MicroVAX I/F
620	Batch Subsystem Enabled	The Batch subsystem was enabled.	D	Disk
621	Batch Subsystem Disabled	The Batch subsystem was disabled.	D	Disk
622	Bad PLC FIC Card	Communication with a PLC FIC went bad. The PLC did not respond to a diagnostic message. Could be caused by a problem anywhere in the communication path between PLC controller and PLC. Check cables, connectors, FIC, and the PLC.	H	PLC
623	Illegal PIO Configuration	A Pulse I/O block was configured incorrectly.	S	ControlFile
624	Redundant HSBY Unit Offline	Indicates that the redundant Modicon PLC is off line.	H	PLC
625	Illegal Port Configuration	A PLC block was configured for port B when FIC redundancy was configured.	S	PLC
626	Batch alarms unsuppressed on <xx>	Records the change in batch alarm suppression for node <xx>.	B	ControlFile
627	Alarms unsuppressed on <xx>	Records the change in alarm suppression for node <xx>.		
628	Batch alarms suppressed on <xx>	Records the change in batch alarm suppression for node <xx>.	B	ControlFile
629	Alarms suppressed	Records the change in alarm suppression.		
630	Unable to open logfile <xx>	The named logfile could not be opened. Refer to the Disk Event List for the reason.		
631	Alarm logging Enabled	Logging of alarms has started.		
632	Alarm logging Disabled	Logging of alarms has stopped.		

No.	Message	Description	List	Alarm Area
633	Wrong logfile type for alarmlog	The alarm log file is of the wrong type. Correct the type to allow the file to open.		
634	Unable to open log print file <xx>	The log print file cannot be opened. This is usually due to insufficient disk space. See the Disk Event List for details.		
635	Unable to write log print file <xx>	The named log print file is unavailable for some reason.		
636	Unable to print log file at node <node>	The log file at node <xx> cannot be printed for some reason.		
637	Unable to read log print file <xx>	The log print file at node <xx> cannot be read for some reason.		
638	Unable to write to logfile <xx>	The log file at node <xx> cannot be written to for some reason.		
639	Alarm log internal fault, logging disabled	There is a problem within the logging system software. Logging has been disabled.	S	Console
650	Backup of file <xx> started	Backup of the named file has been started.		Disk
651	Backup of <xx> folder started	Backup of the named folder has been started		Disk
652	Disk backup started Node: Drive = <node:drive>	Disk backup has been started for the named drive.		Disk
653	Not enough free space on Tape	The tape does not have enough room to hold the requested material.		Disk
654	Insert next Tape and Continue backup	A folder or disk backup operation has filled the tape. Another tape is required.		Disk
655	Disk Backup Complete Node: Drive = <node:drive>	The disk backup of the named drive is completed.		Disk
656	Disk Backup Continue Node: Drive = <node:drive>	The disk backup of the named drive is continuing on the new tape.		Disk
657	Backup Complete 0 file(s) copied	No files were copied in the backup operation.		Disk
658	Restore of <xx> folder started	A restore operation has been started on the named folder.		Disk
659	Tape Restore started Node: Drive = <node:drive>	A tape restore has been started for the named drive.		Disk

No.	Message	Description	List	Alarm Area
666	Cannot Read \$\$PASSWD from Node <xx>	Password file could not be found on disk during logon.	D	Console
668	DL: CP Program Loaded to node <node>	The disk load of the CP program was successful.		
669	DL: MPC Program Loaded to node <node>	The disk load of the MPC program was successful.		
670	DX: Batch Table Primary volume unavailable	The Batch Operating Table primary disk volume has problems and is not available.	D	Disk
671	DX: Batch Table Backup volume unavailable	The Batch Operations Table backup disk volume has problems and is unavailable.		Disk
675	Switched to Backup Disk for Overlay Reads	Overlays are now being read from the backup overlay disk as configured on the CCC screen.	D	Disk
676	Switched to Local Disk for Overlay Reads	Overlay reads were configured to use the backup disk but now will use the console's own disk.		Disk
677	Switched to Backup Disk for General Reads	General disk reads are now being taken from the backup disk as configured on the CCC screen. These include graphics files.		Disk
678	Switched to Local Disk for General Reads	General disk reads are now being taken from the console's own disk. This includes graphics files.		Disk
679	File Compare Done, resulting in <filenamea> xx <filenameb>	The file compare function found that <filenamea> and <filenameb> were: == Files identical != Files different		ABC
681	PeerWay Boot of PWIF Node <node> Unsuccessful	The boot image download operation from a console was unsuccessful.		PWay I/F
682	PeerWay Boot of PWIF Node <node> Successful	The boot operation was successful.		PWay I/F
683	95% files used in <x> folder	The folder has almost the maximum number of filenames.	S	Console
684	95% space used in <x> folder	The folder is nearing the maximum allowed size.	S	Console
685	Load Config Alarm Broadcast Successful	The CAB (Configure Alarm Broadcast) data was loaded correctly.	S	Console

No.	Message	Description	List	Alarm Area
686	Load Config Alarm Broadcast Unsuccessful	The attempt to load CAB (Configure Alarm Broadcast) data failed.	S	Console
687	Save Config Alarm Broadcast Successful	The CAB (Configure Alarm Broadcast) data was saved without problem.	S	Console
688	Save Config Alarm Broadcast Unsuccessful	The attempt to save CAB (Configure Alarm Broadcast) data failed.	S	Console
689	Unable to lock logfile <x>	The named logfile cannot be locked. Refer to the Disk Event List for the reason.	S	Console
690	Unable to unlock logfile <x>	The named logfile cannot be unlocked. Refer to the Disk Event List for the reason.	S	Console
691	Unsuccessful Alarm Regeneration	The attempt to regenerate alarm lists failed.	S	Console
692	Batch node:task <xx> Load Unsuccessful	A batch task failed to load from disk. First, make sure the script you specified exists on the correct disk. Second, select on the script from the Batch Run screen to avoid typing errors. Finally, ensure that you do not have another task running. Retry the restore operation after each of these suggestions.	D	Disk
693	Node <x> not set up for batch prints	Print node <x> software is not compatible with batch.	B	ControlFile
694	Giving up waiting for new master	The logging system has given up trying to find a logfile.	S	Console
695	PW Boot of Console Node <node> Unsuccessful	Console PeerWay boot was unsuccessful.	D	Disk
696	PW Boot of Console Node <node> Successful	Console PeerWay boot was successful.	D	Disk
697	PeerWay Boot of Node <x> Unsuccessful	The PeerWay boot of node <x> failed.	D	Disk
698	File deleted from <xx> Folder	The system has deleted a file from the ABC Log folder. When the Auto-Delete field is set on the Batch Configuration screen, the system will automatically delete finished recipe files from the ABC Log folder on a first-in, first-out basis.	D	Disk
699	Batch script deleted <xx> file	A file, <xx>, has been deleted by a batch script. The file may be a virtual array, virtual string array, or a report file.	D	Disk
702	Volatile memory request failed	There is insufficient volatile (RAM) memory available for the Batch Task.	S	ControlFile

No.	Message	Description	List	Alarm Area
703	Nonvolatile memory request failed	There is insufficient nonvolatile memory available for the Batch Task.	S	ControlFile
732	Fatal Recipe Start Error	A start script associated with a recipe has failed. You should wipe the batch task associated with the failed unit icon and start the recipe using the start/validate menu option.	B	ControlFile
764	Batch script renamed <xx> file	A batch script renamed a file, originally called <xx>. The file may be a virtual array, a virtual string array, or a report file.	B	ControlFile
765	Batch script copied <xx> file	A batch script copied the file <xx>. The file may be a virtual array, a virtual string array, or a report file.	D	Disk
766	Redundant size check failed for file	When the system starts up, a size check is automatically performed on redundant files. This message indicates that two files do not match. This alarm can occur when a node goes down and subsequently returns online. You should check the files (listed by name in the Disk Event List below the actual message) on both the main and redundant disks to locate which file size is correct. You should then delete the bad file and replace it by copying the good one in its place.	D	Disk
767	File error during Redundant check of file	This alarm is related to 766. In this case, the redundancy check is unable to access a file. It may be inaccessible for a number of reasons. You should ensure the file is not currently being viewed on another node. Once you are sure the file is not in use, you may want to re-activate the redundant check. From the Batch Configuration Screen, unpart and then re-part the two nodes. Be sure that a check is not currently in progress. Status is visible on the Batch Configuration screen. If this procedure does not work, the file is more than likely corrupt and should be deleted.	D	Disk
770	Compression Ratio Low	The compression ratio has fallen below the point you designated in the "CR Advisory Alarm" field. The alarm is cleared when the compression ratio rises above the designated point.	P	ControlFile
771	Compression Ratio Below Cutoff	Critical alarm that the compression ratio has fallen below the point you designated in the "CR Cutoff" field. This alarm is optional: it is only created if you selected "Yes" in the "Cutoff Crit Alarm" field. To clear this alarm, you must have a logic step or discrete input configured in the "Reset Input" field on the DCB Continuous Faceplate.	P	ControlFile
772	Slow Event Buffer Full to Node <x>	The buffer for slow data type events to be sent to node <x> is full.	S	ControlFile
773	Fast Event Buffer Full to Node <x>	The buffer for fast data type events to be sent to node <x> is full.	S	ControlFile
774	Discrete Event Buffer Full to Node <x>	The buffer for discrete data type events to be sent to node <x> is full.	S	ControlFile

No.	Message	Description	List	Alarm Area
775	Start Memory Dump cont: <nn>	A manually initiated memory dump of Controller Processor <nn> has been started.	D	Disk
776	Finish Memory Dump cont: <nn>	A manually initiated memory dump of Controller Processor <nn> has been completed. The memory dump takes about twenty minutes.	D	Disk
777	Kill Memory Dump cont: <nn>	The manually initiated memory dump of Controller Processor <nn> has been killed.	D	Disk
790	RNI <xx> Config Save to Primary Failed	Appears when the RS3 attempts to save a value to an RNI (Rosemount Network Interface) Primary Configuration Server from the Configure RNI screen. The Configuration Server may be improperly installed or configured. Check the Configure RNI screen to ensure you entered a valid RNI node number or user message pair. <xx> refers to the name the user has assigned to the configuration.	S	Pway I/F
791	RNI: <xx> Config Save to Backup Failed	Appears when the RS3 attempts to save a value to an RNI (Rosemount Network Interface) Configuration Backup Configuration Server from the Configure RNI screen. The Configuration Server may be improperly installed or configured. Check the Configure RNI screen to ensure you entered a valid RNI node number or user message pair. <xx> refers to the name the user has assigned to the configuration.	S	PWay I/F
800	Duplicate Master Node: <xx>	This alarm occurs as the result of a SCSI bus timeout. Reboot the console or consoles together.	D	Console, Disk
801	Auto Plant Config Backup File Not Found	The \$\$BACKUP file was not found at the time a backup was to be performed.	D	Console
811	Controller Image Checksum Test Failed	The MPC5 controller image checksum test failed. The controller will be reset and the image reloaded from NV memory.	H	ControlFile
1024		See alarm 100: Controller Fault		
1025		See alarm 100: Controller Fault		
1042		See alarm 109: Controllers Incompatible		
1043		See alarm 100: Controller Fault		
1053		See alarm 109: Controllers Incompatible		
1061		See alarm 105: Controller Copy Aborted		

No.	Message	Description	List	Alarm Area
1064		See alarm 144: Controller Switch Complete		
1065		See alarm 144: Controller Switch Complete		
1066		See alarm 106: Controller Switch Aborted		
2100		See alarm 100: Controller Fault		
2110		See alarm 100: Controller Fault		

Appendix A: Acronyms and Abbreviations

A

AC	Alarm Clear
ACK	Acknowledge
A/D	Analog to Digital
AD	Advisor Deviation
AH	Advisory High
AIB	Analog Input Block
AL	Advisory Low
AL#	Alarm Number
AOB	Analog Output Block
AOFIC	Analog Output Field Interface Card
AR	Advisory Rate
AS	Advisory Step
AT	Alarm Type
ATC	Autotuning Controller
ATPID	Autotuning Proportional, Integral, and Derivative Control

B

blk(s)	Block(s)
BP	Block Priority

C

CAB	Configure Alarm Broadcast
CCC	Command Console Configuration
CD	Critical Deviation
CH	Critical High
CIB	Contact Input Block
CL	Critical Low
CLR	Clear

AL: A-2

Cmd	Command
Comm	Communications
CP	Coordinator Processor
CR	Compression Ratio; Critical Rate
CRC	Cyclical Redundancy Check
CRT	Cathode-Ray Tube
CS	Critical Step
CSB	Controller Status Block

D

DC	Direct Controller; Disk Controller; Disk File Copy
DCB	Data Compression Block
DCU	Disk File Update Copy
DDP	Disk Directory PeerWay
DI	Disk Initialize
DL	Disk Load
DR	Disk Restore
DS	Disk Save
DTACK	Data Transfer Acknowledge
DTR	Disk Transfer/Restore
DUART	Dual Universal Asynchronous Receiver/Transmitter
DX	Disk ????
DXD	Disk File Delete
DXR	Disk File Restore

E

ECC	Enhanced Command Console
EDAC	Error Detection and Correction
EOM	End of Message
Err	Error

F

FEM	Front End Module
FIC	Field Interface Card

FIFO	First-In First-Out
FIM	Field Interface Module
FV-SP	????

G

GPM	
GPM/S	

H

HART [®]	Highway Addressable Remote Transducer (HART [®] is a registered trademark of the HART Communication Foundation)
Hdr	Header
HH	Hardware High
HIA	Highway Interface Adapter
HL	Hardware Low
HM	Hardware Miscellaneous
HOB	HART Output Block
HS	Hardware Step
HSBY	????

I

I/F	Interface
I/O	Input/Output

K

KC	Kill Control
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L

LE	Link Editor
LED	Light Emitting Diode

M

mA	Milliampere
MaxCF	Maximum ControlFile

AL: A-4

Mem	Memory
MIB	Multiplexer Input Block
mS	Millisecond
msg	Message
MTCC	Multitube Command Console
Mux	Multiplexer

N

NV	Nonvolatile
NVRAM	Nonvolatile Random Access Memory

P

PID	Proportional, Integral, and Derivative Control
PIO	Pulse Input/Output
PLC	Programmable Logic Controller
PU#	Plant Unit Number
PV	Primary Variable
PWay	PeerWay
PWIF	PeerWay Interface

Q

QBI	QBUS to PeerWay Interface
-----	---------------------------

R

RAM	Random Access Memory
RBL	Rosemount Basic Language
RBLC	Rosemount Basic Language Controller
Redun	Redundant
Req	Request
RFI	Rosemount Factory Interface
RIOB	Redundant Input/Output Block
RNI	RS3 Network Interface
ROM	Read Only Memory
RPQNA	?????
RTC	Real Time Clock

S

SCI	Supervisory Computer Interface
Scrn	Screen
SCSI	Small Computer System Interface
SIB	Smart Transmitter Input Block

U

UART	Universal Asynchronous Receiver/Transmitter
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V

VAX	Virtual Address Extension (a DEC family of computers)
-----	---

X

XMTR	Transmitter
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RS3™

Alarm Messages

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