Web-Based Automated Reporting
Saving Time, Money, and Trees

Spacecraft Emergency Response System
SERS

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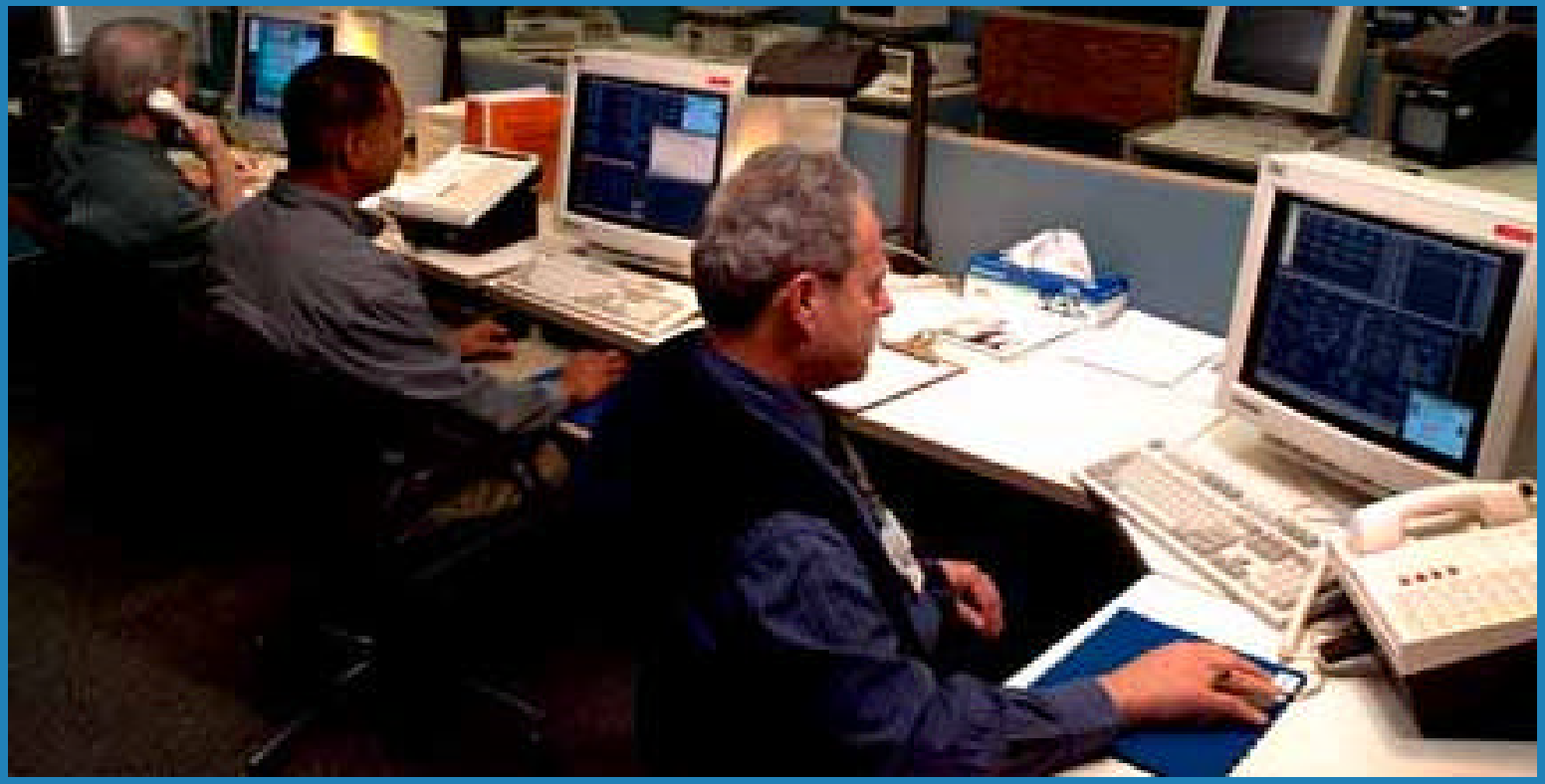
Traditional Mission Operations



Changing Environment

- "Traditional" Operations
  - 7x24 Support
  - Unique and Dedicated Resources
- "Lights Out" Environment
  - No Team Member or just 1.5x8
  - On-Call FOT
  - Multi-Mission Support

Obstacles to Light-Out Ops

- Too much paperwork
  - Anomaly reports, pass plans, pass summaries…
- Must be sure:
  - Spacecraft is healthy
  - Networks are up
- Need to communicate with distributed team

SERS' Goal

Spacecraft Emergency Response System

To work with mission operations staff to develop the future technology and workgroup computing concepts that will be needed to better meet the new ground rules for lights-out mission operations.

SERS Response

- Objective
  - A configurable, automated system which logs and reacts to incidents occurring within a space/ground system
  - Explore, develop, and insert technologies to enable virtual (distributed) mission operations
- Mission Requirements
  - Contact on-call personnel when needed
  - Provide status and history of incidents and actions
  - Synthesize and present information regarding each incident and its context for rapid resolution by on-call personnel
  - Enable cooperative work by on-call humans at distributed locations

SERS - Prime Capabilities

- Automated & Intelligent Report Generation

- Flexible Communications Interface
- Easy Access - Web UI
- Intelligent Notification & Reporting
- 2-Way Communications
- Secure & Reliable
- Cost Effective

... See SpaceOps 98 Paper

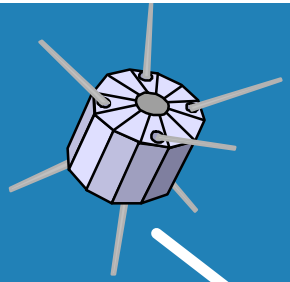
Automated & Intelligent Reporting

- Event Reports
- Pass Summary Reports
- Schedule Changes
- Various Other Reports

Event Reports

- An "Event" is defined as a condition that merits the attention of the SCT and that may require some human intervention
  - Parameters out of range
  - Unexpected States
- Log file or Expert System

Log Processing



ITOS

REP

911/Fault
Email
Via SMTP
Gateway

SERS

Events
DB

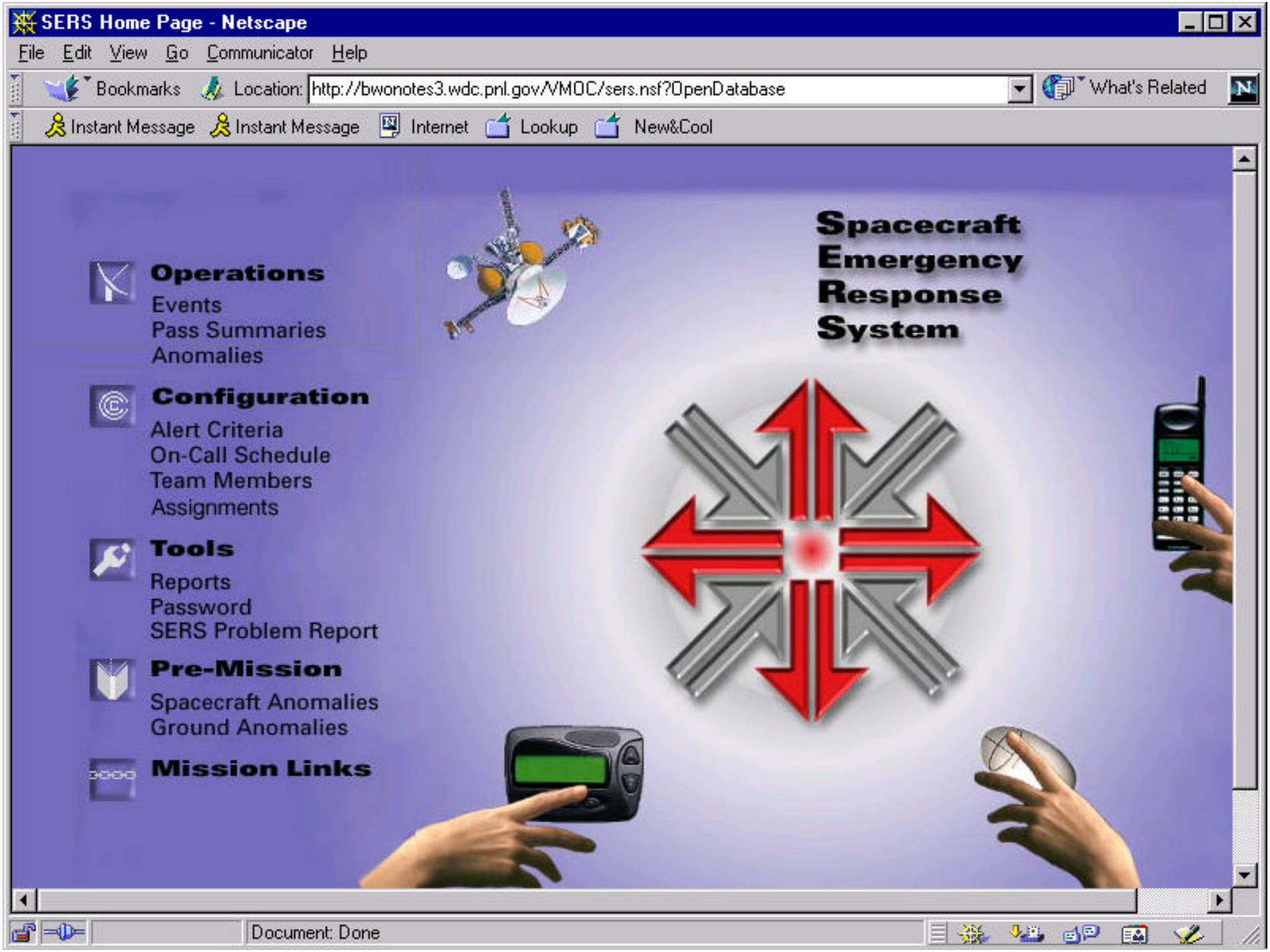
Event
Report

E-Mail Interface

Date: Fri, 1 Aug 1997 11:35:48 -0400
From: chu@trace5
Message-Id: <199708011535.LAA20664@vintage.>
To: vmoc@vmoc1.gsfc.nasa.gov
Subject: VMOC Incident
Status: R

Spacecraft%%TRACE&& Originator%%ITOS&&
EpisodeID%%PASS_INCIDENT&&
EpisodeStart%%4/22/97 09:12:59&&
EpisodeEnd%%4/22/97 15:39:10&&
IncidentStart%%4/22/97 09:14:01&&
IncidentEnd%%4/22/97 15:36:01&&
EventFile%%trace5:/usr/tcw.trace/logs/EVT_97-112-13:12.LOG&&

<ATTACHMENT>
<LIMIT_VIOL>
Time%%97-112-09:35:39&&
Type%%Red&&
Status%%high&&
Title%%AACET&&
Value%%180.8116056&&
<SC_EVENT>
Time%%97-112-09:14:01&&
Title%%UNDEFIN Subsys-OS Code#0000 Data - (0000, 0000, 0000, 0000) 68-145-00:00:00.00000 0&&


SERS Home Page - Netscape
File Edit View Go Communicator Help
Bookmarks Location: http://bwonotes3.wdc.pnl.gov/VMOC/sers.nsf?OpenDatabase
What's Related
Instant Message Instant Message Internet Lookup New&Cool
Spacecraft Emergency Response System
Operations
Events
Pass Summaries
Anomalies
Configuration
Alert Criteria
On-Call Schedule
Team Members
Assignments
Tools
Reports
Password
SERS Problem Report
Pre-Mission
Spacecraft Anomalies
Ground Anomalies
Mission Links
Document: Done

SERS Setup

Process Monitor

System Monitor
(systems behind firewall)

E-mail
(System Status)

FTP
(Log Files)

E-mail
(Process Status)

Real-time
Operational
Computers

Firewall

Firewall

- SERS Domino Server
- REP
- Internet (IP) Pager Gateway
- System Monitor
  (systems outside firewall)
- Ground System Monitor

SERS
Prime

Continuous
Replication

SERS
Backup

- SERS Domino Server
- Analog Pager Gateway
- Telephony Gateway

Telephony Notification
and Response

Alert E-Mail &
Web Access

Alert
Paging (Analog)

Internet

Alert E-Mail &
Web Access

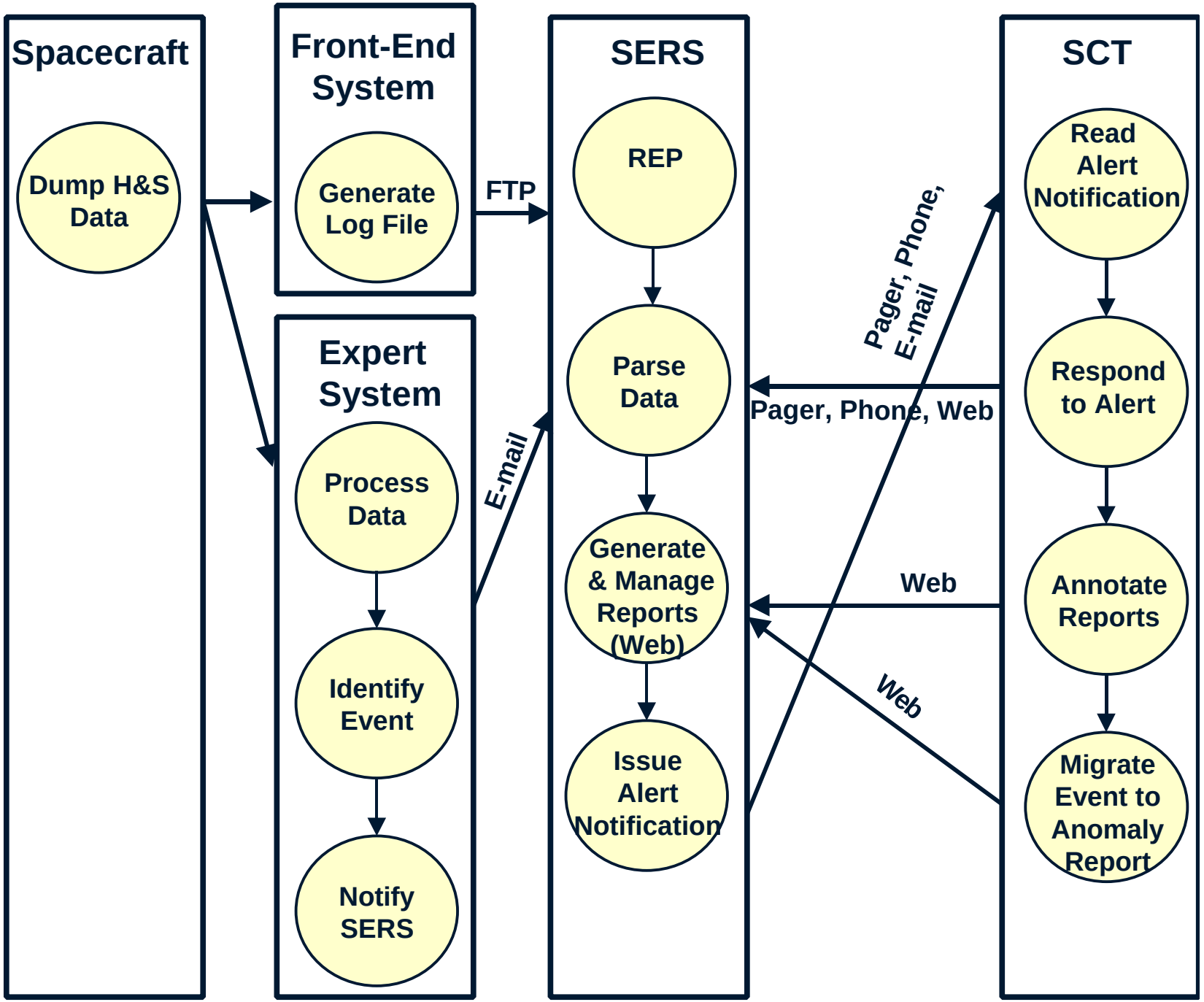
Alert
Paging

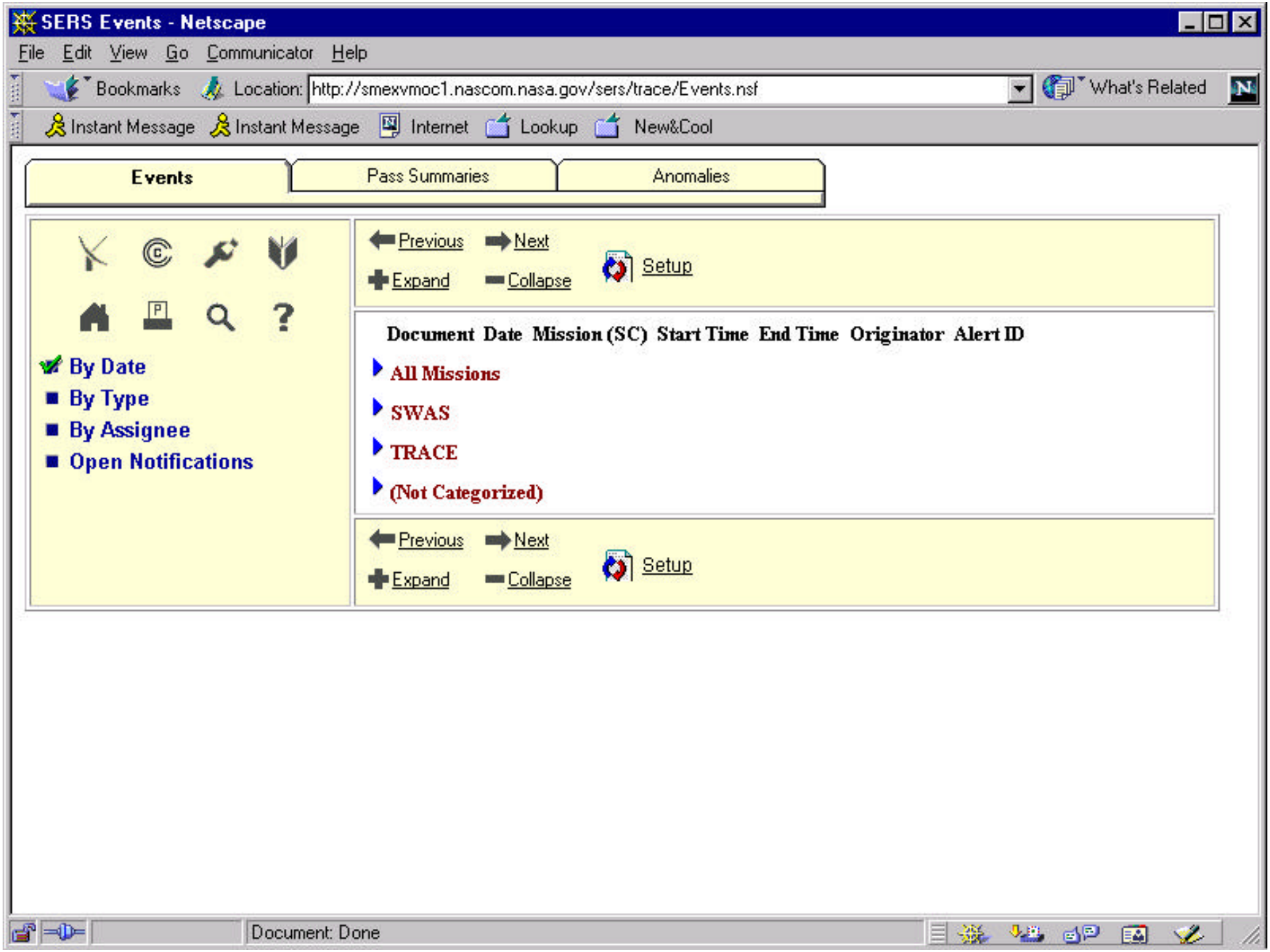
E-mail Notification
Browser Access to
Databases

SkyTel
2-Way Paging
Service

Alert
Paging

Paging Notification
and Response


Spacecraft
Dump H&S Data
Front-End System
Generate Log File
Expert System
Process Data
Identify Event
Notify SERS
FTP
E-mail
SERS
REP
Parse Data
Generate & Manage Reports (Web)
Issue Alert Notification
Pager, Phone, E-mail
Pager, Phone, Web
Web
Web
SCT
Read Alert Notification
Respond to Alert
Annotate Reports
Migrate Event to Anomaly Report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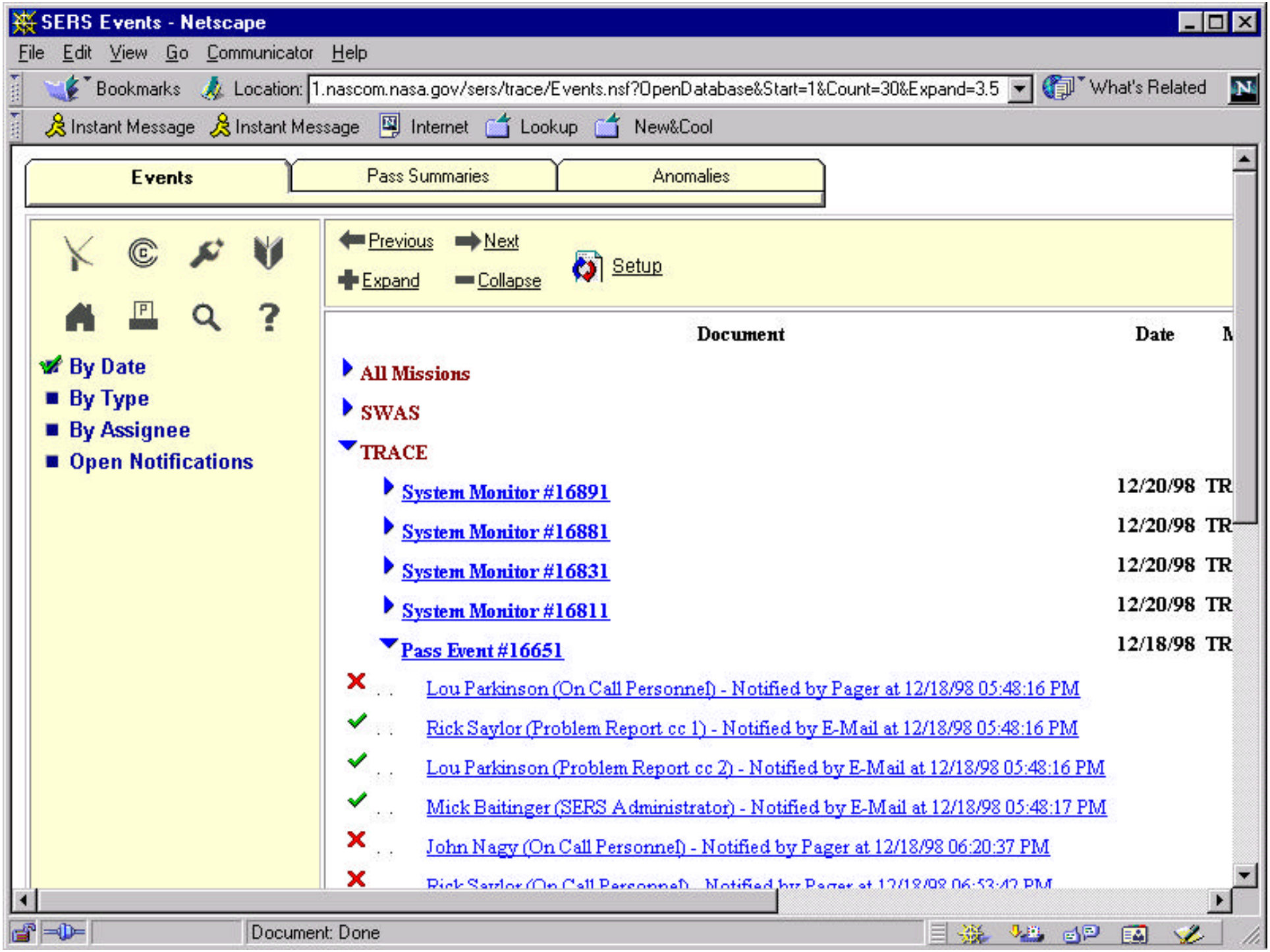
What's Related
Instant Message Instant Message Internet Lookup New&Cool
Events
Pass Summaries
Anomalies
By Date
By Type
By Assignee
Open Notifications
Previous
Next
Expand
Collapse
Setup
Document Date Mission (SC) Start Time End Time Originator Alert ID
All Missions
SWAS
TRACE
(Not Categorized)
Previous
Next
Expand
Collapse
Setup
Document: Done


SERS Events - Netscape
File Edit View Go Communicator Help
Bookmarks Location: 1.nascom.nasa.gov/sers/trace/Events.nsf?OpenDatabase&Start=1&Count=30&Expand=3.5 What's Related
Instant Message Instant Message Internet Lookup New&Cool
Events
Pass Summaries
Anomalies
By Date
By Type
By Assignee
Open Notifications
Previous
Next
Expand
Collapse
Setup
Document
Date
All Missions
SWAS
TRACE
System Monitor #16891 12/20/98 TR
System Monitor #16881 12/20/98 TR
System Monitor #16831 12/20/98 TR
System Monitor #16811 12/20/98 TR
Pass Event #16651 12/18/98 TR
Lou Parkinson (On Call Personnel) - Notified by Pager at 12/18/98 05:48:16 PM
Rick Saylor (Problem Report cc 1) - Notified by E-Mail at 12/18/98 05:48:16 PM
Lou Parkinson (Problem Report cc 2) - Notified by E-Mail at 12/18/98 05:48:16 PM
Mick Baitinger (SERS Administrator) - Notified by E-Mail at 12/18/98 05:48:17 PM
John Nagy (On Call Personnel) - Notified by Pager at 12/18/98 06:20:37 PM
Document: Done

SERS Events: Pass Event Report #16651 - Netscape

File Edit View Go Communicator Help

Bookmarks Location: ec45d6db789852564c200540a82/cb1039876cb2fb57852566de007d43f3?OpenDocument What's Related

Instant Message Instant Message Internet Lookup New&Cool

Back to Main Workspace | Compose Comment

PASS EVENT REPORT #16651

ID:	PASS_INCIDENT	**Originator:**	ITOS
Mission:	TRACE	**Spacecraft:**	TRACE
Episode Started:	12/18/98 17:00:20	**Episode Ended:**	12/18/98 17:42:37
Posted At:	12/18/98 05:48:13 PM		

Background Information

Incident Started:	12/18/98 17:20:51	**Incident Ended:**	12/18/98 17:26:21
Alert ID:	NEWBASIC		
Person(s) Responsible:			

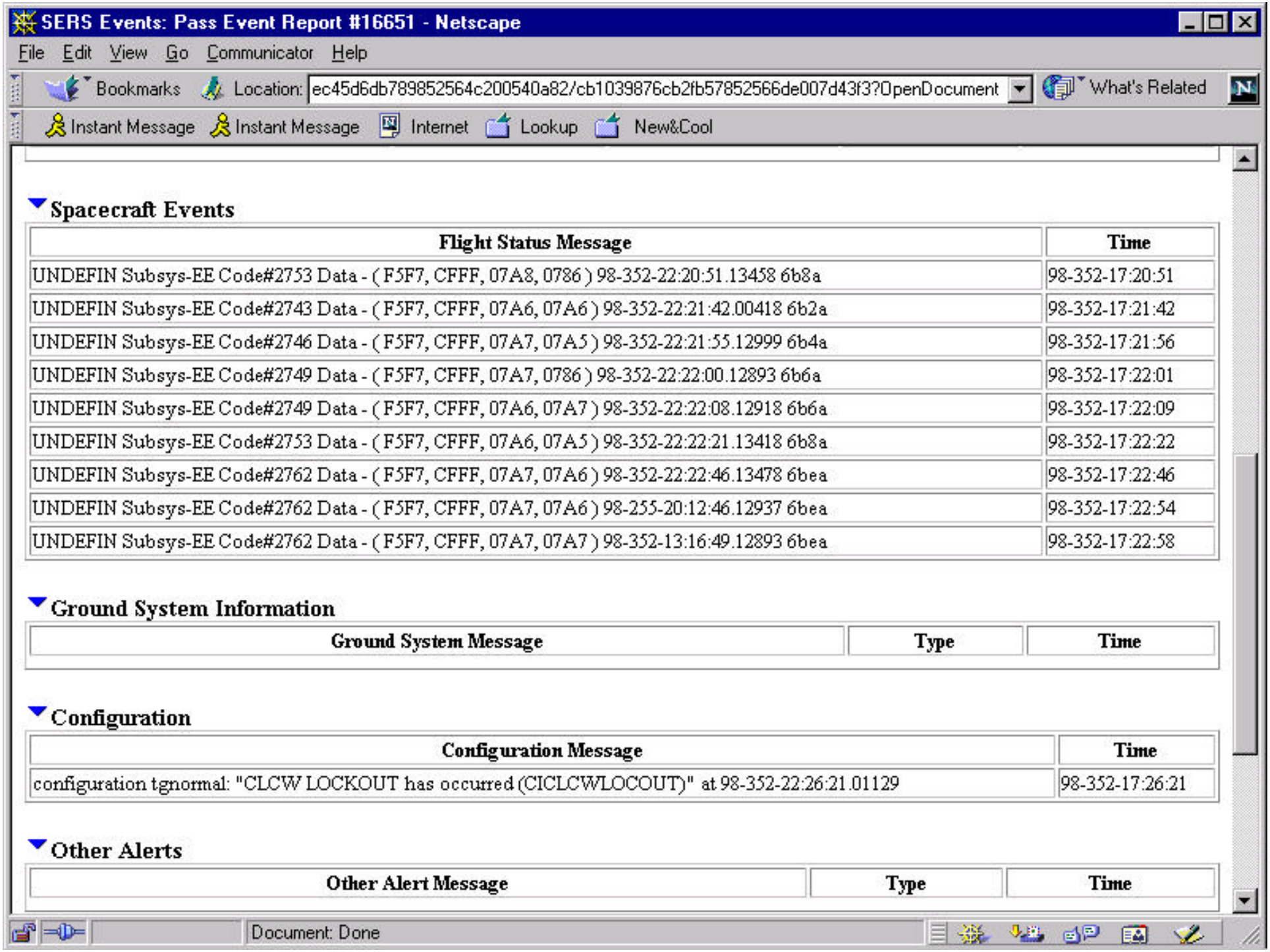
Ground Systems Configuration

Anomalous Alert Information

Limit Violations

Mnemonic	Value	Status	Type	Time

Document: Done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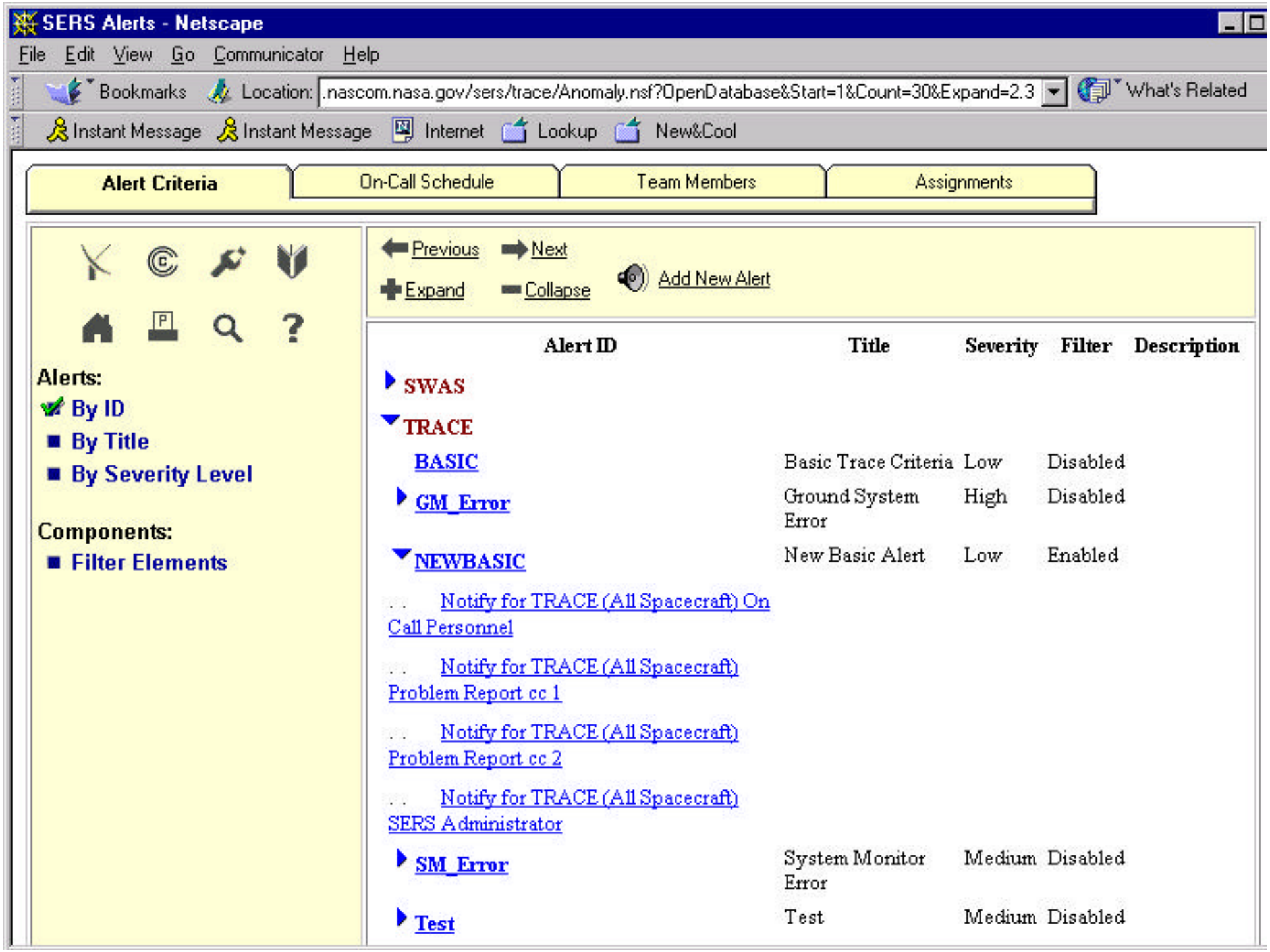
File Edit View Go Communicator Help
Bookmarks Location: ec45d6db789852564c200540a82/cb1039876cb2fb57852566de007d43f3?OpenDocument What's Related
Instant Message Instant Message Internet Lookup New&Cool
Spacecraft Events
Flight Status Message
Time
UNDEFIN Subsys-EE Code#2753 Data - (F5F7, CFFF, 07A8, 0786) 98-352-22:20:51.13458 6b8a
98-352-17:20:51
UNDEFIN Subsys-EE Code#2743 Data - (F5F7, CFFF, 07A6, 07A6) 98-352-22:21:42.00418 6b2a
98-352-17:21:42
UNDEFIN Subsys-EE Code#2746 Data - (F5F7, CFFF, 07A7, 07A5) 98-352-22:21:55.12999 6b4a
98-352-17:21:56
UNDEFIN Subsys-EE Code#2749 Data - (F5F7, CFFF, 07A7, 0786) 98-352-22:22:00.12893 6b6a
98-352-17:22:01
UNDEFIN Subsys-EE Code#2749 Data - (F5F7, CFFF, 07A6, 07A7) 98-352-22:22:08.12918 6b6a
98-352-17:22:09
UNDEFIN Subsys-EE Code#2753 Data - (F5F7, CFFF, 07A6, 07A5) 98-352-22:22:21.13418 6b8a
98-352-17:22:22
UNDEFIN Subsys-EE Code#2762 Data - (F5F7, CFFF, 07A7, 07A6) 98-352-22:22:46.13478 6bea
98-352-17:22:46
UNDEFIN Subsys-EE Code#2762 Data - (F5F7, CFFF, 07A7, 07A6) 98-255-20:12:46.12937 6bea
98-352-17:22:54
UNDEFIN Subsys-EE Code#2762 Data - (F5F7, CFFF, 07A7, 07A7) 98-352-13:16:49.12893 6bea
98-352-17:22:58
Ground System Information
Ground System Message
Type
Time
Configuration
Configuration Message
Time
configuration tgnormal: "CLCW LOCKOUT has occurred (CICLCWLOCOUT)" at 98-352-22:26:21.01129
98-352-17:26:21
Other Alerts
Other Alert Message
Type
Time
Document: Done

Alert Criteria

- A component of SERS to specify reporting and notification conditions
  - Elements
    - Parameters
    - Keywords
  - Types
    - Trigger
    - Inhibit
    - Context


SERS Alerts - Netscape
File Edit View Go Communicator Help
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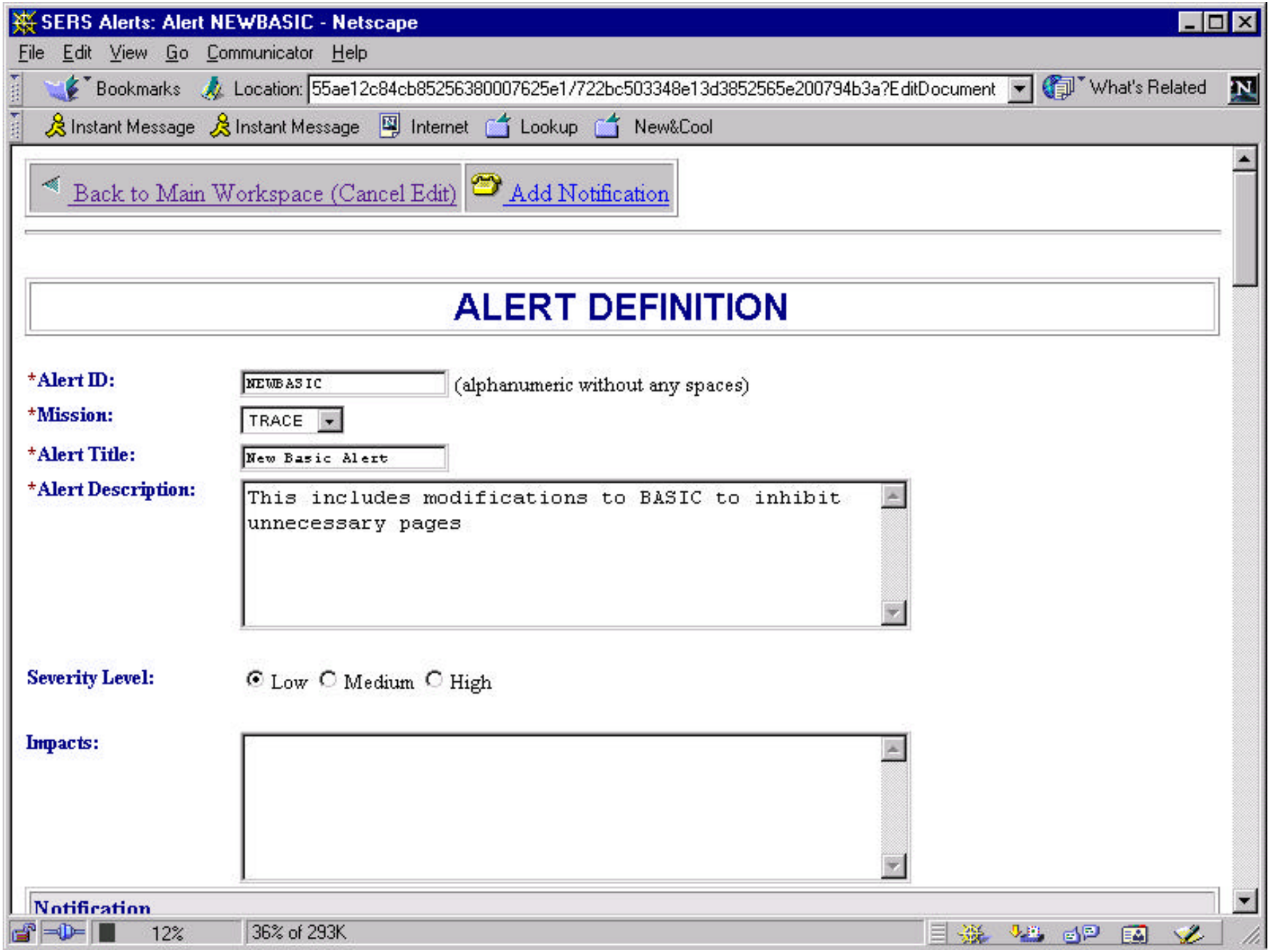
Instant Message Instant Message Internet Lookup New&Cool
Alert Criteria
On-Call Schedule
Team Members
Assignments
Alerts:
By ID
By Title
By Severity Level
Components:
Filter Elements
Previous
Next
Expand
Collapse
Add New Alert
Alert ID
Title
Severity
Filter
Description
SWAS
TRACE
BASIC
Basic Trace Criteria
Low
Disabled
GM_Error
Ground System Error
High
Disabled
NEWBASIC
New Basic Alert
Low
Enabled
. . Notify for TRACE (All Spacecraft) On Call Personnel
. . Notify for TRACE (All Spacecraft) Problem Report cc 1
. . Notify for TRACE (All Spacecraft) Problem Report cc 2
. . Notify for TRACE (All Spacecraft) SERS Administrator
SM_Error
System Monitor Error
Medium
Disabled
Test
Test
Medium
Disabled


SERS Alerts: Alert NEWBASIC - Netscape
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Bookmarks Location: 55ae12c84cb85256380007625e1/722bc503348e13d3852565e200794b3a?EditDocument What's Related
Instant Message Instant Message Internet Lookup New&Cool
Back to Main Workspace (Cancel Edit)
Add Notification
ALERT DEFINITION
*Alert ID:
NEWBASIC
(alphanumeric without any spaces)
*Mission:
TRACE
*Alert Title:
New Basic Alert
*Alert Description:
This includes modifications to BASIC to inhibit unnecessary pages
Severity Level:
Low Medium High
Impacts:
Notification
12%
36% of 293K

Filter Definition

Filter Enabled: (•) Yes ( ) No

Context:	Incident:	Inhibit:	Filters:
☐	☑	☐	00015 Matches any record type "28" - SC_EVENT
☐	☐	☐	00017 Matches any PANIC message
☐	☐	☐	00018 Matches any ALERT message
☐	☐	☐	00019 Matches any null event message
☐	☑	☐	00023 Matches any messages containing _VIOL
☐	☐	☐	00029 Matches any SC event message
☐	☑	☐	00030 Matches any CFG alert
☐	☑	☐	00032 Matches any TCW fault message
☐	☐	☐	00035 Matches any OPER error message
☐	☐	☐	00036 Matches any STOL error message
☐	☐	☐	00037 Matches any CMD error message
☐	☑	☐	00040 Matches any SYS error message
☐	☐	☐	00041 Matches any yellow violation message
☐	☐	☐	00042 Matches any red violation message
☐	☐	☑	00043 Matches a SC_EVENT with Code #0052
☐	☐	☑	00044 Matches a SC_EVENT with Code #0405

SERS Alerts: Alert HYP01 - Netscape

File Edit View Go Communicator Help

Bookmarks Location: 3398855ae12c84cb85256380007625e1/5097dab56782bdc2852566e6005324a2?EditDocument What's Related

Instant Message Instant Message Internet Lookup New&Cool

00055 sfsfs	☐ 00055	☐ 00055	☑ 00055
00056 123	☐ 00056	☐ 00056	☐ 00056
00057 123	☐ 00057	☐ 00057	☐ 00057
00058 Description	☐ 00058	☐ 00058	☐ 00058
00059 aaaaa	☐ 00059	☐ 00059	☐ 00059

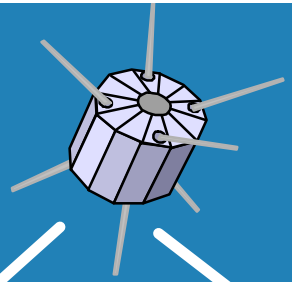
Mnemonics:

Context:	AACCTRMD AACEBDOTBFX AACEBDOTBFY AACEBDOTBFZ AACEN15I
Incident:	AACCTRMD AACEBDOTBFX AACEBDOTBFY AACEBDOTBFZ AACEN15I
Inhibit:	AACCTRMD AACEBDOTBFX AACEBDOTBFY AACEBDOTBFZ AACEN15I

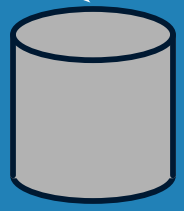
Submit

Document: Done

Expert System



Altair



ITOS

REP

911/Fault
Email
Via SMTP
Gateway

911/Fault
Email
Via SMTP
Gateway

SERS

Events
DB

Event
Report

AUTONOMOUS EVENT REPORT #14811

ID:		**Originator:**	ALTAIR
Mission:	MAP	**Spacecraft:**	MAP
Episode Started:	10/05/98 13:03:36	**Episode Ended:**	10/05/98 13:03:36
Posted At:	12/16/98 12:46:10 PM		

Background Information

Incident Started:	10/05/98 13:03:36	**Incident Ended:**	10/05/98 13:03:36
Alert ID:	HYP01		
Notification Required?	yes		
Person(s) Responsible:	Jeffrey Fox		

Anomalous Condition Information

System	Actual State	Expected State	State Difference	Recommended Action	Autonomous Action Taken	Event Time	Action Time
RESTARTS	WRM_RESTART	NO_WRM_RESTARTS	Variable MHSWRMRC exceeded the high limit of 1 to 2			10/05/98 13:03:36	

Related Anomaly Reports:

Create Linked Ground Anomaly Report

Create Linked Spacecraft Anomaly Report

Pass Summaries

- SCT Configured
- Based on:
  - Deep Space Network (DSN) schedule
    - Skeleton report from 7-day plan
    - Deleted, created, or modified to reflect changes in the schedule
  - Ground system log file
    - Temporary report for each ground system log file after REP examines file
    - Relevant data is extracted

```
*                    WPS 7-DAY OPERATIONS SCHEDULE          VERSION 07 SCHE
*                          CHANGE LOG
*                  WEEK NO. 41 *** 08 Oct 98 - 11 Oct 98
*-------------------------------------------------------------------------
*DAY START BOT EOT  END   FACILITY USER   ACTIVITY          PASS  CONFIG/ WRK
*                                                          NO.   SOE     CAT
*-------------------------------------------------------------------------
*----------
*THU 08 Oct
*----------
*----------
*FRI 09 Oct
*----------
*----------
*SAT 10 Oct
*----------
D283 1054 1124 1140 1205  DSS-76   FAST   RTD, 2250K, 2W    8444  xxxxxx- xxx

I283 1110 1140 1210 1245  DSS-29   FAST   RTD, 2250K, 2W    8444  xxxxxx- xxx

I283 1249 1319 1339 1404  DSS-76   FAST   RTD, 2250K, EE    8445  xxxxxx- xxx


*                    WPS 7-DAY OPERATIONS SCHEDULE          VERSION 07 SCHE
*                        ACTIVITIES LISTING
*                  WEEK NO. 41 *** 08 Oct 98 - 11 Oct 98
*-------------------------------------------------------------------------
*DAY START BOT EOT  END   FACILITY USER   ACTIVITY          PASS  CONFIG/ WRK
*                                                          NO.   SOE     CAT
*-------------------------------------------------------------------------
*----------
*THU 08 Oct
*----------
 280 2304 2334 0004 0029  DSS-29   FAST   RTD, 2250K, 2W    8417  xxxxxx- KEY

 281 0120 0140 0149 0151  DSS-82   SAM    RTD, 900K, 2W, N  4093  xxxxxx- xxx

 281 0139 0209 0221 0246  DSS-29   FAST   RTD, 2250K, 2W    8418  xxxxxx- xxx

 281 0320 0340 0351 0421  DSS-29   TRAC   RTD, 2250K, 2W    2803  xxxxxx- xxx

 281 0412 0442 0502 0527  DSS-76   FAST   RTD, 2250K, 2W    8419  xxxxxx- xxx

 281 0604 0634 0704 0729  DSS-29   FAST   RTD, 2250K, 2W    8420  xxxxxx- xxx
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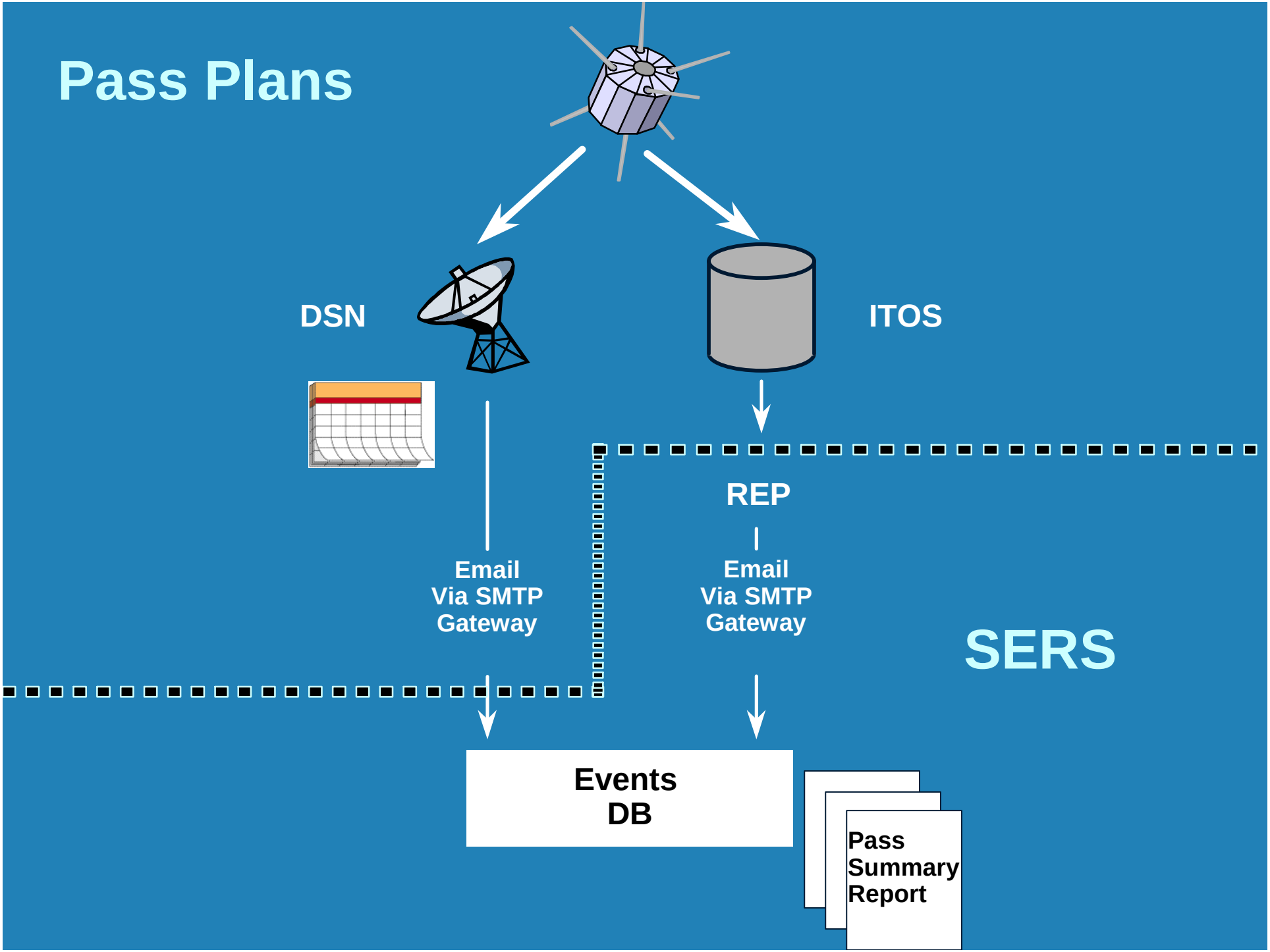
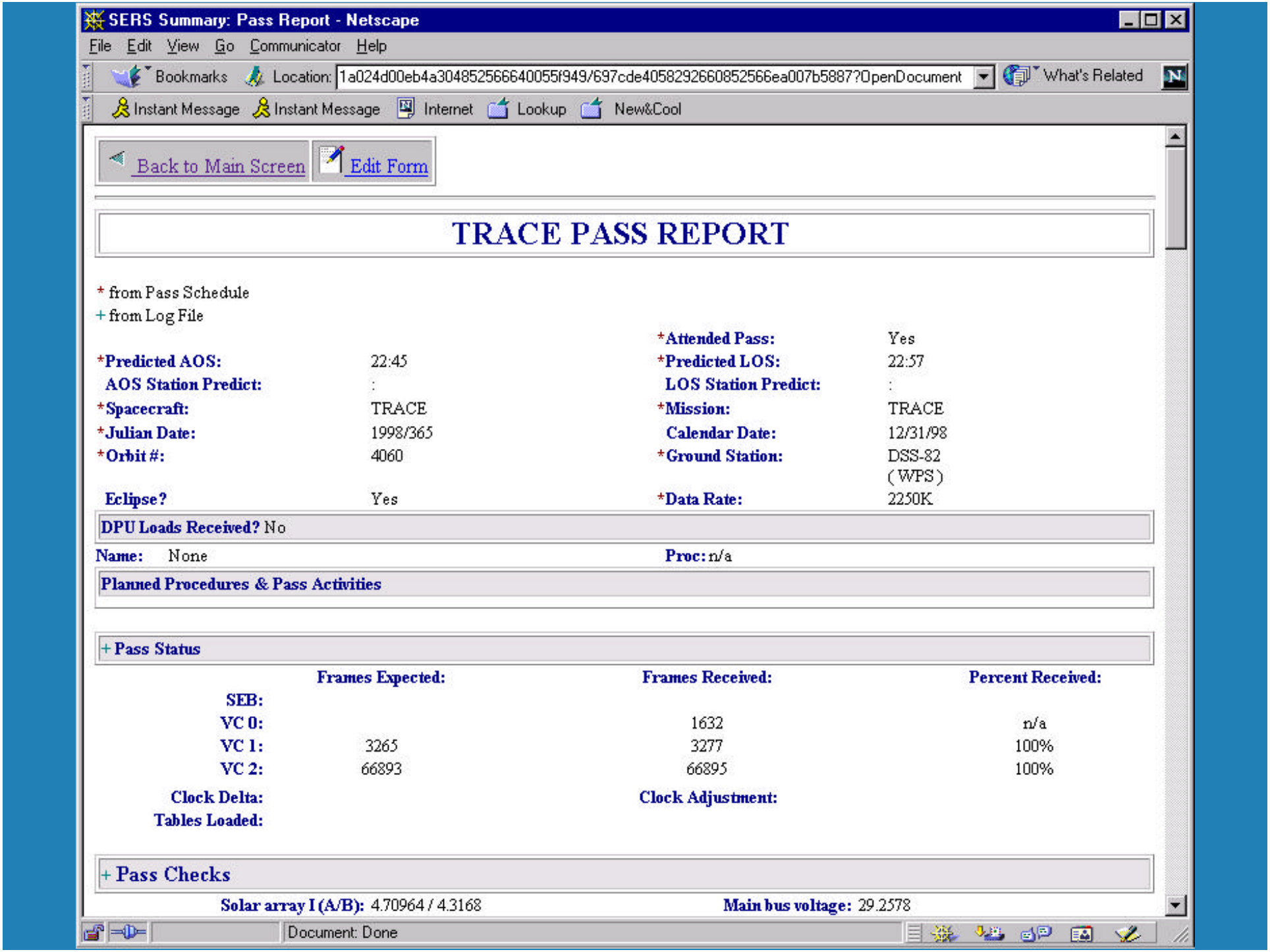

Pass Plans
DSN
ITOS
REP
Email
Via SMTP
Gateway
Email
Via SMTP
Gateway
SERS
Events
DB
Pass
Summary
Report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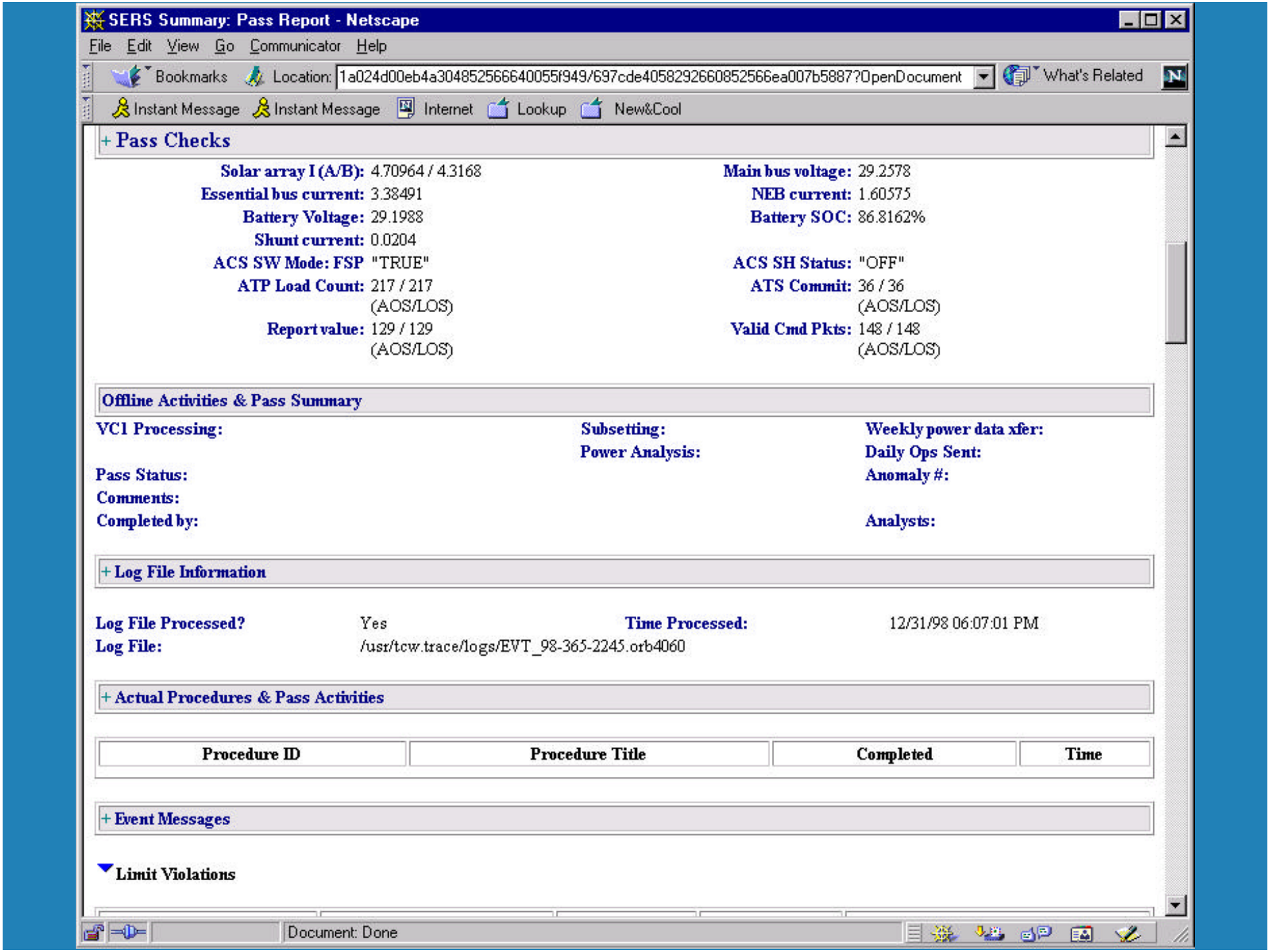
File Edit View Go Communicator Help
Bookmarks Location: 1a024d00eb4a30485256664005f949/697cde405829266085256 6ea007b5887?OpenDocument What's Related
Instant Message Instant Message Internet Lookup New&Cool
Back to Main Screen
Edit Form
TRACE PASS REPORT
* from Pass Schedule
+ from Log File
*Attended Pass: Yes
*Predicted AOS: 22:45
*Predicted LOS: 22:57
AOS Station Predict: :
LOS Station Predict: :
*Spacecraft: TRACE
*Mission: TRACE
*Julian Date: 1998/365
Calendar Date: 12/31/98
*Orbit #: 4060
*Ground Station: DSS-82 (WPS)
Eclipse? Yes
*Data Rate: 2250K
DPU Loads Received? No
Name: None
Proc: n/a
Planned Procedures & Pass Activities
+ Pass Status
Frames Expected:
Frames Received:
Percent Received:
SEB:
VC 0: 1632 n/a
VC 1: 3265 3277 100%
VC 2: 66893 66895 100%
Clock Delta:
Clock Adjustment:
Tables Loaded:
+ Pass Checks
Solar array I (A/B): 4.70964 / 4.3168
Main bus voltage: 29.2578
Document: Done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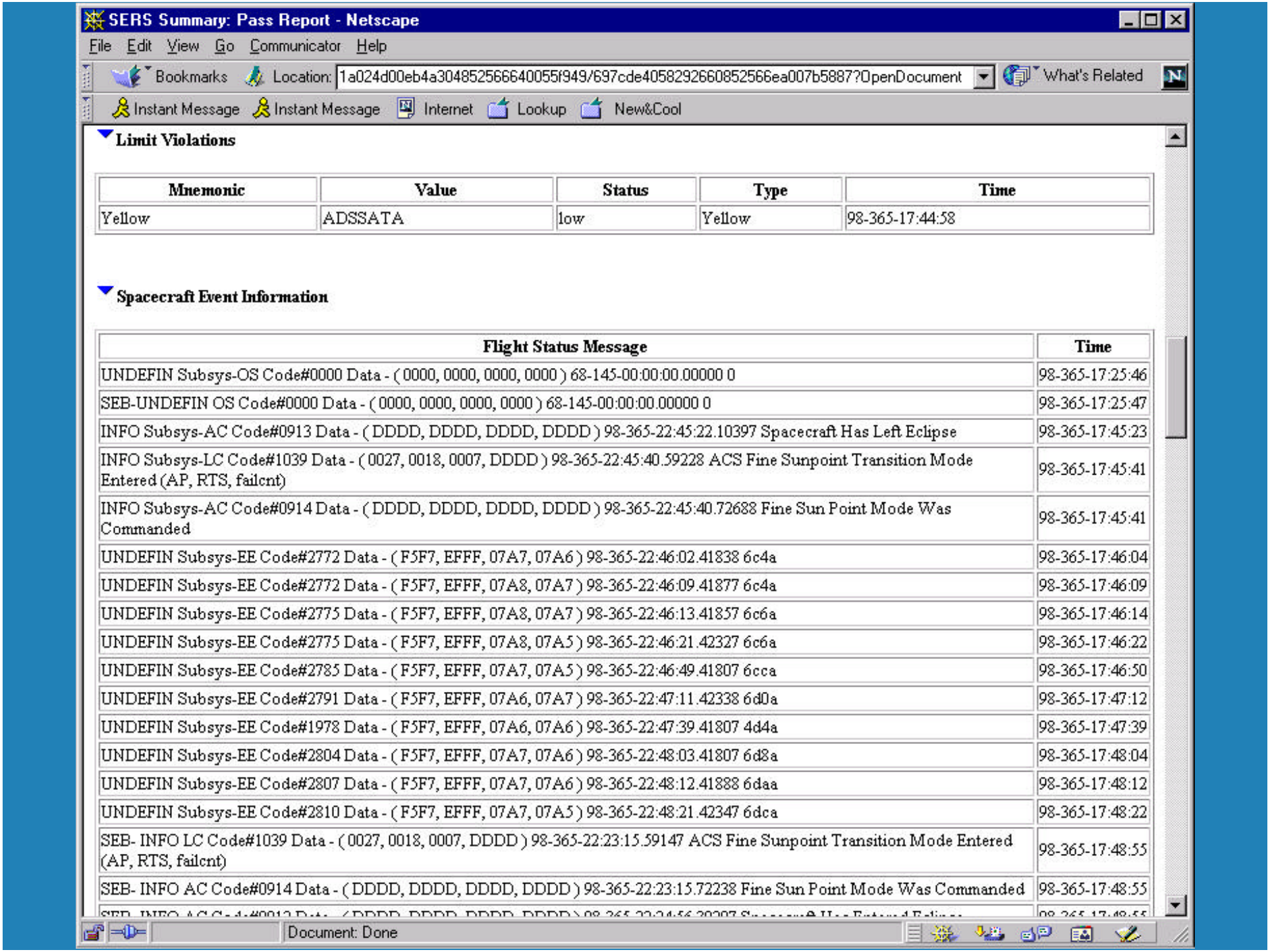
File Edit View Go Communicator Help
Bookmarks Location: 1a024d00eb4a30485256664005f949/697cde405829266085256 6ea007b5887?OpenDocument What's Related
Instant Message Instant Message Internet Lookup New&Cool
+ Pass Checks
Solar array I (A/B): 4.70964 / 4.3168
Main bus voltage: 29.2578
Essential bus current: 3.38491
NEB current: 1.60575
Battery Voltage: 29.1988
Battery SOC: 86.8162%
Shunt current: 0.0204
ACS SW Mode: FSP "TRUE"
ACS SH Status: "OFF"
ATP Load Count: 217 / 217 (AOS/LOS)
ATS Commit: 36 / 36 (AOS/LOS)
Report value: 129 / 129 (AOS/LOS)
Valid Cmd Pkts: 148 / 148 (AOS/LOS)
Offline Activities & Pass Summary
VC1 Processing:
Subsetting:
Weekly power data xfer:
Power Analysis:
Daily Ops Sent:
Pass Status:
Anomaly #:
Comments:
Completed by:
Analysts:
+ Log File Information
Log File Processed? Yes
Time Processed: 12/31/98 06:07:01 PM
Log File: /usr/tcw.trace/logs/EVT_98-365-2245.orb4060
+ Actual Procedures & Pass Activities
Procedure ID
Procedure Title
Completed
Time
+ Event Messages
Limit Violations
Document: Done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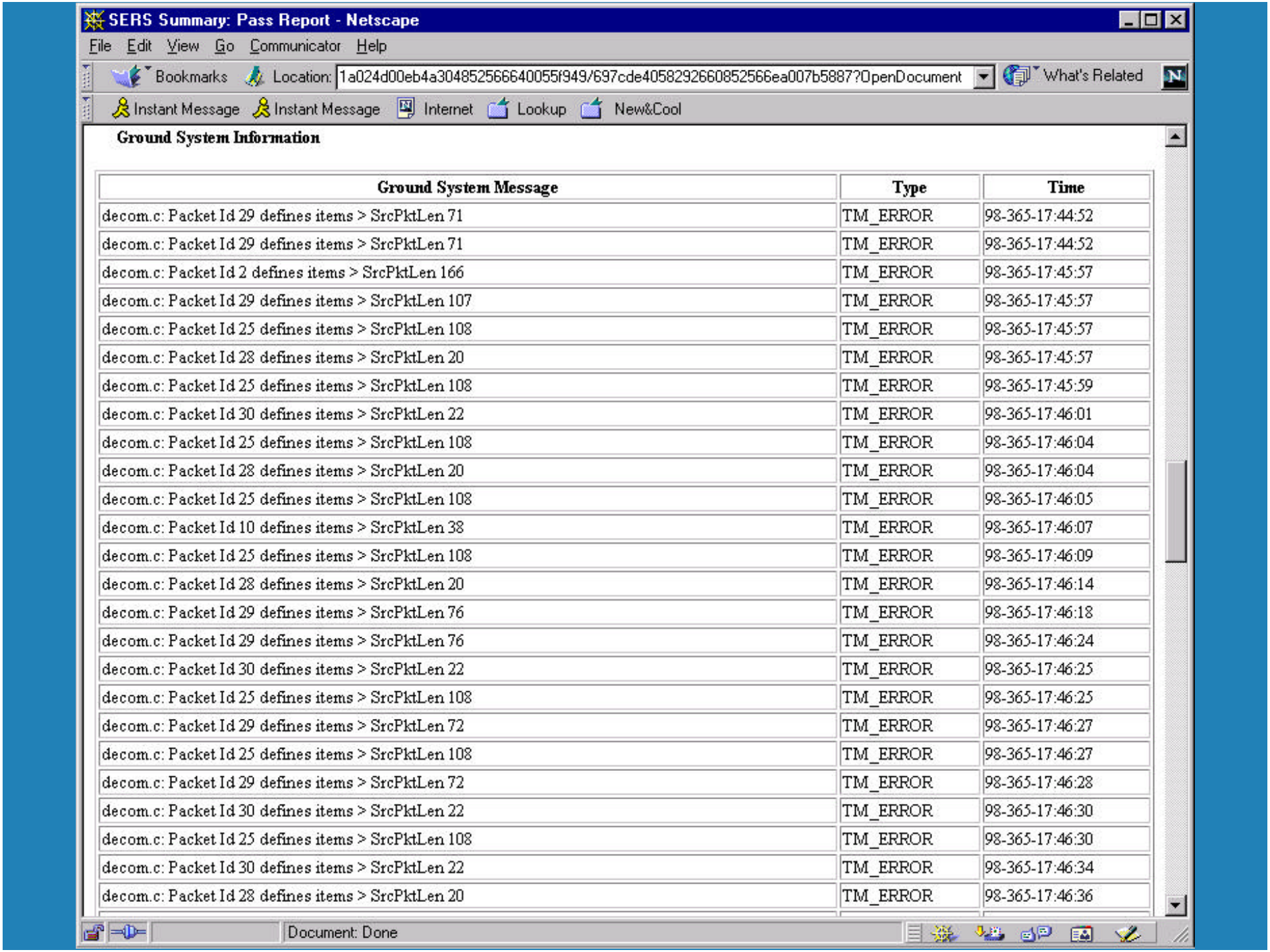
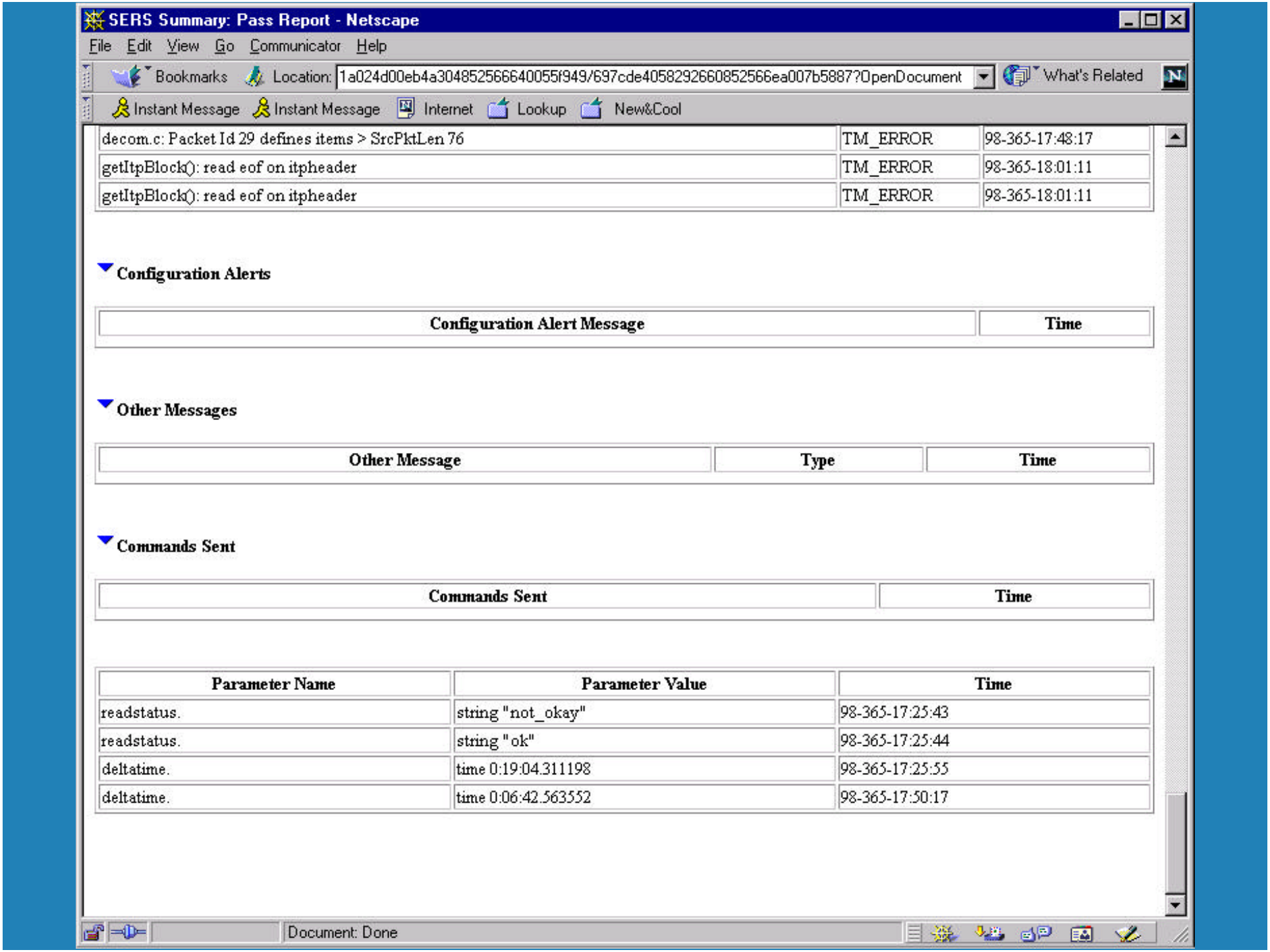
File Edit View Go Communicator Help
Bookmarks Location: 1a024d00eb4a30485256664005f949/697cde405829266085256 6ea007b5887?OpenDocument What's Related
Instant Message Instant Message Internet Lookup New&Cool
Limit Violations
Mnemonic | Value | Status | Type | Time
Yellow | ADSSATA | low | Yellow | 98-365-17:44:58
Spacecraft Event Information
Flight Status Message | Time
UNDEFIN Subsys-OS Code#0000 Data - (0000, 0000, 0000, 0000) 68-145-00:00:00.00000 0 | 98-365-17:25:46
SEB-UNDEFIN OS Code#0000 Data - (0000, 0000, 0000, 0000) 68-145-00:00:00.00000 0 | 98-365-17:25:47
INFO Subsys-AC Code#0913 Data - (DDDD, DDDD, DDDD, DDDD) 98-365-22:45:22.10397 Spacecraft Has Left Eclipse | 98-365-17:45:23
INFO Subsys-LC Code#1039 Data - (0027, 0018, 0007, DDDD) 98-365-22:45:40.59228 ACS Fine Sunpoint Transition Mode Entered (AP, RTS, failcnt) | 98-365-17:45:41
INFO Subsys-AC Code#0914 Data - (DDDD, DDDD, DDDD, DDDD) 98-365-22:45:40.72688 Fine Sun Point Mode Was Commanded | 98-365-17:45:41
UNDEFIN Subsys-EE Code#2772 Data - (F5F7, EFFF, 07A7, 07A6) 98-365-22:46:02.41838 6c4a | 98-365-17:46:04
UNDEFIN Subsys-EE Code#2772 Data - (F5F7, EFFF, 07A8, 07A7) 98-365-22:46:09.41877 6c4a | 98-365-17:46:09
UNDEFIN Subsys-EE Code#2775 Data - (F5F7, EFFF, 07A8, 07A7) 98-365-22:46:13.41857 6c6a | 98-365-17:46:14
UNDEFIN Subsys-EE Code#2775 Data - (F5F7, EFFF, 07A8, 07A5) 98-365-22:46:21.42327 6c6a | 98-365-17:46:22
UNDEFIN Subsys-EE Code#2785 Data - (F5F7, EFFF, 07A7, 07A5) 98-365-22:46:49.41807 6cca | 98-365-17:46:50
UNDEFIN Subsys-EE Code#2791 Data - (F5F7, EFFF, 07A6, 07A7) 98-365-22:47:11.42338 6d0a | 98-365-17:47:12
UNDEFIN Subsys-EE Code#1978 Data - (F5F7, EFFF, 07A6, 07A6) 98-365-22:47:39.41807 4d4a | 98-365-17:47:39
UNDEFIN Subsys-EE Code#2804 Data - (F5F7, EFFF, 07A7, 07A6) 98-365-22:48:03.41807 6d8a | 98-365-17:48:04
UNDEFIN Subsys-EE Code#2807 Data - (F5F7, EFFF, 07A7, 07A6) 98-365-22:48:12.41888 6daa | 98-365-17:48:12
UNDEFIN Subsys-EE Code#2810 Data - (F5F7, EFFF, 07A7, 07A5) 98-365-22:48:21.42347 6dca | 98-365-17:48:22
SEB- INFO LC Code#1039 Data - (0027, 0018, 0007, DDDD) 98-365-22:23:15.59147 ACS Fine Sunpoint Transition Mode Entered (AP, RTS, failcnt) | 98-365-17:48:55
SEB- INFO AC Code#0914 Data - (DDDD, DDDD, DDDD, DDDD) 98-365-22:23:15.72238 Fine Sun Point Mode Was Commanded | 98-365-17:48:55
Document: Done



Ground System Information

Ground System Message	Type	Time
decom.c: Packet Id 29 defines items > SrcPktLen 71	TM_ERROR	98-365-17:44:52
decom.c: Packet Id 29 defines items > SrcPktLen 71	TM_ERROR	98-365-17:44:52
decom.c: Packet Id 2 defines items > SrcPktLen 166	TM_ERROR	98-365-17:45:57
decom.c: Packet Id 29 defines items > SrcPktLen 107	TM_ERROR	98-365-17:45:57
decom.c: Packet Id 25 defines items > SrcPktLen 108	TM_ERROR	98-365-17:45:57
decom.c: Packet Id 28 defines items > SrcPktLen 20	TM_ERROR	98-365-17:45:57
decom.c: Packet Id 25 defines items > SrcPktLen 108	TM_ERROR	98-365-17:45:59
decom.c: Packet Id 30 defines items > SrcPktLen 22	TM_ERROR	98-365-17:46:01
decom.c: Packet Id 25 defines items > SrcPktLen 108	TM_ERROR	98-365-17:46:04
decom.c: Packet Id 28 defines items > SrcPktLen 20	TM_ERROR	98-365-17:46:04
decom.c: Packet Id 25 defines items > SrcPktLen 108	TM_ERROR	98-365-17:46:05
decom.c: Packet Id 10 defines items > SrcPktLen 38	TM_ERROR	98-365-17:46:07
decom.c: Packet Id 25 defines items > SrcPktLen 108	TM_ERROR	98-365-17:46:09
decom.c: Packet Id 28 defines items > SrcPktLen 20	TM_ERROR	98-365-17:46:14
decom.c: Packet Id 29 defines items > SrcPktLen 76	TM_ERROR	98-365-17:46:18
decom.c: Packet Id 29 defines items > SrcPktLen 76	TM_ERROR	98-365-17:46:24
decom.c: Packet Id 30 defines items > SrcPktLen 22	TM_ERROR	98-365-17:46:25
decom.c: Packet Id 25 defines items > SrcPktLen 108	TM_ERROR	98-365-17:46:25
decom.c: Packet Id 29 defines items > SrcPktLen 72	TM_ERROR	98-365-17:46:27
decom.c: Packet Id 25 defines items > SrcPktLen 108	TM_ERROR	98-365-17:46:27
decom.c: Packet Id 29 defines items > SrcPktLen 72	TM_ERROR	98-365-17:46:28
decom.c: Packet Id 30 defines items > SrcPktLen 22	TM_ERROR	98-365-17:46:30
decom.c: Packet Id 25 defines items > SrcPktLen 108	TM_ERROR	98-365-17:46:30
decom.c: Packet Id 30 defines items > SrcPktLen 22	TM_ERROR	98-365-17:46:34
decom.c: Packet Id 28 defines items > SrcPktLen 20	TM_ERROR	98-365-17:46:36


SERS Summary: Pass Report - Netscape
File Edit View Go Communicator Help
Bookmarks Location: 1a024d00eb4a30485256664005f949/697cde405829266085256 6ea007b5887?OpenDocument What's Related
Instant Message Instant Message Internet Lookup New&Cool
decom.c: Packet Id 29 defines items > SrcPktLen 76 TM_ERROR 98-365-17:48:17
getItpBlock(): read eof on itpheader TM_ERROR 98-365-18:01:11
getItpBlock(): read eof on itpheader TM_ERROR 98-365-18:01:11
Configuration Alerts
Configuration Alert Message
Time
Other Messages
Other Message
Type
Time
Commands Sent
Commands Sent
Time
Parameter Name
Parameter Value
Time
readstatus. string "not_okay" 98-365-17:25:43
readstatus. string "ok" 98-365-17:25:44
deltatime. time 0:19:04.311198 98-365-17:25:55
deltatime. time 0:06:42.563552 98-365-17:50:17
Document: Done

Statistics for TRACE

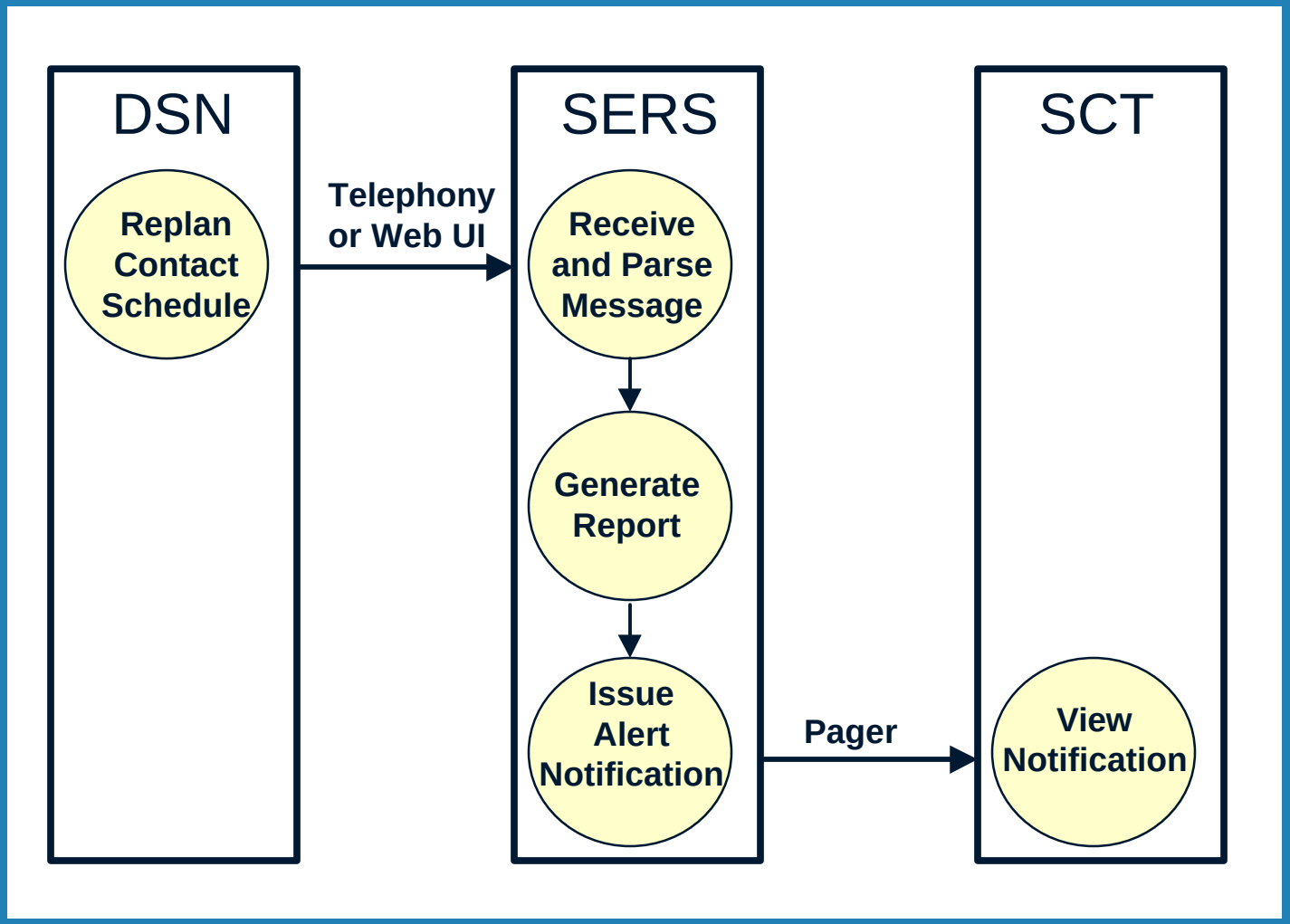
Transition Region and Coronal Explorer (TRACE)

- Events (since 2/99)
  - 1500
  - 5+ times return to MOC
- Pass Summaries (since 12/99)

Other Reporting

- DSN Alerts
- Weather
- Ground System

Contact Schedule Alteration



DSN EVENT REPORT

ID: DSN_Incident
Spacecraft: MAP
Type: Cancel
Originator: DSN Telephony
Incident Started: 7/27/98 11:11:42 AM
Posted At: 07/27/98 11:15:00 AM

Original Contact Information:

Start Time: 07/27/98 02:30

New Contact Information:

***Start Time:**
***End Time:**
New Station ID: **(2 digit ID for new station)**

Related Anomaly Reports:

Create Linked Ground Anomaly Report

Create Linked Spacecraft Anomaly Report

Back to Main Workspace | Compose Comment

DSN REPORT

ID: DSN_Incident
Spacecraft: IMAGE
Type: Reschedule
Originator: DSN Telephony
Incident Started: 7/27/98 9:57:50 AM
Posted At: 07/27/98 10:03:01 AM

Original Contact Information:

Start Time: 07/27/98 01:00

New Contact Information:

***Start Time:** 07/27/98 02:00
***End Time:** 07/27/98:04:00
New Station ID: 7 **(2 digit ID for new station)**

Related Anomaly Reports:

Create Linked Ground Anomaly Report
Create Linked Spacecraft Anomaly Report

Back to Main Workspace | Compose Comment

PROCESS MONITOR REPORT

Episode ID: DPCP Report
Spacecraft: TRACE
Originator: DPCP
DPCP Time: 3/26/1998 2:47:14

Monitored Processes

Process	Machine	Status
Event_Display	trace5	Running
invoke_daemon	trace5	Not Running
Event_Log	trace5	Running
TLM_Static	trace5	Running
fopMux	trace5	Not Running
ftcpTransmit	trace5	Not Running
TLM_Client	trace5	Running
deviceDriver	trace5	Running
Seq_Prt	trace5	Not Running
DP_Server	trace5	Running
Frame_sorter	trace5	Not Running
Run_Event	trace5	Running
Display_Remote	trace5	Running
fop	trace5	Not Running
olSTOL	trace5	Running
tmController	trace5	Running
tlmClcw	trace5	Running
TCW_Start	trace5	Running

Related Anomaly Reports:

Create Linked Ground Anomaly Report
Create Linked Spacecraft Anomaly Report

Back to Main Workspace | Compose Comment

SYSTEM MONITOR REPORT #19731

ID:	GM_Incident	**Originator:**	Ground System Monitor
Mission:	SWAS	**Spacecraft:**	SWAS
Episode Started:		**Episode Ended:**	
Posted At:	01/24/99 06:11:14 PM		

Event Information

Alert ID:	GM_ERROR
System:	ITOS
Incident Time:	01/24/99 06:11:14 PM
Alert Message:	There has been no log file from ITOS for more than 12 hours.
Related Anomaly Reports:	Create Linked Ground Anomaly Report Create Linked Spacecraft Anomaly Report

Back to Main Workspace | Compose Comment

SYSTEM MONITOR REPORT #18661

ID:	SM_Incident	**Originator:**	System Monitor
Mission:	TRACE	**Spacecraft:**	TRACE
Episode Started:		**Episode Ended:**	
Posted At:	01/08/99 07:30:21 AM		

Event Information

Alert ID:	SM_ERROR
System:	150.144.204.216
Incident Time:	01/08/99 07:30:21 AM
Alert Message:	SMEXVMOC1 150.144.204.216 is unreachable.
Related Anomaly Reports:	Create Linked Ground Anomaly Report Create Linked Spacecraft Anomaly Report

PASS EVENT REPORT #19531

ID:	PASS_INCIDENT	**Originator:**	ITOS
Mission:	SWAS	**Spacecraft:**	SWAS
Episode Started:	1/19/99 22:28:18	**Episode Ended:**	1/19/99 22:35:16
Posted At:	01/19/99 10:43:13 PM		

Background Information

Incident Started:	1/19/99 22:29:00	**Incident Ended:**	1/19/99 22:32:17
Alert ID:	BASIC		
Person(s) Responsible:	John Nagy		

Ground Systems Configuration

Anomalous Alert Information

▼ **Limit Violations**

Mnemonic	Value	Status	Type	Time
AGY2CT	61.06624084	high	Yellow	99-019-22:29:00
ASTDPCCDTEM	-2.54	low	Yellow	99-019-22:32:17

Related Anomaly Reports:
Report #: S-0019 (Status: Open)

Create Linked Ground Anomaly Report
Create Linked Spacecraft Anomaly Report

Supporting Web Pages: http://smexvmoc1.nascom.nasa.gov/vmoc_html/SWASEVT_99-020-0240.VC1.htm
Event List File: http://smexvmoc1.nascom.nasa.gov/SWAS/SWASEVT_99-020-0240.VC1.TXT

OPERATIONAL SPACECRAFT ANOMALY REPORT

Anomaly Title: Gyro 2 Case Temp Yellow High
Mission: SWAS
Spacecraft: SWAS
Discrepancy #: S-0019
Originator: John Nagy
Station: DSS-29 (PKF)
Orbit #: 666
Status: Open
Date of Entry: 01/20/99
GMT of Anomaly: 99/19/16:47:17
Categories:

Discrepancy Description:
During routine subsetting the AGY2CT flagged YH a 61.066 and returned to normal 2mins later. The YH limit is currently set to 61.0.

Software Configuration

ITOS:: 6.10 Patch Level 2 **Database::** 18.02

Subsystem Information

Sub-System: CMS
Notify: John Nagy **cc:**

Alert Message:
The preceding anomaly has been reported.

Related Event Reports

Related Event Links
Report # 19531

Limit Violations

Mnemonic	Value	Status	Type	Time
AGY2CT	61.066	YH		019-16:47:17

Spacecraft Event Information

Supporting Documentation

Action Taken

None

Impacts

None

Discrepancy Resolution

This anomaly is currently being investigated and is still within the six month time limit.

Notes

None

Investigated By: John Nagy

Approval

Approved: No

Form 2010

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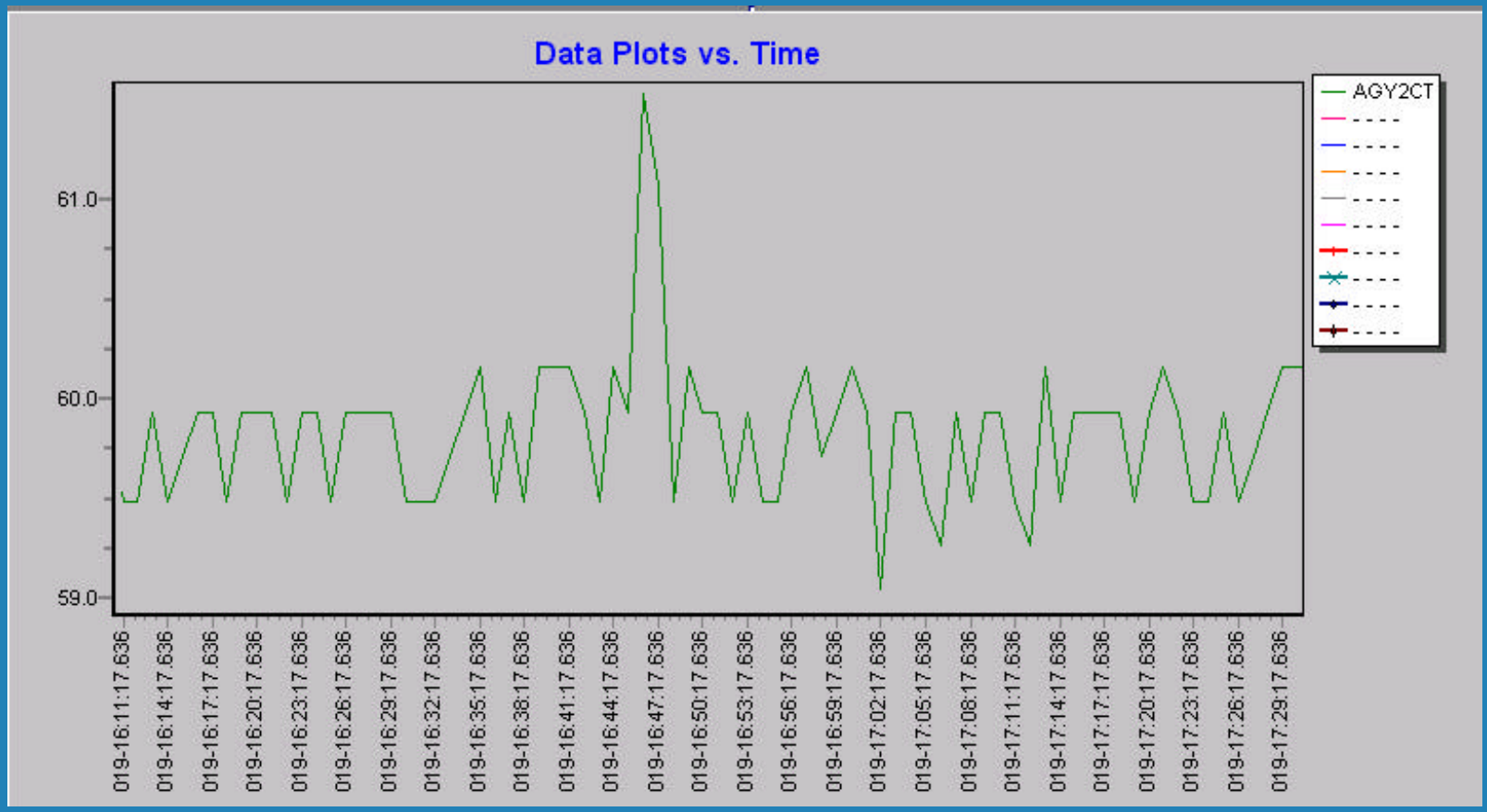
agy2ct.bmp


Data Plots vs. Time
AGY2CT
61.0
60.0
59.0
019-16:11:17.636
019-16:14:17.636
019-16:17:17.636
019-16:20:17.636
019-16:23:17.636
019-16:26:17.636
019-16:29:17.636
019-16:32:17.636
019-16:35:17.636
019-16:38:17.636
019-16:41:17.636
019-16:44:17.636
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019-16:53:17.636
019-16:56:17.636
019-16:59:17.636
019-17:02:17.636
019-17:05:17.636
019-17:08:17.636
019-17:11:17.636
019-17:14:17.636
019-17:17:17.636
019-17:20:17.636
019-17:23:17.636
019-17:26:17.636
019-17:29:17.636

Current Missions

- SMEX
- MIDEX
- New Millennium
- HST

New Initiatives

- Full Life Cycle Documentation
- Collaborative Engineering and Design
- Anomaly Resolution

Opportunities for Partnership

- Contact:
  - Jeff Fox, PNNL
    - jeff.fox@pnl.gov
    - 202-646-5239
  - Julie Breed, NASA
    - julie.breed@gsfc.nasa.gov
    - 301-286-5049
  - Alan Prenoveau, NEXGEN Solutions
    - alan_prenoveau@ngsinc.com
    - 301-654-5555

SERS Development Team

- Pacific Northwest National Laboratory
- NEXGEN Solutions
- Global Science & Technology