

MER Shift Reports

STS-107

Day 7 Shift 1

ORBITER ECLSS

STS-107 ECLSS SHIFT REPORT

FLIGHT DAY 8

SHIFT 1

All ECLSS systems performing nominally.

Consumables:	Supply water	431.6	lb.
	Waste water	116.2	lb.
	Orbiter Nitrogen	213.6	lb.

Shift Leader
GMT 022/17:08



**Thermal 1st Shift Landing Report
STS-107
January 22, 2003 11AM (06/01:21 MET)**

The performance of orbiter thermal systems is nominal and all subsystem temperatures are operating within acceptable limits.

Tim Davies / Andy Hong

MER FLIGHT CREW EQUIPMENT- GFE/CFE
STS-107 SHIFT REPORT

TO: MER MANAGER

SUBJECT: FD07; 2nd SHIFT REPORT

GMT: 022:17:00

EVENTS:

Provided stowage location of the commander's sunglasses. They were packed in the upper tray of MA9F inside a sunglasses case along with other accessories such as contact lens kit, socks. May be tucked up under the edge of the tray for added protection.

FORWARD ACTIONS:

Monitor the water issue with the HUMSEP, which includes procedures for vacuum cleaner use. FCE anticipating a CHIT to review on procedures. Also, monitor sunglasses situation.

CHITS (Monitoring / Working / Waiting for Closure):

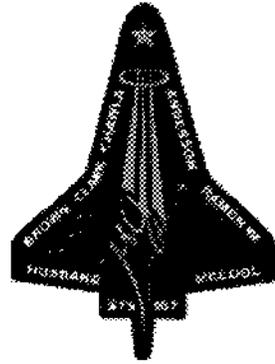
None

HARDWARE STATUS:

There have been no FCE anomalies recorded this reporting period. It is assumed all FCE is performing nominally.



Anna L. Burt
Flight Crew Equipment- GFE/CFE



DPS PASS FSW, MEDS & H/W MER Shift Report

STS-107

Date: 1/22/2003

GMT: 022/17:00:00

Shift: 1st

SYSTEM STATUS / ISSUES BEING WORKED

- All DPS systems performing nominally.

DPS Team Lead: Paul Relyea

Signature: _____

A handwritten signature in black ink, which appears to read "Paul M. Relyea". The signature is written in a cursive style and is positioned above a horizontal line.

STS-107
MER Comm and Track Shift Report
GMT 22:13:00
Shift 1

All comm and track systems are operating nominally.

Lance S. Borden

MER Comm & Track

STS-107 ESD SYSTEMS SHIFT REPORT
DAY 7 SHIFT 1
GMT 022/17:00

Energy Division Subsystems (MPS, RCS, OMS, FC/PRSD, APU, and Hydraulics) continue to function satisfactorily with the following notes or exceptions:

FC/PRSD – O2 tanks 4 and 5 were depleted to residual quantity at 022/00:14 GMT. The H2 tanks 4 and 5 are expected to be depleted in the next few hours.

OMS/RCS – Currently in ROMS interconnect, A regs, B pod heaters. Interconnect usage is at 0.585 %

Walter Scott
ESD Team Lead

STS-107 (OV-102 FLT 28)

1/22/03

8:00 AM

On-Orbit Shift Report

The HYD/WSB Systems are operating nominally and all parameters within their expected ranges. There have been no additional circulation pump runs for thermal conditioning or bootstrap re-pressurization. The HYD/WSB group is not working any issues at this time.

Total Circ Pump Runs

Thermal	Accumulator Recharges
Sys 1: 1 for elevon Park	0
Sys 2: 0 runs	0
Sys 3: 0 runs	0

Jeffery S. Goza

HYD/WSB SSE

STS-107

SIXTH DAILY REPORT

022:12:00 G.m.t.

The STS-107 mission is progressing nominally and all Orbiter subsystems are performing satisfactorily. One Orbiter issue has been reported in the previous 24 hours and is discussed in this report. The Orbiter consumables remaining are above the levels required for completion of the planned mission.

One item that is currently being investigated is the Space Shuttle Main Engine (SSME) 3 liquid hydrogen (LH₂) pre valve (PV6) open indicator "A" that initially failed to the off state at 016:17:25 G.m.t (00:01:46 MET). Four additional data dropouts of this same measurement have been observed in the last five days. The measurement in question is provided to the general purpose computer (GPC) via multiplexer/demultiplexer (MDM) flight aft (FA) 4 Card 08 Channel 00. Review of all measurements routed through the same MDM card and channel revealed four liquid oxygen (LO₂) Pogo Valve Open indications that had also failed to the off state. Of the nine measurements that indicated a failed off state, only one LO₂ and one LH₂ indication occurred at the exact same time. The investigation of the cause of these indications is underway.

David S. Mayo for 022/12:57
Don L. McCormack, Jr.
STS-107 Lead MER Manager

MER Shift Reports

STS-107

Day 7 Shift 2

STS-107 ESD SYSTEMS SHIFT REPORT
DAY 7 SHIFT 2
GMT 017/00:00

Energy Division Subsystems (MPS, RCS, OMS, FC/PRSD, APU, and Hydraulics) continue to function satisfactorily.

IFM Team meeting on Spacehab water problem redlined the IFM and are having WSA fan-separators connectors checked for proper pin registration and continuity. As the temperature is above the dew point, water is not being condensed and the IFM will not be run at this time.

FC/PRSD –The H2 tanks 4 and 5 will be depleted this shift..

OMS/RCS – Currently in ROMS interconnect, A regs, A pod heaters.

Chuck Beatty
ESD Team Lead

ORBITER ECLSS

STS-107 ECLSS SHIFT REPORT

FLIGHT DAY 8

SHIFT 2

All ECLSS systems performing nominally.

A simo dump was initiated at MET 6/2:34. The waste water portion of the dump was terminated at MET 6/03:31 with 14.3 lbs water remaining in the tank. The supply water lasted nearly an hour with the dump terminating at MET 6/03:31.

Consumables:	Supply water	318.1 lb.
	Waste water	28.2 lb.
	Orbiter Nitrogen	211.4 lb.

Shift Leader
GMT 023/01:00

Thermal

STS-107 MER Thermal 2nd Shift Report

023/01:00 GMT, 19:00 CST 01/22/2003

All thermal systems are performing nominally and all temperatures are within acceptable limits.

MOD continues to clarify the landing weight numbers. Worst case seems to indicate that the MLG tire limit could increase by 1°F to 11°F. It could also drop to 9°F depending upon the CG location. TCS will stay on top of this situation.

The ATL is still not correct all the way through EOM. Pointing has currently fixed through MET 8/05:00. EECOM has made it clear to FD that the sooner the ATL is fixed the better.

Lupe Gonzales/John Tran

MER FLIGHT CREW EQUIPMENT- GFE/CFE
STS-107 SHIFT REPORT

TO: MER MANAGER

SUBJECT: FD07; 3rd SHIFT REPORT

GMT: 023:01:00

EVENTS:

Red to Blue team handover for daily activities.

Monitored communications on the proper way to dispose of a used vacuum bag (containing a little water). Final suggestions were acceptable.

FORWARD ACTIONS:

Monitor the water issue with the HUMSEP, which includes procedures for vacuum cleaner use. FCE anticipating a CHIT to review on procedures.

CHITS (Monitoring / Working / Waiting for Closure):

No new CHIT to report that affects FCE hardware. Still waiting on CHIT for review of HUMSEP clean-up procedure.

HARDWARE STATUS:

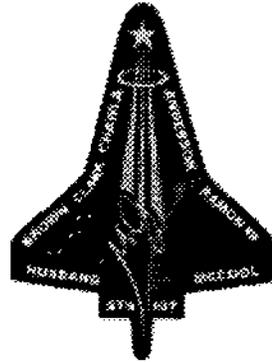
There have been no FCE anomalies recorded this reporting period. It is assumed all FCE is performing nominally.


Falco A. Campana
Flight Crew Equipment- GFE/CFE

MER Shuttle Safety Console
STS-107 FD 7 Shift 2
GMT 023:01:00

The MER Safety Console is not working any safety of flight issues.

Rich Gardner



DPS PASS FSW, MEDS & H/W MER Shift Report

STS-107

Date: 1/22/2003

GMT: 023/00:00

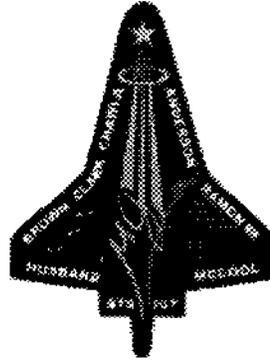
Shift: 2nd

SYSTEM STATUS / ISSUES BEING WORKED

- All DPS systems performing nominally.

DPS Team Lead: Dan Cushman

Signature: 



DPS PASS FSW, MEDS & H/W MER Shift Report

STS-107

Date: 1/22/2003

GMT: 023/01:00:00

Shift: 2nd

SYSTEM STATUS / ISSUES BEING WORKED

- All DPS systems performing nominally.

DPS Team Lead: Dan Cushman

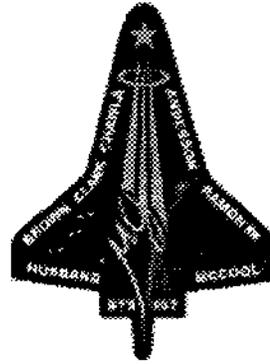
Signature:

A handwritten signature in black ink, appearing to read "Dan Cushman", written over a horizontal line.

MER Shift Reports

STS-107

Day 7 Shift 3



DPS PASS FSW, MEDS & H/W MER Shift Report

STS-107

Date: 1/23/2003

GMT: 023/09:00:00

Shift: 3rd

SYSTEM STATUS / ISSUES BEING WORKED

- All DPS systems performing nominally.

DPS Team Lead: Tom Swartley

Signature: Tom Swartley

**MER FLIGHT CREW EQUIPMENT- GFE/CFE
STS-107 SHIFT REPORT**

TO: MER MANAGER

SUBJECT: FD08; 1st SHIFT REPORT

GMT: 023:09:00

EVENTS:

Blue team is proceeding with daily activities.

FCE monitored communications on the proper way to dispose of a used vacuum bag containing a little water during the 3rd shift of FD07. Final suggestions were the same as our own.

FORWARD ACTIONS:

Monitor the water issue with the HUMSEP, which includes procedures for vacuum cleaner use. FCE is anticipating a CHIT to review on procedures.

CHITS (Monitoring / Working / Waiting for Closure):

No new CHIT to report that affects FCE hardware. Still waiting on CHIT for review of HUMSEP clean-up procedure.

HARDWARE STATUS:

There have been no FCE anomalies recorded this reporting period. It is assumed all FCE is performing nominally.



Keith Illg
Flight Crew Equipment- GFE/CFE

MER Shuttle Safety Console
STS-107 FD 7 Shift 3
GMT 023:08:58

The MER Safety Console is not working any safety of flight issues.

Denise Londrigan

ORBITER ECLSS

STS-107 ECLSS SHIFT REPORT

FLIGHT DAY 8

SHIFT 3

All ECLSS systems performing nominally.

Performed WCS compaction at 6/14:57 MET.

Consumables:	Supply water	397.6	lb.
	Waste water	43.6	lb.
	Orbiter Nitrogen	206.6	lb.

Shift Leader
GMT 023/08:48

STS-107 ESD SYSTEMS SHIFT REPORT
DAY 7 SHIFT 3
GMT 023/09:00

Energy Division Subsystems (MPS, RCS, OMS, FC/PRSD, APU, and Hydraulics) continue to function satisfactorily.

Richard Phillips
ESD Team Lead



Thermal 3rd Shift Report

STS-107, January 23, 2003
3 AM, MET 06/17:21 (23/09:00 GMT)

All temperatures are within acceptable limits and all thermal systems are operating nominally.

Shannon Belknap