

Subject: MPS/PM-1 (Aqua) Engineering Release 5.1 Delivery Letter
To: wfuller@pop500.gsfc.nasa.gov
From: enoone@csc.com
Date: Thu, 22 Jun 2000 19:16:22 -0400

Willie,

We are pleased to deliver Release 5.1 of the ETS Multimode Portable Simulator for PM-1 (MPS/Aqua). This engineering release delivery provides resolutions to Discrepancy Reports (DRs) SMODr07012, SMODr07013, SMODr07015, SMODr07036, SMODr07127, and SMODr07137, as detailed in the ESDIS DR Tracking Tool (DRTT).

There are three attachments to this letter. The first attachment contains the DR descriptions, the list of source files updated, installation instructions, release notes, and known system limitations. The second attachment contains an updated release history summary matrix. The third attachment contains an updated Mission Systems Configuration Management (MSCM) form.

The updated software executable modules are being delivered on CD-ROM. Two copies of the CD are being given to Guy Cordier, who will forward one copy to Raytheon at Denver and will use the other for installation on the MPS/PM-1 simulator PCs in B32/C210H at GSFC.

(See attached file: AttachA.doc)
(See attached file: AttachB.doc)
(See attached file: AttachC.doc)

If you have any questions about this latest delivery, please do not hesitate to contact me.

Estelle Noone

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Attachment A - Release 5.1 Delivery Contents, Installation Instructions, and Limitations

The changes made to the MPS/Aqua software since the delivery of Release 5.0 are in response to the Discrepancy Reports (DRs) described in the following table.

DR Number		Severity	DR Short Description	Comment
SMOdr07012	ETS0398	2	Telemetry packet headers are being corrupted.	Observed during acceptance test.
SMOdr07013	ETS0399	2	Simulator crashes upon command receipt.	Observed during acceptance test.
SMOdr07015	ETS0400	3	APID 1000 not being populated with valid times.	Reported by users
SMOdr07036	ETS0401	3	Packet interval changes are not smooth.	Observed during acceptance test.
SMOdr07127	ETS0402	3	Synchronize copies of the VCDU counter.	This is a Change Request.
SMOdr07137	ETS0403	2	Cannot make changes to packet headers.	Reported by users.

The changed source files are:

Executable Module	Files
NeTTServer.exe	Corrected NeTTModuleHolderIF.h to remove the cause of the crash upon command receipt.
SCPM1.dll	CucTimecode.cpp, ClcwPacket.cpp, ClcwPacket.h, TlmPacket.cpp, Tlmpacket.cpp, TlmVirtualChannel.cpp, TlmPacketController.cpp, TlmGenerator.cpp, TlmDatabase.cpp, TlmVCDU.cpp, and TlmDumper.cpp

Installation Instructions

The changed files have been compiled and linked into the executable modules named in the preceding table. Copy the new executable modules into the *c:\Program Files\csc\PM1 Server 5.0* folder, replacing existing files of the same name.

Release Notes

With Release 5.1, the simulated VCDU Sequence Counter in APID 1000 is copied from the CLCW packet when in IP mode, and from the enclosing VCDU when in Serial mode. Thus the simulated VCDU counters are synchronized as closely as possible.

Limitations

1. In response to DR ETS0403, the Modify TLM Packet Header window has been fixed so it works properly for all APIDs. Also, the Modify CUC and Modify Times windows work properly for all APIDs. However, the Modify EDU window, which is called up from the Modify Packet option of the Telemetry menu, only works for APIDs that do not have a secondary key. This is true even if the secondary key has only one value.

The workaround for the Modify EDU window is to use the setbuffer directive. This is actually a better option because of the flexibility of the directive. If the APID being modified does not have a secondary key, the container name is TlmPacketnnnn, where nnnn is the APID number. If the APID does have a secondary key, then at each invocation setbuffer may be used to modify the packet for only one instance of the secondary key. The container name is TlmPacketnnnnxxxx, where xxxx is the secondary key value to be modified. The following examples should illustrate the concept.

No secondary key:

```
setbuffer TlmPacket0953 20 word 0xF0 0xF1 0xF2
```

Secondary key:

```
setbuffer TlmPacket01140012 20 word 0xF0 0xF1 0xF2
```

2. In IP mode, the simulated VCDU counter in APID 1000 becomes static if CLCW packet transmission is halted.

Attachment B - Release History Summary Matrix

Attached is the release history summary matrix, which reflects the MPS/PM-1 Release 5.1 delivery. Please note that some of the release numbers reverted to 1.0 with the Release 3.1 delivery.

Release History Summary Matrix

System: MPS/Aqua

Release Number		1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.1	
Delivery Date		7/30/99	9/2/99	9/24/99	10/25/99	11/18/99	12/17/99	1/21/00	3/17/00	5/12/00	6/22/00	
Configuration Item	CI No.											
Core (Client)	1.1	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	
Core (Server)	1.2	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	
SC-PM1 (Client)	1.3	1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.0	
SC-PM1 (Server)	1.4	1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.1	
GS (Client)	1.5	1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.0	
GS (Server)	1.6	1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.0	
IP Input (Client)	1.7	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	
IP Input (Server)	1.8	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	
IP Output (Client)	1.9	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	
IP Output (Server)	2.0	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	
DQM (Client) ¹	2.1											
DQM (Server) ¹	2.2											
Logging (Client)	2.3	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	
Logging (Server)	2.4	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	

¹ To be delivered in a future release

Release Number		1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.1	
Delivery Date		7/30/99	9/2/99	9/24/99	10/25/99	11/18/99	12/17/99	1/21/00	3/17/00	5/12/00	6/22/00	
Configuration Item	CI No.											
Scenario (Client) ²	2.5								1.0	1.1	1.1	
Scenario (Server) ²	2.6								1.0	1.1	1.1	
Serial Input (Client) ²	2.7								1.0	1.1	1.1	
Serial Input (Server) ²	2.8								1.0	1.1	1.1	
Serial Output (Client) ²	2.9								1.0	1.1	1.1	
Serial Output (Server) ²	3.0								1.0	1.1	1.1	

² New in Release 4.0

Attachment C — Mission Systems Configuration Management Form

This attachment contains the completed Mission Systems Configuration Management (MSCM) form for the delivery of MPS/PM-1 Release 5.1.

Mission Systems Configuration Management Form

<u>1. ORIGINATOR</u> Estelle Noone	<u>2. ORGANIZATION</u> CSC	<u>3. PHONE</u> 301-805-3653	<u>4. E-MAIL ADDRESS</u> enoone@csc.com		
<u>5. ELEMENT</u> ETS (MPS/PM-1)		<u>6. INSTALLATION PRIORITY</u> Routine	<u>7. TRACKING NUMBER</u> (Assigned by CM Office)		
<u>8. SOURCE CHANGE REQUEST(S):</u> ETS delivery of MPS for EOS PM-1 (MPS/PM-1)		<u>9. APPROVALS</u>			
		Element Manager	_____ / ____ / ____		
		Flight Ops Director	_____ / ____ / ____		
		Operations Manager	_____ / ____ / ____		
<u>10. DELIVERED SYSTEM</u> (Check all that apply)					
	Name	Version	Media Identification	Identification Date	
<input type="checkbox"/>	Hardware	_____	_____	_____	
<input checked="" type="checkbox"/>	Software	<u>MPS/PM-1</u>	<u>R5.1</u>	<u>CD-ROM</u>	<u>06/22/00</u>
<input type="checkbox"/>	Database	_____	_____	_____	
<input checked="" type="checkbox"/>	Documentation:				
	<u>MPS/PM-1 Delivery Package</u>	<u>N/A</u>	<u>via email</u>	<u>06/22/00</u>	
	_____	_____	_____	_____	
	_____	_____	_____	_____	
<input type="checkbox"/>	Other	_____	_____	_____	
<u>11. CHANGE DESCRIPTION</u>					
<u>Release 5.1 of MPS/PM-1 (SIMSS/PM-1)</u>					

<u>12. ATTACHMENT(S):</u> Check if YES <input checked="" type="checkbox"/>					
Description: <u>MPS/PM-1 Release 5.1 delivery package (cover letter with attachments) dated 06/22/00</u>					

<u>13. CM OFFICE USE</u>					
	Location (Bldg/Room)	Slot location(s)			
Hardware	_____ / _____	_____			
Media	_____ / _____	_____			
Documentation	_____ / _____	_____			
Installation date	_____ / ____ / ____	CM Office Signature _____			

Form MSCM (970327)