

## Attachment F – Unresolved Discrepancy Reports

All open SIMSS Discrepancy Reports (DRs) are listed in the following table. These consist of DRs that remain open from Release 1.0 (through 135), Release 2.0 (149 through 210), Release 3.0 (211 to 261), and Release 4.0 (262 to 310). The table includes the DR Number, Description, and Severity.

### Summary of Open Discrepancy Reports

High	Medium	Low	Total
4	38	30	72

DR	Description	Severity
100	Some modules disappear, others don't when client disconnects from server.	Low
135	Multiple projects need to be supported.	Low
150	We are losing HANDLES and THREADs after we remove modules from the Project. Two threads are typical.	Medium
152	GenericTLM, OutputIP, TestModule are not supporting Directives but in the latest build GUI flag was set to TRUE.	Low
153	(OutputIP, TestModule) Modules are not cleaning up opened windows after Project is closed.	Low
211	A text floating point number prefixed by a 0 (e.g., 0.125) is not correctly converted into an RmmContainerNumeric<float>, though without the prefix (“.125”).	Medium
215	SerialInput status window should not show "Lock" or "Search" when the project is stopped.	Medium
219	(TXFile): Unable to lock on data when the Interval in the TXFile module is less than 10 msec. This problem occurs with data either from CD or hard drive - (IT-DR1)	Medium
232	Reverse Order did not work for a large size file. This needs to be redone, i.e. file reversal should be done prior to transmission – Regression Test R15.5: TXFile Module: Reverse Order.	Medium
236	CmdXmit: Save/Restore command files at all levels failed - R3 Item Test I18.4.	Medium
237	CmdXmit: Build and transmit CCSDS command blocks failed - R3 Item Test I18.5.	Medium
238	Stripper to Serial Interface: current configuration not working - R3 Item Test I123.2.	Medium
241	At 1Mbts with a frame size of 200 bytes, a drop approximately every 1000 frames. At 800 bytes per frame, a drop approximately every 600 frames. This appears to be a handshaking issue? and/or the TDMGen is not responding quickly enough? - (IT-DR4).	Medium
243	(GenTlm): The genericlmbd.txt was modified. The only way to make the system recognize the change was to remove the GenTlm module from the project and reinsert it (IT-DR6).	Medium
244	(GenTlm): The users guide does not explain how to change data as per Requirement TG1.1.4c. We were unable to find any reference to how to do this. Also, an application error (memory referenced can not be read) occurred when the system is taken from run to stop - (IT-DR7). (Note: Developer could not reproduce the software problem.)	Low
245	(GenTlm): Unable to transmit telemetry data over multiple channels. Requirement TG1.3.1 - (IT-DR8).	Low
246	(GenTlm): The only way to change parameters E & F is by modifying the text file, which requires to stop, removing the module and re-adding the module. Requirement TG1.1.4 states the user shall have the capability to change parameters. This requirement implies to include E & F - (IT-DR9).	Low

247	(GenTlm): Could not find any way to define whether to allow packets to be split or not to be split as per Requirement TG1.2.1 - (IT-DR10).	Low
248	(GenTlm): Could not find any reference to the Packet Splitting Flag in the User's Guide (Requirement TG1.2.3.c) - (IT-DR11).	Low
249	(CmdXmit) The virtual channel and the frame length appear to be reversed - (IT-DR12).	Medium
251	(CMDXMIT): After a Load CLTU function the values in the Edit Sel displays do not reflect the current values. The data is restored properly (IT-DR14).	Medium
252	(CMDXMIT): This module will not ingest raw command data. It does not process the data file into code blocks. Requirements CG1.3 and CG1.3.1 (IT-DR15).	Low
253	(CMDXMIT): We could not find a way to perform the CRC calculation. Requirement CG1.3.3 (IT-DR16).	Low
254	(CMDXMIT): This module will not perform these functions. As per our earlier discussions a new module will perform these functions. Requirements CG1.4, CG1.4.1, CG1.4.2 (IT-DR17).	Medium
255	(GenericCmdIngest): We were unable to display the information in Requirement CI1.8 without going to a getBuffer type-in. These functions should be available in a pop up window (IT-DR18) – Same as DR 222 (ST-R10.3)	Low
263	Certain arithmetic functions (asin, sin, tan, etc.) return incorrect results for some legal inputs. (Aura)	Medium
265	(Client Core) DR12-1: When the Client software is initialized a date and time appears in the SIMSS Client Window Header. What date and time does this relate? It is not the release date or the current date. (R4IT-DR1)	Low
266	(OutputIP) DR12-2: The system is not able to connect via the second Ethernet card. (DT9) (R4IT-DR2).	Medium
267	(AvtecOutput) DR13-1: System will not switch to external clock mode (DT-3.7 failed) - (R4IT-DR3).	Medium
268	(AvtecInput) DR13-2: Avtec input status display does not perform the following. DT4.4a : No Enable/Disable Status. DT4.4b: No indication of Data Frequency. DT4.4c: Frame Length is not displayed. There is a spot for it, but no value is displayed. DT4.4i: We have no idea where this is displayed or why it is a requirement here. (R4IT-DR4)	Low
269	(AvtecOutput) DR13-3: DT4.5 Fails. The boards will not accept NRZ-M or NRZ-S data. The board always appears to be in APC Mode. Changing the mode in the configuration menu for APC has no effect. Also inverting the data has no effect. D through E should be deleted. (R4IT-DR5)	Medium
270	(AvtecInput) DR13-4: The Avtec input status display is lacking displays for items DT4.6 a, b, c, and v. Why DT4.6v is here does not make any sense. (R4IT-DR6)	Low
271	(AvtecInput) DR13-5: There are some problems with the Sync Detect logic. The system needs 32 bits of both sync and mask to properly lock on the data. If you enter the following: 24 bit Size, the system will put the last byte of the previous frame in the first byte of the buffer. Frame Sync will be put in the next three bytes of the buffer. If you configure for 32 bits of sync, the data will be properly aligned in the buffer. The Size field for the sync length does not seem to play a role in the functioning of this module. (R4IT-DR7)	Medium
272	(TDMGen) DR14-1: In testing we encountered an old problem. The displays do not accurately reflect the system status. Data was started in TDMGen and the border of Channel 1 went green. The status indicator shows the Status as Disabled. This has happened since Release 1.0 and has not yet been fixed. (R4IT-DR8).	High
273	(SerialOutput) DR14-2: When Convolution Encoding mode is selected, no data is transmitted. This turned out to be a limitation of the module. The module will not send out any data if the frame length is greater than 2048 bytes. (R4IT-DR9).	Medium
274	(SerialInput) DR14-3: The User's Guide does not reflect the Release 4.0. It does not accurately give the user the information needed to run this release. For example on the Serial Input Module. Which board does this relate to? It would help the general user if the module name changed to ICS Serial Input Module from Serial Input Module. This would be consistent with the AVTEC Serial Input Module. The Parameter for Frame Size does	Medium

	not exist on the Serial Input Configuration Window. (R4IT-DR10). (Note: The SUG has been updated to reflect the problem mentioned)	
275	(SerialInput) DR14-4: DT 6 The ISC Serial Input board does not support TTL. This requirement needs to be corrected. (R4IT-DR11).	Low
276	(SerialInput) DR14-5: Unable to receive data on the ICS B card. (R4IT-DR12).	Medium
277	(AvtecInput) DR14-6: System crashes when you attempt to reconfigure the AVTEC Serial Input Module. This did not occur during individual testing of the module. (R4IT-DR13).	Medium
278	(AvtecInput) DR14-7: The Data Dump on the AVTEC Serial Input module only displays 256 bytes of data. (R4IT-DR14).	Medium
279	(SerialOutput) DR15-1: The ICS card will not properly transmit buffers containing odd number of bytes. (R4IT-DR15).	Medium
280	(GenTlm) DR15-2: Until the fill VC's are implemented this module cannot be realistically be connected to a serial output module. The Fill VC's are required to maintain the contiguous data stream. (R4IT-DR16).	Medium
281	(GenTlm) DR15-3: Because of the varying lengths of the VC's, it will not work properly with the Serial Output Module. (R4IT-DR17).	Medium
282	(GenTlm) DR15-4: Packet Sequence errors. We are seeing packet sequence errors. These seem to occur more when the packet size is larger than the virtual channel size. (R4IT-DR18).	Medium
283	(VC Processor) DR15-6: The Virtual Channel Processor did not properly display the number of frames received. (R4IT-DR19). <b>Type: Defect</b>	Medium
284	(Packet Processor) DR15-7: The Packet Processor does not appear to process Packets in the 1100 series. (R4IT-DR20).	Medium
285	(DTMGen) DR16-1: TDMGEN The reset counters switch does not reset the counters. (R4IT-DR21).	Low
286	(SerialInput) DR16-2: Serial Input requires the entire command, including post-amble, to come in before it is passed to the TDM Command Ingest module. This can cause long delays in command verification, especially when multiple commands are sent. This would cause telemetry verification failures. This needs to be redesigned to detect the preamble and spacecraft sync (barker code). It should then pass a defined number of bits (individual command length) to the command ingest module. The command ingest module should verify the commands. If it detects an error or it detects postamble, it should tell the serial input module to reset and start looking for preamble and sync. (R4IT-DR22).	High
287	(TDMCmdIngest) DR16-3: Configured Command Ingest for no postamble (0 length). Received the following message. 047:14:21:07 Proj 0 TDMCmdIngest DLL: Warning: Could not find the Postamble Sequence, should be: (hex) Since there was no postamble, this message should not have occurred. (R4IT-DR23).	Low
288	(TDMCmdIngest) DR16-4: The only way to reconfigure TDM Command Ingest module is to stop the entire system. This should be changed. (R4IT-DR24).	Medium
289	(TDM DQM) DR16-5: The Output displays need to have the ability to be updated while the system is running. (Not really in the requirements, but for the module to be useful, this needs to be done.) (R4IT-DR25).	Low
290	(TDM DQM) DR16-6: The list button in the output configuration display appears to do nothing. (R4IT-DR26).	Low
291	(CmdXmit) When using two CmdXmit modules, get error messages concerning packet container items. (R4ST-DR1)	Low
292	(Serial Input & Output) using same ICS card for serial output and serial input caused crash at high rates. (R4ST-DR2).	Low
293	(SerialInput) could not get any serial input data detected on ICS board B. (R4ST-DR3).	Medium
294	(GenTlm) Channel 2 in GenTlm outputs one frame and quits when connected to serial output modules. (This DR could be linked to the existing DR which has not been identified yet). (R4ST-DR4).	Low
295	(AvtectInput) the encoding on Avtec Serial Input module did not work, i.e. NRZM,	Low

	NRZS. (R4ST-DR5).	
296	(Encoding) CRC-16 encoding not working on the encoding module. (R4ST-DR6).	Low
297	(SerialOutput) CRC-16 encoding not working on the serial output module. (R4ST-DR7).	Low
298	(SerialOutput) ICS Serial Output module cannot output frames with odd number of bytes. (R4ST-DR8).	Low
299	(Generic CmdIngest) DR 19-1: Command Status always indicates "disabled". (R4IT-DR27).	Medium
300	(Generic CmdIngest) DR 19-2: We need positive event messages when commands are being processed without any errors. At a minimum, BD type commands should be displayed. Once this module can be data base driven the other types of commands will be taken care of. The only way to tell if commands are being processed is by checking the REPVAl in the CLCW. (R4IT-DR28).	High
301	(Generic CmdIngest) DR 19-3: Container buffers are not displayed when using the getbuffer directive. (R4IT-DR29).	Medium
302	(Generic CmdIngest) DR 19-4: The 32 bits of CLCW that this module generates does not report the REPVAl at all. None of the flag bits are reported. No matter what flag bit is set, only the "bit lock" bit is reflected in the telemetry. (R4IT-DR30).	High
303	(Generic CmdIngest) DR 19-5 There seems to be no way to determine the rate of CLCW output let alone suspend/resume the update. The CLCW should be constantly updated. (R4IT-DR31).	Medium
304	(Monitor) DR20-1: The browse function in the Log Module Configuration menu does not allow you to switch to another drive. The file browse function must allow the user to access any drive attached to the system. (R4IT-DR32).	Medium
305	(Log) DR20-2: This module does not have a buffer dump in the Run Time pop up window. It appears the only way to meet this requirement is to add a monitor module. (R4IT-DR33).	Low
306	(TxFile) DR20-3: At end of playback the Transmit menu does not reflect that it has completed by changing the send button back to a mode that will accept input. (R4IT-DR34).	Low
307	(TxFile) DR20-4: Manual mode is not working properly. (R4IT-DR35).	Medium
308	(TxFile) DR20-5: Auto-Blocks Mode is not working. (R4IT-DR36).	Medium
309	(Monitor) NOTE 20-1: It would be helpful to the user if the buffer display addresses would default to decimal. The data should default to hex, but the address should be displayed in decimal.(R4IT-EH1).	Low
310	(Encoding) DR26-1: The module does not properly CRC encode the data stream. There is a fix for this problem but has to be incorporated into this release (R4IT-DR37).	Medium