



June 7, 2000

APPLICATIONS NOTE

STS 54500 Installation Recommendations

1. The Larus 54500 shelf can be configured with a number of plug-in cards. One popular configuration consists of one DS1 bridging input card, one GPS Stratum One card, and one DS1 output driver card, plus information management and alarm interface.
2. The plug-in cards are all hot pluggable. Through experience, Larus has found the best methods of installing this equipment to achieve customer satisfaction. Technically, the cards can be inserted into the shelf in any sequence, but one sequence will provide the expected results without intervention. Other sequences might require a trained technician.
3. The recommended sequence:
 - A. Mount the shelf. No cards are inserted yet. Attach -48VDC power and ground.
 - B. Mount the GPS antenna on the roof with a clear view of the sky. Connect the coaxial cable from the antenna down to the rear of the equipment shelf. Before attaching it to the "GPS ANT 1" connector, test the cable with an ordinary multimeter. A resistance of a few hundred ohms should normally be seen, representing the normal GPS antenna load. A resistance of zero would be a short circuit. A resistance of more than 1 Megohm would be an open circuit. If this tests OK, then attach the cable to "GPS ANT 1" connector.
 - C. Attach a terminal to the Local Access port on the shelf. This could be a VT100 data terminal, or it could be a laptop computer with terminal emulation software such as Hyperterminal or Procomm. The terminal settings should be 9600 baud, N-8-1. Have the terminal or software connected through its assigned serial port to the Larus shelf using a null modem cable (typically p/n 041-02007-000).
 - D. Start at the left side of the shelf. Insert the 54511 bridging input card into the leftmost slot. There may or may not be a DS1 input signal available.
 - E. Insert the 54593 GPS card into the second leftmost slot. There should be GPS input signal from step 3. B. above.
 - F. Insert the 54550 Information Management card into the proper slot. Then press the RESET PROC button. Now you are ready to begin the Log On process:
 1. If you have the TL1 interface, then enter the complete ACT-USER command with user name and password. Response header and prompt will then allow the next TL1 command.
 2. If you have the Menu interface, then the system should bring you to the screen which says **0) Log On**. Press **0**. The system prompts for the User name. Enter the default user name unless something different has been set. The system prompts for the password. Enter the default password unless something different has been set. The defaults are: **SYSADMIN** then **-VISTA-**
 3. A prompt will tell you that the log on is complete. Now watch the system progress.
 - G. Insert the 54560 Alarm card into the proper slot.
 - H. The 54593 card will make progress toward GPS mode and finally indicate that after some period of time, which might be several hours, but is typically quicker.
 - I. If an installer error had been made and if the GPS antenna was not properly attached before 54593 power up, then the 54593 card will come up into free run mode, not GPS mode. If the antenna is then attached late, the 54593 might come up into GPS mode and then fail shortly later. Obviously, this is not desired. If the GPS antenna cable is intact from the start, then this will get the expected result and indicate that both on the front panel display indicators and also on the screen messages.

- J. If GPS failure happens, then remove the 54593 card temporarily. Run a one-foot length of twisted pair jumper wire from one unused signal of the 54571 card output wirewrap pins on the shelf rear to the first input port (terminating) on the 54511 card (actually at J1) unless there is an input signal already there. The 54511 input card should see this DS1 signal and apply it to the system. Once this is done, then restore the 54593 card back into its slot and watch the process again until success is reached.
- K. There are some known bugs in the 54550 Information Management card. If a terminal session is broken, the user might not be logged off. This is not correct and will be fixed shortly as a security feature.

— — —