

<b>NUMBER</b>	SB2005
<b>TO</b>	T-311 Customers / Dealer Network
<b>SUBJECT</b>	Initial Commissioning Procedure for SES
<b>REVISION</b>	Rev A
<b>DATE</b>	04/15/2020

## AFFECTED ASTRONICS AEROSAT PRODUCT

<b>DESCRIPTION</b>	T-310 and T-311 Tail Mounted SATCOM System
<b>PART NUMBER</b>	000-2129-2004, 002-2129-1004
<b>PART NUMBER REVISION</b>	Rev All

## REFERENCE DOCUMENTATION

<b>000-2129-1004-IM</b>	T-310 Tail Mounted SATCOM System Installation Manual
<b>000-2129-1004-LMM</b>	T-310 Tail Mounted SATCOM System Line Maintenance Manual
<b>000-2129-2004-IM</b>	T-311 Tail Mounted SATCOM System Installation Manual

### 1.0 COMPLIANCE — MANDATORY

Compliance with this Service Notification is mandatory until such time as this content is officially included in the following documents as standard practice:

- *T-310 and T-311 Tail Mounted SATCOM System Installation Manual, 000-2129-1004-IM and 000-2129-2004*
- *T-310 Tail Mounted SATCOM System Line Maintenance Manual, 000-2129-1004-LMM*

### 2.0 BACKGROUND

The initial release of the T-310 and T-311 Tail Mounted SATCOM System requires the satellite service provider to collect additional information.

### **3.0 PURPOSE**

This Service Notification is formatted to provide a procedure on data collection for the service provider, modem file loading, and to serve as a method to complete antenna alignments due to the limited failover period provisioned by the network.

### **4.0 SCOPE**

This Service Bulletin is serves as an approved technical procedure for the completion of modem commissioning on the SES network.

### **5.0 APPROVAL**

This Service Notification is approved by Astronics AeroSat Field Service Engineering.

### **6.0 PROCEDURE**

The requirements for this procedure are as follows. It is assumed that the technician is aware of the Astronics AeroSat equipment and has been adequately trained in its operation.

#### **6.1 PERSONNEL REQUIREMENTS**

- One adequately trained technician is required.

#### **6.2 TOOLING REQUIREMENTS**

Laptop with CAT5e or greater Ethernet cable for variable length to accommodate the desired technician workspace location on the plane, or properly configured wireless access point serving as a DHCP server, to access the ACMU web page at <https://192.168.62.10> and modem web page at <https://192.168.62.20> simultaneously.

#### **6.3 PARTS REQUIREMENTS**

- T-310 and T-311 Tail Mounted SATCOM System, 000-2129-1004 and 000-2129-2004
- A properly configured modem to enter the desired service provider network, or applicable files to load to the modem to gain entrance into the desired network.

#### **6.4 WEIGHT AND BALANCE**

There is no effect to the weight and balance to the aircraft.

#### **6.5 ELECTRICAL LOAD**

There is no effect to the electrical load to the aircraft.

## 7.0 INSTRUCTIONS

Perform the following steps to commission the system in the service provider's network for the first time or any time the ACMU is replaced.

### 7.1 PREREQUISITES

- Complete Step 4.4.4.1 in *000-2129-X004-IM*, T-310 and T-311 *Tail Mounted SATCOM System Installation Manual* before performing the steps in **Section 7.2**.

### 7.2 PROCEDURE

1. Ensure the T-310 / T-311 system has a clear line of site to the required satellite used for service.

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#### NOTE:

Use of external satellite pointing tools such as [www.dishpointer.com](http://www.dishpointer.com) can be helpful to determine the location of the satellite once it is known.

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2. Connect the laptop to the ACMU through a network cable connection to the Operator Control Panel (External Maintenance Port) or a wireless access point connection.

Refer *000-2129-1004 and 000-2129-2004*, T-310 and T-311 *Tail Mounted SATCOM System Installation Manual* for instructions on how to configure the laptop for network cable connections.

3. Open a Chrome, Firefox, or Internet Explorer v11 or greater supported web browser.
4. Navigate to <https://192.168.62.10> to access the ACMU web interface.
5. Open a second supported web browser in another window.
6. Navigate to <https://192.168.62.20> to access the modem web interface.

The iDirect Welcome page appears.

7. Enter the following user account information onto the iDirect Welcome page.
  - Username: **admin**
  - Password: **iDirect**

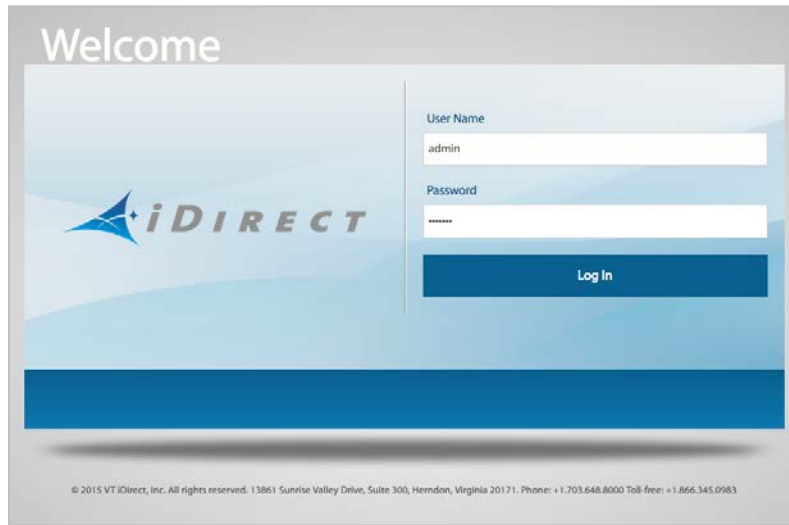


Figure 1 — iDirect Welcome Page

8. Click the **Start Wizard Button** at the top of the page, as shown in **Figure 2**.



Figure 2 — iDirect Commissioning Wizard Start Button

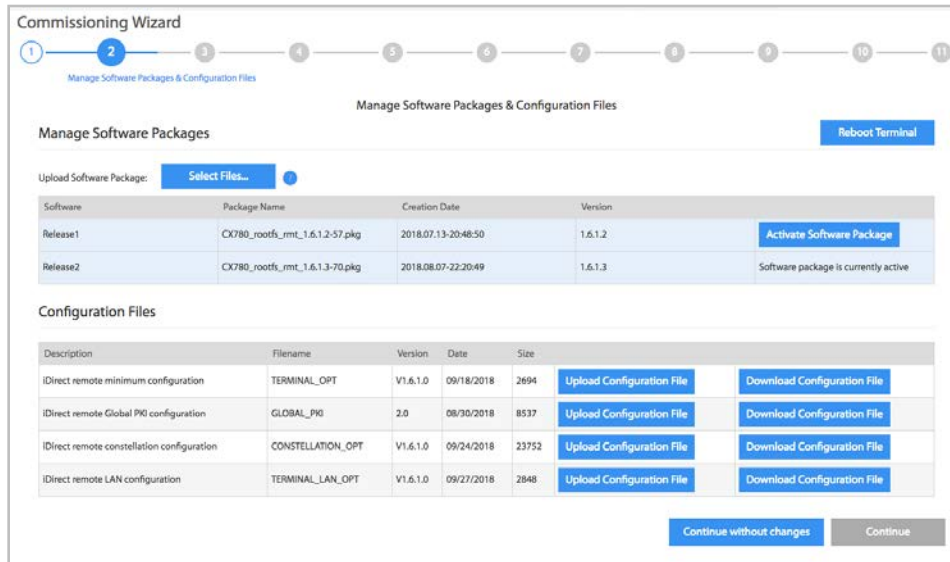
The Commissioning Wizard appears. Step 1 (Start commissioning process) is highlighted.



Figure 3 — Commissioning Wizard Step 1 (iDirect Commissioning Mode)

9. Click the **Enter Commissioning Mode >** button, as shown in **Figure 3**.

The second step (Manage Software Packages and Configuration Files) in the Commissioning Wizard is highlighted, as shown in **Figure 4**.



**Figure 4 — Commissioning Wizard Step 3 (Manage Software Packages & Configuration Files)**

**NOTE:**

Five files were loaded onto the modem by the factory in order to enter the modem into the desired network. All of the files will only require reloading if a service provider is changed. The other two files must be reloaded in the field, along with the most up-to-date file provided by the network provider (This can be completed Over the Air).

The five files include:

- iDirect remote minimum configuration: Name: 'TERMINAL\_OPT' (Field).
- iDirect remote Global PKI Configuration file: Name: 'GLOBAL\_PKI' (Factory).
- iDirect remote constellation configuration: Name: 'CONSTELLATION\_OPT' (Factory).
- iDirect remote LAN configuration: Name: 'TERMINAL\_LAN\_OPT' (Field).
- iDirect remote Commissioning configuration: Name: 'commissioning.json' (Factory).

10. Load each file with the exception of the `commissioning.json` to their respective location by selecting the 'Upload Configuration File' button. See **Figure 4**.
11. Open a SCP session with the modem as "root"
  - a. SCP to 192.168.62.20 Port: 22 / User: **root** Password: **iDirect**
12. Transfer `commissioning.json` file provided to `/sysopt/config/network` overwriting the existing file if in this directory. See **Figure 5**

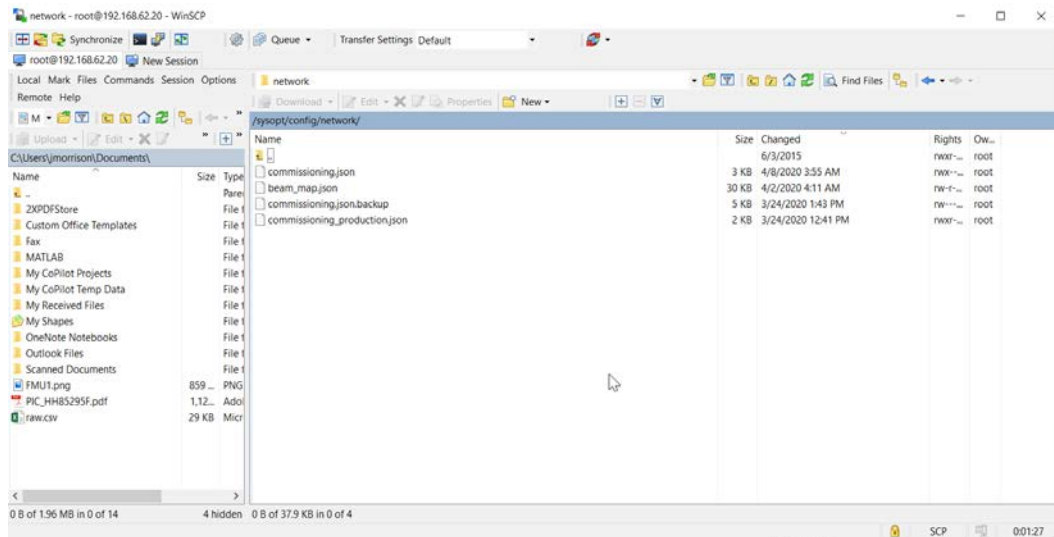


Figure 5 — SCP Location of Commissioning File

13. Select the **'Reboot Terminal'** button and wait 2 to 4 minutes for the modem to reboot. See **Figure 4**.
14. When the modem web page is available again, select the **Quit Commissioning Mode** link located on the modem user interface.
15. Refer to Section 4.4.6 in the *000-2129-1004-IM* and *000-2129-2004 IM*, T-310 and T-311 Tail Mounted SATCOM System Installation Manual to perform network connectivity check.

Task complete.

## 8.0 ACCEPTANCE/REJECTION CRITERIA

Link Closure is acceptable criteria for return to service.

## 9.0 RECORD OF COMPLIANCE

Upon completion of the maintenance action, ensure an entry is made in the appropriate aircraft log or operator's maintenance documentation system.

## CONTACT INFORMATION

For questions regarding this Service Bulletin, please contact Astronics AeroSat Product Support.

### Astronics AeroSat

Product Support

220 Hackett Hill Road

Manchester, NH 03102

Email: [AeroSat.Support@astronics.com](mailto:AeroSat.Support@astronics.com)

Phone: 1-603-400-2528