

# Appendix B – Spare Parts Calibration Manual

GLOBETrekker™



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### 1. Overview

#### 1.1 Purpose and Scope of the User Guide

This maintenance manual explains procedures to:

Calibrate spare upper boom arms

This user guide is specifically written for the GLOBETrekker™

#### **1.2 Audience**

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The guide will be of interest to the following personnel:

- Skilled Maintenance Technicians
- Systems administrators (or IT; Lifecycle/Sustainment Managers)

#### READ THE MANUAL BEFORE YOU ATTEMPT REPAIRS OR MAINTENANCE ON THE GLOBETrekker™

## 2. Upper Boom Arm Calibration

A calibration is required whenever the Upper Boom Arm is changed. Calibration is required to ensure accurate polarization angle reading. Each Upper Boom Arm spare is shipped with a USB drive containing the calibration values and a calibration table document. The GlobeTrekker saves the calibration values when a calibration has been completed. Whenever a system restore is performed, the calibration values will default back to the original Upper Boom Arm calibration value. Calibration will need to be done again if the original Upper Boom Arm is not being used after a system restore has been completed.

#### 2.1 Procedure

1. Look up the System ID of the Upper Boom Arm.



- 2. Locate the USB drive or the calibration table document for the corresponding Upper Boom Arm System ID.
- 3. Insert the USB drive into the GlobeTrekker or a computer.
- 4. Open the file containing the calibration values inside the USB drive.

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calibration\_table\_90261.txt

- 5. Follow the steps below to enter the calibration values into LinkControl.
  - a. In LinkControl, select Tools > Administration > Motor Calibration.



b. When prompted for password, enter "norsat".

🤨 LinkControl 7 - LinkPro	ifile : SES 2 Modem Tx H	
Tools Help		
Start	LinkControl	
Auto Auto Acquire	System Alarm Enter Password Discourse Advantation Description	
Transmit	Accept Cancel	
Status	Motor ControllerOK	NE
Norsat	Park Auto No DVB No Modem <mark>System </mark> Antenna Acquire Off Lock Lock Alarm Trar	No 1smitter Transmitter

c. The calibration interface will pop up. Click "Polarization" under "Feedback".

🤨 LinkControl 7 - Lir	nkProfile : SES 2 Modem Tx H	
Tools Help		
Start	LinkControl Calibration Interface	
Pointing Auto Acquire Alignment Transmit	Feedback       Azimuth         Elevation       Polarization         Motor       Azimuth         Elevation       Polarization	- and
		1
0 Norsat	Park Auto No DVB No Modem System No Antenna Acquire Off Lock Lock Alarm Transmitter	r Stop Transmitter

d. The calibration interface will display the Polarization Feedback Calibration. Click on "Delete Selected Row" until all rows are deleted.

🛈 LinkC	ontrol 7 - Lin	kProfile : SES 2 Moder	n Tx H				- F	23
Tools	Help							
	Start inkProfiles Pointing Auto Acquire	Calibration Interface Feedback Azimuth Elevation	Polarization Add Calibration Value Raw Value: 65 Enter Raw Value Manually	Feedback Calibrati Raw Value 512	ion Angle in Degrees 0			
	Alignment Transmit Status	Polarization Motor Azimuth Elevation Polarization	Angle in Degrees: 0.00 + Calculated Angle: 157.25° Add Value	585 663 785 384 245 Delete	-22.5 -49 -95 42.5 92.5 Selected Row			A A A A A A A A A A A A A A A A A A A
				3				
0	Norsat International Inc.	Park Antenr	Auto Acquire Off Lock	B No Modem Lock	System Alarm	No Transmitter	Stop Transmitte	er

e. Click on "Enter Raw Value Manually" and enter the "Raw Value" and "Angle in Degrees" obtained from the USB drive or calibration table document.

🕕 LinkCo	ontrol 7 - Lin	kProfile : SES 2 Moden	n Tx H			
Tools	Help					
	Start nkProfiles	Calibration Interface	<b>LCon</b> Polarization	Feedback Calibratio	n	3
	Auto Acquire lignment ransmit Status	Azimuth Elevation Polarization Motor Azimuth Elevation Polarization	Add Calibration Value         Raw Value:       512         I✓       Enter Raw Value Manually         Angle in Degrees:       0.00         Calculated Angle:       N/A         Add Value	Raw Value	Angle in Degrees	
				15		
	Norsat	Park Antenr	Auto Acquire Off Lock	No Modem Lock	System Alarm Transi	o Stop mitter Transmitter

#### f. Click "Add Value".

🤠 LinkControl 7 - Lii	nkProfile : SES 2 Modern Tx H
Tools Help	LinkControl Calibration Interface
Pointing Auto Acquire Alignment Transmit Status	Feedback   Azimuth   Elevation   Polarization     Motor   Azimuth   Elevation   Azimuth   Elevation   Polarization     Motor   Azimuth   Elevation   Polarization     Motor   Azimuth   Elevation   Polarization     Delete Selected Row
0 Norsat	Park Auto No DVB No Modem System No Transmitter Transmitter

g. Repeat Steps e and f until all the calibration values have been entered.





### **ABOUT NORSAT**

Norsat International Inc., founded in 1977, is a leading provider of innovative communication solutions that enable the transmission of data, audio and video for remote and challenging applications. Norsat's products and services include customizable satellite components, portable satellite terminals, maritime solutions and satellite networks. The company's products and services are used extensively by telecommunications services providers, emergency services and homeland security agencies, military organizations, health care providers and Fortune 1000 companies.

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