



skySensor

TSO Service Bulletin

Software Upgrade to Wi-Fi 0.2.43



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Patent uavionix.com/patents

1 Revision History

Revision	Date	Comments
A	8/22/2024	Initial release

2 Warnings / Disclaimers

uAvionix is not liable for damages arising from the use or misuse of this product.

This equipment is classified by the United States Department of Commerce's Bureau of Industry and Security (BIS) as Export Control Classification Number (ECCN) 7A994.

These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.

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4 Planning Information

4.1 Distribution / Eligibility

The Accomplishment Instructions contained in Section 11 may only be performed by appropriately authorized personnel.

4.2 Applicability

This Service Bulletin applies to the TSO Authorized uAvionix skySensor UAV-1006900-001 with Wi-Fi software release 0.2.41 or earlier.

Use Table 4-1 Applicability to determine applicability of the software update.

P/N Marking	Applicability
UAV-1006900-001	Verify by procedure

Table 4-1 Applicability

Parts identified above as “Verify by procedure” may have Wi-Fi software release 0.2.41 or earlier. To determine what version of software is installed:

1. Power the skySensor and use the SSID and WPA2 passphrase included in your package to connect to its Wi-Fi access point using a client device such as a phone or computer.
2. Using a web browser on the client device, open the configuration web page at <http://192.168.4.1>
3. Find the line labeled “Wi-Fi Part Number” and verify that it matches the skySensor TSO Wi-Fi Software part number, UAV-1007057-00().
4. Find the line labeled “Wi-Fi Part Number” and verify that its value is 0.2.41 or earlier.

Parts identified above as “Does not apply” do not need to perform the procedures described in this Service Bulletin.

4.3 Description

This Service Bulletin provides instructions for loading uAvionix skySensor UAV-1006900-001 with updated Wi-Fi software release 0.2.43.

4.4 Changes

This update includes compatibility, robustness, diagnostic, and operational improvements such as fixes to minor bugs. The change is considered minor per 14 CFR 21.619.

In detail, the changes are as follows:

- Compatibility
 - Improved compatibility with EFBs that require the ForeFlight Identification message, such as Garmin Pilot
- Bug Fixes
 - Fixed a bug that would prematurely disconnect Wi-Fi clients
 - Fixed GDL90 traffic reports properly indicating when a target's vertical and horizontal velocity are invalid per AC 20-165B
 - Safeguard against incorrect 1090 Surface Position Message decodes when no 3D GPS fix is available
 - Fixed GDL90 Ownship reports latitude/longitude initial conditions
 - Fixed ADS-R UAT/1090 track transition timers
 - Fixed over-the-air software update file name recognition
- Diagnostic
 - GPS information is now displayed on the main web page at <http://192.168.4.1>
- Performance
 - Improved performance and stability in high-traffic environments

4.5 Approval

The software described in this Service Bulletin continues to meet the previously authorized TSOs.

4.6 Time Required

Up to 30 minutes is required to perform this update procedure.

4.7 Weight and Balance

No change.

4.8 Electrical Load Data

No change.

4.9 Software Accomplishment

No change.

4.10 Applicable Publications

The following documents are applicable to the ADS-B software release 0.2.43.

Title	Part Number	Revision
skySensor TSO User and Installation Guide	UAV-1006950-001	A

5 Required Items

The following items are required to perform the update:

1. A Wi-Fi-enabled device with a web browser, such as a phone or personal computer
2. The following software update file(s):

Item	Filename	Validation Hash
Wi-Fi Operating Program	UAV-1007057-001_SkySensorTSO_V0.2.43_96af5529.bin (see Section 6 Update Notes)	b1f2baa7fc95dee515f7630191709ea b44ffe48a7a772964563cd883c3660 df6

Table 5-1 Software Update Files

uAvionix software update files are available for download from the uAvionix Support website at no charge, at:

<https://uavionix.com/support/skysensor/>

6 Update Notes

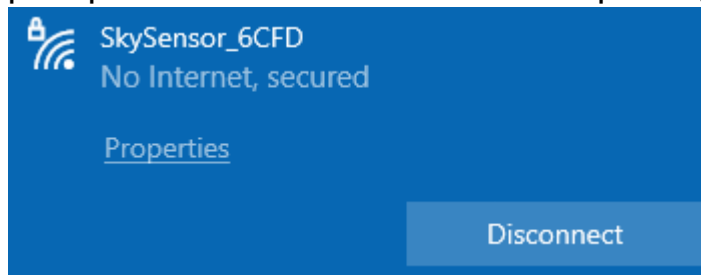
All skySensor configuration settings will be preserved during this update procedure.

7 Update Procedure

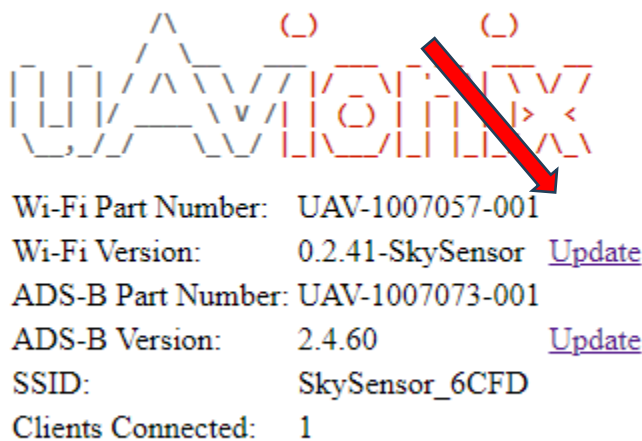
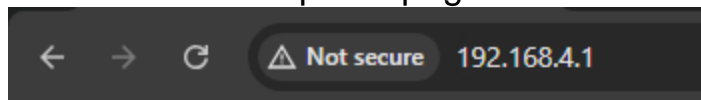
Ensure you are running a previous version of Wi-Fi software. Specifically, your skySensor should currently be running ADS-B version 0.2.41 or earlier.

7.1 Execute the Update Procedure

1. Power the skySensor.
2. On a Wi-Fi enabled device with a web browser, connect to the skySensor's Wi-Fi network using the Wi-Fi SSID and WPA2 passphrase included with the unit's packaging.

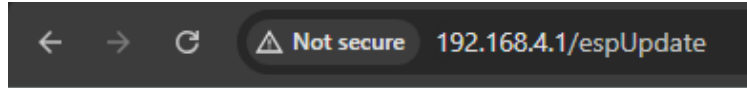


3. In a web browser, navigate to the skySensor configuration webpage at the following address:
<http://192.168.4.1>
4. On the line labeled "Wi-Fi Version," click on "Update" to open the Wi-Fi Firmware Update page.



[Settings](#)

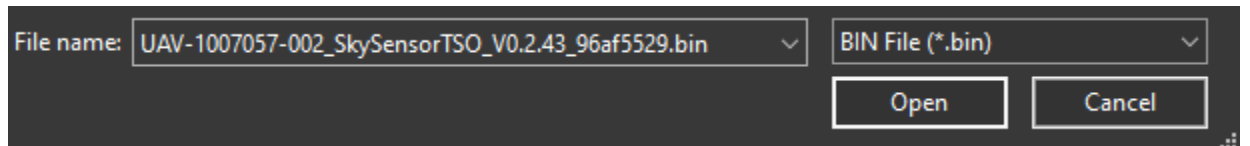
5. On the Wi-Fi Firmware Update page, click the “Choose File” button and select the previously downloaded software update file.



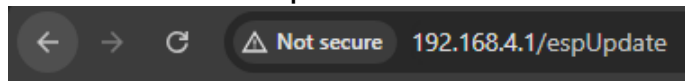
Wi-Fi Firmware Update

No file chosen

[Main Page](#)



6. Click the “Start Update” button.



Wi-Fi Firmware Update

Upload is in progress (10%)...

UAV-10070...96af5529.bin

[Main Page](#)



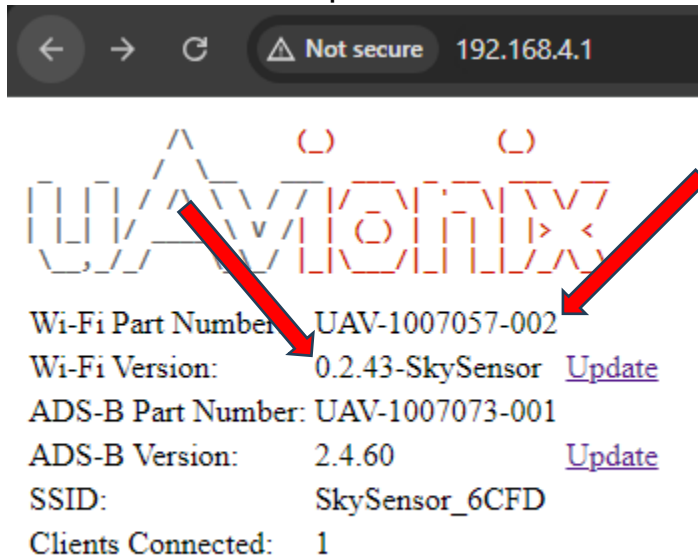
CAUTION: Do NOT turn off power to the skySensor during the update process.

7. Complete the Post-Accomplishment Verification instructions in Section 0.
8. After verification, remove power from the skySensor.

8 Post-Accomplishment Verification

Verify the software load by performing the following procedure:

1. Power the skySensor and use the SSID and WPA2 passphrase included in your package to connect to its Wi-Fi access point using a client device such as a phone or computer.
2. Verify the Wi-Fi Part Number and Wi-Fi Version match those shown in Table 8-1 Accomplishment Versions.



[Settings](#)

3. Click on “Settings” near the bottom of the configuration webpage to open the Device Settings page.
4. Double-click on the page title “Device Settings” at the top of the page.
5. Three additional lines of text will appear at the bottom of the page. Verify that the line labeled “(Active)” is labeled “(Valid)” and that the listed Validation Hash matches the one shown in Table 8-1

Accomplishment Versions.

← → ↻ Not secure 192.168.4.1/settings

Device Settings

Settings loaded.

WiFi
Channel: Auto

Pwr Level:

[Main Page](#)

Factory SHA256 (Valid): b1f2baa7fc95dee515f7630191709eab44ffe48a7a772964563cd883c3660df6
OTA 0 SHA256 (Valid) (Active): b1f2baa7fc95dee515f7630191709eab44ffe48a7a772964563cd883c3660df6
OTA 1 SHA256 (Valid): a4a6780c6c38f2fd0abdc9d9a5a84ac61f3957b6ccef6898b31cad304b53637e

Wi-Fi Part Number	Wi-Fi	Validation Hash
UAV-1007057-002	0.2.43	b1f2baa7fc95dee515f7630191709eab44ffe48a7a772964563cd883c3660df6

Table 8-1 Accomplishment Versions

If any post-accomplishment check fails, please contact uAvionix support, as guided in Section 10.

9 System Checkout

Perform the post-installation checks procedure as described in “skySensor TSO User and Installation Guide” UAV-1006950-001 Section 7.6.

10 Support

For additional questions or support please visit:

<http://www.uavionix.com/support/>

11 Maintenance Record

When post-accomplishment verification and system checkout is completed, make appropriate entries in the Aircraft Maintenance Log Book.

Maintenance Record

Service Bulletin UAV-1008316-001 Rev A for skySensor UAV-1006900-001 has been complied with.



A copy of this form must be submitted by visiting:

<https://uavionix.com/logbook/>

Date:	By:
Aircraft Information	
Make:	Model:
Serial Number:	Registration Number:
skySensor Information	
Serial Number:	Wi-Fi SSID:
Customer Information	
Name:	
Email:	
Telephone:	
Address:	