



SERVICE INFORMATION LETTER

SIL N° S-139-23-004
S-169-23-002
S-189-23-002
S-119-23-002
DATE: June 27, 2023
REV.: /

To: Leonardo Helicopters products
Owners / Operators / Service Centres

SUBJECT: Heliwise version 2.0 release

Helicopters Affected: All AW139, AW169, AW189, AW119 with HUMS systems installed

References:

- [1] S-GEN-21-008 dated October 27, 2021
New Heliwise4Mobile release for laptop, tablet and smartphones devices
- [2] S-139-22-003 / S-169-22-003 / S-189-22-003
New Heliwise4Mobile release with Rotor Track & Balance (RTB) capabilities

Dear Customer,

Leonardo Helicopters (LH) is pleased to inform you that the new 2.0 version of Heliwise (web edition), is now available.

Heliwise platform has been modernized to improve the navigation experience of the Operators, enhancing its ease of use and data computation-visualization performances. All the main functionalities of the previous versions are still available.

The new full web-based architecture of Heliwise requires no more dedicated Computer/Laptop/Tablet configuration, browser authentication certificates or Microsoft Silverlight installation.

Heliwise 2.0 is accessible from the Leonardo Customer Portal, or directly from the link <https://heliwise.leonardo.com>, by using duly authorized credentials.

Heliwise version 2.0 release

The screenshot displays the Heliwise version 2.0 interface. At the top, there is a navigation bar with the Leonardo logo and user information. Below this, a grid of helicopter thumbnails is shown, each with a unique ID (e.g., 11901, 11902, 11903, 13901, 13902, 13903, 13907, 13908, 13909, 13910, 13911, 13912, 13913, 13914, 13915) and a small image of the helicopter. To the right of the grid is a detailed 'Aircraft Information' panel for a selected helicopter, showing fields for Serial Number, Tail Number, Variant, SW Version, Role, Environment, Location, and Customer, along with a 'Last DSH' status and a 'Ready' indicator.

Below the grid, there are several data visualization components:

- A/C Parameters:** A list of parameters with checkboxes, including Main Rotor Speed, Hyd Oil 1 Press, Hyd Oil 2 Press, Engine Oil Pressure (checked), Main Gear Box Oil Pressure, Radio Altitude, Pressure Altitude, True Airspeed, Indicated Airspeed, Altitude - Vertical Speed, Ground Speed, Ground Track (checked), Fuel Quantity 1, Fuel Quantity 2, Heading, Sideslip Angle, Pitch Angle, Roll Angle, Body Pitch Rate, Body Roll Rate, Body Yaw Rate, Body Longitudinal Acceleration, Body Lateral Acceleration, Body Normal Acceleration, Engine Torque, Free Power Turbine Speed, and Inlet Turbine Temperature.
- ESIM Charts:** A line chart titled 'ESIM Charts DSH 247' showing 'Engine Oil Pressure' over time, with a y-axis ranging from 80 to 100.
- Arriving Table:** A table listing arrival events with columns for DSH, Description, and Reason. The table contains several entries for 'AMB EXC - Oil Cooler Gear - ESA_WEA - OGO' and one for 'STR - AMB EXCD - FPOG - MS VERT - IR'.
- Health Index Charts:** A complex chart titled 'Health Index Charts' showing 'Ground Track' over time. It features multiple data series: a red line for ground track, a yellow line for another metric, and a purple line for a third metric, all plotted against a y-axis ranging from 0 to 200. The chart also includes a scatter plot of blue dots representing individual data points.

Heliwise version 2.0 release

A cutting edge engine used for the in-house development of the new Heliwise platform allows a faster visualization of all its sub-functions, granting the Operator a time saver displaying the data needed for analysis.

The loading time of HUMS interactive pages main areas has been drastically reduced: the Health Indexes of the Transmission Vibration Monitoring, the Condition Indicators of the Rotor Track and Balance plots and the flight parameters of the Enhanced Structural Usage Monitoring graphs.

The new Heliwise suite design bases the concept of use on convenience and faster data transfer. Users can connect via Wi-Fi the Helicopter Data Transfer Device to their own personal device, like tablet or smartphone.

To achieve this goal and remove duplicated functionalities, the following HUMS operations are currently assigned exclusively to "Heliwise4Mobile" applications:

- Data Upload and Debrief
- Rotor Track & Balance Adjustments Computation

For a quick consultation, it is possible to access the "Heliwise User Manual" by clicking the appropriate section "User Manual" in the "Main Menu" bar.

In order to allow a proper familiarization with the new platform, the Silverlight based version of Heliwise will remain active until December 2023: the old and the new platforms can be used in parallel during the HUMS data analysis operations.

This new release, along with "Heliwise4Mobile" application (Ref [1] and [2]), completes the Heliwise suite as part of a continuous improvement process of the HUMS data collection and management, analysis capabilities that additionally expand the support services potential.

For any additional information, please do not hesitate to contact LH HUMS Support Team at hums.mbx.aw@leonardo.com functional mailbox.

Yours Sincerely,



Francesco Bellardi
VP Customer Support & Services