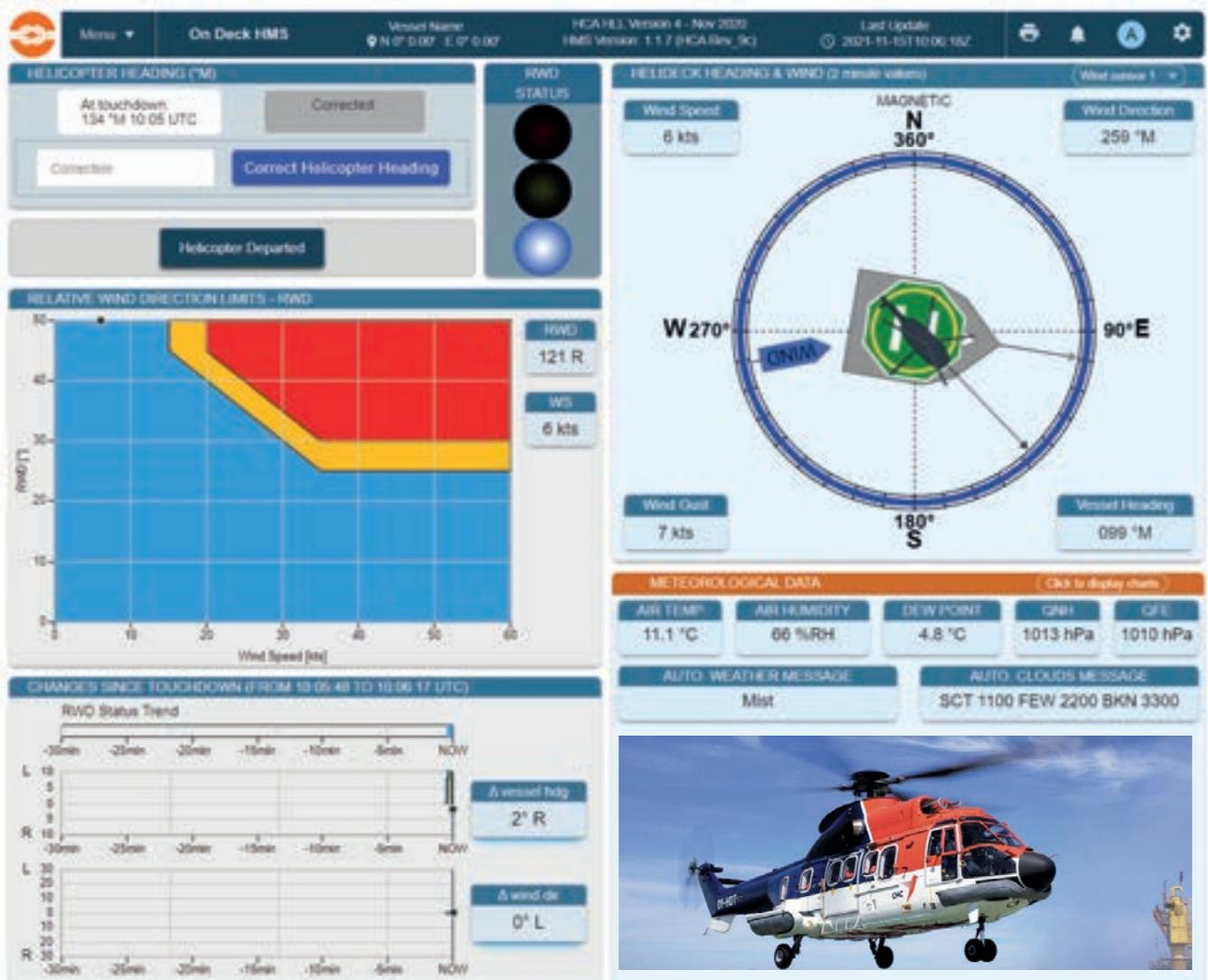


HELIDECK MONITORING SYSTEMS



WISE Group have been involved in developing Helideck Monitoring Systems since these systems were first introduced as an aid to improve safety in offshore operations. Our HMS-systems utilizing the well proven and user-friendly DADAS real-time data acquisition software have been in operation in harsh offshore conditions for decades with minimum downtime.

The systems can be tailor-made to suit local conditions and can easily be expanded in the future to comply with new demands, rules and regulations. We can also provide installation support, annual service, calibration services and training of personnel as required. Current new systems will comply with all known rules and regulations worldwide, including the UK CAA CAP 437, NORMAM 27, HCA and Norwegian Standards for HMS-systems.

Helideck Monitoring System

A basic Helideck Monitoring System is designed to comply with the rules and regulation of the region where it operates as well as the aviation safety standards of the owner. Typically most systems are built to comply with CAP 437 for fixed or floating helidecks.

Such basic systems shall include:

- Wind sensor
- Air Temperature and Humidity
- Barometric pressure (QNH / QFE)
- Motion sensor for the helideck, 6 DOF (for floating rigs or vessels)
- Visibility sensor with Present Weather
- Cloud Height sensor with Cloud Amount
- Data acquisition and display system
- Helideck Status Lights or Repeater Lights as required by local rules and regulations – both Ex and non-Ex versions available

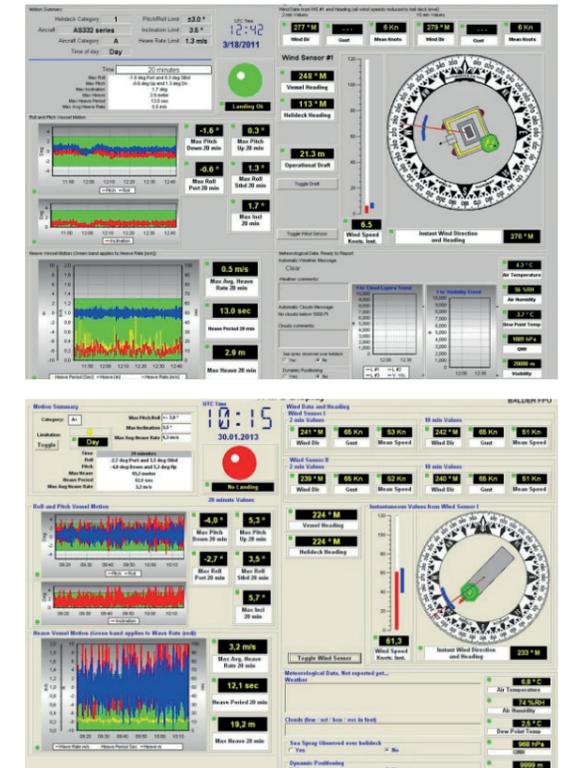
The main purpose of the system is:

- To provide Pre flight information and screenshots to the Helicopter Operators for flight planning
- To provide local operators with real-time data of the prevailing conditions during helicopter operations
- Communicating HMS-data to other users, local or remote



Features and options

- Clear, user-friendly displays of all data vital to helicopter operations
- Automatic or manual generation of a helideck report that can be sent electronically to onshore users, incl. helicopter operators
- Additional DADAS software modules available for METAR, SYNOP, HeliMet, DF 22, additional reporting and many other applications
- Can be connected to LAN or Internet for further data distribution or web access
- Long term data logging capacity for later data analysis or investigations
- Modular design to allow adding sensors or users and to expand the system to a full EMS system, incl. MetOcean, Anchor Tension, Excursion, etc.
- Full integration between HMS systems and any other marine or structural system available and encouraged in order to avoid duplication and costs
- Can be free-standing, rack-mounted or integrated in other packages
- Virtual server installations available
- Trend displays and / or History displays can be added and customized to the individual user
- Quick and easy installation and commissioning
- Full worldwide support capability for service and annual check and maintenance
- Motion verification services available including a comprehensive report documenting the system performance
- Full operator and technical training available, both as on site training and as classroom training onshore
- Regular onshore training courses available



Rules and Regulations for HMS

HMS systems from WISE Group can be made to comply with all the following rules and regulations:

- CAP 437 from UK CAA is a current de facto standard for many areas of the world
- Certified by CAA Norway to conform to aviation standards BSL D5-1 and relevant parts of BSL G7-1 for supply of HMS
- Standard Measuring Equipment for Helideck Monitoring Systems (HMS) and Weather Data issued by Norwegian Helicopter Operators, current revision
- All guidelines by HCA-Helideck Certification Agency
- NORMAM 27 from Brazilian authorities
- Relevant Canadian rules and regulations
- Relevant parts of ICAO Annex 14 and WMO standards, including METAR and SYNOP codes



DADAS HMS software—A market leader

The DADAS family of software products has been developed since 1992 specifically for HMS and MetOcean applications and has a number of unique features:

- Extremely flexible and modular design for easy implementation and expansion
- Well proven from a large number of demanding installations, onshore and offshore
- Very user friendly displays (GUI) developed in close cooperation with experienced system users
- Optional alarm and data exchange with third party systems in proprietary or standard formats, such as Modbus, SNMP, NMEA and many others



Installation and commissioning services Offshore experience

We have a well qualified team of field service engineers who can undertake service work on all kinds of meteorological and oceanographic sensors and systems. All our engineers have extensive experience from offshore work, shipyard work and onshore work.

Onshore service and calibration services

We are also able to service and calibrate all kinds of sensors and MetOcean equipment used in offshore renewable projects. Our workshop is equipped for servicing and calibrating many different kinds of sensors and instrumentation.

Operation and maintenance services - O&M

The WISE team of field service engineers can also undertake O&M service work on MetOcean sensors and systems as well as on other kinds of sensors and systems. Our engineers can take care of preparing O&M schedules, carry out maintenance visits, analyse data, service equipment and many other related tasks.

We can also offer online preventive service agreements for systems that can be reached online.



Turn-key instrumentation projects

We can take full responsibility for all aspects of offshore instrumentation projects from design of the system, engineering, system integration, installation, commissioning, operation and maintenance to data management.

CERTIFICATIONS:

WISE GROUP:
ENVIRONMENTAL INSTRUMENTATION
IS OUR SPECIALITY!

