

RECCE Touch Software

Providing Real-Time
Results to
the Brazilian Navy

Case Study

Challenge

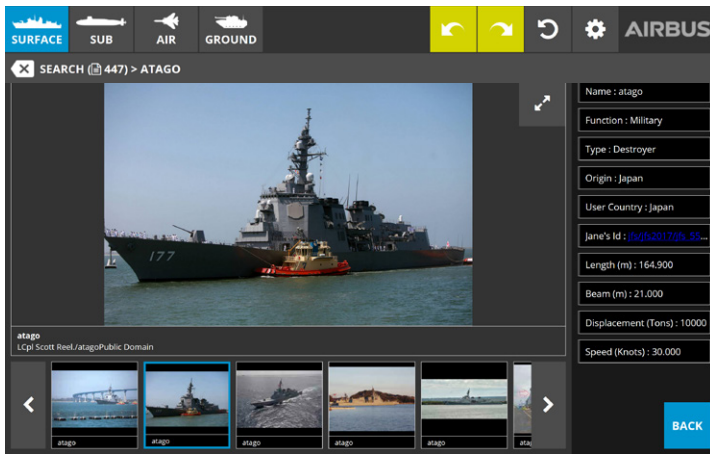
A software solution capable of rapid and reliable object identification in a harsh on-board environment, to be operated in low-light conditions without a keyboard or mouse.

Solution

Airbus developed RECCE Touch software, which allows real-time on-board object recognition.

Benefits

Touchscreen interface for real-time surveillance, with night and day display modes, and low resource consumption.



Recce Touch console top screen



Recce Touch console bottom screen

Challenge

When the Brazilian Navy requested mobile target recognition software – capable of providing real-time results – be included in its contract for eight new H225 helicopters, Helibras (Airbus Helicopters Brazilian subsidiary) turned to Airbus Defence and Space.

The brief called for a solution capable of rapid and reliable object identification in a harsh on-board environment, and operated without a keyboard or mouse – all in low-light conditions. The software also had to work with touch sensitive responsive screens, and be implemented on the existing SAMSARA equipped mission management console.

Solution and Results

To meet these challenging requirements, Airbus Defence and Space developed RECCE Touch. The unique software is an on-board version of the popular semi-automatic recognition tool, RECCE Engine®, which is already operational in over 50 organisations worldwide, and has been purchased by the Brazilian Navy to equip its headquarters. RECCE Touch integrates seamlessly with RECCE Engine® but has been specifically designed to be effective in harsh conditions and can operate via a touch-enabled ruggedised laptop or the on-board console.

During mission preparation, preferred recognition keys and databases are exported from RECCE Engine to the RECCE Touch console. During the mission, the on-board operator uses RECCE Touch to identify – in real time – all targets already present in the database. Recognition is rendered easier by the use of an intuitive man-machine interface (MMI) and efficient tools for targets not available in the database. Photographic images are also captured during the mission to further enrich intelligence databases and RECCE Engine®, thus contributing to knowledge capitalisation.

Solution Description

The new RECCE Touch software allows the Brazilian Navy to perform real-time on-board object recognition, thanks to a very intuitive interface and a database already containing more than 1,500 objects. This successful first implementation of RECCE Touch paves the way to other applications on-board helicopters, planes, vessels or armoured vehicles in the very near future.

Benefits

- Man machine interface designed to be operated via a touchscreen in harsh conditions.
- Real-time surveillance and reconnaissance operations.
- Night and day display mode to be used in cockpits, ship cabins or armoured vehicles.
- Low resources consumption (CPU, memory) adapted to on-board constraints.