# **Honeywell**

# **OBSERVER**

Seamless sensor integration for maximum focus on task and optimum mission results



# **Observer "Managing your Mission"**

Observer is a fully integrated multi-workstation system designed to be used by the airborne tactical commander and crew to provide maximum mission awareness.

The system is optimised to support Airborne Law Enforcement, Search & Rescue and Surveillance operations as a management tool that ensures cost effective use of expensive airborne resources.

### Capability

Observer has been designed as a modular system, configurable to the operational role of the airborne asset. At its core the system contains a mapping, navigation and sensor integration processor, capable of interfacing to, and being controlled by, up to seven workstations on the platform. A control panel allows for distributed command and control to each of the workstations plus data upload & download capability.

### **Functionality**

Observer includes a full suite of aeronautical and mission maps, sensor management tools, flight planning and logging capabilities. It also delivers traffic and weather in a format that allows the crew to make intelligent decisions on whether to continue a mission. The integration of smart database search engine, mapping and sensor inputs allows optimum control of data gathering and the cost effective deployment of the airborne command, control and communication process (C3) to ensure mission success.

# CERTIFICATION

All elements of the Observer System, hardware & software are EASA ETSO C113 certified; FAA TSO Approval covers TSO-C113 Airborne Multipurpose Electronic Displays; TSO-C118 Traffic Alert and Collision Avoidance System (TCAS) Airborne Equipment, TCAS I, (Display functions only) and TSO-C147 Traffic Advisory System (TAS) Airborne Equipment, Class A (Display functions only). The hardware meets the requirements of RTCA DO160D and the software is Level D (RTCA DO178).



Search and Rescue



**Border Patrol Role** 



Airborne Law Enforcement

#### **Features**

High Dispatch Reliability

Class Leading Ergonomics

Maps, Imagery & Overlays

Web driven Data Updates

Relative Terrain Rendering

Vertical Profile Down Track

Flight Plans & User Profiles

Secure Data Set-Up Option

Multiple Smart Waypoints

Smart Data Search Engine

Traffic Overlays & Pop-ups

Weather Overlay & Screens

Global Digital Elevation Model

Circle & Polygon Exclusion Zones

## **Features Support**

- Vector Maps (Jeppesen Data)
- Raster Maps (ICAO Charts)
- Approach Plates (Static No Overlay)
- Airport Diagrams (A/C Overlays)
- Direct To Search & Flight Planning
- Airspace Alerting (Lateral & Vertical)
- Extended Track & Runway Centre Line
- Orientation (North, Track, Grid, Heading)
- Position Data (Deg, Min, Sec or Decimal)
- Coordinates (WGS84, UTM, OSGB, MGRS)
- Multiple Units (Knots, Km/Hr & Miles/Hr)
- Position Transmit (ARNAV & NMEA)

- Waypoint (ARNAV, NMEA & ARINC 429)
- Save flight log files in Google Earth<sup>TM</sup> format
- Memory Map & Jeppesen Interface
- Easytask Pre/Post Flight Plan/ Analysis
- Function Hot Key Designation
- Own Ship and Target Modes
- Landscape & Portrait Support
- Auto Zoom & Map Zoom
- Waypoints and User Airports
- Load & Lock Profiles on System
- Bulk Waypoint Delete (Non Locked)
- Wind vector Data (Heading Required)
- Enhanced Touch Screen Mode
- Note Pad Support (1200 Characters)

- Search Engine (Text String Data)
- Display Line Obstacles (Data Required)
- Map Lock to Last Track in Hover Mode
- Keep-out Rings and Polygons
- Road over Flown Display
- Area of Probability Search
- Full Text Keyboards supported
- Touch Screen 3rd Party Displays
- Composite I/O Control Code
- Back of Cabin Auto-Boot (Option)
- Flight Logging (1-99 sec's)
- Cameras 'Trail' & Log File Entry (Option)
- Line Features & Points (Custom Option)



Front MFD Display



Observer Processor



Rear Work Station

### Interface

AIS Transponders	SAAB R4A, Avionetics TX-20, Shine Micro
Search Radar	Telephonics RDR1500, 1500B+ and 1700B
Direction Finding (Sea)	Chelton 931-16, 935-2 or -11 & Rho Theta RT-600
Direction Finder (Land)	Tracker (LoJack) PTC2 and PTC3 Vehicle Tracking
Camera Interface	Wescam L3 MX10, 15 & 20 FLIR SeaFLIR, Star Safire Series, Ultraforce 350
Touch Screen 3rd Party	PS2 Interfaces, Skyquest and RDDS Displays
Position Source Internal	Internal 12 Channel VFR GPS
Position Source External	ARNAV-R30 & NMEA 0183 plus ARINC 429
Traffic TAS/TCAS 1	Honeywell KTA 8/910, TPU66A/KT73, Avidyne TAS6xx, Goodrich TRC497 & 899
Weather Interfaces	L3WX500KDR610Interface,NEXRAD,TAF,METAR
AHRS Interface	ARINC 429, Minimum HDG
Enhanced Touch Screen Mode	RS422 Skyquest Full Touch Screen Support
Radio Altimeter (ARINC429)	Honeywell KR405B & Free Flight TRA3000/3500
USB Read & Write	USB1.1Interface,Low&HighBandwidth
SATCOM Data	SkyConnect Tracker III, SkyTrac, SMS messaging, Text based email

