

# BK117-850D2

## EVOLUTION



- 1. GENESYS IDU 450 (4" X 5") SMART SCREENS**  
Configured as Primary Flight Display/Multi-Function Display (Each Pilot)  
Self-Contained Flight Management System
- 2. L3 TRILOGY STANDBY INSTRUMENT**  
Combines attitude, altitude, airspeed, slip/skid and optional heading data  
in a single digital display
- 3. DUAL TORQUE INDICATOR**  
INSCO Solid State critical engine instrument.  
Significantly more reliable than previous electro-mechanical versions.  
Meets TSO C47
- 4. N1 INDICATOR**  
INSCO Solid State critical engine instrument.  
Significantly more reliable than previous electro-mechanical versions.  
Meets TSO C47
- 5. TURBINE OUTLET TEMPERATURE INDICATOR**  
INSCO Solid State critical engine instrument.  
Significantly more reliable than previous electro-mechanical versions.  
Meets TSO C47

# **BK117-850D2**

## **E V O L U T I O N**

### **BK-117 850D2 EVOLUTION GLASS COCKPIT UPGRADE KEY METRICS**

Key capabilities of the system include:

- 3D Synthetic Vision – shows 3-dimensional terrain, obstacles, and traffic in real time on Primary Flight Display (PFD).
- Highway-In-The-Sky (HITS) navigation – Provides a 3D highway for the aircraft to fly through on the PFD in relation to local terrain and aircraft positions. A series of ever decreasing squares are displayed on the PFD for the helicopter to fly through.
- Geo-referenced Hover Vector – Allows you to hover on a known point.
- Helicopter Terrain Awareness System (HTAWS) – Global Terrain Data Base ties in with GPS position.
- Graphical Flight Management System (FMS) – Central Navigation and communication management system.
- Full-colour, hi-res, sunlight-readable (1,000 nit) LCD screen with fully-adjustable brightness
- Dual, redundant backlight
- Input: ADHRS, GPS receiver (all included)
- DO-178B, Level-A Software – Highest approval level a key element for the IFR clearance.
- NVIS-A and NVIS-B Night Vision Goggle compatibility
- Digital flight performance recording of last five flights
- Redundant display/sensor architecture – display failure reverts remaining to a primary flight display.
- RNP 0.3/BRNAV/PRNAV-compliant – Allows aircraft to be qualified for precision navigation using GPS.

#### **4 x Genesys IDU 450 (4" x 5") LCD Smart Screens**

- Configured as Primary Flight Display/Multi-Function Display (each Pilot)
- Self-Contained Flight Management System

#### **2 x Genesys Air Data, Attitude Heading and Reference Systems (ADAHRS)**

- Magnetic Sensing Unit (MSU) – Magnetic compass
- Outside Air Temperature (OAT) Probe
- Micro-Electro-Mechanical System (MEMS) providing extremely precise digital output and referencing of aircraft position rate, vector and acceleration data.
- Air Data Computer to calculate all pressure related metrics (Airspeed, Altitude etc.).

#### **2 x Genesys GPS WAAS Receivers**

- Beta 3 – Effectively the latest in GPS technology.
- WAAS – Wide Area Augmentation System – US and Japan only allows the use of a ground based beacon to provide higher GPS accuracy.
- RAIM – Receiver Autonomous Integrity Monitoring (RAIM) a way of predicting satellite coverage for a set time and space. Really important when you use GPS as a sole source of navigation.

#### **1 x Genesys Remote Bugs Panel**

- Dedicated control panel for frequently used features such as Heading Bugs and Range Rings

#### **1 X L3 Trilogy Standby Instrument**

- Combines attitude, altitude, airspeed, slip/skid and optional heading data into a single digital display.
- Logically grouped flight data eliminates multiple instruments, making the transition to standby easier.
- Internal battery (ESI-2000 model) provides flight data for a minimum of one hour after power loss.
- Single instrument reduces weight and scan times vs. reading multiple instruments.
- Solid-state design offers increased reliability compared to electro-mechanical instruments.

#### **Solid State Engine Instrumentation**

Airwork in partnership with INSCO precision instruments, have exclusively developed new BK117 solid state critical engine instruments. These solid state units are significantly more reliable than previous electro-mechanical versions. They include:

- 6 Dual Torque Indicator p/n 4355-3018 (140% torque). Meets TSO C47.
- N1 Indicator p/n 6503A-3218 Meets TSO C49.
- Turbine Outlet Temperature Indicator p/n 5032-3227 Meets TSO C43.