THALES ENHANCED FLIGHT VISION SYSTEM (EFVS), IMPROVED SITUATIONAL AWARENESS AT NIGHT AND IN LOW VISIBILITY

SELECTED ON BOMBARDIER GLOBAL XRS AND GLOBAL 5000 BUSINESS AIRCRAFT

Enhanced Flight Vision System Benefits

Enhanced situation awareness to approach with confidence, unfamiliar airports in all weather conditions.

Intuitive, real-time image approved for use during all phases of flight, in day, night, VMC and IMC.

Higher mission reliability and lower rate of missed approaches.

Meets the latest FAR 91.175 requirements.

Approved for stabilized straight-in ILS and LNAV/VNAV instrument approaches using DA from DA to 100 feet HAT for other than CAT II or CAT III approaches.

Can be used for enhanced situation awareness during CAT II approach.
ENHANCED FLIGHT VISION SYSTEM

THALES ENHANCED FLIGHT VISION SYSTEM (EFVS), THE ESSENTIAL TECHNOLOGY FOR INCREASED SITUATION AWARENESS SELECTED ON BOMBARDIER GLOBAL XRS AND GLOBAL 5000 BUSINESS AIRCRAFT

TECHNICAL DATA

TOTAL WEIGHT OF LRU’S AND TRAYS
• Less than 41 kg (89 lbs), includes Combiner (COU), Optical Projector Unit (OPU), Head-up Flight Display Computer (HFDC), Mounting Trays (2), Infrared Sensor Unit (ISU), Infrared Window (IRW) and Controls

POWER CONSUMPTION
• HUD 200 W max
• Sensor 100 W max
• Heater for IRW 300 W when in icing conditions

QUALIFICATION
• Computer Do 160C
• IR Sensor Do 160D
• Software Do 178B Level A/B Do 178B Level C
• Firmware Do 254 Level B Do 254 Level C

BASIC FEATURES
• Single cooled infrared sensor unit (ISU) for infrared detection runway lights and landscape
• Built-in image processing function
• EFVS Controls added to existing Glare Shield panel
• Flexible and easy sensor installation due to compact size
• EFVS LRU’s
  - HUD Computer (HFDC)
  - HUD Combiner (COU)
  - HUD Optical Projector Unit (OPU)
  - Infrared Sensor Unit (ISU)
• Installation includes mounting trays and Infrared Window (IRW)
• Pressurized infrared sensor unit (ISU) – no cabin air ducting required and no contamination
• Low weight to large optics ratio

EFVS ARCHITECTURE

OPERATIONS BENEFITS

• Reduces pilot workload during low-visibility and night approaches
• EFVS will permit CAT I landing in most CAT II visibilities with Cat I trained crew
• EFVS CAT I capability during non-precision landings
• Visual range lower than RVR or SVR in low visibility conditions
• Copilot monitoring of EFVS approach on Head-Down Display
• Thales expertise in providing the highest EFVS integration standard
• Improves the level of pilot acuity to limit runway incursions, especially at night or during low-visibility conditions
• Higher mission reliability and lower rate of missed approaches
• Low training costs
• Meets the latest FAR 91.175 requirements

DISPLAY PERFORMANCE
• The complete field of view: Raster display is 33 deg x 25 deg
• Certified HUD symbology duplicated on EFVS without compromising content

RETROFIT CAPABILITY
• HUD computer and projector upgradable for EFVS mode
• EFVS computer (HFDC) is compatible with existing baseline HUD
• No changes to existing HUD/Avionics interface