FlightSafety Database Library

Unprecedented Scene Detail for Precision Training

FlightSafety offers the most comprehensive Database Library in the industry, with more than 400 airports and heliports modeled worldwide to support both fixed-wing and rotary-wing training. Regularly updated, the robust database offers unprecedented high-fidelity scene detail with dense culture and high resolution, real-world terrain information. The database incorporates full airport capabilities and includes real-world accurate lighting systems and runway illuminations as well as precise time-of-day environmental lighting. Specifically designed high-detail areas of interest support specialized training for emergency response or military mission rehearsals. Moving model capabilities feature advanced effects such as smoke and fire, and detailed representations of tens of thousands of building and tens of millions of trees. FlightSafety’s database provides the most accurate and highly detailed library for aviation training.
FlightSafety Database Library

Features

• Largest database library in the industry
• More than 400 airports and heliports worldwide to support both fixed-wing and rotary-wing training
• Commercial library airports regularly updated
• Commercial VITAL Subscription Service available for entire worldwide library
• Worldwide database incorporates the latest high-fidelity terrain information and obstruction data
• Geo-specific satellite imagery used for high resolution real-world detail
• Whole Earth model supports worldwide continuous flight and realistic training environments between high-detail airport and other objective area models
• Specially designed high-detail areas of interest support a multitude of specialized training types such as emergency response scenarios and first responder training, fire training, sensor training, law enforcement, wind-farm, offshore oil-platform training, and other specialized content dependent tasks
• Military mission rehearsal supported by high detail correlated areas of interest featuring low-level route detail, wide areas of dense urban build, and high detail air bases, fixed-base operations, landing zones, drop zones and target fields or threat scenarios.
• Unprecedented scene detail with tens of thousands of buildings with tens of millions of trees
• Advanced micro-texture techniques create ultra-high resolution for important visual acuity
• Winter and contamination support – geospecific, organic, high detail contaminants for non-repetitive real-world appearance and training
• Exceeds FAA Level D and military equivalent night vision devices
• Advanced night scenes featuring illuminated roadways, highways, building windows, and dense urban areas including cultural lighting; all illumination and lighting fully responsive to time of day
• Airport lighting capabilities include real-world accurate lighting, such as runway and taxiway edge and centerline lights, PAPI/VASI lights, approach lighting systems, runway end identification lights (REILs), lead-on leadoff lights, threshold lights, touchdown zone lighting, end lights, apron lighting, approach guidance systems, circling guidance systems (CGS), and fully functional surface movement guidance and control system (SMGCS) lighting, etc.
• Multi-Spectral sensor support provided by single database – ensure perfect 1-to-1 correlation
• Vast DIS compliant moving model library featuring dynamic infrared thermal signatures, weapons effects, damaged/destroyed states, specular highlights, normal maps, and more
• Moving models feature dynamic thermal signatures for items such as engines, wheels, guns/turrets
• High-detail moving models featuring all articulated parts including all control surfaces
• Moving model capabilities feature advanced effects such as icing, physically correct search lights/landing lights, smoke, engine fire, damaged/destroyed states, oil leaks, tracers, flares and chaff
• Moving model library is Combat Air Forces/Mobility Air Forces (CAF/MAF) compliant
• Moving model library integrated with MACE to ensure full seamless functionality for effects, animation systems (CGS), and fully functional surface movement guidance and control system (SMGCS) lighting, etc.