

AERONAUTICAL SYSTEMS ENGINEERING
SIMULATORS & ENGINEERING SOLUTIONS THAT
SOAR

Basic Aviation Training Device



G222

Introduction

The G222 aircraft is a twin turboprop transport that was developed in Italy and has recently found a user in the Afghan National Air Force. ASE developed a suite of simulators for the Afghans under a contract from the US Army simulator procurement office. The Basic Aviation Training Device (BATD) was built with the FAA AC 61-136 as a guide and baseline performance spec, with added features. The finished device far exceeds the requirement of a BATD and is an example of a highly capable, but low cost device that would be useful in any training program, but especially where very low hour students are involved.

Equipment and Furnishing

The cockpit is a combination of LCD instrument panels and real aircraft controls and radio heads. The center console consists of real or full-scale replica instruments and radios. Many of the control panels and radio heads were created from scratch using photographs of the aircraft equipment, but without any access to the aircraft.

Flight Deck and Instrumentation

Though not required on devices of this level, ASE installed its own Level D-quality control loading system in order to give the students the highest fidelity flying experience possible for maximum transfer of training.

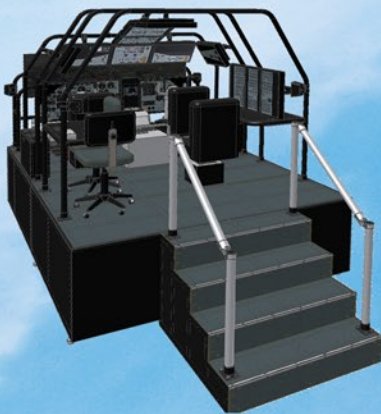
Software

The flight dynamics software is a duplicate of that used on the Level 5 FTD, also developed by ASE. It is possible, and common, to qualify these low-level devices by using Flight Simulator or X-Plane or other widely available game-type models. But this BATD is driven by the same software that simulated the G222 performance and handling qualities in the Level 5 FTD.

Visual System

Non-Collimated Day/Dusk/Night visual system consisting of a single-channel PC-based Image Generator (IG) and two HD LCD screens.

This device uses a large Geospecific database of Afghanistan that was created by ASE, and includes 23 highly detailed airfields.



Location: ANAAC (Kabul, Afghanistan)



Aeronautical Systems Engineering, Inc.
2448 Destiny Way, Odessa, FL 33556
P: 727 375 2520 x113 | F: 727 375 2051
Info@aerosyseng.com | www.aerosyseng.com