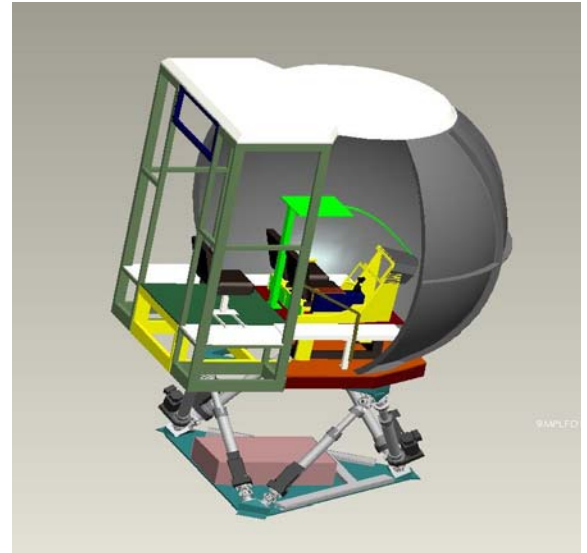


HeliFlight-R

HeliFlight-R includes a cockpit that is reconfigurable to represent a wide range of aircraft, both rotary and fixed wing. The instrument panel uses LCDs to provide realistic rendering of analog instruments as well as simulation of the Multi-Function Keyboards and Displays used in modern aircraft. Touch sensitive transparent overlays provide functional switches for the computer generated switch displays. Reconfiguring the cockpit to different aircraft involves loading different software to provide the aircraft-specific instrument rendering, so this can be done in a matter of minutes. The flight dynamics model is also software reconfigurable, as are the load characteristics of the pilot's and copilot's controls. HeliFlight-R is designed to be readily deployable to remote facilities so the system has a modular design that facilitates rapid assembly and disassembly. The HeliFlight-R system is expandable to allow upgrades as the customer's requirements change. The fixed base configuration may be expanded to use a motion platform; the field of view can be increased to accommodate chin windows, and the simulator can be networked to other simulators to support distributed simulation applications.



The HeliFlight-R system includes interchangeable crew stations to support either a two pilot or one pilot cockpit. The Crew Station and an on-board Instructor/Operator Station (IOS) are housed in a 12 ft. diameter visual display dome. Both rotary and fixed wing controls are provided for maximum flexibility. The rotary wing controls include four-axis control loading to provide programmable control load characteristics. Interchangeable tables of geo-specific navigation aids are interfaced to navigation sensor models to drive instrument displays. NAV/COM channels are either selected from a glass cockpit type keyboard unit or from conventional radios. All instruments and displays are computer generated on LCDs with a touch screen overlay for crew interaction.

The HeliFlight-R system includes an optional 6 degree of freedom motion platform. This feature can also be added at a future time since the fixed base HeliFlight-R simulator is designed for compatibility with the motion platform.

The IOS allows for record and playback of both visual display channels and selected flight data and audio and visual signals may be routed to external monitors and speakers. An external IOS includes three displays to replicate the out-the-window visual channels and additional displays for external viewing of the aircraft, monitoring of MFD displays, and simulator control functionality.

