



**TRU**  
SIMULATION™

FIXED-WING FLIGHT TRAINING DEVICE

# INTEGRA AURA

# CHANGING HOW YOU THINK ABOUT SIMULATION

When you work with TRU Simulation™, you'll get a team who listens to your needs for today and tomorrow. Together, we'll consider your training requirements and financial realities to help you select from our full lineup of devices—supporting ab-initio to type rating pilot training. We've integrated technology across our entire product lineup, so pilots can train on the same software used in Full Flight Simulators (FFS). Keep exploring to learn how TRU Simulation™ excels in Fixed Wing simulation and how we can bring that reality to you.



## ***INTEGRA AURA***

Discover high quality training balanced with an attractive price when compared to full flight simulators. TRU Simulation™ is an expert at building the most advanced FFS and our Integra Aura™ Flight Training Devices (FTD) benefit from the same software baseline and advanced design delivering the highest fidelity and realism for this category of simulation.

## ***QUALIFICATION***

**FAA, TC, ANAC, CAAC, CASA, JACB, GACA** FTD 4,5,6,7

**EASA, DGCA, GCAA** FNPT II / FTD 1-2

## ***EXPLORE THE DEVICE***

The world of simulation and training can be a complicated and confusing one. At TRU Simulation™, we are here to help guide you in understanding your training requirements and suggest a solution that is best fit for you.

## *SIMULATOR COMPONENTS*



The required components of an FTD are largely defined by aviation regulators. While these regulations vary from country to country, most are aligned with the FAA (14 CFR Part 60) or EASA (CS-FSTD) which are similar in their requirements. Integra Aura™ simulators meet or exceed all regulatory requirements, but instead of a one-size-fits-all approach like many other simulator manufacturers, TRU Simulation™ prides itself on customizing the training device to meet the customer's specific needs.

## MOTION

Most FTDs are not equipped with a motion system in order to save on costs as it's not a regulatory requirement. However, TRU Simulation™ has a design to fit every need including mini-motion FTDs that create a truly immersive flight training experience. It's level 7 FTD elevates the training experience by including an enclosed environment on a Six Degrees of Freedom (6DOF) electric motion system with 14-inch stroke actuators. This state-of-the-art system combines easy to replace Commercial Off The Shelf (COTS) computer hardware with TRU Simulation's™ proprietary REALCue™ motion cueing software creating a highly realistic flight experience. TRU Simulation's™ eMOTION™ Control Panel with intuitive Graphical User Interface (GUI) makes testing, running diagnostics, and manual operations easy and efficient

## VISUAL

The visual systems are highly customizable to fit the customer's desired needs. Displays can range from high-definition televisions to large wrap around visual systems using the latest projectors. All visual systems are designed to create a bright and clear visual scene with an Image Generator (IG) capable of displaying many different scenes and special effects including:

- High definition airport models
- Full atmospheric and environmental effects such as clouds, fog and storms
- Various lighting conditions including day, dawn, dusk and night



## ***FLIGHT CONTROLS***

TRU Simulation™ has a long history of producing the most advanced Control Loading System (CLS) in the industry. Our latest generation digital electric CLS provides a high fidelity, realistic force-feel simulation exceeding all simulator regulatory requirements. In fact, TRU Simulation™ uses the same control loading technology in our FTD products that drives our FFS products!

## ***INSTRUCTOR OPERATING STATION (IOS)***

The TRU Simulation™ IOS combines powerful components and features with an intuitive user interface to enhance the instructor's ability to effectively manage the simulator. Two touchscreen displays are used to control and navigate the IOS. The IOS also supports maintenance functions such as Qualification Test Guide (QTG) testing, operational readiness tests and troubleshooting. An optional wireless tablet, known as the Remote Instructor Control Unit (RICU), allows the instructor to control the IOS from anywhere in the simulator environment.





## ***SIMULATOR OPTIONS***

In addition to the core simulator components found in the Integra Aura™ simulator you can choose from a variety of options to enhance device capabilities based on unique requirements.





## ***CUSTOM-MODELED AIRPORTS***

Select any of the world's airfields included in the modeled airport database. Desired airports can be added on request.



## ***CUSTOM VISUAL SCENES***

Create unique scenes to address any number of scenarios. While the possibilities are nearly limitless, examples include:

- Off-airport landing on non-maintained surfaces, sloped terrain or confined area
- Search and rescue operations
- Smoke and fire scenes
- Emergency Medical Services (EMS)
- Oil and gas (Offshore)
- Tours
- Surveillance
- Night Vision Goggles (NVG)
- Nap of the Earth (NOE)
- Cargo/Long line vertical reference
- Military and defense

## ***DEBRIEF SYSTEM (DBS)***

The DBS makes simulator training session debriefing more effective. The system can capture and combine information from the avionics as well as audio and video of the actual session using mounted camera(s). When the training session is complete, the IOS-controlled system transfers video, audio, moving map, navigational charts, instrument displays and more to the debrief station outside of the simulator for playback.

## ***LESSON PLAN SYSTEM (LPS)***

Consistently manage a training session's various scenarios with it's LPS. Using the lesson plan builder, instructors can easily create lesson plans for each training session that include a predetermined sequence of events and activities, making training session management easier than ever.





## *INTEGRA AURA FTD LINEUP*

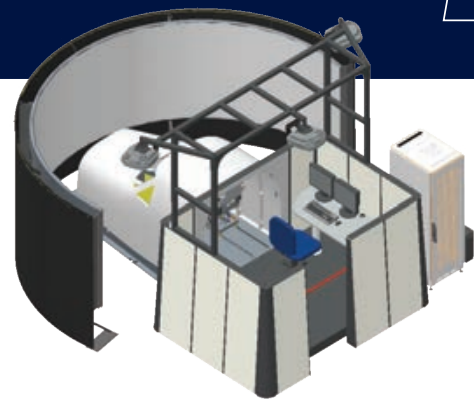
TRU Simulation™ offers a wide-ranging lineup of Integra Aura™ FTDs, ensuring we will meet the unique needs of any customer.







## FTD OPTIONS





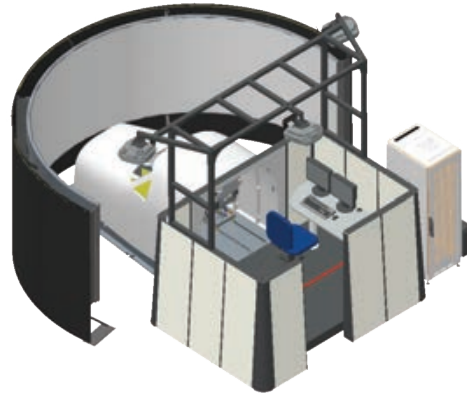
## **SIMULATOR DETAILS**



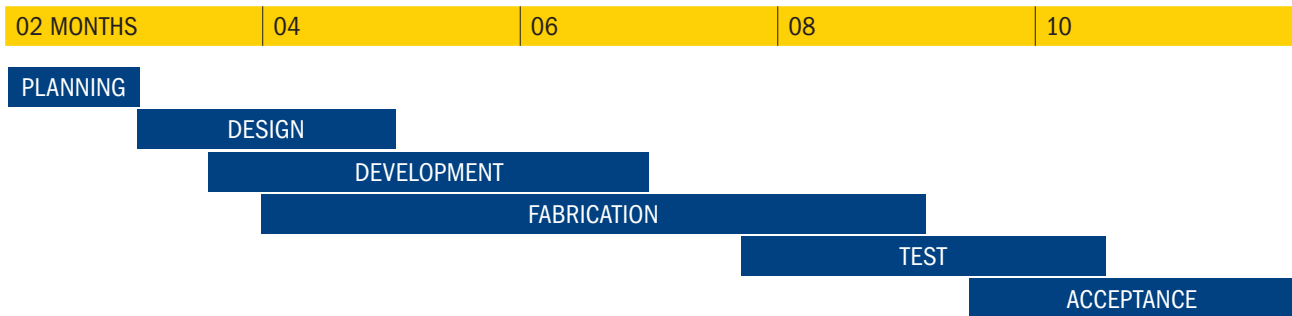
The price range for the Integra Aura™ simulator varies based on the complexity and configuration. While simulator components such as the addition of a motion system or enhanced visual system make up much of the cost variations, the type of avionics and certification level of the device can also affect price. Other factors that drive pricing include optional avionics, software and/or hardware.

## SIMULATOR ROOM

Simulator room sizes vary greatly depending on the type of FTD. The most basic FTDs with small visual system and no motion system can fit virtually anywhere in an existing facility. More complex FTDs with larger visuals and motion systems require between to 16-33ft (5-10m) horizontal clearance and 13-15ft (4-5m) vertical clearance.



## PROJECT TIMELINE



## TRU'S FIXED-WING PRODUCT LINEUP

### INTEGRA AURA

### ODYSSEY AURA

	FAA FTD 5 EASA FNPT II	FAA FTD 6 EASA FTD 2	FAA FTD 7 EASA FTD 2	FAA/EASA FFS Level D
Price	\$	\$\$	\$\$\$	\$\$\$\$
Field of View	Three 60" HD Televisions	220° X 40°	220° X 50°	200° X 40°
Motion	None	None	6 DOF Mini-Motion	6 DOF 60" actuators
Control Landing	Passive or Active	Active	Active	Active
Enclosed Cockpit	No	Yes	Yes	Yes
Simulator Room Size (L x W x H)	10ft x 12ft x 10ft (3.1m x 3.7m x 3.1m)	16ft x 20ft x 13ft (4.9m x 6.1m x 4.0m)	33ft x 27ft x 15ft (10.1m x 8.3m x 4.6m)	41ft x 41ft x 29.5ft (12.5m x 12.5m x 9.0m)
Typical Training Purpose	Procedural Training	Initial/Recurrent Training	Initial/Recurrent Training	Initial/Recurrent Training & Checking

# LET'S WORK TOGETHER

TRU Simulation™ collaborates with you to select the right simulator solution – or combination of solutions – to fit your organization.

## 240+

*QUALIFIED, SUPPORTED DEVICES*

## 120+

*CUSTOMERS WORLDWIDE*

