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FOR SALE \$200,000

AST factory demo Re-configured CRJ Configuration, Cockpit Specific

FAA Approved, Advanced Aviation Training Device



Photograph courtesy Delta

Device Description and Specification Summary

Scope of Work:

1. Re-configured the un-finished AST CRJ FTD.
2. Completely dis-assemble the FTD, and re-furbish it to new condition with our own added hardware and software. (Lockheed Martin Microsoft 3 PD software)
3. Test Fly and obtain FAA AATD Certification under our company name.
4. Meet the specification and description according to the attached documents.
5. Offer the client an Extended Parts and Labor Limited Warranty, if desired.

Pricing:

FAA Approved, CRJ Configuration, AATD, AST Re-Configured
Professional Installation and Setup Included
Professional Packaging Included
Operator and maintenance training Included
1 Year Parts and Labor Limited Warranty Included

Total Price (excluding crating, shipping, taxes, duties, tariffs) \$200,000

Specification Summary: CRJ AATD

- 1. General:** The Advanced Aviation Training Device (AATD) is representative of the CRJ™ aircraft, as required herein. It is designed and manufactured with strict quality control, and in accordance with professional industry standards.
- 2. Certification Criteria:** The AATD is designed and built to exceed FAA Advanced Aviation Training Device requirements as set forth in AC61-136, and the latest applicable FAA regulations and guidance criteria.
- 3. Flight Deck:** The cockpit enclosure and area is a realistic replica of the CRJ flight deck, made of a metal/fiberglass shell, mounted on a heavy-duty metal frame, with locking wheels, that enable it to be re-positioned with ease. The interior is well finished with CRJ style liners, premium carpeting, and pertinent fixtures and markings. The seating consists of rail-mounted dual (Pilot and Copilot), fully adjustable CRJ style aircraft seats, with head-rests.
- 4. Panels and Hardware:** All of the cockpit panels are back-lit, and have CRJ style hardware installed, with realistic knobs, buttons, and switches. All toggle and push-button switches are heavy-duty, as per manufacturer/OEM specifications, and of the proper type.
- 5. Yoke Controls:** The dual yoke flight controls are representative of the CRJ aircraft, with a complete set of functional buttons and switches, including stick-shaker, AP Disconnect, PTT, etc. The controls are heavy-duty, and dampened to provide the pilot with a realistic “feel”. They are designed to accept a full digital control loading system, as an option.
- 6. Rudder Controls:** The dual, interconnected rudder controls are representative of the CRJ aircraft, with functional toe-brakes. The rudder pedals are heavy-duty, and dampened to provide the pilot with a realistic “feel”. They are designed to accept a full digital control loading system, as an option. A functional CRJ style Rudder Trim panel is provided and installed on the center console, in the appropriate position. **CRJ Representative AATD Cockpit**
- 7. Throttle Quadrant:** The throttle quadrant is a replica of the CRJ, and is of aircraft quality, with fully functional heavy-duty components, including dual lever throttles with TOGA switches, thrust-reversers, spoilers, flaps, and parking brake, and all other relevant buttons, lights, indicators, and switches.
- 8. Pitch Trim:** The pitch trim is electronic, and is controlled by the dual yoke mounted switches.
- 9. Other Controls:** Fully functional CRJ replica controls for the landing-gear and nose-wheel tiller, are also installed.
- 10. Instrument Panels:** All of the panels, including main instrument panel, overhead panel, center pedestal, and side panels, accurately represent the CRJ panels, and include all of the instrument displays, FMS/CDU, controls, and equipment, properly positioned and installed, in a sturdy and secure manner.
- 11. Flight Instrumentation and Avionics:** The AATD is equipped with a realistic representation of the CRJ “Glass Cockpit”, with high-resolution instrumentation graphics displayed on LCD monitors, and realistic representation of the avionics as found in the aircraft. The composite standby instrument (ASI, ADI and Altimeter) is accurately positioned and displayed, as a functional replica of the real instrument.
- 12. FMS:** The dual, integrated FMS/CDU units represent the FMS model as installed in the CRJ aircraft, with a world-wide database of nav-aids, fixes, airports, SIDS and STARS, which is user-updatable.

- 13. Systems:** The major systems representing the CRJ aircraft are fully functional, including Air Conditioning, Pressurization, Automatic Flight, APU, Communications (simulated radio tuning), Electrical, Emergency Equipment, Fire Protection, Flight Controls, FMS, Fuel, Hydraulics, Ice & Rain Protection, Landing Gear, Navigation, Pneumatics, Power Plant, and Warning Systems.

AST Re-configured) CRJ AATD Cockpit



- 14. Flight Model:** The flight model is realistic and adaptable. It is user-adjustable from the Instructor Station to accommodate changes in flight conditions, such as weight, CG, configuration, etc, with minimum ease. The model allows the performance of the device to exceed the level of certification sought. The data is derived from manufacturer specifications, and represents the general handling and performance qualities of the CRJ type of aircraft. A complete Qualification and Acceptance Guide (QAG) and a technical specifications support document are provided.
- 15. Sound:** The sound effects are derived from a digital recording of the actual CRJ aircraft, and are realistically reproduced using a multiple-channel, Bose™ premium sound system, with a high-powered sub-woofer. The EGPWS system is accurately represented, with a complete set of multiple callouts, using digitized recordings. The multiple selection of Warning and Caution messages are accompanied with the proper Auditory Alerts.
- 16. FCP Panel:** The glare-shield is equipped with the Flight Control Panel (FCP) that is heavy-duty, fully functional, highly accurate, with integrated Autopilot functions, and Pilot controlled modes.
- 17. Navigational Database:** The AATD computers are loaded with a current world-wide database consisting of more than 24,000 airports and associated navigational facilities. It includes highly detailed scenery and terrain reflecting the actual landscape, structures, and hazards of the real environment. The database can be updated by the user.

18. **Digital Recording System:** A digital audio/video cockpit recording system is provided, capable of recording the entire training session, with play-back capability for debriefing purposes.
19. **Electronic Flight Bags:** Dual Jeppesen Electronic Flight Bags (EFBs) with LCD touch-screen functions are installed for the pilot and co-pilot at the appropriate locations on the side panels, as also installed in the CRJ aircraft.

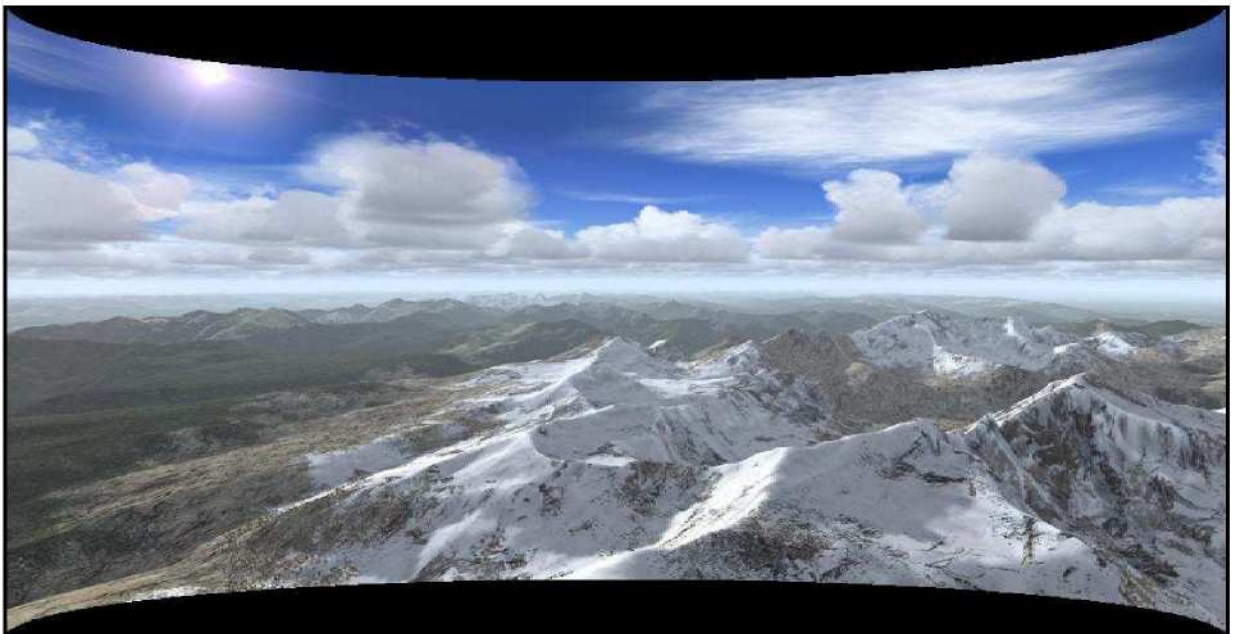
Graphical Instructor Console and Station (GICAS™)



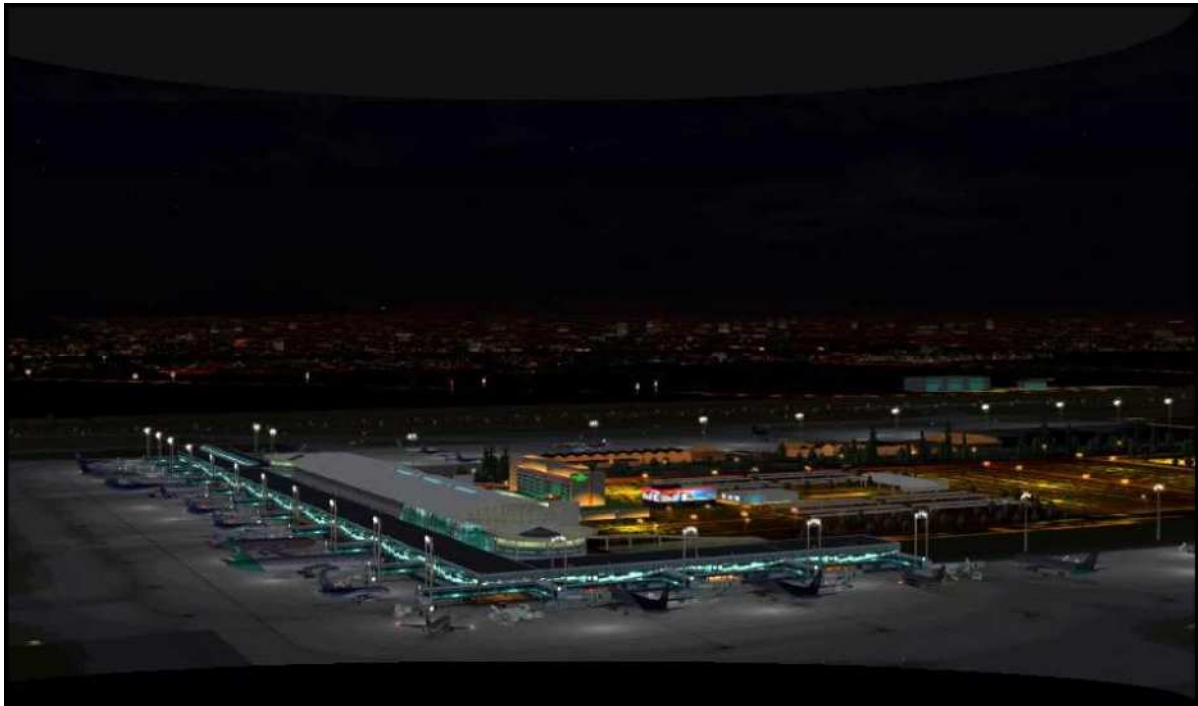
20. **Instructor Station:** A Graphical Instructor Console and Station (GICAS™) is provided, which also controls the start and shut-down operation of the device. It consists of four LCD monitors, a keyboard, and mouse. It allows the instructor to control and monitor the AATD, as per the certification and operational requirements. It is also equipped with a master key switch, and “Hobbs” hour meter, and intercom jacks.
21. **Computer System:** The computer system is installed in a separate, heavy-duty computer cabinet, with the computers connected through a LAN-based Ethernet system, with dedicated host, IOS, Image Generators, EFB, and other supporting computers. The cabinet is mounted on wheels, equipped with a suitable surge-protection and power back-up system, and cooled with multiple cooling fans.
22. **Documentation:** The AATD is accompanied with a complete set of Operating and Maintenance Manuals, with provisions for updates and revisions, as required.
23. **Training:** Upon completion of the delivery, installation, and set-up of the AATD at the training facility, complete on-site operator and maintenance training is provided for the safe and proper operation of the AATD.
24. **Warranty and Support:** Standard Technical Support and Limited Warranty for Parts and Labor for a one year period are included, with an Extended Limited Warranty available as an option.

25. Visual System: The visual system is multi-channel, ultra-high resolution, with a world-wide database, and provides an accurate representation of the terrain. It consists of a library of over 24,000 airports, with an additional set of 20, ultra-high resolution, highly detailed, major US and international airports, with accurate modeling and representation of the airport terminal, ramp, runway, signage, lighting, and surrounding environment. The display system consists of a 200 degrees horizontal, and 43 degrees vertical coverage, curved screen, using multiple HD projectors, with image calibration, distortion correction, and edge blending.

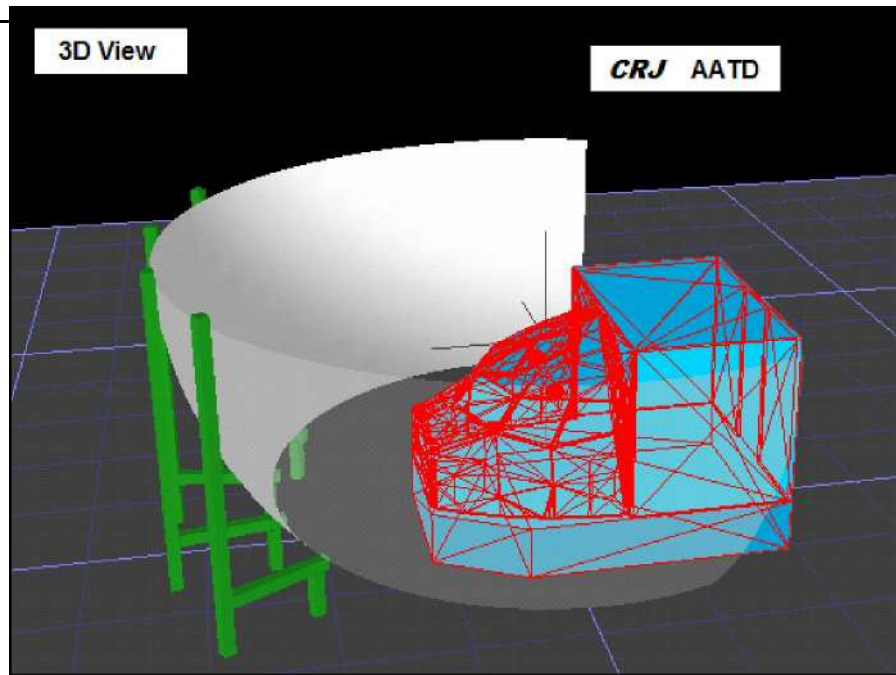
CommandVisual 200™ “Wrap Around” Visual System



Specification Summary: CRJ AATD



Specification Summary: CRJ AATD



CRJ AATD Interior

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