ATCiB completes the flight simulation experience with synthesized traffic and ATC communications. Pilots can truly train as they fly in an engaging and convincing ATC environment.

**HOW DOES AIR TRAFFIC CONTROL IN A BOX (ATCiB) WORK?**

ATCiB software is integrated with the flight simulator and generates traffic correlated to the training mission. The traffic environment including the ‘own-ship’ is managed by ATCiB’s virtual air traffic controllers. The flight crew communicates directly with the virtual controllers to receive ATC clearances and instructions, which are issued automatically using appropriate phraseology after the system assesses the relevant traffic. Both the pilot and co-pilot are able to hear and see contextually correct communications with other traffic. The traffic seen out the windscreens can also be displayed on TCAS or on-board radar.

**KEY FEATURES**

- Can be integrated with a flight simulator’s Instructor Operator Station with override and event control capability
- Uses a speaker independent speech recognition system for communications with virtual ATC
- Immerses flight crew within virtual air traffic situations which increase work prioritization and decision making tasks
- Provides a visually correlated synthetic air traffic
- Challenges pilots when transmissions are not understood, or are incorrect, or when ATC instructions are not followed
- Supports both ICAO and FAA standards
- Optional functionality for military operations such as PAR and AAR

ATCiB can operate autonomously ... no need for instructor inputs.
Supports proposed regulatory requirements for flight simulation ATC
- Product discrimination in a competitive market
- Improves standardization of training profiles/scenarios
- More effective training in the simulator leading to reduced training costs
- Compliments ICAO Level 4 language requirements training attracting more foreign pilot training interest

**NEW PILOT**

- ATC communications proficiency through simulation increases the effectiveness of in flight training
- Learn and practice standard FAA or ICAO ATC radio communications
- Learn and practice radio frequency discipline and radio frequency management
- Reach flight proficiency more effectively within the minimum number of regulated flight hours

**EXPERIENCED PILOT**

- Increases fidelity for a more realistic training experience
- Adds a valuable dimension to CRM training
- Provides ATC procedures familiarization for new airports
- Realistic practice for ICAO Level 4 English Language Proficiency
- Provides training for runway incursions and emergency situations

**INSTRUCTOR**

- Significantly reduce instructor role playing allowing more time to monitor student performance
- Reduces simulator preparation time
- Reinforces consistent and standard ATC phraseology
- Provides functions that permit changes in intensity without affecting the lesson plan
- Pre-programming of training events and teaching points

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