



Advanced Simulation Technology Inc.

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SERA^{✈️} for Flight School Next

Students currently train in unrealistically barren environments and lack essential ATC interaction skills needed for advanced aircraft transition. ASTi's SERA provides comprehensive simulated ATC services, including ground, tower, and departure controllers, with realistic radio procedures and synthetic other-aircraft traffic. SERA creates a vibrant, realistic training environment that builds confidence, safety, and best practices from the ground up.

ENHANCED READINESS

Students arrive at advanced aircraft training (AH-64, UH-60, CH-47) with proven radio proficiency and are capable of navigating in national airspace.

REDUCED FAILURE RATES

Students with strong radio fundamentals show measurably lower failure rates in flight training.

LOW EFFORT IMPLEMENTATION

Seamless integration with ASTi communications and aural cueing software.

COST-EFFECTIVE TRAINING

Virtual ATC reduces the need for dedicated controller personnel during training, allowing instructors to focus on higher-value tasks.

REALISTIC ENVIRONMENT

Eliminates the barren simulation environments that fail to prepare students for real-world operations.

CONFIDENCE BUILDING

First radio calls in actual aircraft become routine rather than terrifying experiences.

THROUGHPUT

Evidence from early adopters shows accelerated program timelines.

SAFETY

Situational awareness and increased fluency contribute to flight safety.

powered by
ASTi



ADVANCED FEATURES

- Airport-specific procedures for Fort Rucker and training airports
- Regional/International accent variations spoken and understood for realistic training
- Realistic synthetic traffic patterns with multiple aircraft operating simultaneously

- Visual separation training in VR environments
- Mission-specific communication scenarios
- Multi-ownership capability allows students to train in the same operational environment

PROGRAM ALIGNMENT

Innovation, Efficiency, and Quality through Technology

FSN Performance Objectives call for “**Innovative approaches that create efficiency while improving quality...**” “...Maximizing **innovation, efficiency, and technology** to more effectively train the next generation...”

Civilian Airspace Training Gap

The FSN Call for Solutions states “The Army’s pilots **must be capable of operating in the national airspace**”, recognizing the longstanding training gap of flying in civilian-controlled airspace.

SERA Addresses Core FSN Requirements

- Foundational skill enhancement (radio communications, situational awareness)
- Tool for Threat and Error Management (TEM) objectives
- Cost reduction using ATC simulation; throughput increase by learning efficiency
- Increased training realism and immersion
- Prepares pilots for increasingly crowded and complex multi-domain operations
- Facilitates trainee performance data collection and analysis
- Seamless integration with civilian FAA curriculum
- Prepares pilots to safely and confidently fly in civilian-controlled airspace

PROVEN RESULTS

CONFIDENCE IMPROVEMENT

Students reported dramatically reduced anxiety for first real-world operations, including radio calls.

PROFICIENCY ENHANCEMENT

Measurable improvement in radio call accuracy and timing.

EXPANDED TRAINING TIME

24/7 operation without breaks, overtime pay, or scheduling constraints, enabling continuous training availability & flexible student practice time.

TRAINING ACCELERATION

Navy training program of 10 years, with average pass rate of 91%, improved to 101% with SERA implementation, with prior cohort failures passing.

COST SAVINGS

Students progressed faster through radio proficiency requirements, decreasing per-student training time and allowing higher throughput.

*“A group of 58 flight students at Embry-Riddle Aeronautical University were able to reduce the time it took them to complete a first solo flight by **more than 30 percent**.”*

Dr. Kenneth Byrnes

Embry-Riddle Aeronautical University
PILOT Program powered by SERA

Ready to enhance
Army pilot training
with realistic ATC?

Contact ASTi today at info@asti-usa.com

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