

TacAir-Soar at Sea



Soar Technology

Deployment in BFTT

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The Battle Force Tactical Trainer

- Designed to provide full spectrum of ship-board training
- Distributed simulation integrated with ship's sensors
- Limited capabilities to train air traffic controllers



– One human required for each synthetic aircraft

Air Management Node

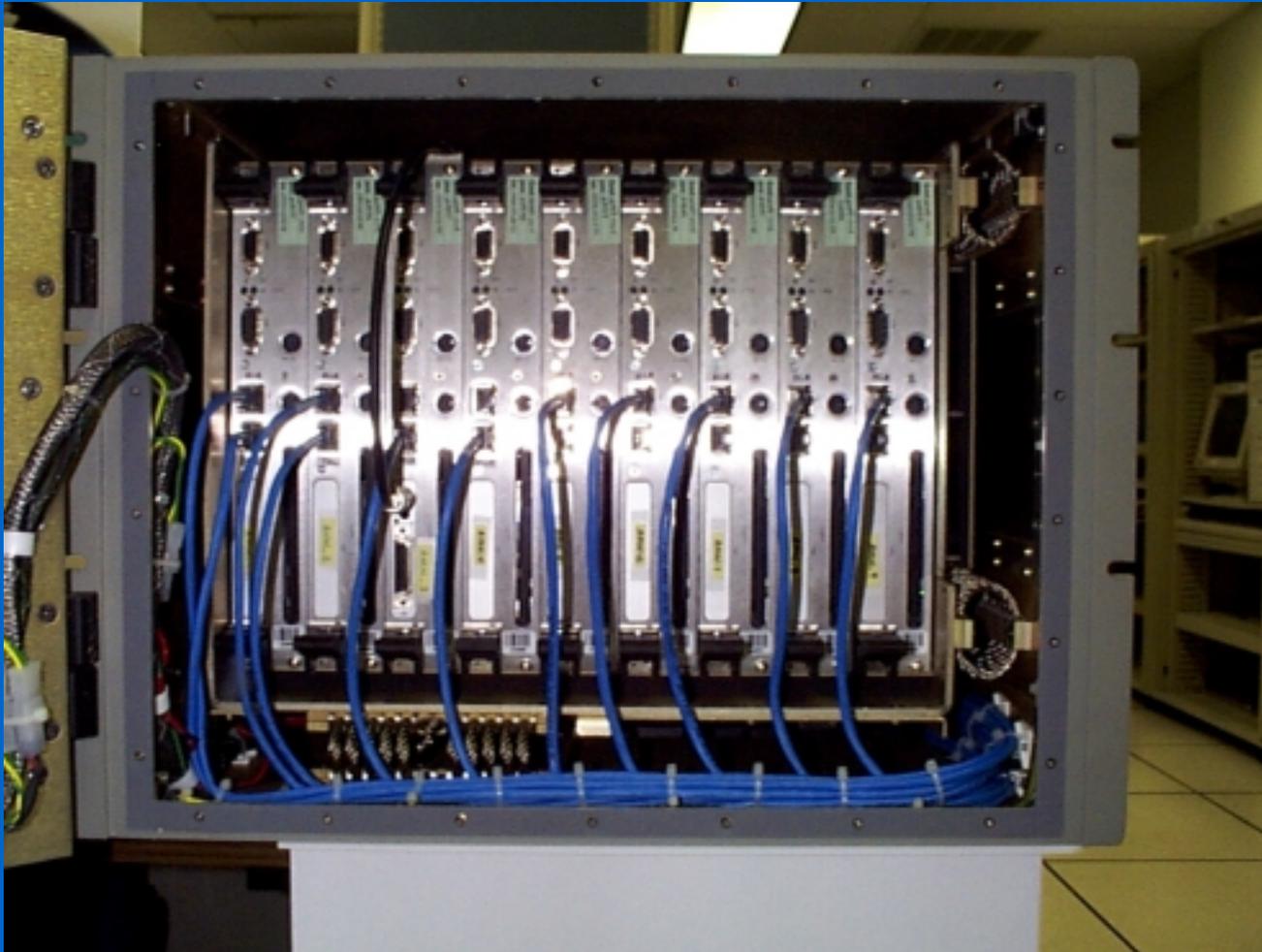
- Keeps ATCs proficient in procedures and terminology
- Improved “pseudo-pilot” interface
- Support more (and more autonomous) synthetic aircraft
- Migrate STOW technology



Thinking Inside the Box



Thinking Inside the Box



Golden Nugget

- TacAir-Soar implements the behaviors for all of the synthetic aircraft in the BFTT AMN



Behavior Development

- Provide behavior for fixed-wing and rotary-wing aircraft (and VSTOL)
 - Partial merger of TacAir-Soar and RWA-Soar
 - Total merger for formation flying
- Build in behaviors and communication specific to ATC training
 - Approximately 2000 rules added to TacAir-Soar, but should be smaller
- FWA must use “new” flight dynamics



Other Development

- “SoarSpeak” agent provides translation from English to simulation language (CCSIL)
- Dynamic and “in-flight” creation of agents, missions, formations



Lumps

- FWA/RWA merge needs lots of help
- Some BFTT behaviors are inconsistent with other TacAir-Soar applications
- Subcontracting to a large defense contractor can be annoying



Nuggets, Part II

- AMN (with TacAir-Soar) installed on the carrier BonHomme Richard (LHD6) in July 1999
- Scheduled for deployment on LHD7 in June 2000 (?)
- TacAir-Soar is a fixture in BFTT for future installations

