# "E-CATS, YOUR NEXT GENERATION LIVE TRAINING"

## REAL FLIGHT, SYNTHETIC TARGETS





Imagine......Alone in the sky or in a two or four ship formation

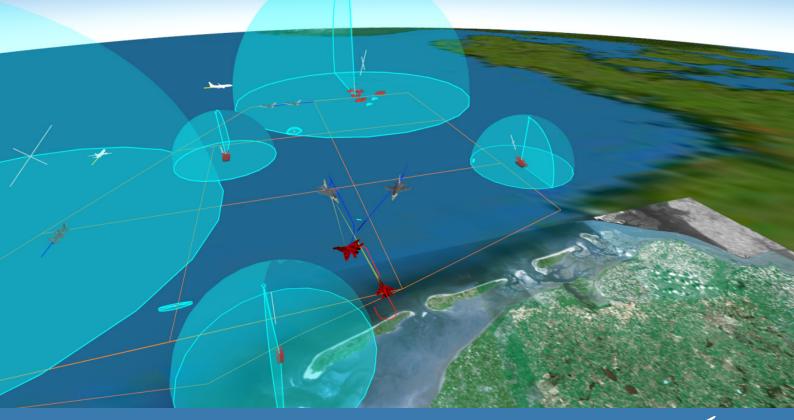
Upon the flip of a switch you can start a preplanned combat scenario for you and your flight members and train against smartly constructed air and ground adversaries

- E-CATS provides you with maximum training without operational compromises
- Train as you fight has never been more realistic

Airbus Defence and Space Netherlands and NLR have jointly developed an Embedded Combat Aircraft Training System (E-CATS) for 4<sup>th</sup> and 5<sup>th</sup> generation aircraft. This system interfaces with the mission system of the aircraft in order to exchange data. The mission system processes the virtual targets as if they are being acquired by the aircraft ownship sensors and presents them in an identical way to the pilot.

E-CATS is currently integrated in the F-35 Lightning II mission system and will be available on all aircraft from Block 3F. E-CATS has also been integrated on an operational F-16 MLU fighter aircraft from the RNLAF and will be available on demand for other F-16 versions.

"This can be your training......every day.....without extra cost or assets"







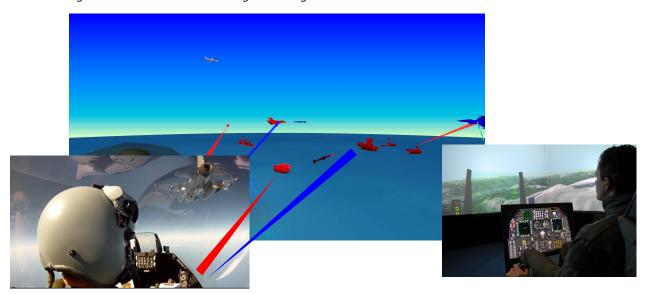




HUD and MFD displays in an F-16 showing the virtual treaths

E-CATS Embedded and LVC enabled training system offers you a full range of training capabilities from initial simple tactical training to more advanced multi ship mission training independent from instrumented training ranges.

E-CATS will help you to achieve your training proficiency in a record time and with minimum dependency on (sparse) resources providing you maximum benefit from the available flight hours. The LVC compatibility further provides you with an unprecedented training flexibility by allowing ground simulators to join the scenario or have instructors on the ground in full control of the flight training.



#### E-CATS operational benefits to the pilot:

- Air-to-Air and/or SAM training everywhere and anytime
- Rangeless (no instrumented training range necessary)
- Synchronized multi-ship scenario's
- **Smart Red Air**
- Planning and debriefing as for any normal mission
- Allows personalized training
- Virtually enlarged training airspace fitting new gen fighters and weapons capability Reducing impact of airspace limitations
- Virtual dispensers
- LVC enabled (over instrumented range):
  - Inclusion of ground entitities (simulators) in combat scenario
  - (blue air/ red air flight sims, AWACS sim, JTAC sim, UAV sim, SAM sim, etc)

White cell instructor able to follow live training and to manipulate scenario on the fly

#### E-CATS is ideally suited:

- To keep proficiency during operational deployments
- To conceal tactics and platform/weapons capabilities to prying eyes. (Covert training).
- To get a repetitive exposure to threat specific notifications from the mission system
- To support new competence based training systems.
- To built highly efficient mission teams by including coalitions pilots, AWACS, JTAC, SAM operators, UAV operators in LVC type mission training scenario's.
- To get additional training value for equal or less budget.
- To replace or supplement Red Air live aircraft
- To progressively scale up from current training methods to LVC type of training methods

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