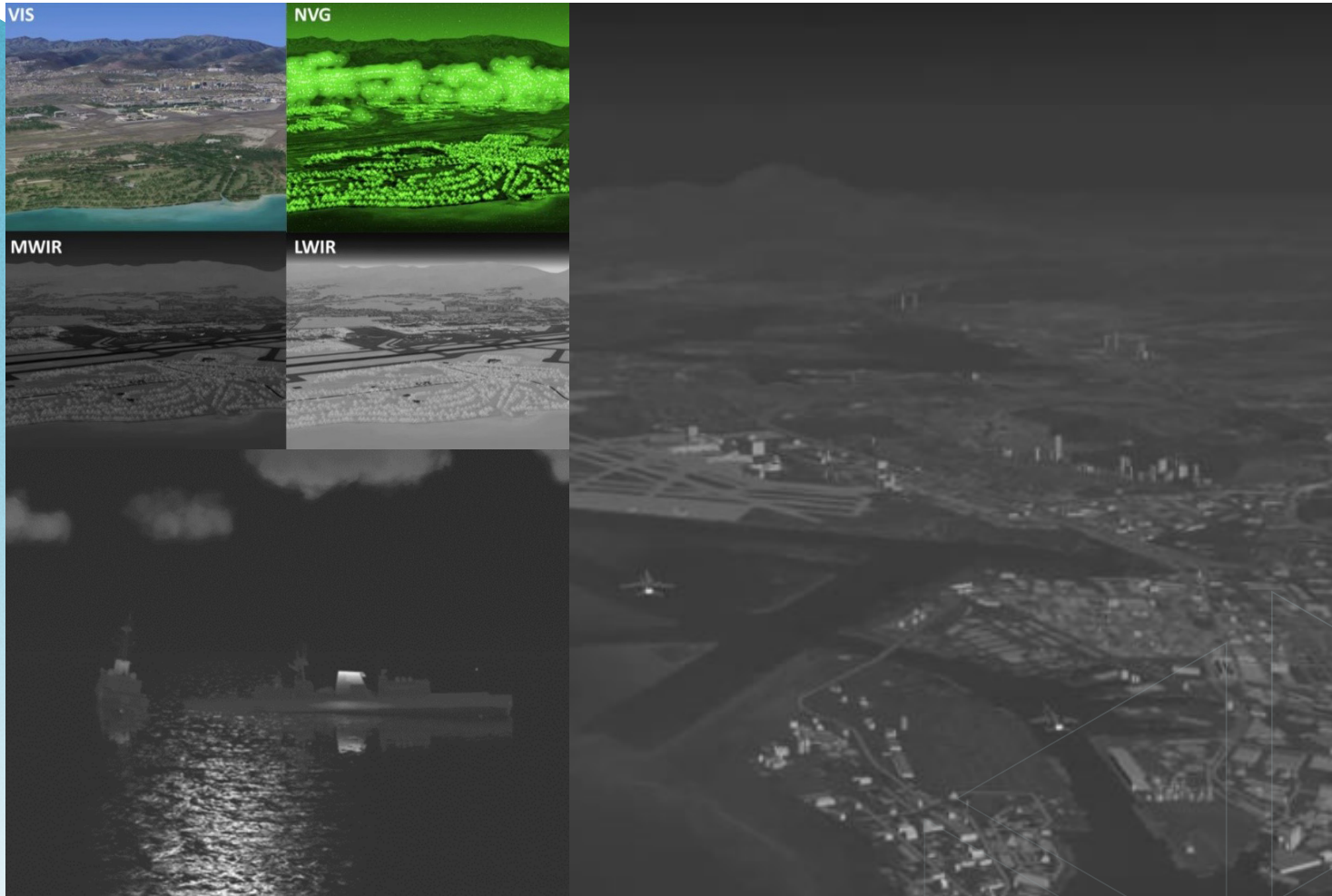# A²EOSTIM

STIMULATOR FOR DISTRIBUTED APERTURE SYSTEMS

Textron Systems' Advanced Architecture Electro-Optical Stimulator (A²EOSTIM) mitigates the excessive costs of operational tests for Distributed Aperture Systems (DAS) by testing object recognition and scene stitching through high fidelity, real-time scene simulation. Whether a land, air, sea, or space platform is being used, any multi-aperture, real-time imaging system can be tested with the A²EOSTIM. Visual environments are created with graphics processing. The system includes Modtran visual models and support many other file types. An expansive library of motion models and a consistent, intuitive user interface are provided by our A²PATS® product line. When combined with A²PATS®, A²EOSTIM provides complete multi-spectral test capabilities, including visual, SWIR and RF.

TextronSystems.com

TEXTRON Systems

▸ **PUSHING PAST POSSIBLE**

ADVANCED ARCHITECTURE ELECTRO-OPTICAL STIMULATOR

BENEFITS

> Test as you develop
> Mitigate costs and time of operational tests
> Validate detection and identification capabilities in real time

APPLICATIONS

> Automotive 360° Bird's eye view systems
> Aircraft Distributed Aperture Systems (DAS)
> Maritime Photonics Mast systems
> Tethered / Mounted Persistent Surveillance Systems
> Digital video injection and collimated / projected scene applications

FEATURES

> Proven A²PATS® User Interface (UI) & scenario controller
> CHIMAERA™ Scene engine provided by JRM Technologies
> Established, high-fidelity A²PATS mathematical motion models
> Full spherical environment simulation
> Simulates dynamic weather, multiple orders of reflection, and camera / sensor effects (UI) & scenario controller
  - Flare, Smoke, Dust, Plume, Fire, and thermal reflection
> Generates environments and effects in real-time

CAPABILITIES

> 16-bit, high-fidelity digital scene injection
> Spectrum replication from 0.20 – 25.0 µm
> Physics-based sensor modeling, including all major optical, detector, and electronics effects
> Supports U.S. Government Signature Model codes
> 8-24-bit DP1.4 2048x2048 @ 30-120Hz, 10 Gigabit Ethernet
> DIS protocol real-time network interfaces

TARGET → DAS SENSORS → DAS PROCESSOR → COCKPIT DISPLAY