AFA
Space Symposium

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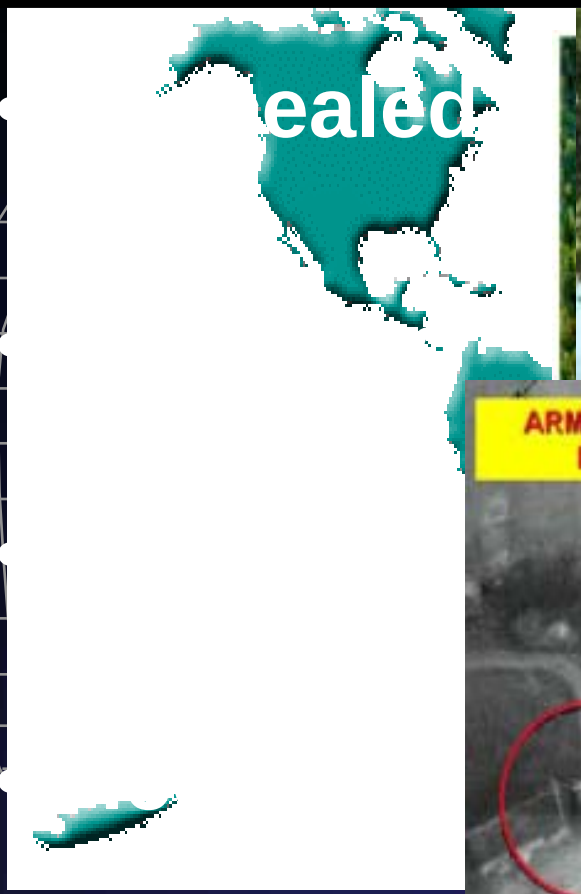
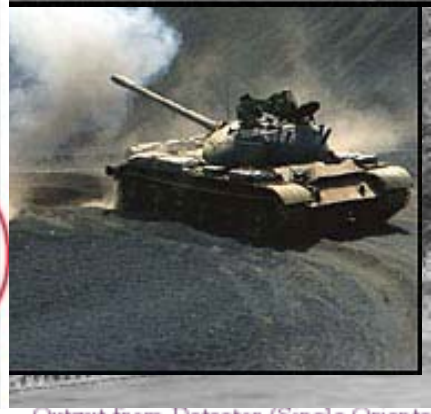
21 November 03

AIR POWER CHALLENGES

Range / Precision / Knowledge / Decision / Time





Output from Detector (Single Orientation)

AIR POWER CHALLENGES

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A Need for Predictive Battlespace Awareness

PREDICTIVE BATTLESPACE AWARENESS

The ability to understand the nature and characteristics of the battlespace so that we may…

- **Detect & identify objects of interest**
- **Confirm past movements**
- **Predict likely courses of action**

Using C2ISR for continuous tracking to Confirm Rather than Discover

PBA REQUIREMENTS

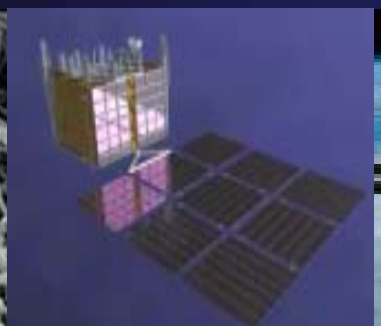
- Integrated Sensors
- Persistent Sensor Presence
- Integrated Databases
- Geographic Characteristic & Delimiting Tools
- Location & Movement Forecasting Tools
- Information “Efficienology”



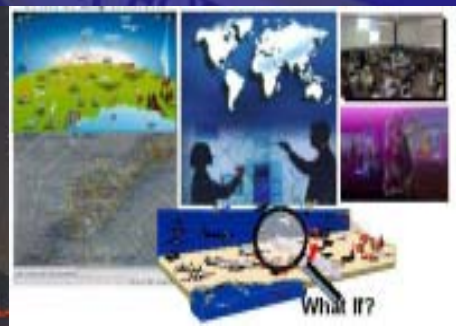


AFRL INITIATIVES

- Nanotechnology
  - Lighter Weight and Stronger Materials
  - Thermal Properties of Materials
  - Multiple Function Materials
- Power Technology
- Propulsion
- Directed Energy
- Human Effectiveness





TRANSFORMATIONAL VECTORS

Range / Precision / Knowledge / Decision / Time

- **Battlespace Awareness with Touch of Screen --- KNOWLEDGE**
- **Real-time/Understandable Information to Leaders at all Levels --- DECISION**
- **Achieve Desired Effects Near Instantaneously --- ACTION IN TIME**

Break the Time Barrier


AIR FORCE MATERIEL COMMAND