

Headquarters U.S. Air Force

Integrity - Service - Excellence

Precision Engagement

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Precision Engagement

"The capability to locate the objective or target, provide responsive command and control, generate the desired effect, assess our level of success, and retain the flexibility to reengage with precision when required."

Joint Vision 2010



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Why Precision Engagement?

- **Target characteristics**
 - **Hardening / buried**
 - **Urban location**
- **ROE / collateral damage concerns**
 - **“CNN effect”**
- **Trend of weapons development**
 - **Smaller size**
 - **Smaller warheads**



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Target Execution



Targets may be classed as:

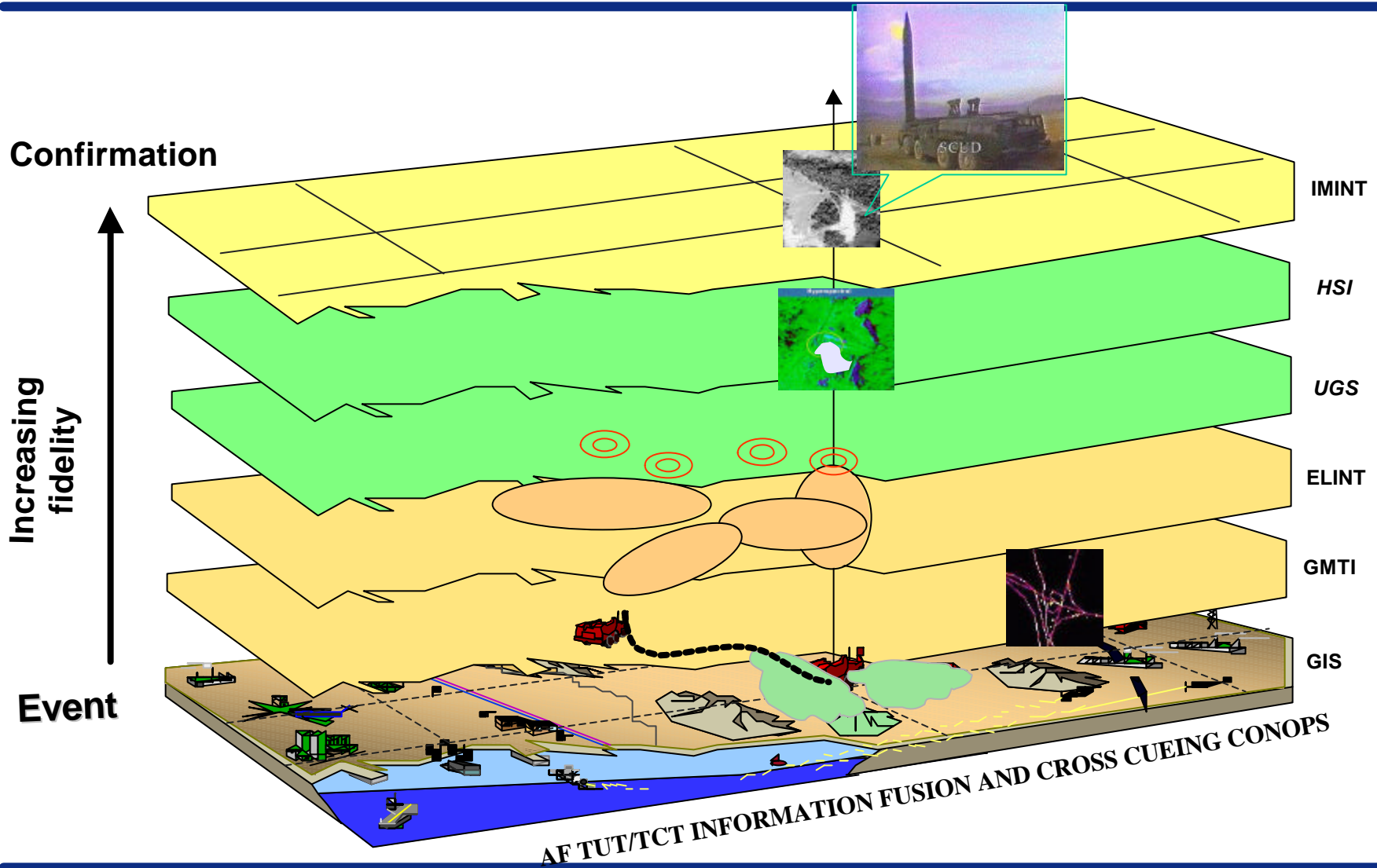
- **Fixed target -- planned events**
- **Planned dynamic -- known targets, but unable to fix in advance**
- **Unplanned dynamic -- not known in advance**

Any/all of these can be time critical



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The Operational Picture: Fusion is Critical



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Kill Chain

Sensor to C2 to Shooter

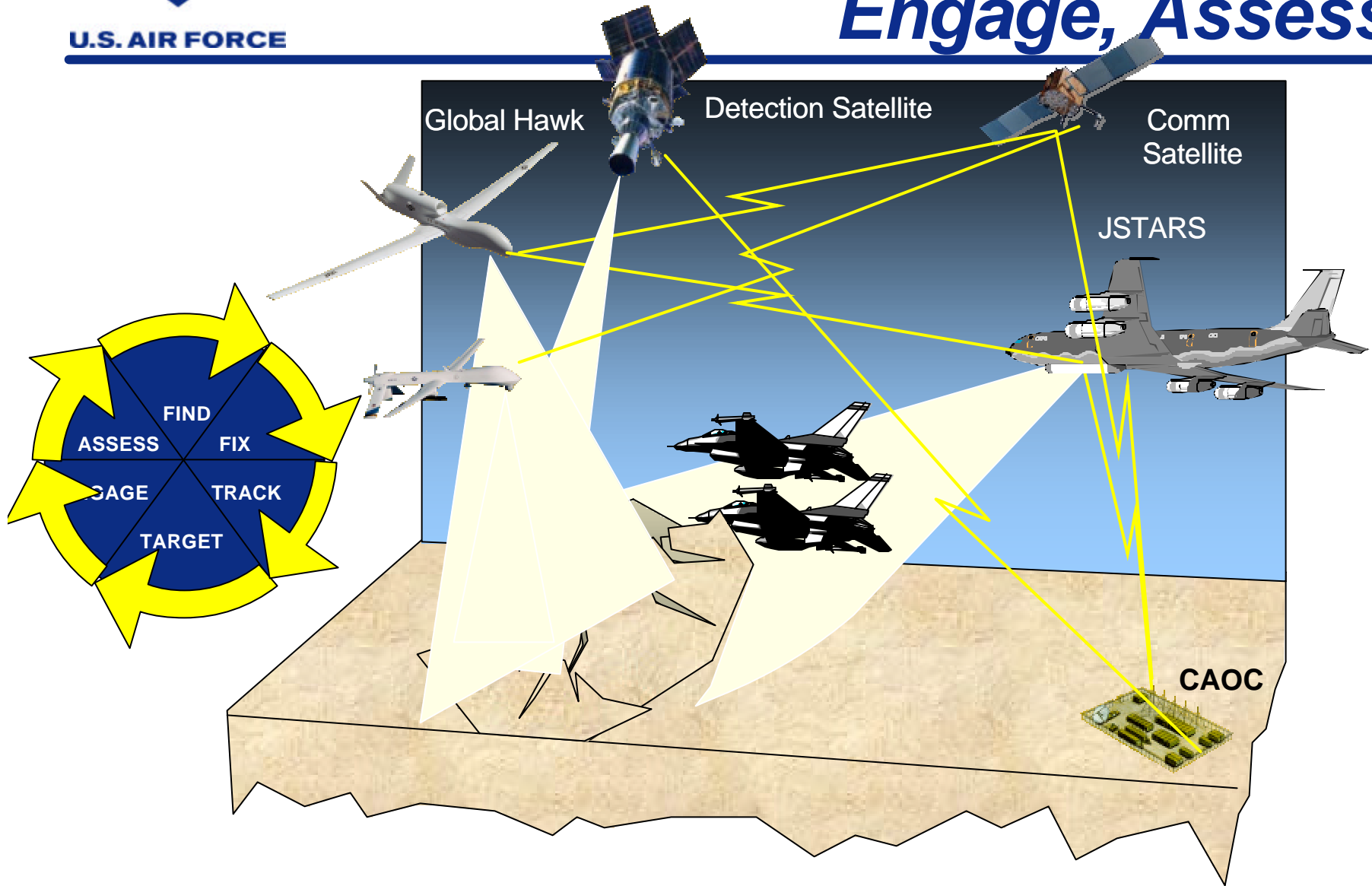


F2T2EA



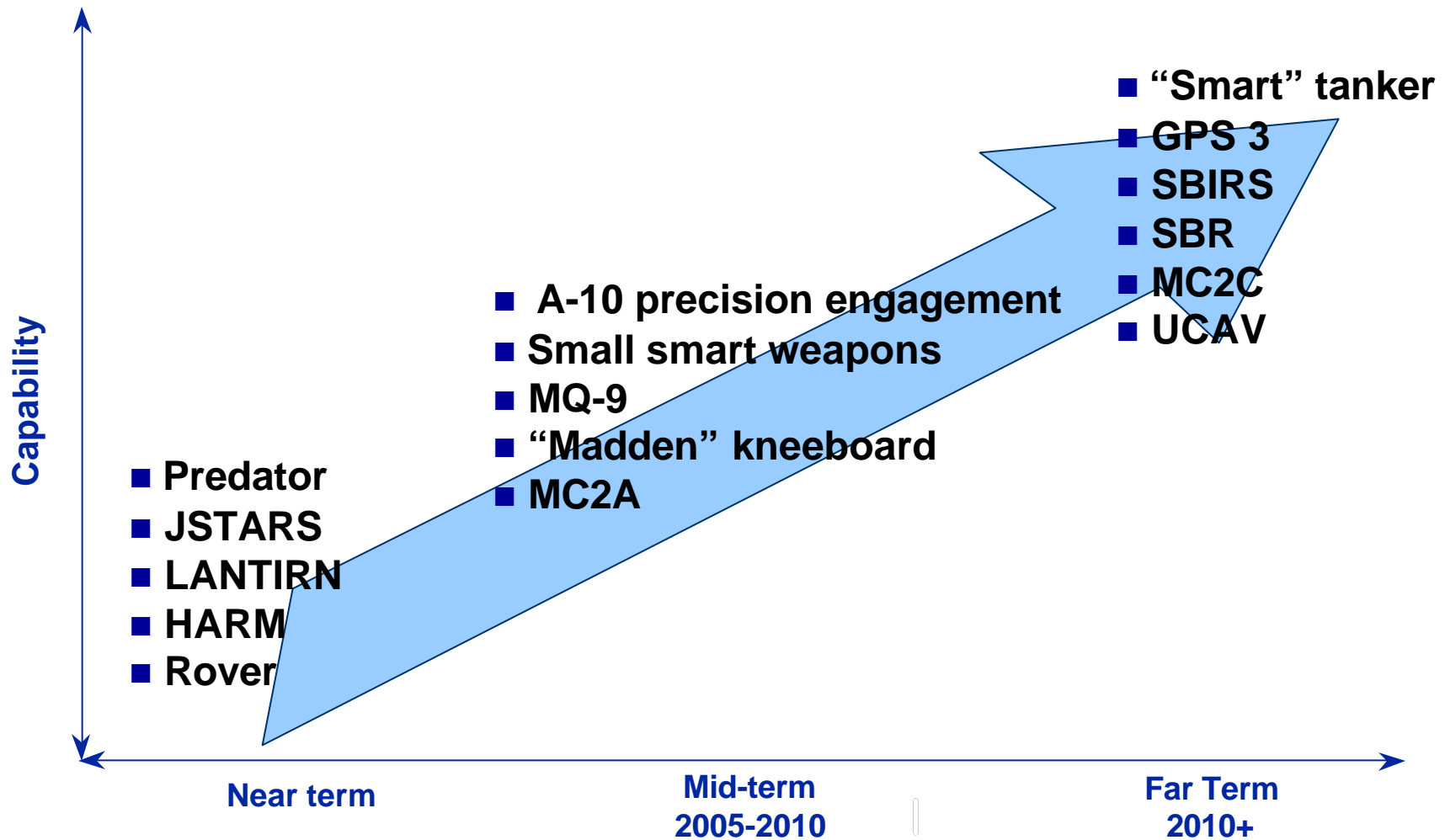
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Find, Fix, Track, Target, Engage, Assess



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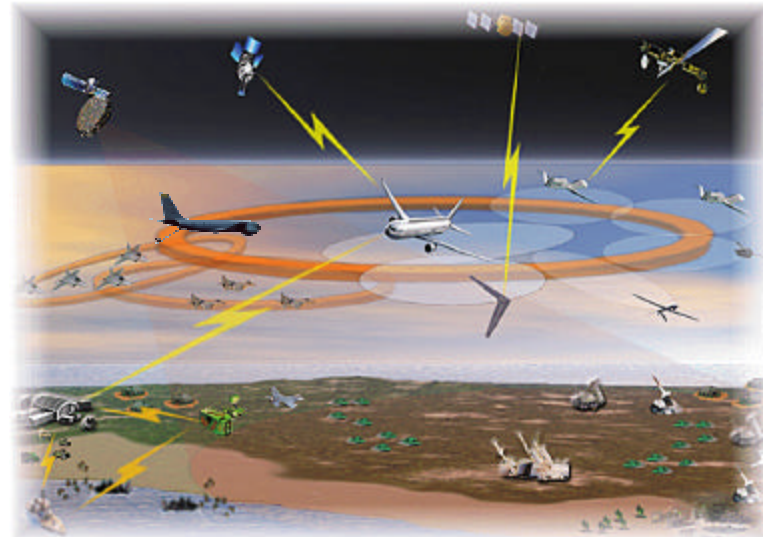
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Future Airborne Network: Integrated for Speed & Accuracy



- Global Information Grid
- Joint Battlespace Infosphere
- MC2C

- *Horizontal Integration*
- *Machine-to-Machine*
- *Auto Target Cueing/Recognition*





Future Alternative Concepts

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Reduced Exposure --

- Surveillance & Recce:
- Greater use of Space
 - Greater use of UAVs

AOC Plans & IPB

C2:

- Reduced Theater Footprint
- Tailored Theater Staffs
- Airborne C2 Element

Stealth Shooters:

- Improved Stand-off-PGMs
- New UCAV Platforms



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Outlook

Challenges

- Combat ID
- Bandwidth
- Distributed mission training/ops
- Personnel
- Weapons effects

Capabilities Required

- Data fusion
- Secure links
- Secure GPS
- Auto target recognition
- TPED

Look beyond programs to capabilities for effects