#### Headquarters U.S. Air Force

Fly - Fight - Win

**Precision Strike Association Winter Roundtable** 

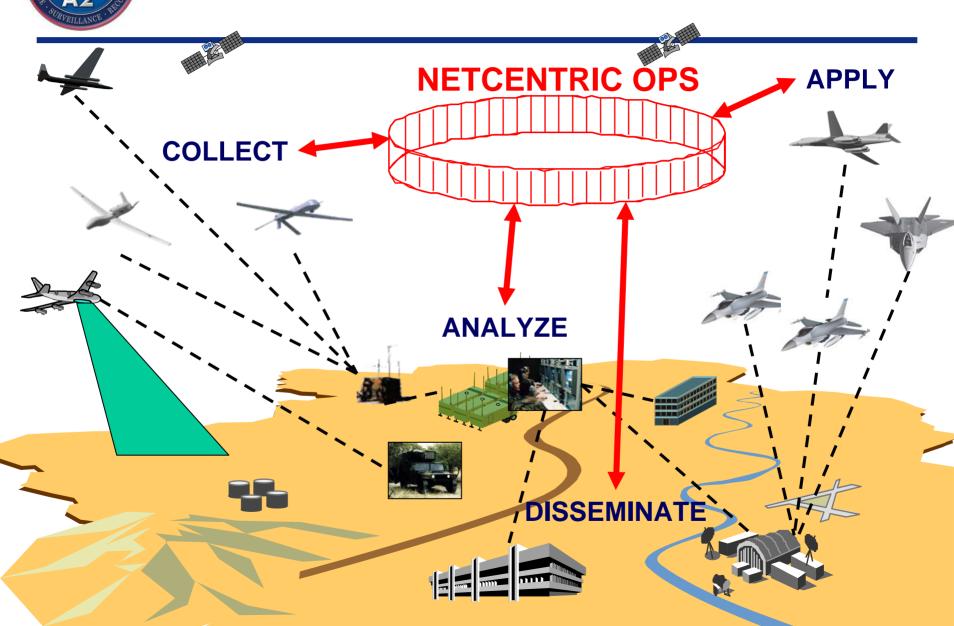
Application of ISR Capabilities to Tighten the Kill Chain: USAF Perspective



Colonel Dash Jamieson
Director of ISR Transformation, HQ USAF



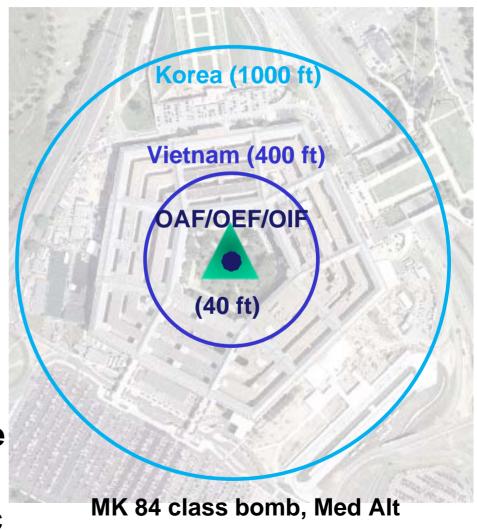
### ISR Effects





### **Changing Focus**

- ISR has always been about the kill chain
  - Artillery spotting
  - Roots of airpower
- 20th century Hitting Targets
  - Anywhere, anytime
- 21st century Determine and Assess Effects
  - Kinetic or non-kinetic





#### The Prominence of ISR Operations

- Not just the enemy or type of war
  - Non-state actors, Irregular warfare
- Expectations
- Desert Storm: 99% of sorties had assigned targets
- OIF: 99% of sorties take off w/unknown target
- Requires flexibility
  - Extremely netted operations
  - Global effects
  - Minimal footprint, risk
  - Projects power, not vulnerability





## Optimizing the Kill Chain



"Interoperability is all about what capabilities I have that can make your operations better. Interdependence is all about what you need done that you can't live without, (and) my capability is the only capability you have."

**General Ronald E. Keys** 



#### **Predator Video**

FRIENDLIES

SNIPER



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# The Wave of the Present

How Do We Improve Today?

- UAS role surpassing expectations
  - Capability, versatility
  - Value for cost
  - Reliability, maintainability
  - Significantly reduce risk
- Deputy SecDef Memo 13 Sep 07









## F2T2EA...and E Again



Fly - Fight - Win



## ISR Inventory Evolving



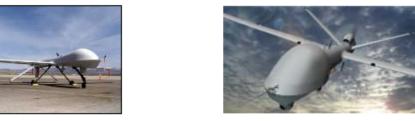






- Paradigm shift in terms of iron
- Legacy ISR Aircraft: LD/HD won't be fixed through procurement
- Mission Migration From Manned To Unmanned
  - Deliver wide range of kinetic and non-kinetic effects
  - Increased ranges, loiter times, payloads with decreased risk and

footprint





- Sensor-Shooter line blurring
  - UAS adding attack capability
  - Next gen aircraft incorporate ISR capability





#### F2T2EA to F3



Predator: 600+ hours looking for and tracking al-Zarqawi



2 F-16Cs: 10 minutes of force application



Fly - Fight - Win



# Self-Imposed Hurdles

**Overcoming Semantics** 

- Strategic Operational Tactical
  - Effects not platforms
- Sensor Shooter
  - Nomenclature constricts potential
  - Misperceptions
    - F/A and non-traditional ISR
    - RQ can't shoot
- ISR: Support or Operations?
  - ISR *Is* Ops...the *Hunter* in Hunter-Killer



Assessmen

Assessment

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Cross-domain integrated ISR optimizes effects chain