

UNCLASSIFIED



# *Space Superiority Systems Wing*

*Vision for 21st Century  
Space Control Capabilities*

**Col Mike Taylor  
Commander**

***“One team controlling  
the ultimate high ground”***

UNCLASSIFIED

UNCLASSIFIED



# Today's Economy Depends on Space



FINANCE



PRECISION FARMING



BROADCASTING



COMMUNICATIONS



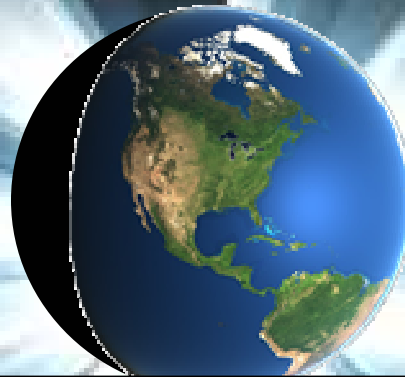
WEATHER



LOGISTICS



SCIENCE



NAVIGATION



AVIATION

## SPACE INDUSTRIAL BASE



SPACECRAFT



LAUNCH & OPERATIONS



USER EQUIPMENT

UNCLASSIFIED



UNCLASSIFIED



# Today's Warfighter Depends on Space



MISSILE WARNING / DEFENSE



COMMUNICATION



WEATHER



NAVIGATION



PRECISION STRIKE



SIGNALS INTELLIGENCE



INDICATIONS & WARNING



BATTLE DAMAGE ASSESSMENT

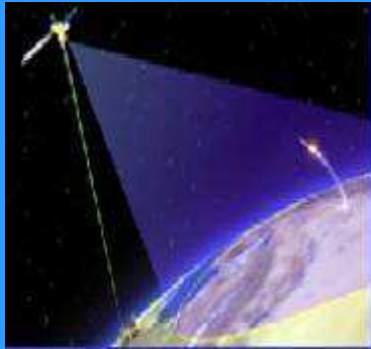
UNCLASSIFIED

UNCLASSIFIED



# SMC Mission Overview

*Develop, acquire, field and sustain the world's best space and missile capabilities for the joint warfighter and the nation*



## Space Superiority

Space Situation Awareness  
Defensive Counter Space  
Offensive Counter Space

**SYSW**



## Space Support

Launch Systems  
Spacelift Range  
Sat Control & Network



## Force Application

ICBMs  
Prompt Global Strike



## Space Force Enhancement

Milstar/AEHF/GBS  
DSCS (Comm)  
TSAT (Comm)  
GPS (Navigation)  
DSP/SBIRS (Surv)  
DMSP (Weather)  
NUDET (Nuclear Detection)

**Delivering Operationally Responsive Military Space Capabilities to Preserve Peace and Win Conflicts**



# Space Superiority Systems Wing

## Space Situation Awareness (SSA)

Knowledge of space objects, status, activities, threats and environment to enable courses of action\*



### Defensive Counterspace (DCS)

Operations to preserve US/allied ability to exploit space to its advantage...to protect friendly space-related capabilities from attack\*

### Offensive Counterspace (OCS)

Operations to preclude an adversary from exploiting space to his advantage\*



### Command and Control (C2)

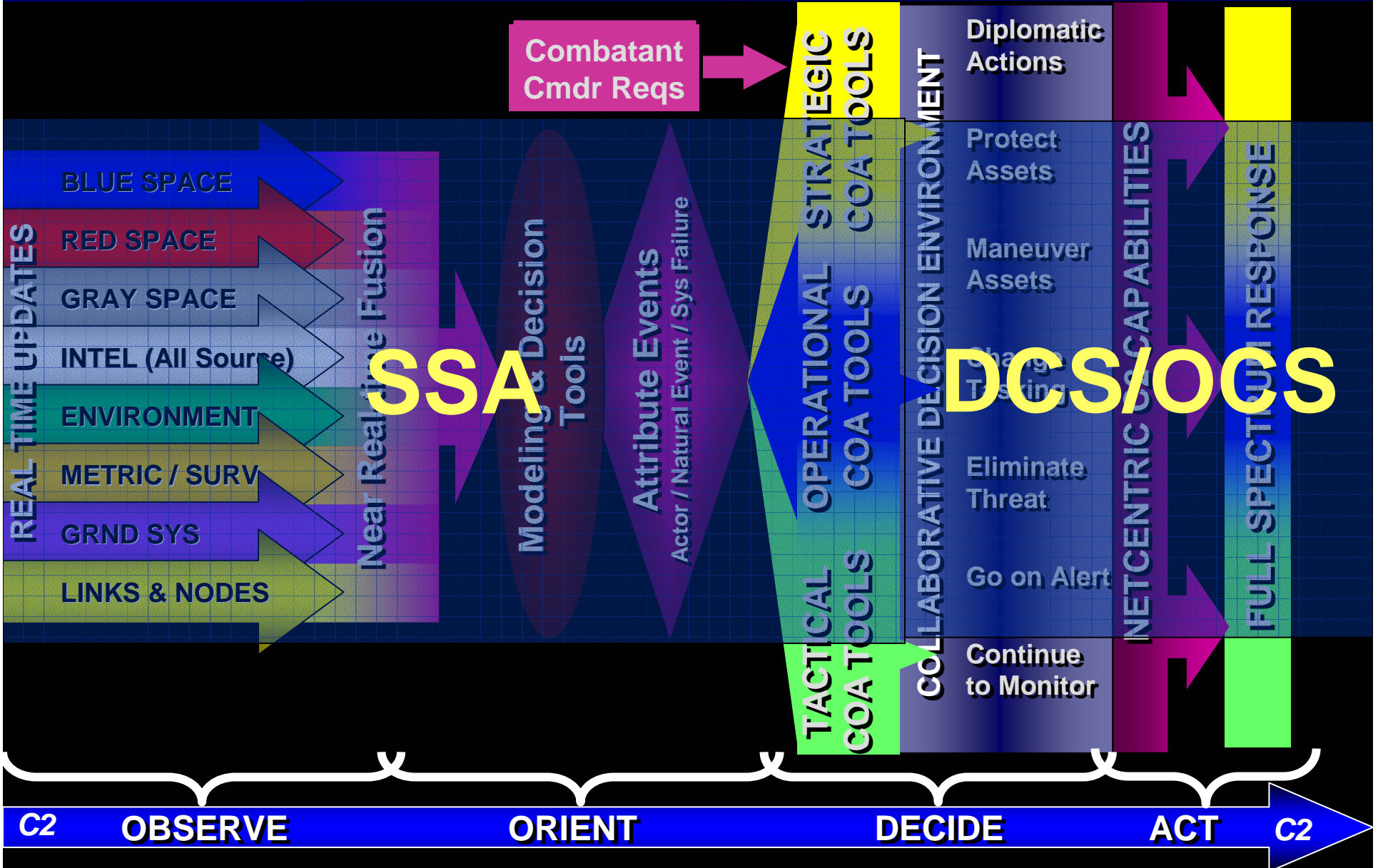
The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission\*

**\* AF Doctrine Document 2-2.1**



# Integrating the Space Battlefield Picture (JFCC-Space Perspective)

DATA becomes INFORMATION that ENABLES ACTION





# *Developing a Coherent Framework - Architecting the Future*



- **Today's Space Control Environment**
  - **Fragmented collection of systems**
  - **Changing war fighter needs and shrinking budgets**
  - **Aging systems**
  - **Point solutions**
- **Best Value SSA Architecting Tool (Lookout)**
  - **Analyzes current and future systems using Family of Systems (FoS) approach**
  - **Ability to "what if" in terms of war fighter capability and cost**
  - **Provides objective plan for divestiture**
  - **Applies sensor's strengths to create the optimum integrated SSA architecture**

**Provides decision makers with quantifiable SSA sensor performance and cost data – focusing on warfighter needs**

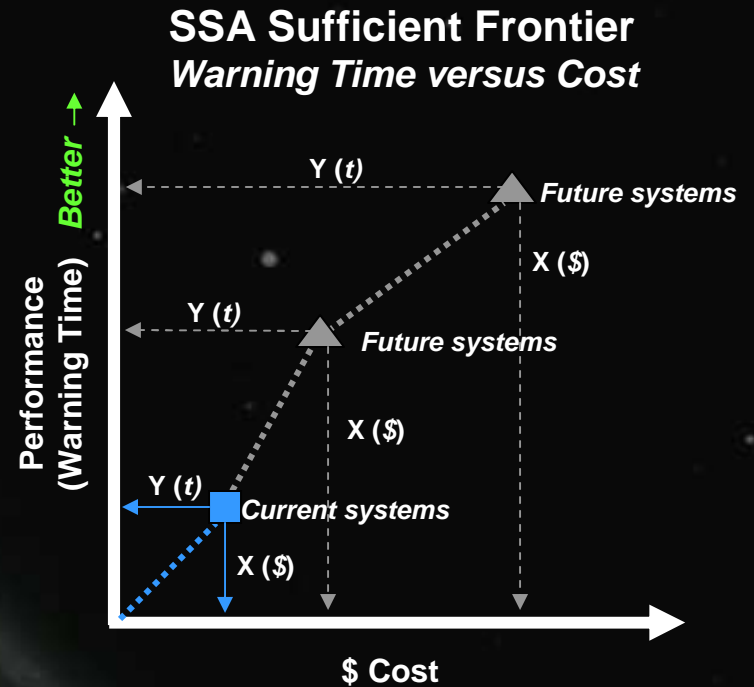
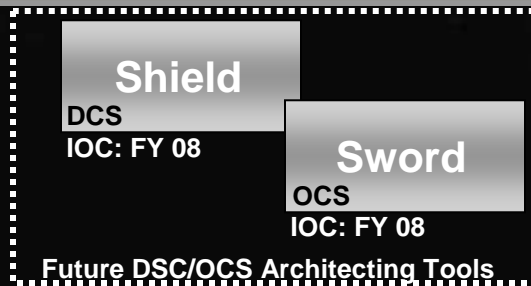
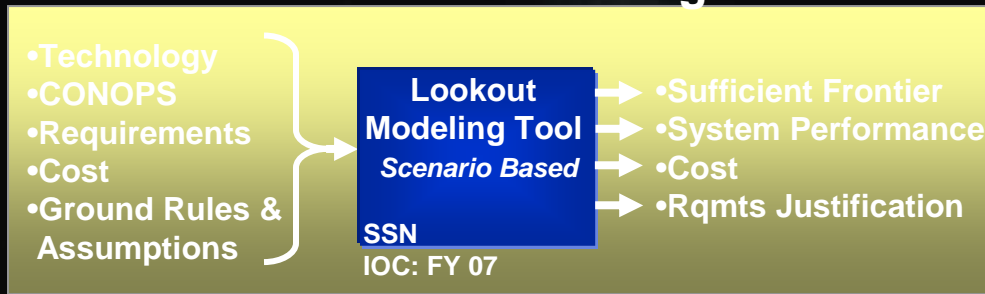


UNCLASSIFIED



# Developing a Coherent Framework - Architecting the Future

## SSA Architecting



**Provides decision makers with quantifiable system performance and cost data – focusing on warfighter needs**

# Current Programs



- SBSS Blk 10
- ISSA
- RAIDRS Blk 20
- Space C2

➤ **Architecting**

- RAIDRS Blk 10
  - SASSA
- 

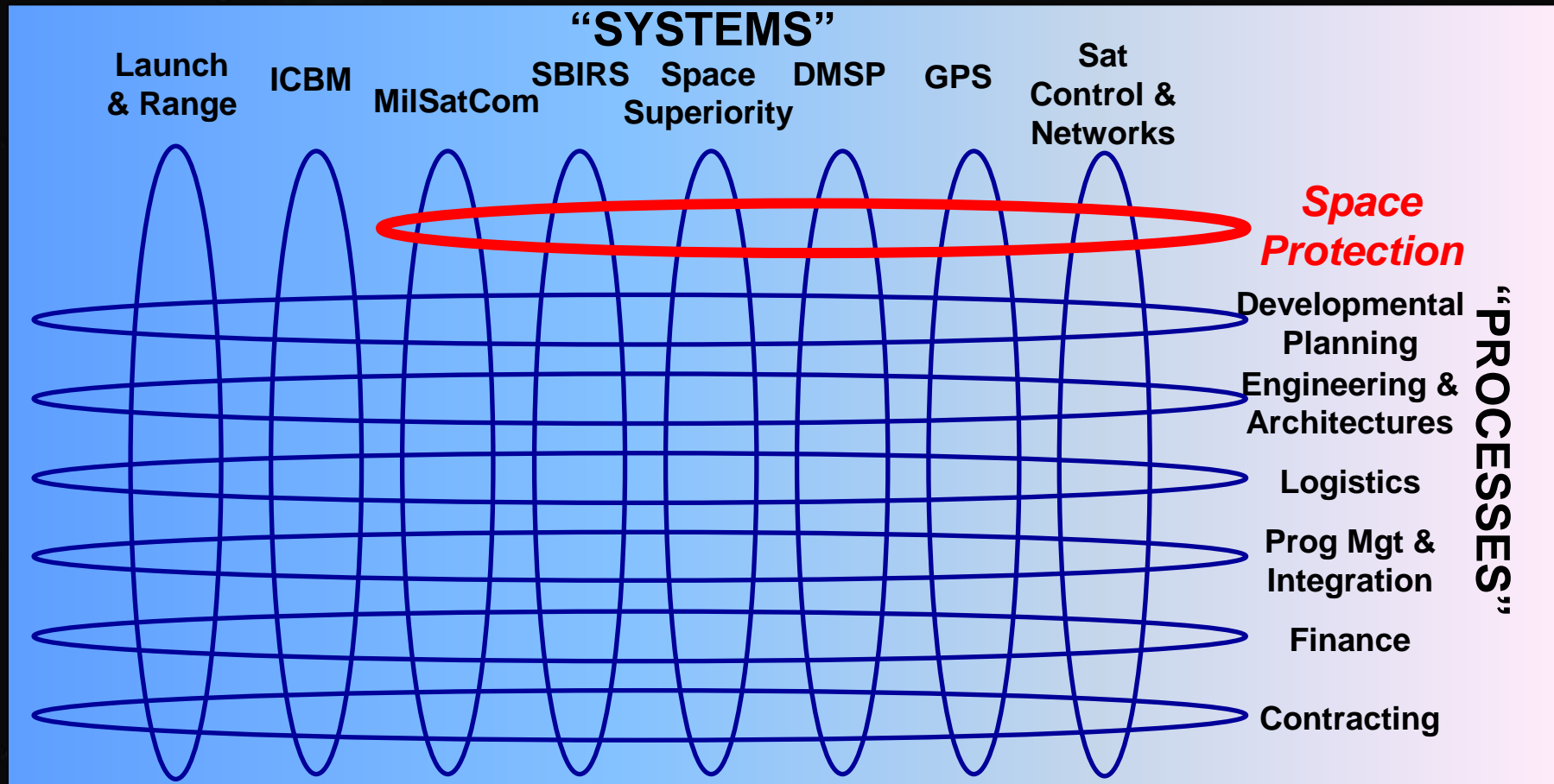
➤ **Enabling Technologies**

- CCS Blk 10
- Other Efforts

➤ **Space Depot**



# Protecting Space-Based Assets (Horizontal Integration Across SMC)



**Protection is a critical process applied horizontally to SMC's space systems**

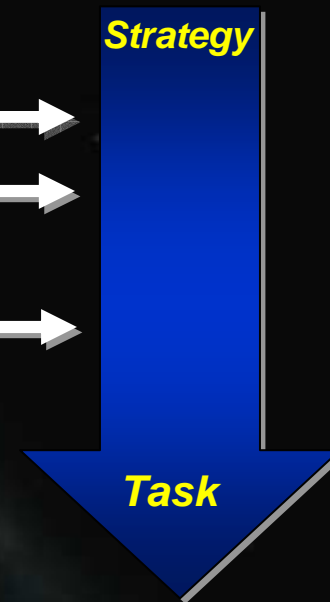


UNCLASSIFIED

# ***SYSW Space Protection Strategy and Thrusts***



- **Space Protection Strategy**
  - *Develop, deliver and sustain material solutions that provide defensive capabilities (passive and active) to protect U.S. space forces*
- **Space Protection Thrusts**
  - SPP Support →
  - Vulnerability assessments across the space protection enterprise →
  - Developing technology solutions to counter the pervasive threat →
  - Developing other advanced counterspace capabilities →



***Delivering on the National Imperative to Maintain our U.S. Asymmetric Advantage in Space***

UNCLASSIFIED



## *Future Opportunities*

- **Space Situational Awareness Architecture activities**
- **Space Control Technologies**
- **Self Awareness Space Situation Awareness (SASSA)**
- **Integrated Space Situation Awareness (ISSA)**
- **Rapid Identification Detection and Reporting System (RAIDRS) Block 20 (name change after FY10 POM)**
- **Space-Based Space Surveillance, Blk 20**
- **Counter Communications System (CCS) Blk 20**
- **Counterspace C2 (was JETSS)**



UNCLASSIFIED  
*Summary*



- **Space is important**
- **SSA -- Providing accurate, timely and operationally relevant space battlefield information to warfighter**
- **Counterspace – Developing DCS and OCS capabilities**
- **Engaged support to Space Protection**
- **Expanding mission area in a resource constrained environment**

**Success Requires Engaged Partnership Between All Stakeholders**



## ***SYSW Points of Contact***

- **SSA -- Col J.R. Jordan, SYAG/CC**
  - (310) 416-1755
  - james.jordan@losangeles.af.mil
- **Counterspace -- Col(s) Lee Rosen, SYCG/CC**
  - (310) 416-1601
  - lee.rosen@losangeles.af.mil
- **Contracting -- Lt Col Ron Ortiz, SYSW/PK**
  - (310) 416-1559
  - ronald.ortiz@losangeles.af.mil

UNCLASSIFIED



# *Space Superiority Systems Wing*



Questions?