



Acquisition Effects on the Precision Strike Kill Chain

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16 April 2008

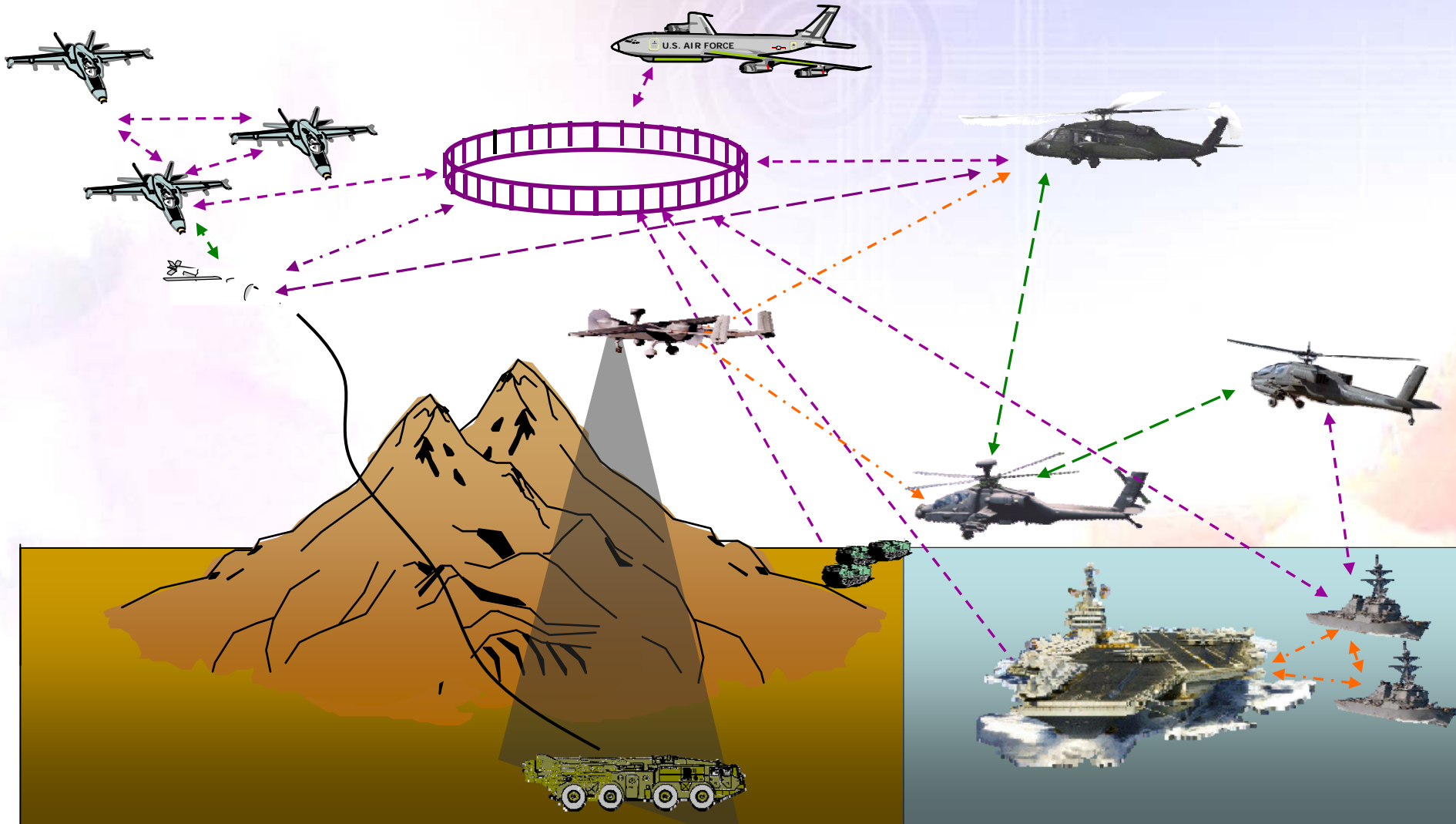


Agenda

- “Big A” Perspective
 - Nature of the kill chain problem
 - Requirements analysis process
- “Small A” Perspective
 - Management approach
 - Today, tomorrow

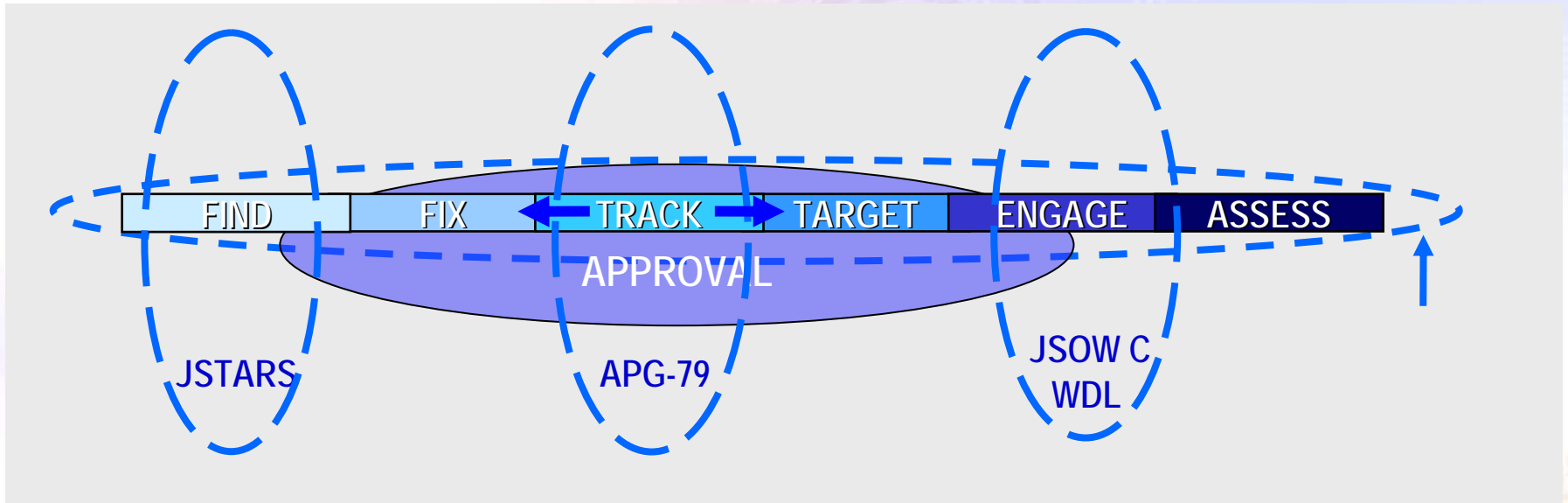
Network Enabled Kill Chains

Any Sensor – Any Weapon – Any where – Any Time





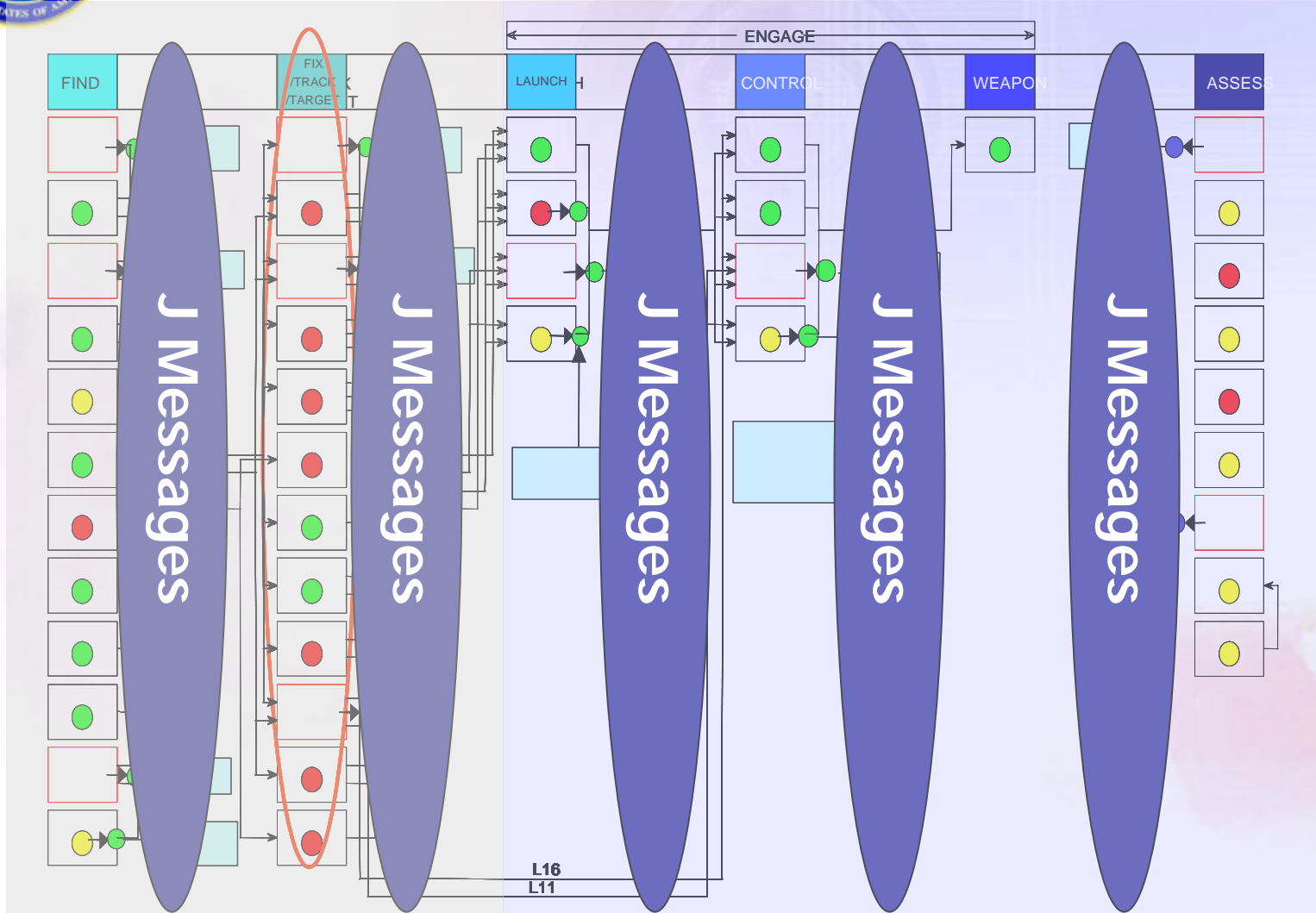
Capability-based Analysis



- Systems Engineering between Programs and Kill Chains
 - Horizontal integration generates and assesses end-to-end capability
- Fund Programs of Record
- Fund Kill Chains/Capabilities (Systems Engineering and Integration)



Kill Chain and Network Links



Approval/ID on critical path

Net enabled weapons need a network



Situation

- For each scenario
 - Kill Chain involves several “platforms”
 - Myriad combinations with lots of gaps
- Management process to ensure automated chain requires changes to mission systems and platform operational flight program
 - For every platform in the scenarios
 - C², ISR, strike aircraft and netted weapon



Requirements Issues

- Network robustness
- Traditional or streamlined C2
- Extent of automation
- Quality of information
- Coalition interoperability

- New technology drivers
 - Sharing AESA images



“Small A” Challenge

- Must define a System-of-Systems Requirement and flow allocated requirements to all system components
- Program Office for each mission system and each platform, each with own
 - Knowledgeable team
 - Priorities
 - Resource constraints
 - Standing Contracts



“Small A” Challenge (cont’d)

- Must task and fund each Program Office
- Must coordinate individual efforts, including performance trades
- Must evaluate the performance of each component and the system-of-systems
- Must report



Systems Integrator Role

- Congressional concerns notwithstanding
- Must have a single organization to focus the program efforts
 - A separate office, or
 - A lead office from one of the system program offices
 - Government or contractor
 - Responsible for:
 - System-of-systems integration
 - Overall financial resourcing and management
 - Overall tasking to individual system program offices
 - Coordination among individual system program offices
 - Reporting



Management Approach

- Crawl, walk, run
- Experimenting in JFEXs, JCTDs, JTEs and funded demonstrations
- Future timeline will be driven by the results and lessons learned from the experiments



Summary

- Network-enabled kill chains are coming to a theater near you sooner than you expect
- Strike, ISR and C² platforms must collaborate in order to achieve integrated kill chains
- We still have technical and management issues to resolve