Reducing the Size of the AOC with Parallel Air Tasking

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Introduction

• AOC structure based on scope of mission and people required to work around an outdated system (H/W, S/W & process)
  – *Process is the root cause* – hardware and software problems are the symptoms
  – *Integration* is a contributing factor

• Parallel Air Tasking
  – Reduces each ATO to the smallest unit size convenient for execution
  – Multiple ATOs executed simultaneously
  – Not artificially time constrained
  – Time based on desired effects
  – Makes it easier to implement effects-based operations (EBO) and decompose the structure of the AOC
Today’s ATO Production and Management is a Serial Process

ATOS

AT LEAST 3 ATOs ARE PROSECUTED EVERY 24 HOURS AFTER D+3

PLAN

EXECUTE

ASSESS

D+3

A      B     C     D    E     F     G     H     I      J     K
Weak Points in Current ATO Production

• A single message covering as many expected events as possible in a given block of time (usually 24 hours)
  – **Negative Impact** on Content – the ATO covers a lot of information because it covers a large block of **time**
  – **Negative Impact** on AOC **Size** – too many contractors, liaisons and “experts” to produce each ATO

• Improvements are merely incremental because the serial production process hasn’t changed
  – Even with better tools the production cycle will only **marginally** improve
  – Making the individual steps in a **serial process** go slightly faster is less improvement than making them operate in parallel
  – It’s time to change the production process
The Major Steps in the New Parallel Process

**PBA**
Defining Targets that Drive the Adversary to a Specific COA

- IPB
  - Define the Battlespace
  - Describe Battlespace Effects
  - Evaluate Adversary
  - Determine Adversary’s COAs

**MAAP**
Matching Targets to Capabilities to Create Effects

**Queuing**
Managing the Flow of Operations

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**BLUE FORCES STATUS REPORTING**
Location and Operational Availability
Predictive Battlespace Awareness (PBA): Predictive ISR

**Intelligence Preparation of the Battlespace (IPB)**

- Define the Battlespace
- Describe Battlespace Effects
- Evaluate Adversary
- Determine Adversary’s COAs

**Doctrine (behavior) and OB**

**Products of IPB are Decision Aids**

- Geospatial
- Weather
- Targets
- COA, NAI, TAI

**Decision Aids**

**4 Elements of PBA**
1. IPB
2. ISR Strategy & Planning
3. ISR Execution
4. Assessment

**Time Sensitive Targets (TST)**

**Joint Integrated Prioritized Target List (JIPTL)**

**ISR Collection Plan**

**Problems Remedied:**
- ISR becomes postured to support EBO
- ISR anticipatory, not reactive
- ISR remains synchronous and asynchronous with operations

**Drive the Adversary to the Commander’s desired COA**

*COA – Course of Action
NAI – Named Area of Interest
TAI – Targeted Area of Interest
Master Air Attack Plan

Operational Context
- Commander Joint task force (CJTF)
- Joint force Air Component Commander (JFACC) Strategy
- Joint Air Operations Plan (JAOP)
- Rules of Engagement (ROE)
- Allocation Request (ALLOREQ)
- Joint Integrated Prioritized Target List (JIPTL)
- Joint Guidance Apportionment and Targeting (JGAT) Worksheets

Operational Environment
- Weather Effects
- Targets, Electronic Target Folders (ETF)
- Enemy Orders of Battle
- Battle Damage Assessment (BDA)
- Adversary Tactics, Techniques and Procedures
- Bases' Operational Status
- Fuel, Petroleum, Oil and Lubricants (POL)
- Munitions, Standard Conventional Loads (SCL)
- Utilization Rate (UTE)
- Friendly Orders of Battle (FROB)

Per Joint Publication 3-30, Command and Control for Joint Air Operations, Figure III-14
The MAAP Feeds a Stream of ATOs to Force Capabilities

- **Targets**
  - Matches Targets to Available Forces
  - Determines Time Window Over Target
  - Manages ISR to Ensure Tracking of Targets

- **ISR Visualization**

- **MAAP**
  - Automated Queuing
  - Equivalent to Today’s Combat Ops Division

- **Coordinator**

- **ATOs**
  - AEW
  - AEW
  - AEW
  - ESG
  - CSG
  - Other

- **BLUE FORCES STATUS REPORTING**
  - Location and Operational Availability

- **Nominated Targets**
- **ISR Plan**
Ever been to the commissary on pay day?
• Queuing is a set of rules to assist processing
• It requires real-time **feedback** on process flow
  – How are things stacking up?
  – How long is the wait?

Visibility into servicing capabilities and bottlenecks is vital

*FIFO = First In First Out
  LE  = Lunch Express
  LIFO = Last In First Out
  Time = Processing Time*
Changes to the AOC Structure

The Deployed AOC is a Decision Node
Conclusion

• Establishing this construct facilitates oncoming improvements in weapons and C4ISR
  – Creates a modular production process, enhancing flexibility
  – Easier to “plug-and-play” new capabilities
• Reduce the time and labor to produce and manage the ATO
  – AOCs are “ATO factories”
  – Factories consolidate resources (footprint), i.e., people, comms, equipment, to mass produce products
  – We no longer have to operate our “factory” like Henry Ford—it’s time to optimize production
• Take the human out of the labor but keep the human in the decision cycle
How to Reach Us

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