Kessel Run Road to Agile Acquisitions - Middle Tier & Software Acq Pathway

Hannah Hunt
Agenda

Kessel Run Overview

Middle Tier Acquisition Overview

Kessel Run’s Implementation of Middle Tier Acquisition

Movements Toward Software Acquisition Pathway
Iran's ballistic missiles

Iran has been working on its ballistic missile capabilities for the last three decades. These are some of the most prominent missiles used by the Iranian military.

2015: Iran Nuclear Deal doesn’t cover ICBMs and other missiles

2017: Khomeini said it didn’t matter and that they don’t need a range longer than 2,000km

‘A 2,000km range ballistic missile from Iran is not capable of hitting the United States, but can cover much of the Middle East, including several American bases and naval facilities in the region’

2018: ’Major General Mohammad Ali Jafari told reporters in the capital, Tehran, on Tuesday that the missile range can cover “most of American interest and forces” within the region, even as he underlined the programme’s defensive purpose. Jafari said the ballistic missile range is based on the limits set by the country’s Supreme Leader Ayatollah Ali Khamenei.

2018: Jafari warned Iran’s enemies of the “high costs” of provoking his country.”

2019: Soleimani killed; Khomeini vows to respond ‘against military sites’
KEssel Run Vision

Deliver combat capability that can sense & respond to conflict in any domain, any time, anywhere.
But what really is Kessel Run?

**Kessel Run** is a hybrid acquisition & operations detachment charged with delivering and executing the Dynamic Tasking Order (DTO) in any domain, anytime and anywhere relying on an all-domain common platform with ‘Day 2‘ Ops capabilities.

We are the weapon system and are part of the fight by delivering combat capability to warfighters every day.
Three Core Product Lines

**OpsC2**
Plan the Dynamic Tasking Order (DTO) during Agile Combat Employment (ACE)

**WingC2**
Inform & Execute the Dynamic Tasking Order (DTO) during Agile Combat Employment (ACE)

**All Domain Common Platform**
Provide globally available survivable computing capabilities for OpsC2 and WingC2
Agile Acquisitions -
The Role of Middle Tier
Kessel Run inserts **agility** into the traditional waterfall process of DoD acquisition
...and part of that is the use of Middle Tier Acquisitions to deliver value fast.
But first, a quick overview
What is MTA?

- Utilized for capabilities that have a level of maturity to allow them to be rapidly prototyped or fielded within five years
- **Rapid prototyping** - field innovative prototypes that can be demonstrated in an operational environment within five years
- **Rapid fielding** - Field proven technologies with minimum development. Initiate production within six months.

Field proven technologies with minimal development.

Initiate production within 6 months and complete fielding within 5 years from MTA Program Start.
Why MTA?

- **Exempt** from Major Defense Acquisition Program (MDAP) (i.e. ACAT designation)
  - Provides relief from statutory documentation and set milestones that requires significant admin burden
- **Exempt** from formal Joint Capabilities Integration and Development System (JCIDS) Requirements Process
- Allows us to deliver warfighter capability **faster** and more **securely**
So instead of this...
...we can use this.
Kessel Run Implementation
KR MTA Acquisition Strategy

AOC Rapid Fielding 804

Divide into 6 Rapid Fielding 804s

Data Science Portfolio

Objectives, Monitoring, & Assessments Portfolio

Target Development Portfolio

Allocations, Taskings, and Re-tasking Portfolio

Intelligence Collection Portfolio

Wing Operations Portfolio

Investment Master List: KR Enterprise Services (KRES) + All Domain Common Platform
Kessel Run MTAs: Document Tailoring

In accordance with AF SM2018-63-146-01 “Air Force Guidance for Rapid Acquisition Activities,” Kessel Run tailored the following documentation while maintaining accountability and transparency to the Air Force acquisition community:

- Tailored Integrated Master Schedule
- Funding Schedule
- Tailored Acquisition Strategy/Plan
- Tailored Concept Analyses
- Clinger-Cohen Act Compliance
- Risk Management Framework
- Cybersecurity Strategy
- Test Planning
- Transition Planning of Products
- Systems Engineering

The MTA plans served as the documentation to meet those tailored requirements.
Tailored Life Cycle Sustainment Plan

Notional Continuous Delivery + Parallel Test Construct

Discovery

- Project Kickoff
- Pain Point Discovery
- Pain Point Prioritization

Framing

- Solution Generation
- Solution Prioritization
- Dev Starts

Continuous Delivery Iterations

- Continuous user feedback loops
- Iterations go on forever…

After MVP

- 3-6 month cadence
- Independent org assessments

Periodic/Parallel OT, Cyber Test, MCO Scenarios, Exercises & Training Events

Periodic Test Event Intent: snapshot assessment to inform backlog priority
not a pass/fail grade…software is never done!
...which looks a lot like this.
Shift to Software Acquisition Pathway
Why the shift?

The Software Acq Pathway didn’t exist at the time!

Programs/Portfolios shift rapidly - MTA structure too rigid

We are in year three of MTA and MTA is maximum five years

Software Acq Pathway better in line with KR business model and needs
From Big Bang to Agile

- Capability increments in months not years
- User-oriented solutions with loose coupling vs tightly coupled and rigid system of systems

CODE. DEPLOY. WIN.
The organization [KR]... is revolutionizing the way we command and control airpower. You've got a great team, and I may be their biggest fan.

Col Frederick “Trey” Coleman
609th AOC CC
Thanks.