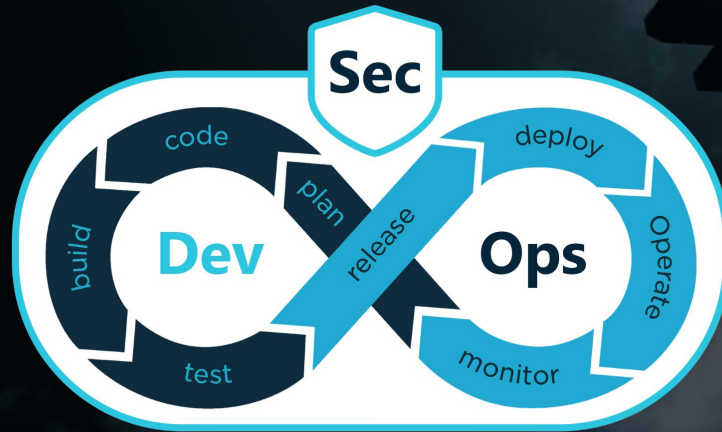




DevSecOps Technology Workshop

20 Jan 2022

KESSELRUN is a System Program Office leading digital transformation within our programs of record. We are a hybrid acquisition / operations (DevSecOps) unit delivering war-winning software capabilities, expediting the timeline from concept to fielding from months to days with rigorous 'Day 2' Ops.



Code. Deploy. Win.



Kessel Run includes 6 Major SPOs

Ranked by percentage of Kessel Run's FY21 funding



81.8%

Air Operations Center
(AOC)



7%

Targeting & GEOINT
(T&G)



5.7%

Theater Battle
Management
Core Systems
(TBMCS)



3.5%

Air Force
Modeling and Simulation
Training Toolkit
(AFMSTT)



1%

Patriot
Excilibur
(PEX)



1%

Joint Targeting
Toolbox
(JTT)

Code. Deploy. Win.



THREE CORE PRODUCT LINES

Ops C2



Plan the future Air Tasking Order (ATO) during Agile Combat Employment (ACE) operations

Wing C2

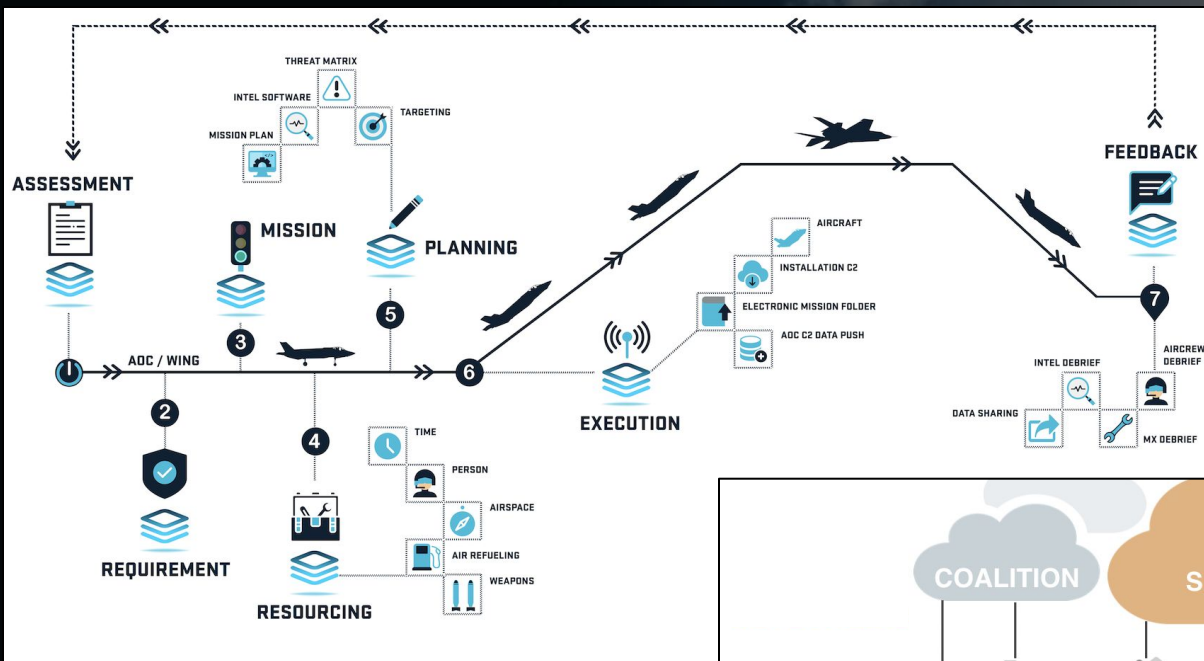


Inform & Execute the future ATO during ACE operations

All Domain Common Platform

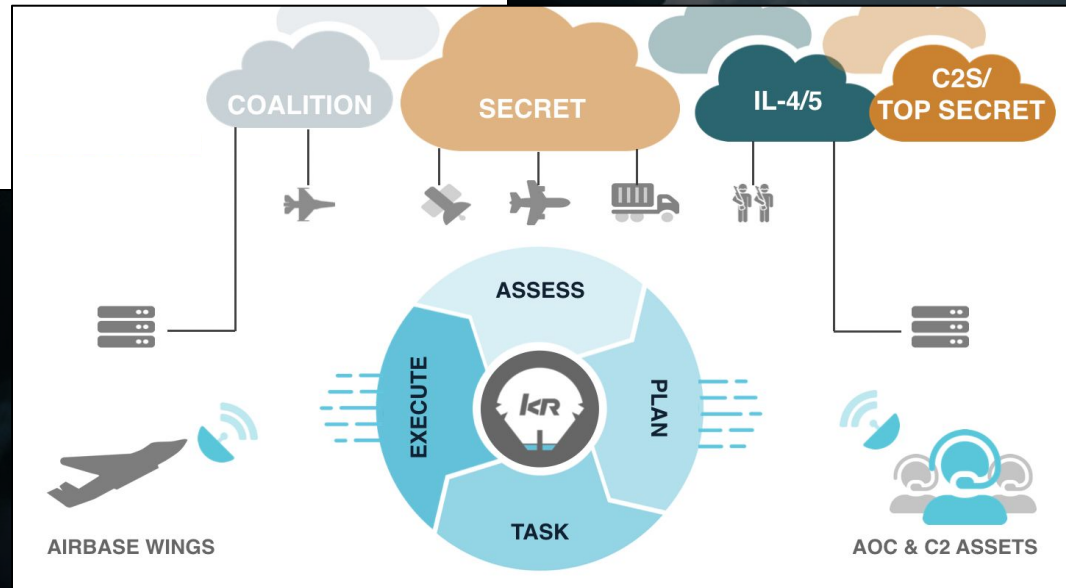


Enable OpsC2, WingC2 & partner organizations build, deploy, run and monitor their mission applications



Inform & Execute a Future Air Tasking Order

Multi-classification, Multi-network Ops



KESSEL RUN 2021 YEAR IN REVIEW



KESSEL RUN DEVELOPS CHAOS
ENGINEERING PLAYBOOK FOR
POTENTIAL DOD USE



C2IMERA AND SLAPSHOT WERE
USED TO PLAN OAR EVACUATION
FOR 122,300 PEOPLE



ACC & KESSEL RUN SIGN
USER AGREEMENT

KESSEL RUN SOFTWARE DELIVERY & PERFORMANCE

TOTAL DEPLOYMENTS

2824

DEPLOYMENT FREQUENCY

1 HOUR 50 MINUTES

LEAD TIME

120 HOURS

CHANGE FAILURE RATE

4.3% INCIDENTS/
DEPLOYMENTS

MEAN TIME TO RESTORE

1 HOUR 45 MINUTES

C2IMERA DEPLOYMENTS

27

NIPR DEPLOYMENTS

23

SIPR DEPLOYMENTS

INSTALLATIONS USING C2IMERA

60

INSTALLATIONS
WORLDWIDE



COMBAT SUPPORT OPERATIONS

29

LNO'S DEPLOYED TO AL UDEID
AS COMBAT SUPPORT



MARAUDER OPERATIONS

45K

MISREPS CREATED
IN OPERATIONS



STAKEHOLDER SATISFACTION

96%

SATISFACTION RATING
FROM 609TH IN Q3 2021



EMPLOYEE DEMOGRAPHIC

7%

MILITARY

20%

CIVILIAN

73%

CONTRACTOR

Valuation Defined by Outcomes

- Apps are our currency
 - It is baseless without user adoption
 - At scale user adoption creates emergent system performance
- User Adoption Comes a few Ways
 - Only Option / Mandate
 - ✓ Users Love it - Functionality & Features
 - ✓ Gains in Mission Effectiveness - Greater Operational & Strategic Advantages



OPERATIONAL Delivery

Kessel Run All-Domain Operations Suite (KRADOS)

Integrated suite of nine applications used for operations at 609 Combined Air Operations Center to plan and execute the Master Air Attack Plan



Marauder

Mission Report (MISREP) Analysis Tool used for every mission worldwide, deprecated legacy MISREP tool



C2 Incident Management & Emergency Response App (C2IMERA)

Wing-level situational awareness and response management tool used at various installations worldwide



Code. Deploy. Win.



Differing Acq & Relationship Approaches

KRADOS

- Small Business Vendor Partners
- **Software Developers & Designers that are integrated with government personnel on product teams**
- Government-owned source code & artifacts
- Hosted in ADCP full path to prod and services
- Executes Agile DevSecOps

C2IMERA

- Prime Contract Vendor Partner
- **Government program management, vendor product development**
- Government-owned source code & artifacts (GPR of proprietary module)
- Hosted and deployed in Cloud One
- Executes Agile DevSecOps



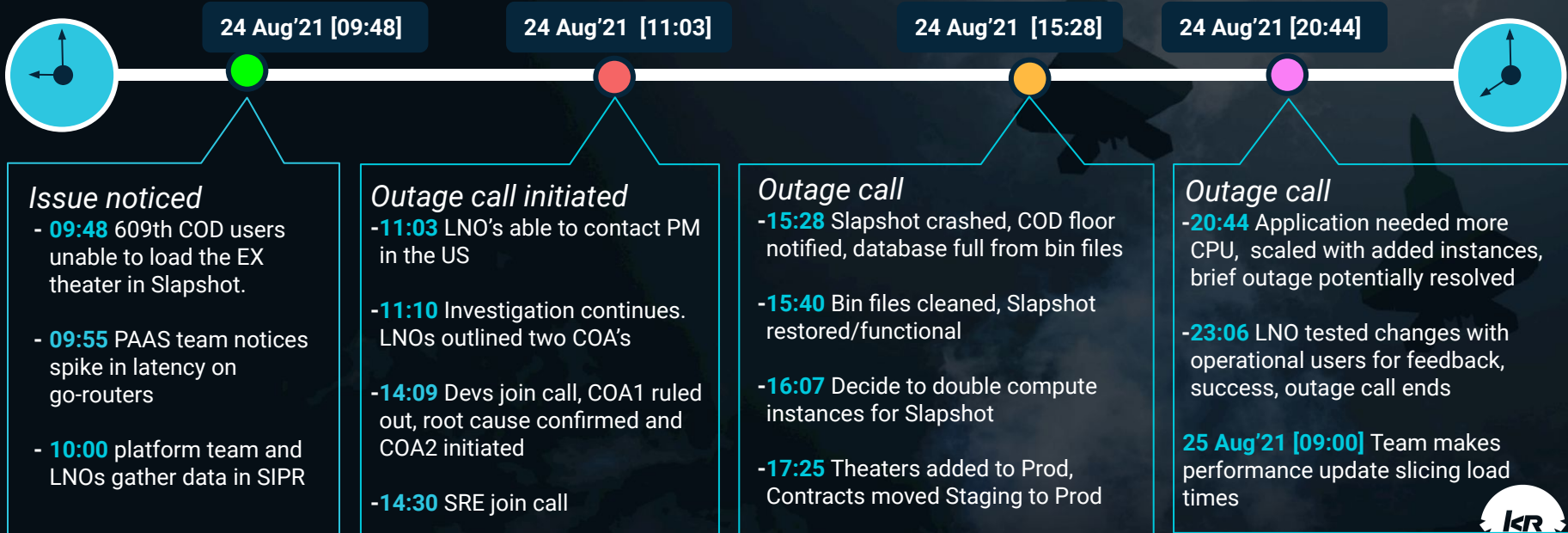


Slapshot is used to build, disseminate, and execute the Master Air Attack Plan used at the 609th AOC for daily operations

Problem The 609th could not plan the ~230 mobility missions + support the surge of new users editing that was needed for the largest airlift in history, out of Afghanistan

Causing intermittent 3-6 minute loading times and the product crashed

Outcome The 609th could easily plan over the ~230 mobility missions + support the new user load with 2-3 seconds load times and no crashing in <24 hours



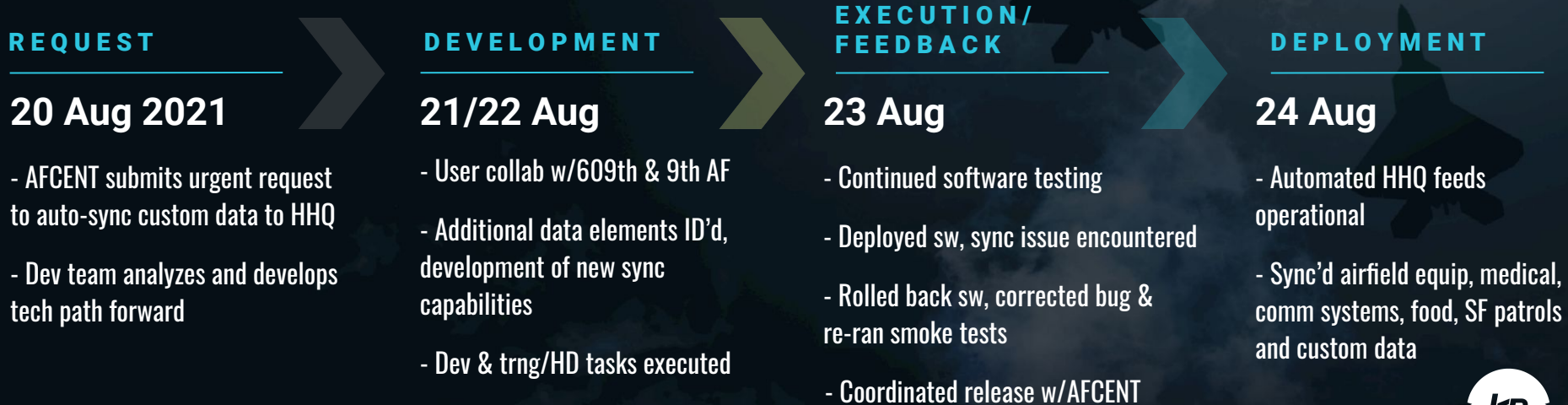
Times are in QAT time-(GMT-4)

Code. Deploy. Win.



AFCENT Problem: Could not effectively assess or communicate theater operations in support of Afghan Noncombatant Evacuation Ops due to disaggregated systems

C2IMERA Impact: Delivered an aggregated, customizable, data reporting capability supporting 6 Wings and the AFCENT AOC & AFFOR staffs. 650+ AFCENT users added. Provided HHQs with visibility on equip, beds, medical, food, ramp parking, etc.



Code. Deploy. **Win.**





"Kessel Run's programmers more than kept pace, rapidly iterating critical applications like SlapShot in order to meet the evolving needs of leaders, planners, and operators across the world in real-time."

- Lt Gen Gregory M. Guillot
Commander, 9th AF (AFCENT)



"C2IMERA gives commanders the operational sight picture to execute the mission. I am confident Kessel Run's dedication to C2IMERA's continued growth and system improvements will benefit the Air Force across the enterprise."

- Gen Mark D. Kelly
Commander, Air Combat Command

Build
Quality Product

Realize
Strategic Outcomes

Code. Deploy. **Win.**

Achieve
Operational Effectiveness

