Unmanned Aircraft Systems (UAS) Executive Working Group

Presented to: UASEWG

Date: January 17, 2020

Remote ID

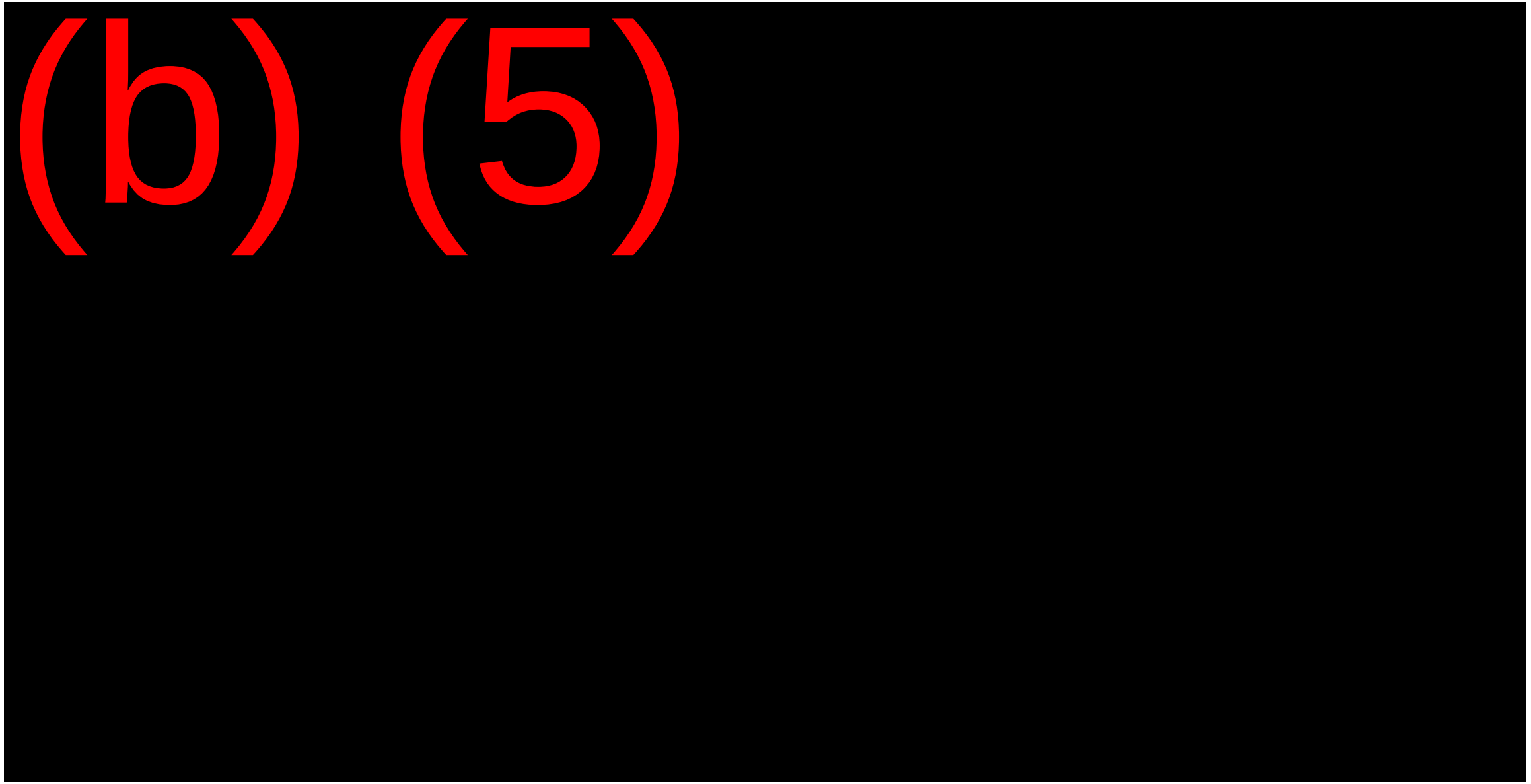
ATO Remote ID (RID) Implementation Plan

- **ATO, ANG, and AUS met on December 17 to discuss parallel activities around the ATO's minimum viable product (MVP) and ANG's UPP2**
- **ATO's primary objective is to deploy a MVP by December 2020**
  - Additional capabilities will be deployed in future phases as additional requirements are defined
- **ANG's UPP2 will demonstrate potential capabilities such as correlation and broadcast**
- **ATO and ANG agreed to form a cross-LOB team to evaluate ANG-developed UTM concepts and determine the proper time and receiving organization for the transfer of that information**
- **ATO, ANG, and AUS are in agreement that these demonstrated capabilities are not expected to be in the MVP rollout in December 2020**

RID Cohort 12-Month Objective: MVP

One of the primary objectives of RID is to provide government agencies access to UAS information to ensure public safety and educate the public about unmanned aircraft.

- **PMO (AJM-337) is leading a Remote ID Cohort that has been established via an RFI**
- **The Cohort is focused on RID data exchanges, especially with industry USSs**
- **Cohort activities expected to begin in January 2020**
- **PMO is framing an objective to reach an initial MVP configuration in 12 months**
- **The MVP configuration provides a common picture of sharing information at a minimum level.**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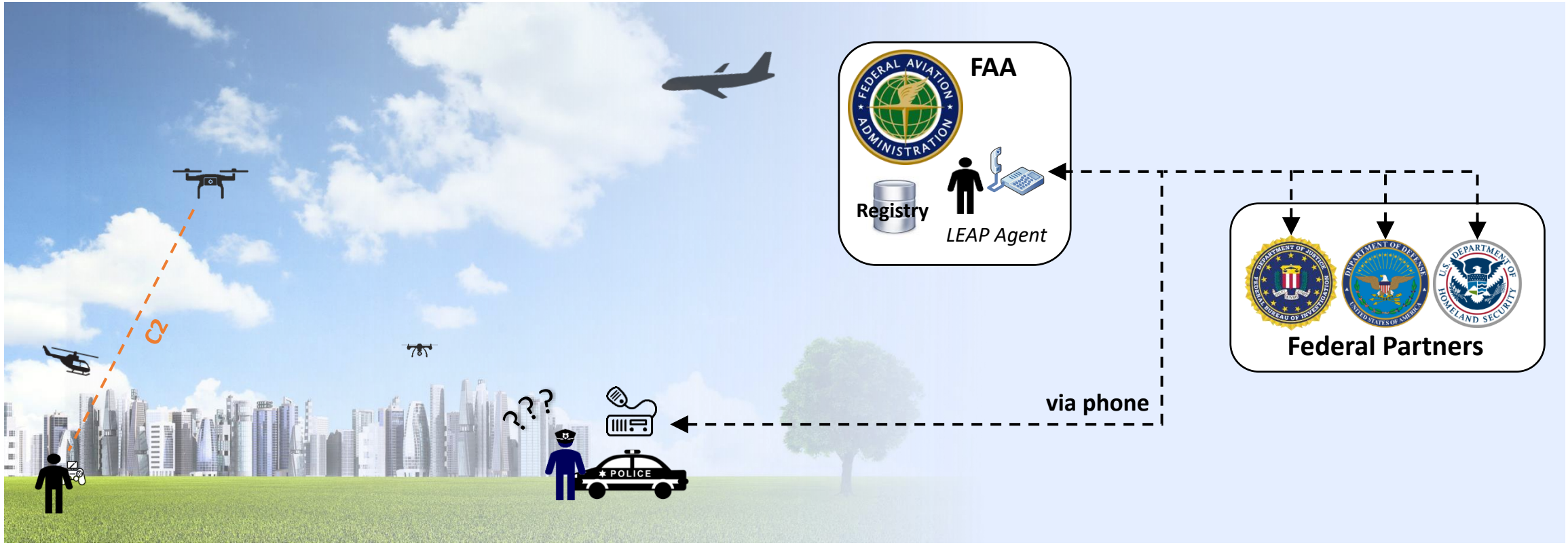
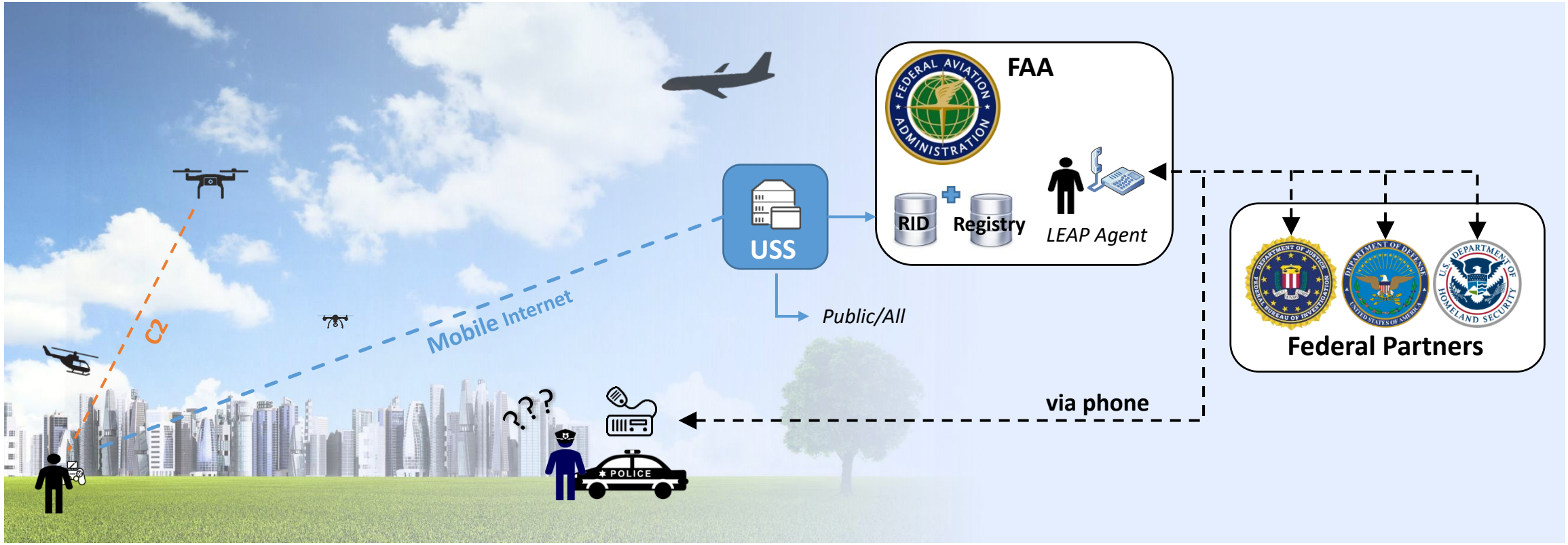
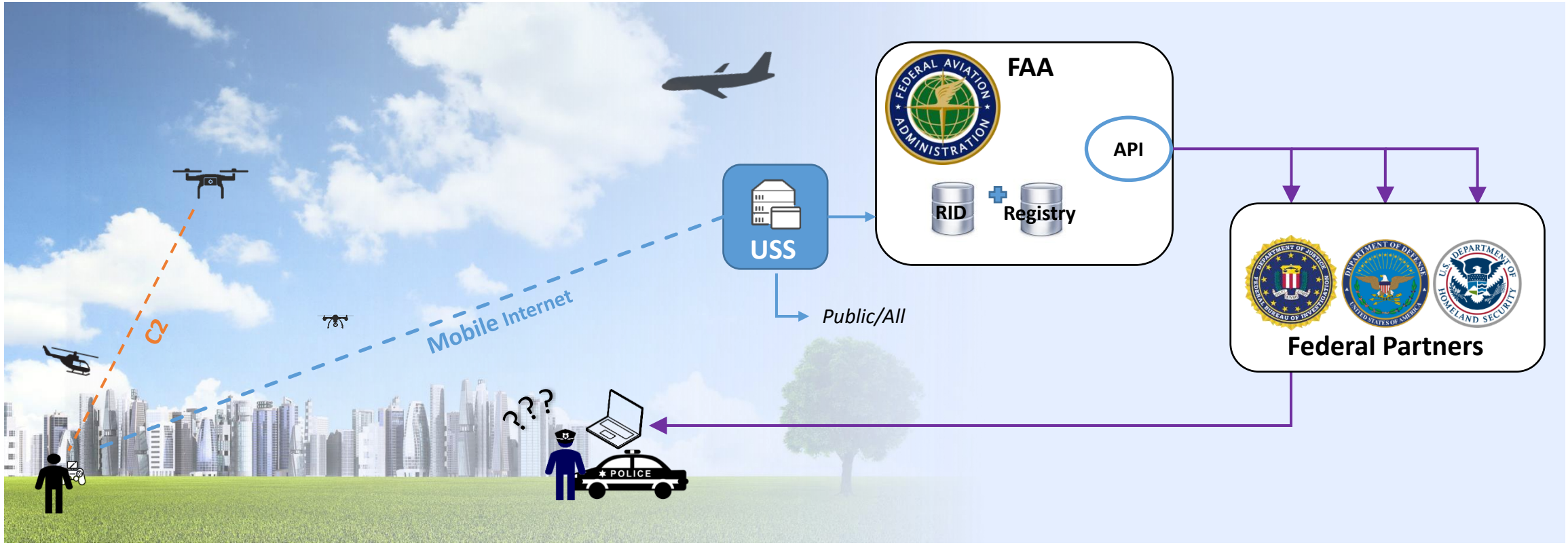
Network RID Concept: Current State



Network RID Concept: MVP Configuration



Network RID Concept: Beyond MVP Configuration



Status of UTM Implementation Plan

UTM Implementation

Objective: Provide an externally focused strategy for implementing UTM services

Address the requirements of P.L. 115-254 Section 376

Output: 30 Page Document responding to the requirements of the reauthorization language (next slide)

Due: TBD (per 376, 1 year after completion of UPP)

Near-term Milestones: Proposed Approach to Documents - February 15

Initial Rough Draft – March 31

UTM Implementation: Reauthorization Requirements for Implementation Plan

Req 1 Define approval/checkout process for qualifying USS Services
Req 2 Define roles and responsibilities for implementing new UTM services
Req 3 Describe Remote ID service
Req 4 Describe strategic de-confliction service
Req 5 Define methods of USS oversight to include description of interfaces
Req 6 Identify additional enabling technologies such as DAA/GBDAA
Req 7 Describe the strategies for the safe separation of UAS within UTM from traffic receiving ATC services
Req 8 Define data FAA will provide to ensure the safe separation of UTM operations from traffic receiving services (i.e. constraint information, UASFMs, etc))
Req 9 Describe the operational limitations of the UTM system
Req 10 Describe the additional work that would be required to accommodate higher risk operations
Req 11 Define cybersecurity practices used for UTM services
Req 12 Define processes used to ensure data reliability and integrity
Req 13 Define process for independent checkout/qualification of UTM services
Req 14 Define process for reviewing USS applications for approval/qualification of new services within 120 days of request
Req 15 Describe services categorization method

FAA Roles in JARUS and the ICAO RPAS Panel

Overview

Purpose: Inform EWG about FAA roles in JARUS and the ICAO RPAS Panel

Topics:

1. JARUS and ICAO Background
2. Summary of Leading Roles
3. FAA Roles in JARUS
4. FAA Roles in ICAO RPASP
5. FAA Collaboration on RPASP Work

Outcome: EWG understanding of FAA participation in these two international efforts and feedback on future updates

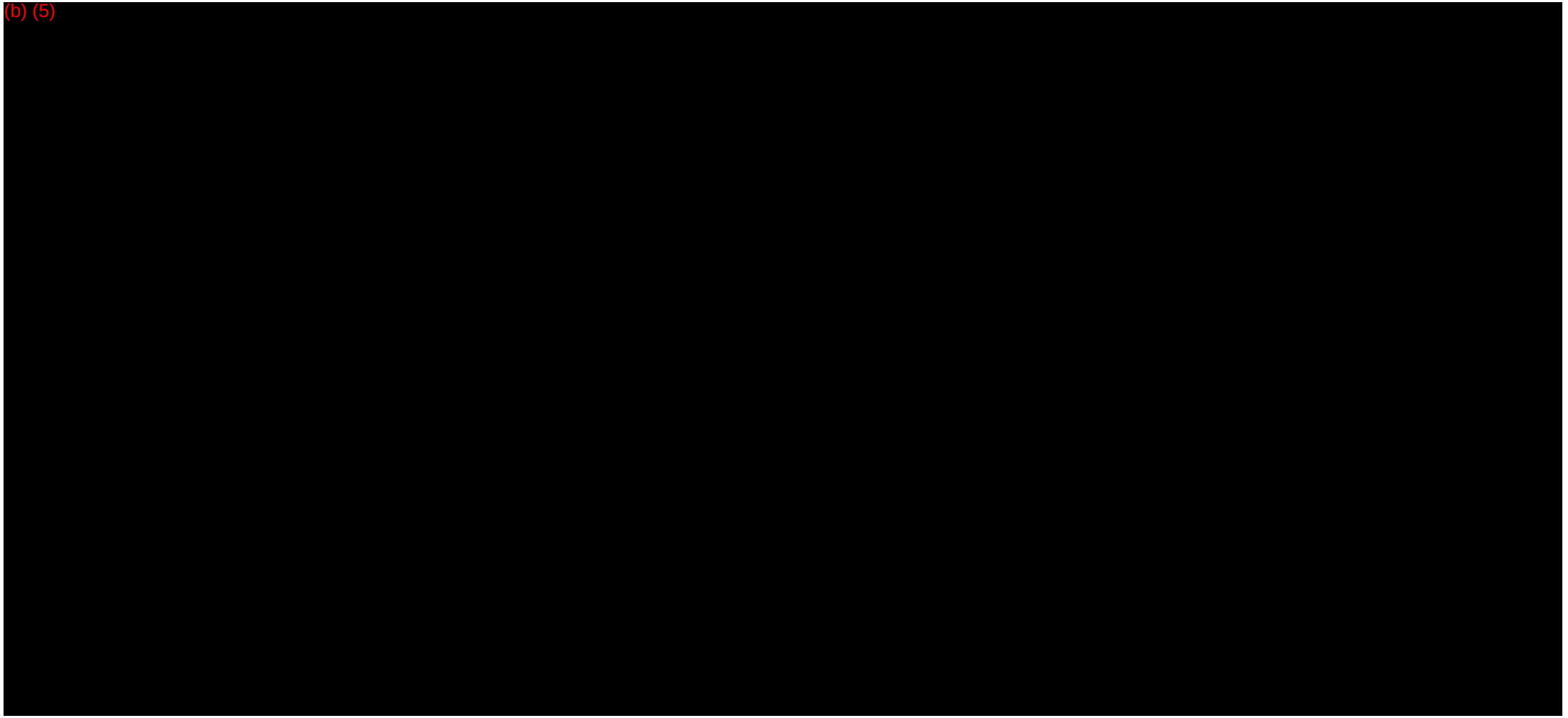
JARUS and ICAO Background

Background Elements	JARUS	ICAO RPASP
Civil Aviation Authorities	61 + EASA, EUROCONTROL	22 members + 4 observers
Industry Participants	~ 38	13 members + 4 observers
FAA Participation	2010 - present	2015 - present
Work Products (Deliverables)	Recommendations	SARPS and guidance
Meeting Schedule	Semi-annual	3 per year
Organizational Structure	7 work groups → 4 programs 1 focus group	8 work groups 1 joint task force
Work Tasking	Member agreement	ICAO

JARUS and ICAO Leading Roles

Work Area	JARUS	ICAO RPASP
FAA Lead	AUS-200 - Chris Swider	AUS-200 - Chris Swider
Flight Operations	AFS-800 - John Meehan	AFS-400 - John Swigart
Airworthiness	AIR-600 - James Blyn	AIR-600 - James Foltz
Detect and Avoid	AUS-400 - Paul Campbell	AUS-200 - Chris Swider
Control/Communication	None	AJW-1C3 - Don Nellis
Safety Risk Management	AUS-400 - Jarrett Larrow	AUS-200 - Chris Swider
Air Traffic Management	Not applicable	AJV-P220 - John Page
Human Factors	Not applicable	AUS-400 - Steve Plishka
Other : RPAS Manual	Not applicable	All of the above
Future Work	AUS-200 - Chris Swider	Not applicable

FAA Roles in Future JARUS Work



FAA Roles in ICAO RPASP

Work Area/Group	Specific Role	FAA Representative
FAA Lead	U.S. Member	AUS-200 - Chris Swider
Airworthiness	Annex 8, Airworthiness Manual and RPAS Manual	AIR-600 – James Foltz
Control/Communications (C2)	Spectrum use for C2 and DAA	AJW-1C3 – Don Nellis
Detect and Avoid (DAA)	Annex 10, Volume 4, DAA Manual and RPAS Manual	AUS-200 – Chris Swider
Operations	Annex 6, Part 4, RPAS Manual and other guidance material	AFS-400 – John Swigart ***AFS-400 – Paul Albuquerque** ***AFS-400 - Bartholomew Angle**
Air Traffic Management	Annex 11, RPAS Manual and ATM guidance material	AJV-P220 – John Page
Human in the System	RPAS Manual and human factors guidance material	AUS-400 – Stephen Plishka
Joint Task Force – Safety Management and RPAS Panels	Annex 19, RPAS Manual and Safety Management Manual	AUS-200 – Chris Swider

* New participants

FAA Collaboration on RPASP Work

RPASP Work Areas	ICAO Panel	U.S. Member
Airworthiness, C2, and DAA	Airworthiness	AIR – Dave Higginbotham (Chair)
C2, DAA, Operations, and ATM	Communications	ANG – Theresa Brewer
C2	Frequency Spectrum Management	ATO – Michael Biggs
DAA, C2, Operations, and ATM	Surveillance	ATO – Doug Arbuckle
Operations, DAA, and ATM	Flight Operations	AFS – Janet Greenwood
ATM and DAA	ATM Operations	ATO – Keith Henry
DAA and ATM	Separation and Airspace Safety	ANG – John Warburton
DAA and ATM	Aerodrome Design and Operations	ARP – John Dermody
DAA and Operations	Safety Management	AVP – Chris Pokorski
DAA	Meteorological	ANG – Michael “Pat” Murphy
ATM	Information Management	ANG – Diana Liang

Summary

- Reviewed FAA roles in JARUS and the ICAO RPAS Panel
  1. JARUS and ICAO Background
  2. Summary of Leading Roles
  3. FAA Roles in JARUS
  4. FAA Roles in ICAO RPASP
  5. FAA Collaboration on RPASP Work

- Glad to answer any other questions or provide future progress updates

IPP Annual Report Update

New Twitter Handle
@FAADroneZone

Handling Reports from Consumer Product Safety Commission

APO Demo

Open Discussion

Unmanned Aircraft Systems (UAS) Executive Working Group

Presented to: UASEWG

Date: February 7, 2020

Remote ID Implementation

Schedule and Status

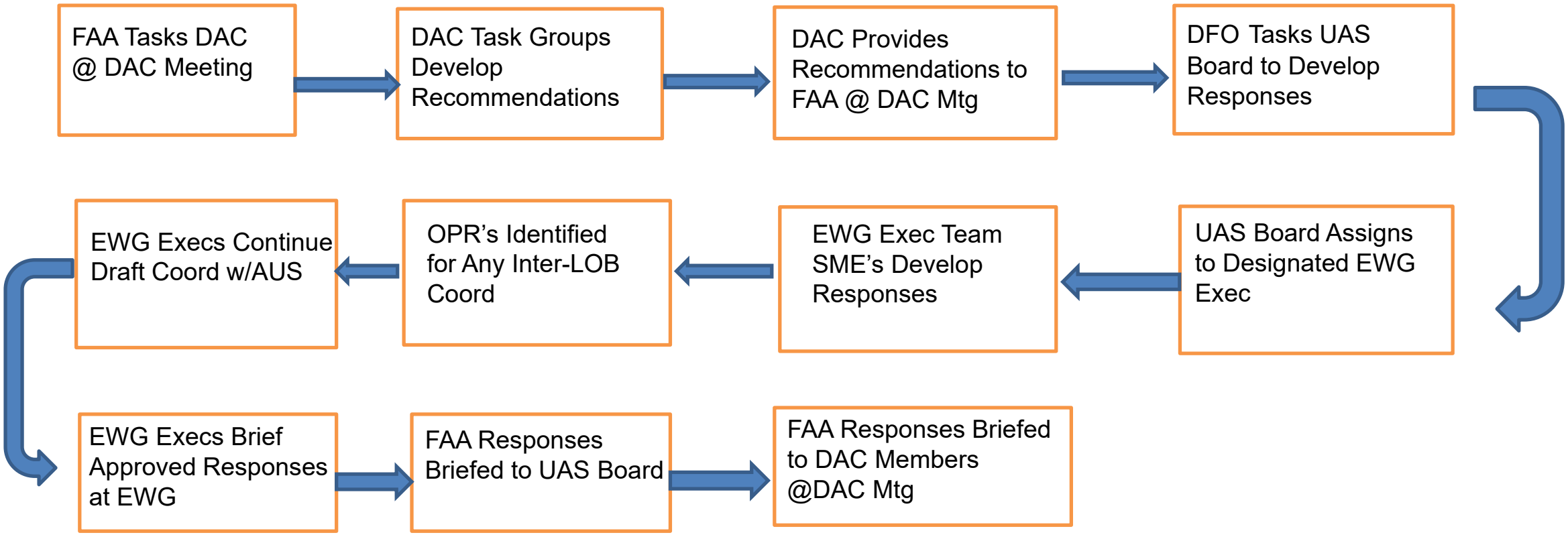
- **Still in process of pulling together integrated schedule and work breakdown structure**
  - With inputs from team, can solidify by mid-March
  - RID Implementation Plan by end of March
  - Late March, begin monthly program review of schedule and risks, including reports by other offices
- **Status and Milestones**
  - 9355 comments to NPRM (as of 2/6)
  - RID USS Cohort selection made public
  - First discussion with Security SSG on 1/31
  - ASTM Remote ID standard release imminent

Open Items and Risks

- **Ongoing discussions**
  - Security partner needs/expectations
  - Funding, IT architecture and deployment approach
    - Charters in various stages of development/signoff for registration unification, CBO recognition, manufacturer declaration, and data correlation
  - Safety Risk Management
- **Risks**
  - Timeliness of interagency security requirements
  - External pressures on final rule schedule

Responses to DAC Recommendations

Developing FAA Responses to DAC Recommendations



Task Group #1 Remote ID Early Equipage

DAC Recommendation	FAA Response
Recommend the ASTM Remote ID (RID) standard to the DAC as the equipage basis for the voluntary program.	We acknowledge the DAC's consensus agreement to recommend the pending ASTM remote identification (RID) standard as the basis for any voluntary equipage incentives, and welcome the DAC's layered approach to incentivizing as described in your recommendation.
The DAC recommended incentives regarding waiver application processing and requirements, contract preference, equipage acknowledgement, airspace access, and rebates or monetary incentives.	*Waiver application processing and requirements* - The FAA commits to conducting a gap analysis of any RID industry consensus standard published during period 1, and communicating to manufacturers and operators any additional information part 107 waiver applicants would need to provide in order for the FAA to give credit to using RID as a risk mitigation in a waiver application. *Contract preference* - In order to be fair and equitable, it is highly unlikely that the FAA's procurement processes would enable preferential treatment for voluntary early adoption of equipment or compliance to regulations. *Equipage acknowledgement* - The FAA will maintain an online database of manufacturers who have declared compliance with an industry consensus standard recognized by the FAA as a means of compliance with the RID rule. We will begin this database with the first declaration of compliance. *Airspace Access* - The FAA commits to working with our federal security partners to determine whether an expedited process for RID compliant aircraft could be established in order to approve airspace access for certain UAS in certain circumstances. Additionally, we will add a field on the FAA SOSC SGI form for indication of RID compliant aircraft, which could facilitate coordination with incident commanders and security partners in certain circumstances *Rebates or monetary incentives* – The FAA commits to considering this option as an incentive for early RID compliance and equipage, for a fixed period of time and a specific number of UAS, but would need additional input from manufacturers in order to determine the best window to make this offer.

Task Group #1 Remote ID Early Equipage

DAC Recommendation	FAA Response
The DAC recommended incentives regarding waiver application processing and requirements, contract preference, equipage acknowledgement, airspace access, and rebates or monetary incentives.	We strongly encourage states and municipalities to favorably consider RID equipped aircraft when establishing their restrictions and conditions, and we commit to undertaking an educational campaign for states/cities/municipalities specifically related to the benefits RID provides in terms of situational awareness for their law enforcement and public safety officials. The FAA's final commitment is to reconsider the DAC's recommendations, as well as any additional ideas to incentive voluntary RID equipage, as we get closer to finalizing the rule.

Task Group #2 UAS Security Issues

DAC Recommendation	FAA Response
OEMs should equip their UAS with geofencing capabilities.	The FAA recommends that OEMs cooperate with the FAA and other stakeholders to develop and field geo-fencing capabilities, which support restrictions to accessing defined airspace, which are more nuanced than outright, simple prohibitions.
OEMs should create alerts for UAS operators when their UAS is approaching sensitive flight areas, such as controlled airspace, prohibited flight areas, TFRs, etc.	The FAA supports the expedited development and fielding of automation enabling alerting supported by geospatial cross-referencing of UA positions with airspace features, specifically including airspace restrictions.
OEMs should voluntarily equip “ADS-B In” receivers on UAS systems (i.e., airframe and/or controller), combined with the notification system recommended above. A follow-on to this would be voluntary equipage of an airborne conflict resolution/collision avoidance capability for the UAS operator.	(b) (5) [redacted]
OEMs should explore the voluntarily enablement of automated UAS flight performance limitations—such as altitude limitations, return-to-home features, and decrease in UAS speed or maneuverability—while in or near sensitive flight areas.	The FAA supports the development and integration by industry, in cooperation with the FAA, of automated UAS flight performance limitations linked to proximity to airspace restrictions and other sensitive areas.

Task Group #2 UAS Security Issues

DAC Recommendation	FAA Response
OEMs should explore the voluntarily development and equipage of UAS with performance-based detect and avoid (DAA) technology, for collision/obstacle avoidance, on the airframe, using acoustic, optical, and/or other sensors, as well as robust DAA algorithms.	The FAA supports the OEMs exploring the voluntarily development and equipage of UAS with performance-based detect and avoid (DAA) technology, for collision/obstacle avoidance, on the airframe.
The federal government should make available a consolidated, standardized, and up-to-date database for critical infrastructure and TFRs issued that are machine processable.	The FAA already provides standardized sources capturing TFRs and other security driven airspace restrictions, which are automation-compatible, including systems used by Low Altitude Authorization and Notification Capability (LAANC) UAS Service Suppliers (USS). (b) (5) [redacted]

Task Group #3 Part 107 Waivers

DAC Recommendation	FAA Response
Auto-renewal of expiring waivers - Expiring waivers should auto-renew unless there is a compliance issue or change in regulations to reduce administrative burden and limit re-submissions. If this is not possible, then only require entry of renewal dates or other changes, not re-entry of the entire waiver application.	The FAA is implementing an expedited part 107 waiver renewal application process within DroneZone. This process is designed to reduce the reapplication burden for the existing waiver holder, and not duplicate the FAA review process for waivers where the residual operational risk, regulatory structure, and policy has not changed since original waiver issuance.
Modify Drone Zone – The FAA should modify Drone Zone to allow the operator to update non consequential information without having to file an application for an amendment to their waiver, i.e. change responsible person, office address etc.	The FAA is exploring adding functionality in DroneZone to more quickly respond to waiver applications for administrative updates.
Checklist of safety cases for complex waiver approvals – The FAA should create a checklist inventorying appropriate examples of satisfying safety cases for complex waiver approvals, like BVLOS, which is then used to provide constructive feedback to those applicants that do not meet the required thresholds pointing the applicant to specific examples that would have satisfied the requirement.	The FAA continues to update its Part 107 waiver website and will update disapproval letters by the end of 3rd quarter FY20 to provide additional information and more constructive feedback to waiver applicants whose application did not result in a issued certificate of waiver. As an intermediate step, the Part 107 waiver team and UAS Support Center staff will engage in recurring meetings to address waiver applicants' questions and concerns and will provide additional details to applicants who contact the UAS Support Center for assistance with their waiver applications.

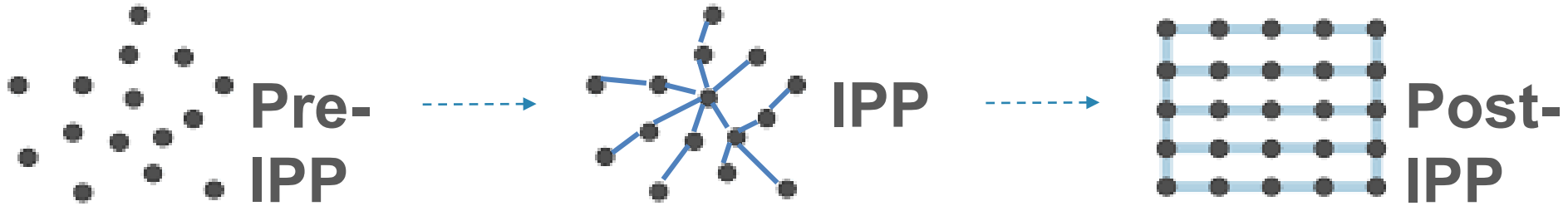
Task Group #3 Part 107 Waivers

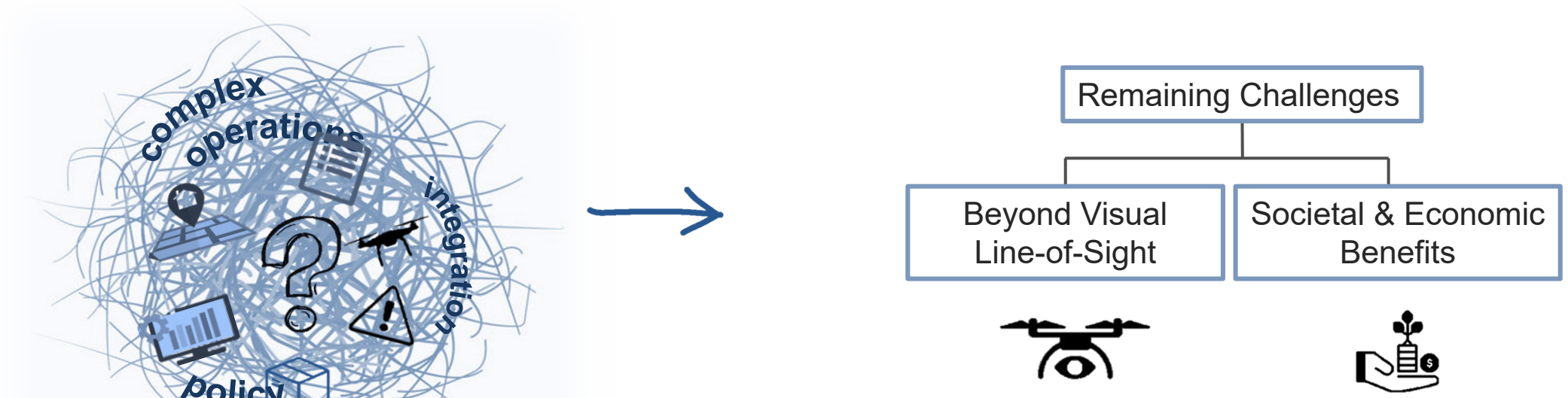
DAC Recommendation	FAA Response
Streamlined automated approval - The FAA should consider a streamlined automated approval for those applicants trained by an operator who has flown under an existing waiver for at least 1 [or X years] year and complies with all waiver requirements; or, an operator who has received a Special Airworthiness Certificate-Experimental Aircraft from a UAS Test Site.	(b) (5) [redacted]
Streamlined process for operators - The FAA should consider a streamlined process for groups of operators applying for waivers of the same type of operations for a business use case. Current Drone Zone processes actively discourage the shared use of templates or flow-down procedures.	The FAA is exploring different DroneZone application formats to streamline the application, receipt, and analysis of the waiver applications. The FAA is continuously evaluating new strategies and methods to make our part 107 waiver application and evaluation system more efficient.
Increased transparency and accountability of Part 107 - The FAA should increase transparency and accountability of Part 107 analysts by creating a pathway for applicants to learn who reviewed their application and why it was not approved.	The Support Center staff will continue to coordinate directly with waiver analysts to provide support to applications about waiver applications, disapprovals, and general UAS questions.
Structured program for Part 107 waiver inspectors - The FAA should require Part 107 waiver inspectors to attend a structured training program.	All FAA waiver analysts are certified and duly accredited Aviation Safety Inspectors who have been specifically trained in waiver processing. Analysts assigned to the part 107 waiver team attend additional training, including ongoing training, unique to part 107 waiver processing.

UAM Roundtable

IPP Updates

After the IPP – Finishing What We Started





Flying Beyond Visual Line-of-Sight (BVLOS)

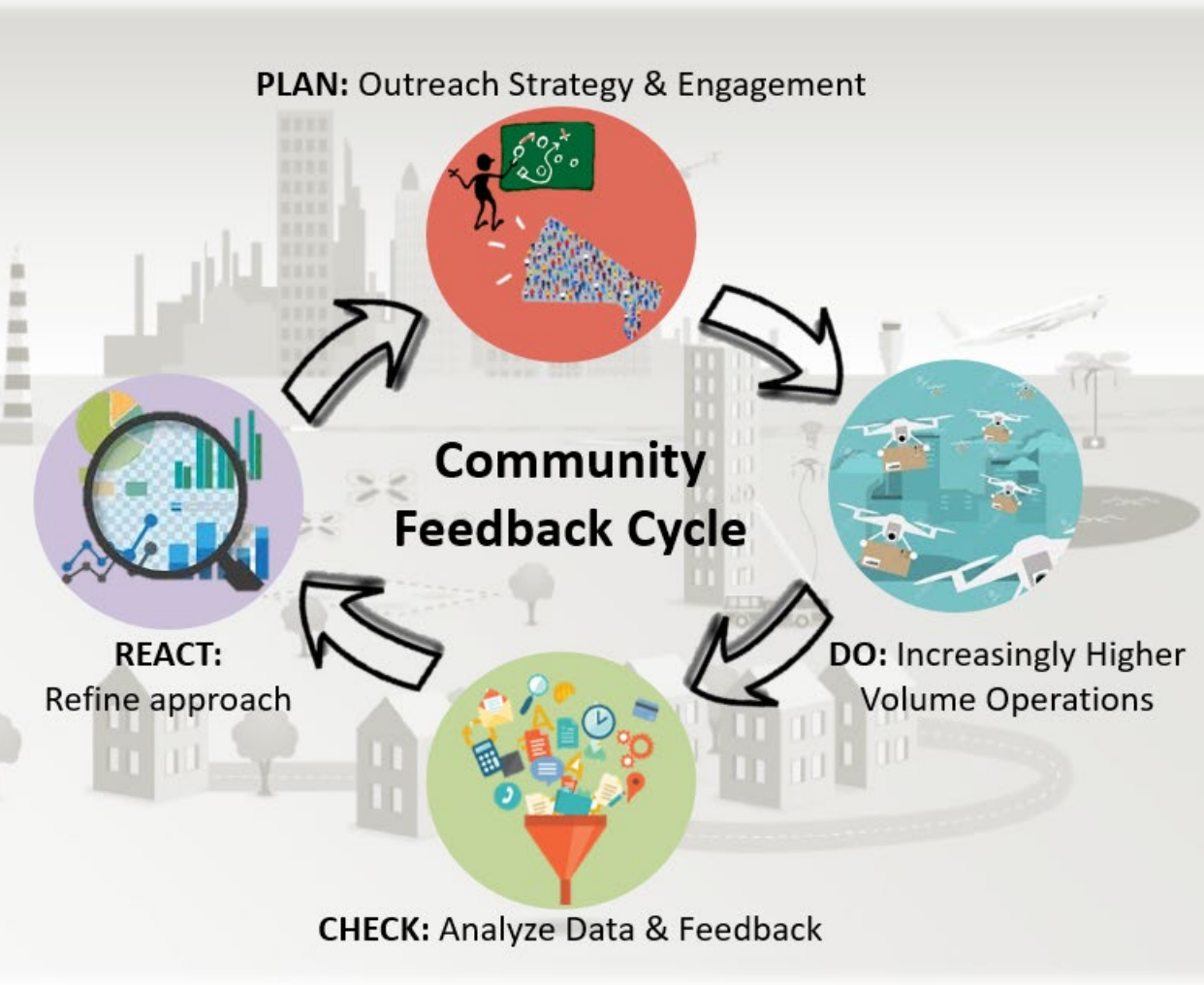
FAA RULEMAKING & POLICY EFFORTS

e.g. MOSAIC
UTM/UAM…
(b) (5)
[redacted]

- Air and ground risks and challenges vary for each area of operation
- Need to focus on specific, task-oriented aspects leading to routine, scalable, and economically viable BVLOS operations

Addressing Community Feedback to Realize Societal & Economic Benefits

- Similar challenges and best practices as manned operations, but additional flexibilities in addressing community concerns
- Full societal benefits won't be realized until broader integration



Mechanisms for Continued Work

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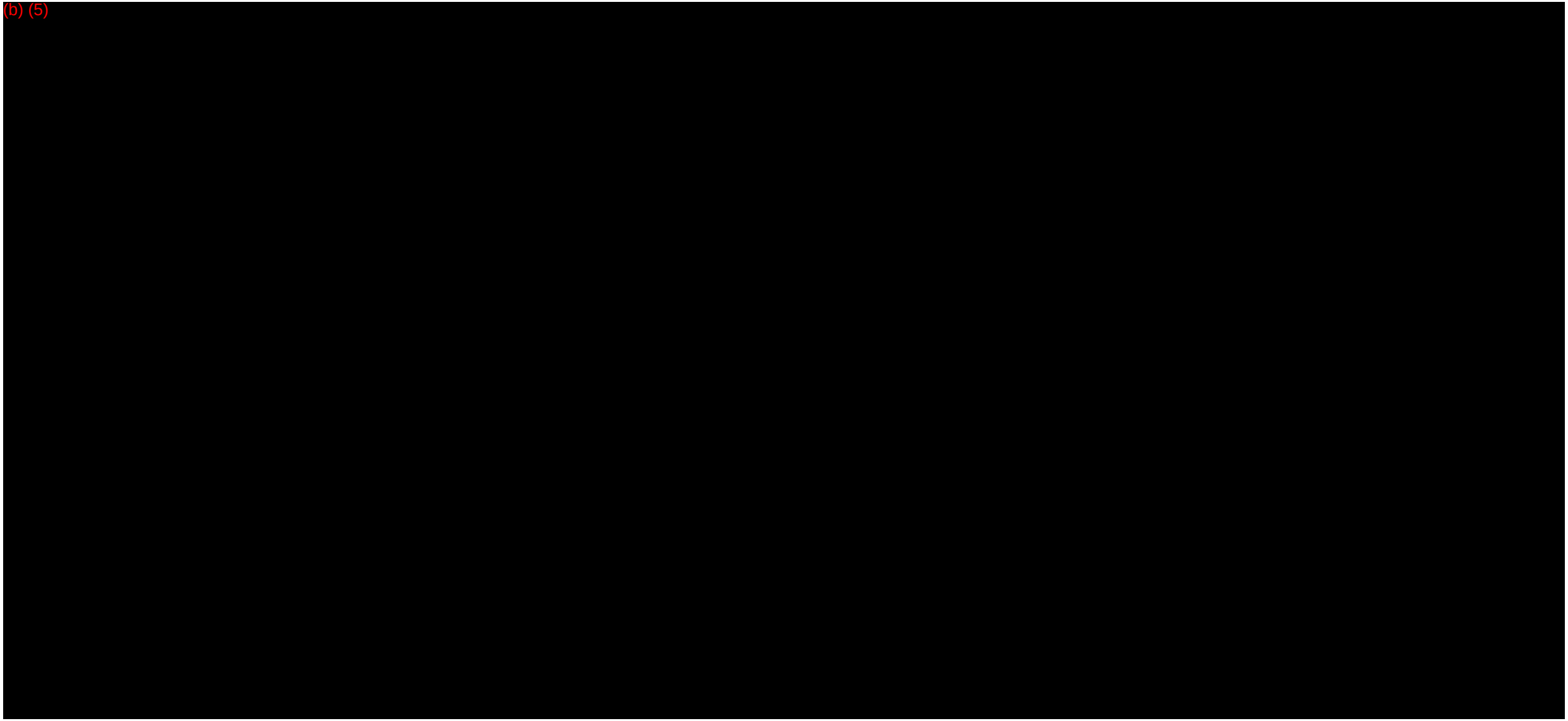


PROGRAM TIMELINE

UAS INTEGRATION PILOT PROGRAM

2020

JAN
- LP Quarterly Report

FEB
- Draft IPP Comm. Plan

Mar
- PMR

APR
- LP Qtr Report
- Focus Meeting

MAY
- IPP Final Report 1st Draft

JUN
- PMR

JUL
- Focus Meeting
- LP Quarterly Report
- EBR

SEP
- PMR
- LP Final Report Update

OCT
- Focus Meeting
- End of IPP Oct 25
- LP Quarterly Report

NOV
- LP Final Report Update

2021

JAN
- IPP Final Report

Highlights

- 9 Months left (MOA)
- 4 Quarterly Reports
- 3 PMRs
- 3 Focus Meetings

UAS Technical Workshop for African Region

FAA UAS Integration Workshop for Africa Region

- **Workshop hosted by Rwanda CAA February 17-20 at Kigali Convention Center**
- **Supports FAA Strategic Objective 4: Economic Competitiveness/Infrastructure Goal**
  - AVS Strategic Initiative: Collaborate globally to influence the continuous improvement of aviation safety worldwide
- **Participating offices: ATO, ARP, AFS, AIR, AOC, AEU, API, AUS**
- **Targeting an audience of up to 60**
- **Workshop content:**
  - 2.5 days of UAS Integration presentations
  - 0.5 day of Regional/International Organization presentations
  - Site visit to Zipline UAS delivery operations (medical supplies)
- **Challenge: Competing against Africa Drone Forum**

FAA UAS Symposium Update

5th Annual FAA UAS Symposium

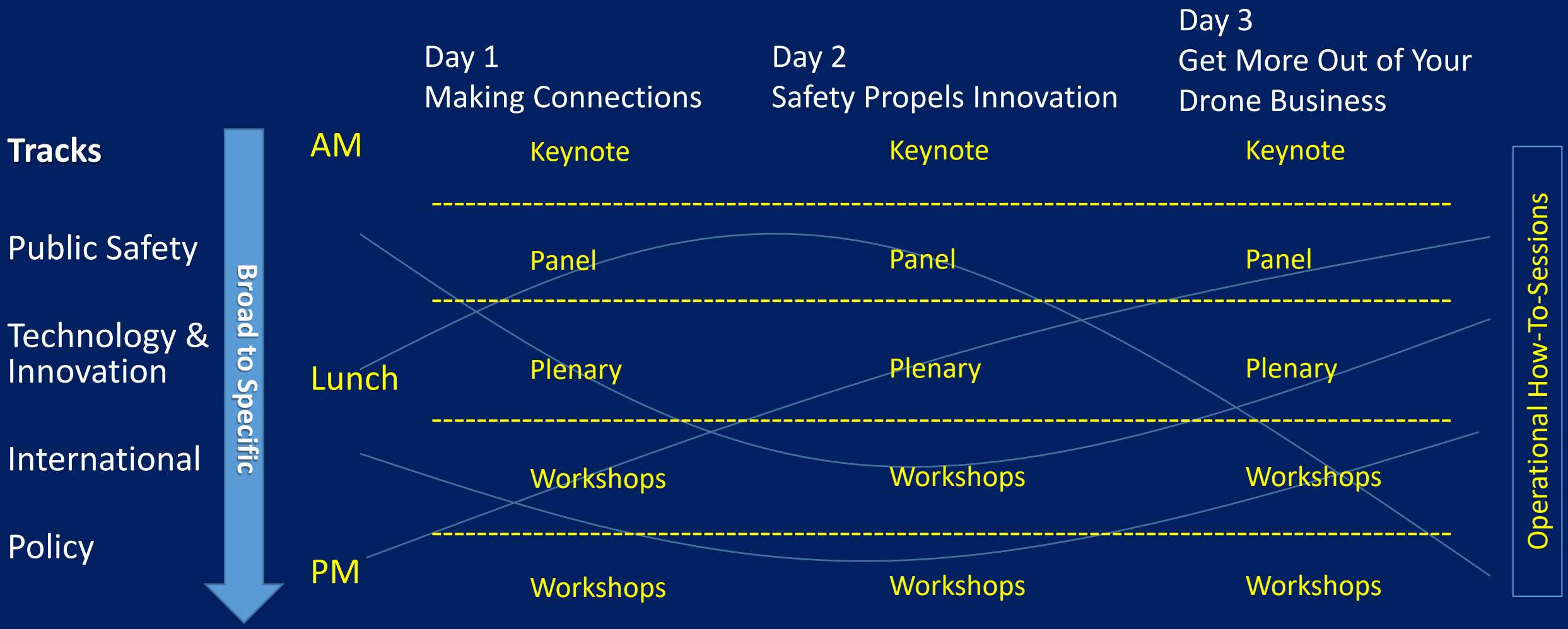
- **June 16-18 at the Baltimore Convention Center**
- **1,500 attendees from across the UAS community**
- **Global Theme: “Drones. Here for Good”**
- **Daily sub-themes:**
  - Making Connections
  - Safety Propels Innovation
  - Get More Out of Your Drone Business

Cont…5th Annual FAA UAS Symposium

- **Over 30 keynote, plenary, and breakout sessions**
- **Four Tracks**
  - Public Safety
  - Technology & Innovation
  - International
  - Policy
- **Daily "How To" sessions**
- **Resource Center**
- **AUS Career Table**

UAS Symposium
Drones. Here For Good.

16-18 Jun 2020
Baltimore, MD



UAS Symposium
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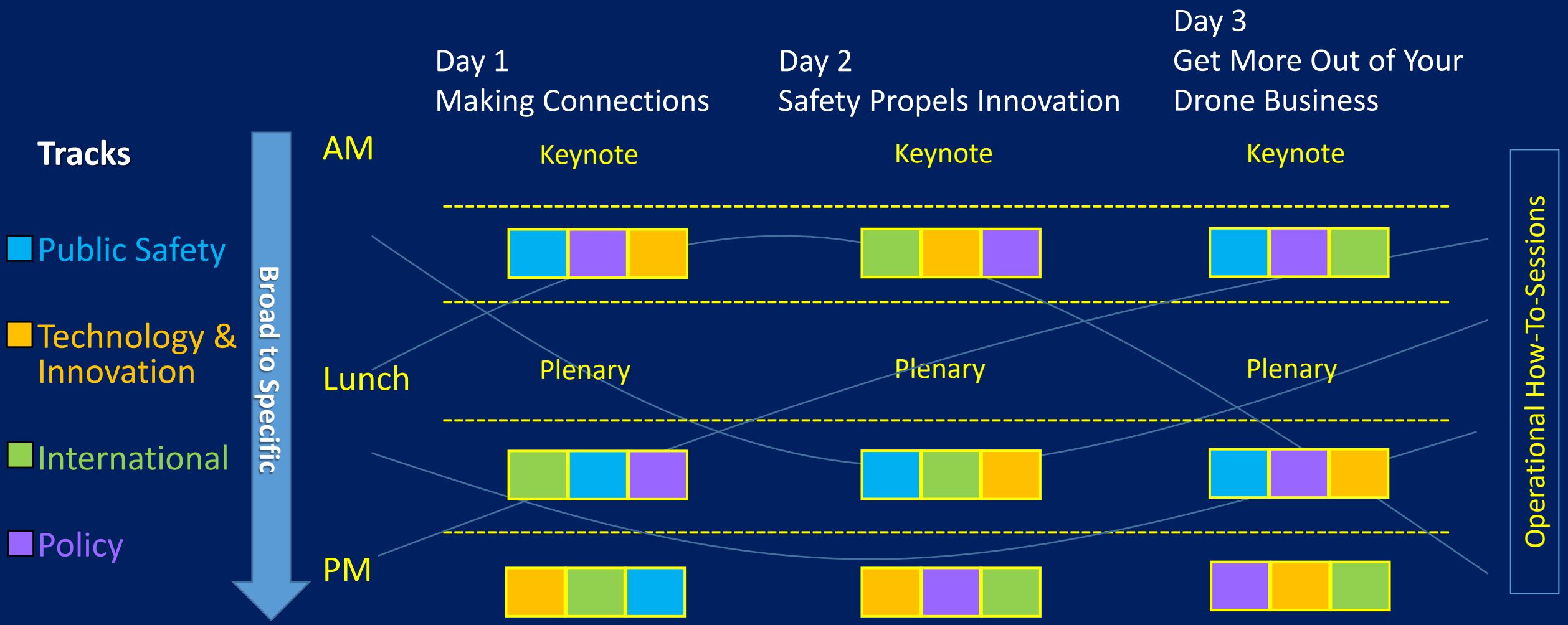


Open Discussion

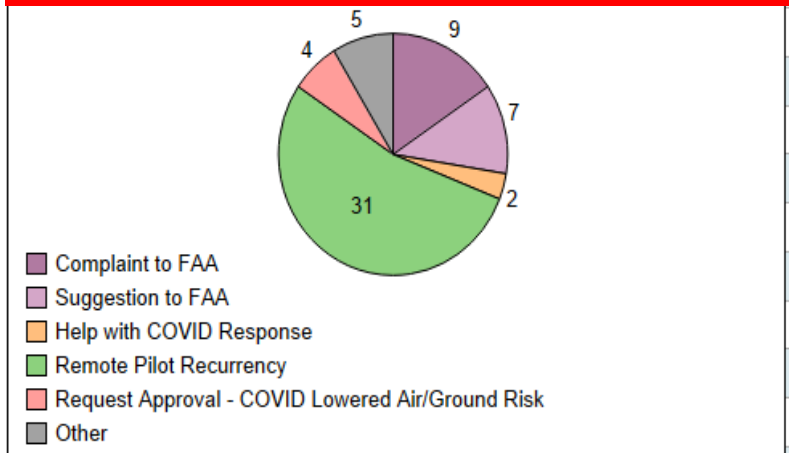
UAS Executive Working Group

April 17, 2020

COVID-19 Related Activities
Joe Morra

COVID-19 Updates

Support Center COVID Inquiries – 58
Total Inquiries for March – 1,684



Complaint to FAA - Displeased with canceled flight or airlines' response to COVID

Suggestion to FAA - Providing suggestions to FAA or airline to combat COVID spread

Help with COVID Response - Drone operator offering assistance in combating COVID

Remote Pilot Recurrency - Drone operators asking for an extension to their certification, or ability to take test online due to closing of testing centers

Request Approval - COVID Lowered Air/Ground Risk - Asking for waiver approval due to lower air and ground risk by shelter in place orders.

Other - No common theme

**Includes all inquiries that specifically mention COVID up to March 31, 2020. Additional inquiries relating to COVID may exist but did not mention COVID, and are not included in the COVID totals.*

COVID Operational Requests Overview

Waivers Granted:
- Airobotics

Actual Operations:
- Wing
- University of Alaska Fairbanks

SGI Approvals:
- The City of Syracuse (NY) Fire Department
- The City of Los Angeles (CA) Fire Department
- The Township of Union (NJ) Police Department
- The City of Norfolk (VA) Police Department
- The County of Washington (NY) Department of Public Safety

Proposed Operations in Coordination:
*list does not include all proposals
- UPS Flight Forward
- Zipline
- Eagle Hawk

Withdrawn Proposals:
(b)(5) [redacted]

Federal Aviation Administration

COVID-19 Response

Wing Aviation, LLC

(b) (5)

(b) (5)

COVID-19 Response

UPS Flight Forward

(b) (5)

(b) (5)

COVID-19 Response

UPS Flight Forward

(b) (5)

COVID-19 Response

Zipline/Novant Health

(b) (5)

(b) (5)

COVID-19 Response

Causey Aviation Unmanned/Flytrex

(b) (5)

(b) (5)

Upcoming Meetings & Events
Erik Amend

Remote ID
Ann Cihon
Chris Foster

Goal & Scope

- Goal: Define, implement, and manage cross-organization plan for implementation of RID rule
- Scope
  - Collect input from all stakeholders for high-level planning/timelines
  - Help define and adjudicate cross-organization decision points
  - Ensure all required tasks are completed by appropriate LOB/SO and support completion efforts
  - Manage and communicate program risk

Current Status

- Held Implementation Team Meeting 3/20/20
  - Currently working to verify/update POC list and timelines
  - Scheduling LOB meetings to tee up larger, cross-org issues for the entire team
- Remote ID SRM

(b) (5)

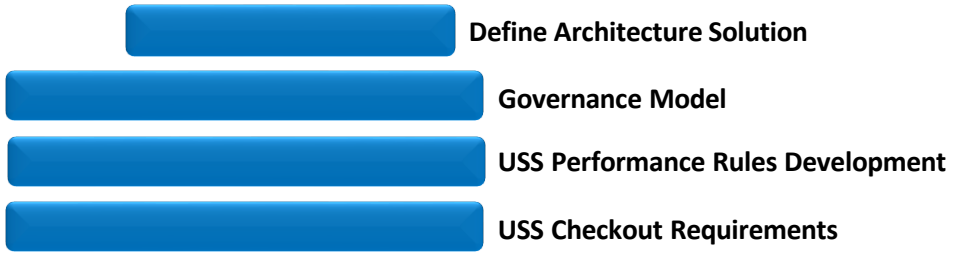
[redacted]

Updated POC List

Ann Cihon	AUS
Christopher Foster	AIT
Jennifer Ambrose	AGC
Andrew Guion	AIR
Casey Nair	ATO
Sean Hook	ATO
James Wetherly	ATO
Brandon Youngblood	ATO
Brandon Lint	ANG
Praveen Raju	ANG
Biruk Abraham	ANG
Leesa Papier	ASH
Shelly Roman (CTR)	ASH
Kelsey Muka	AVP
Ben Walsh	AFS
Silas Still	AFS
Bonnie Lefko	AFS

Overall RID Implementation Roadmap

USS



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OPR: AJM

- SRM (Dependency-AVP)
- Cohort
- MOA
- Performance Rules
- MVP
- Operations/ maintenance policy
- PIA/PRA
- Governance

MOC/DOC

MOC AC - Incorporate changes from NPRM comments and finalize document

DOC AC - Incorporate changes from NPRM comments and finalize document

Fund and work with AIT to develop DOC e-portal*

Coordinate with ASTM before and after final rule to ensure standard aligns

Publish NOA to accept industry standard MOC

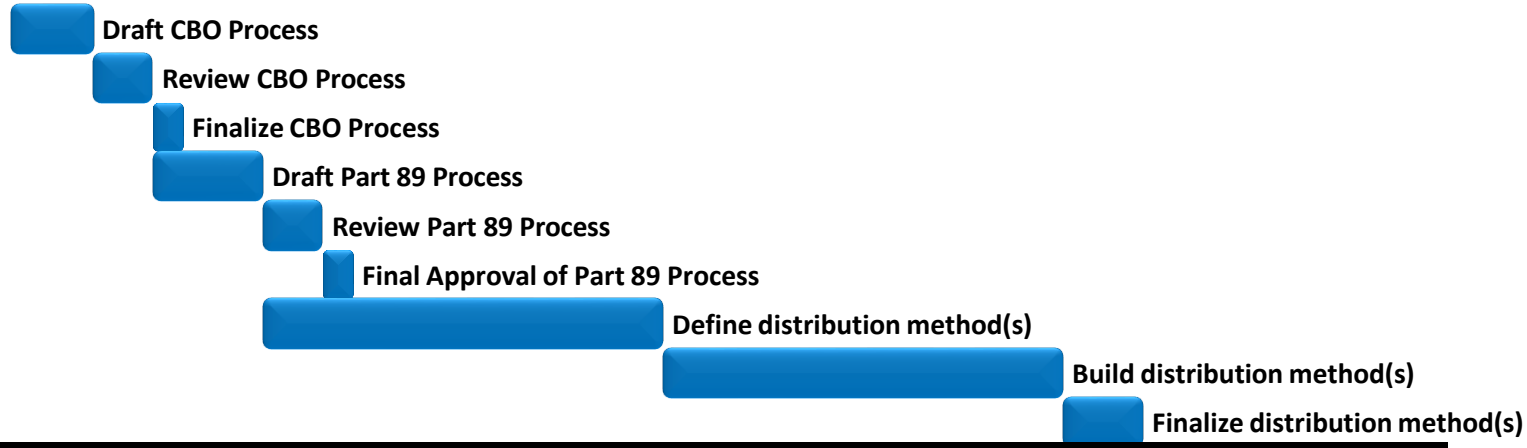
(b) (5)

[redacted]

OPR: AIR

- Means of Compliance AC
- Declaration of Compliance AC
- E-Portal
- ASTM Coordination
- Notice of Availability (NOA)

FRIA



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[redacted]

OPR: AJR

- CBO (Dependency-AFS)
- Application Process
- Distribution methods
- PIA/PRA

Data Security and Access

(b) (5)

OPR: AIT, ASH, AFS, AJR

- E-Portal
- ASTM Coordination
- Notice of Availability (NOA)

Remote ID Supporting AIT Projects

Registration Unification

- Mission owned by AVS/AFS
- Modification to DroneZone sUAS registration process to require one-to-one device registration operators flying under the Exception for Recreational Flyers

Community Based Organization (CBO) Recognition Project

- Mission owned by AVS/AFS and ATO/AJV
- New functionality under the DroneZone that will allow CBOs to submit applications to be recognized by FAA as well as the ability for CBOs to submit requests for various fixed flying areas

Declaration of Manufacturer

- Mission owned by AVS/AIR
- A new system that will allow manufacturers to submit information to FAA regarding device compliance to the Remote ID and Operations Over People rules

Remote ID Supporting AIT Projects

DroneZone / LAANC Data Correlation

- Sponsored by ATO/PMO
- Analysis of DroneZone and LAANC data that will be valuable for Remote ID queries to include design of data models and implementation of APIs

Remote ID Core System Implementation

- Sponsored by ATO/PMO
- Implementation of the USS data exchange MVP

UAS Registration Unification

Mission Owner	AVS/AFS
Problem Statement	sUAS registrations that currently takes place in the DroneZone application utilizes a one to many relationship for UAS operators flying under the Exception for Recreational Flyers. The proposed Remote ID rule will require all UAS to be registered by serial number.
Scope	Modify the recreational flyer registration process to require all individual UAS be registered by serial number.
Phase	Initiation: Charter has been signed, but planning is currently on hold while deconfliction with the CARES service takes place.

(b) (5)

Federal Aviation Administration

CBO Recognition Project

Mission Owner	AVS/AFS (CBO recognition) and ATO/AJV (Fixed flying site approval)
Problem Statement	The FAA does not have an established process for Community Based Organizations (CBOs) to submit requests to be recognized by the Agency. In addition, the FAA does not have a process for CBOs to submit applications for approval of fixed flying sites across these categories: Standard, Unique, Sanctioned Event, and FAA Recognized Identification Area (FRIA).
Scope	Implement new functionality into the FAA DroneZone application that will allow CBOs to submit applications to be recognized by FAA and additional functionality to allow recognized CBOs to submit requests for fixed flying sites.
Phase	Planning: Charter has been signed, project has had a formal kickoff with supporting services and initial requirements meetings have been held.

(b) (5)

[redacted]

Federal Aviation Administration

Declaration of Manufacturer

Mission Owner	AVS/AIR
Problem Statement	The FAA does not have a means to collect and track information from manufacturers or persons declaring their compliance with sUAS rules such as Remote ID or Operations Over People. A system is needed so that a declaration and means of compliance can be submitted to the FAA for approval or denial.
Scope	This project is to develop an application to allow sUAS manufacturers to submit documentation to FAA regarding compliance with sUAS rules. It will also include the development of data services to provide manufacturer declaration to other authorized systems.
Phase	Initiation: Charter has been drafted and is under review
(b) (5)	[redacted]

Federal Aviation Administration

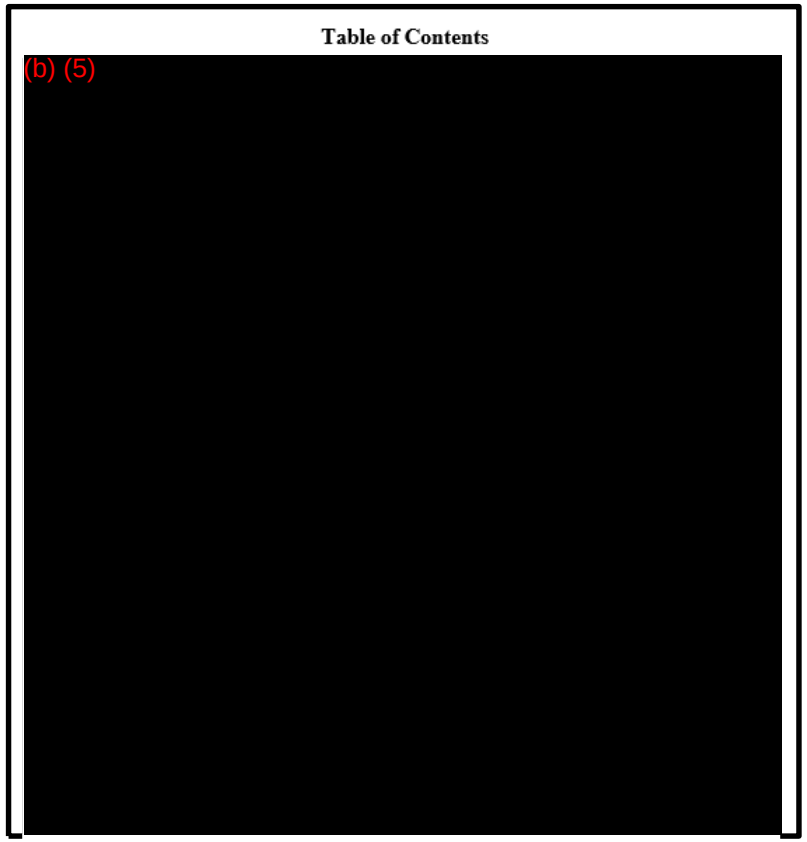
UTM Draft Implementation Plan & Coordination
Jarrett Larrow

Section 376 Recap

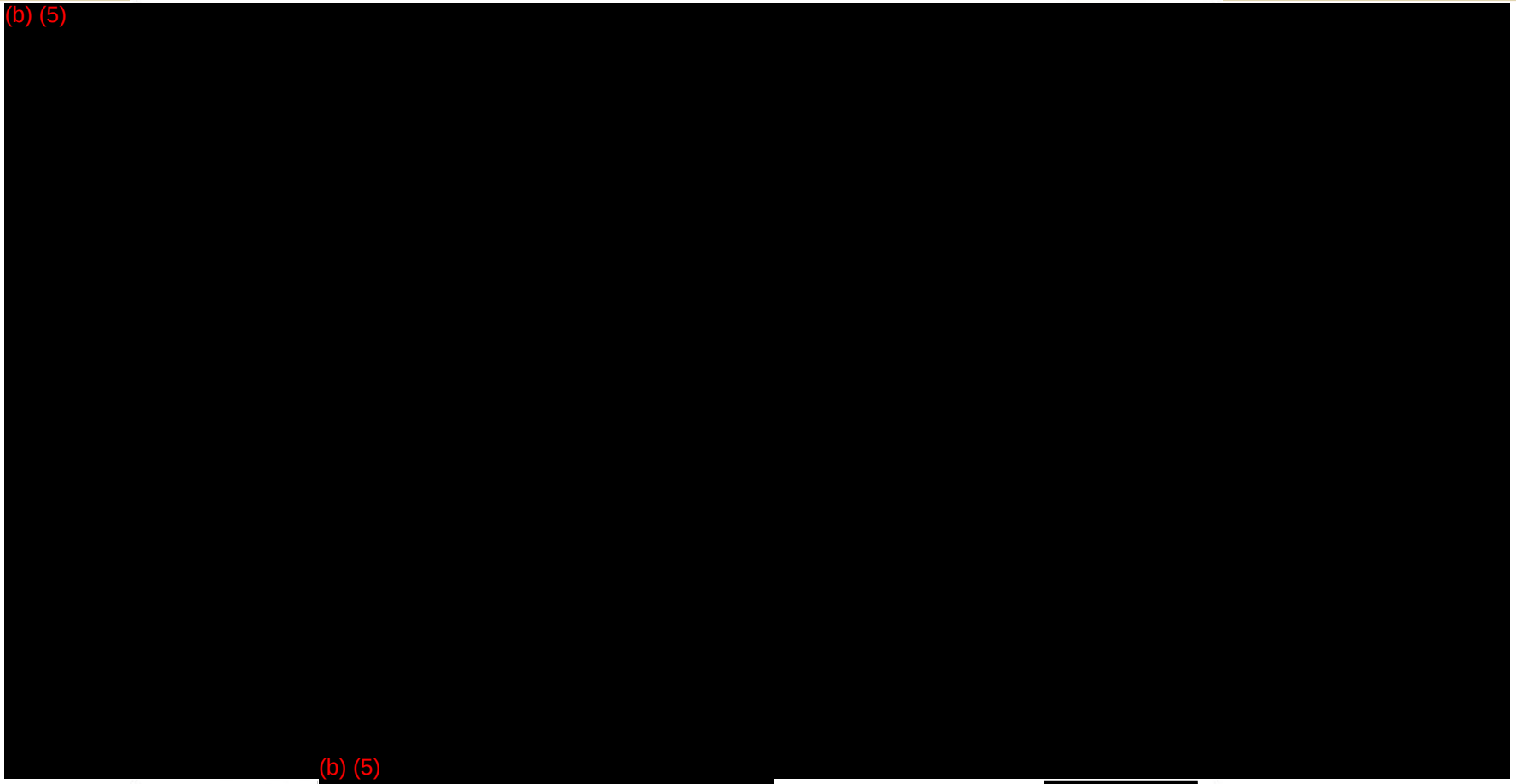
- Develop a UTM Implementation Plan
  - Development of safety standards to permit, authorize, or allow the use of UTM services
  - Roles and responsibilities of industry and government
  - Assessment of risk reduction
  - Process for accepting applications for UTM services, using private sector validation and verification, and notifying applicant within 120 days
- Deliver plan to Congress within 1 year of conclusion of UTM Pilot Program
- Ability to revoke permission, authorization, or approval
- Expedited procedures for UTM services in low risk areas

Document Status

- ~50% drafted
- Will begin to engage LOB/SO representatives
  - AFX, AOV, AIR, AUS
  - ANG
  - AJV, AJM, AJI, AJR
  - AIT
  - AGC



UTM Architecture & AVS Oversight



Connection to UPP

- UTM Pilot Program Phase 2 awarded to VT MAAP and NYUASTS
- Program objectives to test RID technologies and operations with increasing volumes and density to enable safe BVLOS operations
- Included request to collaborate with industry partners to provide input into a process for regulatory approval and checkout of UTM services

Industry Outreach

- Ongoing dialogue within ASTM, JARUS, and GUTMA
- Need for centralized industry forum to discuss and refine implementation details on:
  - Discovery and synchronization
  - Private sector validation and verification
  - Service bundling and rollout plans

Thoughts?

Integration Pilot Program
Rachel Carlstrom
Laura Brown

UTM Tabletop: North Carolina DOT, Jan 24

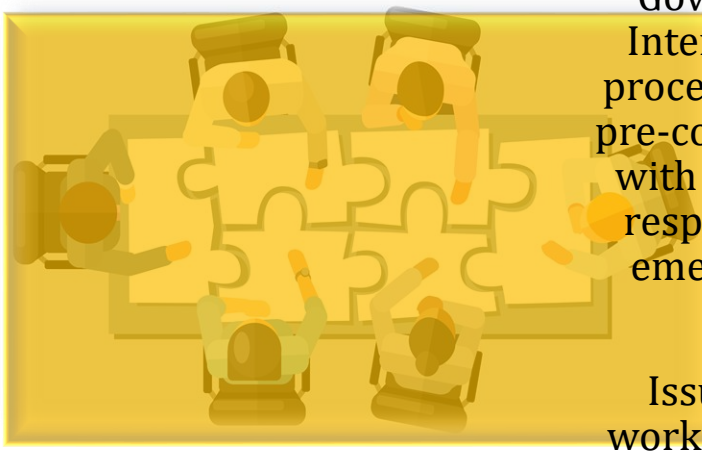
FAA Responses:

There is no specific definition of qualified service provider (QUSS) or requirements for designation.

- FAA Version 2.0 UTM CONOPs defines QUSS. "Services that are required to be used by operators due to FAA regulation and/or have a direct connection to FAA systems. These services must be qualified by the FAA against a specified set of performance rules."

UTM Tabletop: North Carolina DOT, Jan 24

In Progress:

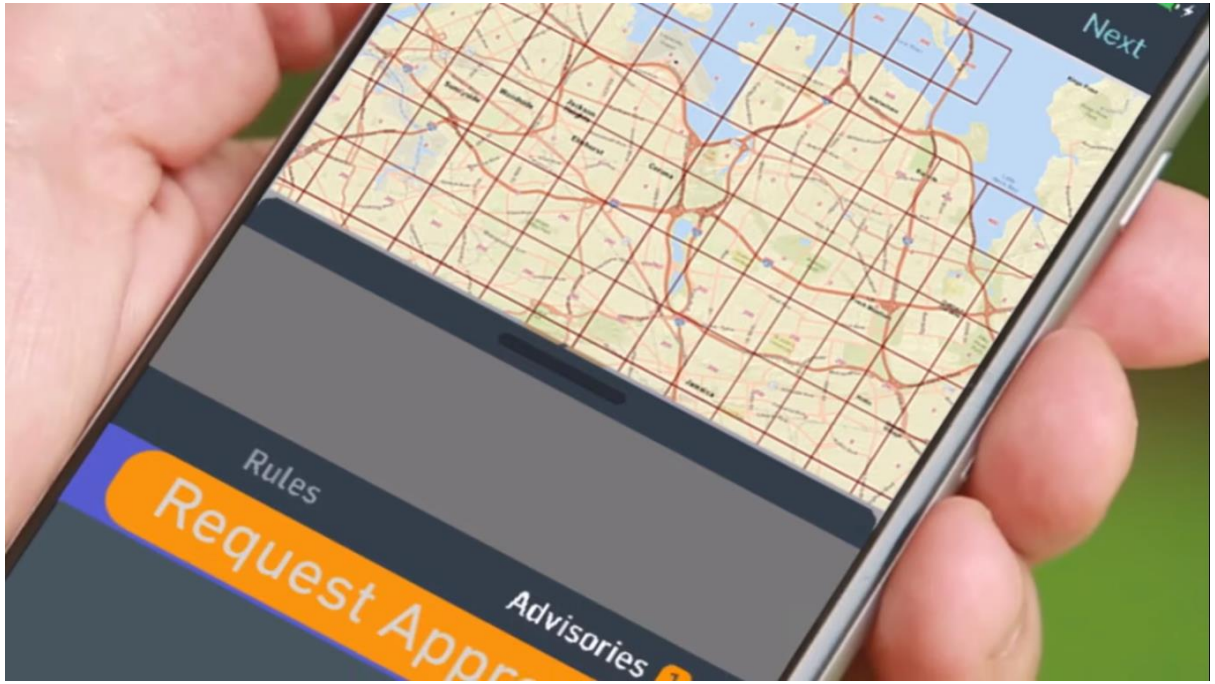


Expedite Special Government Interest (SGI) process through pre-coordination with operators responding to emergencies.	Process to qualify new UTM services or become a qualified service provider for priority public safety operations.	UAS Volume Restrictions (UVRs) do not restrict other UAS from entering the airspace.	Process for prohibitions or restrictions to UAS operations in close proximity to a fixed site facility (Section 2209 of the 2016 FAA extension)
Issue being worked by AFS-800/FAASTeam/ AJR/SOSC	Leveraging LAANC process to determine criteria and implementation (UPP phase 2)	Determine if eligible for future rulemaking and implementation (UPP Phase 2)	Currently scheduled for Rulemaking in fall 2020

UTM Tabletop: North Carolina DOT, Jan 24

Issues for Future Discussion as UTM Matures:

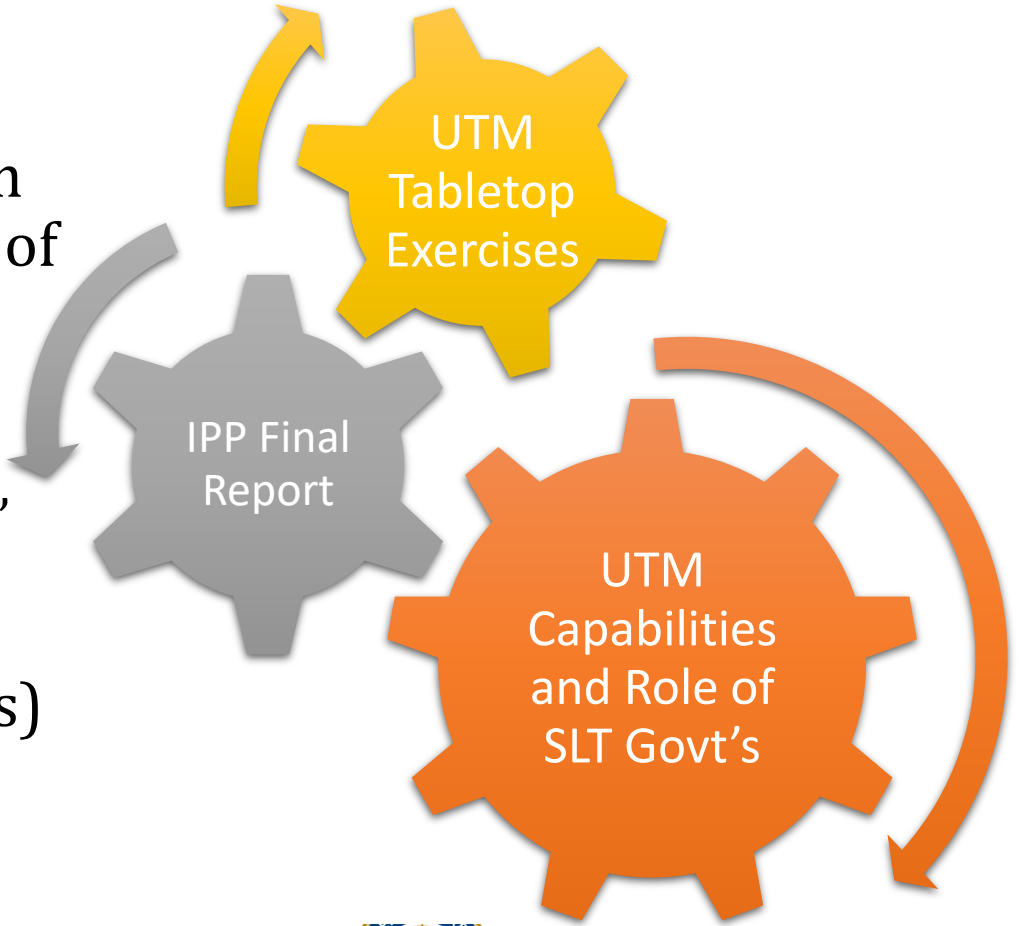
- How will priority be established with multiple missions?
- How do non-UTM participants receive notifications when priority is issued?
- Process needed for determining how to prioritize UAS Volume Reservations (UVRs)



UTM Tabletop: North Carolina DOT

Next Steps:

- Continue work with NCDOT to support and inform the development of UTM capabilities and the role of state and local governments
- FAA is planning at least one additional tabletop
  - Second UTM tabletop exercise with NCDOT is proposed, based on discussion with NCDOT, AGC and OST.
  - Reno UTM tabletop postposed due to the COVID-19
- Outcomes and lessons learned from the tabletop(s) will be included in the IPP final report.



Open Discussion

UAS Executive Working Group

March 6, 2020

Remote ID Updates

Remote ID Safety Risk Acceptance - Background

Why do we Need SRM?

SRM is required as part of the implementation of the remote identification rule as its considered a “change to the NAS”

SRM Plan

Conducted under FAA Order 8040.4 framework

Cross-organizational team will define the scope

Stakeholders

AVP will lead the cross FAA SRM Panels to assess the changes to the NAS presented by the proposed rule

The cross organization team has been established and gathered a list of stakeholders for the panels

Remote ID Implementation Safety Risk Management

(b) (5)

- Remote ID SMEs Meet to Scope SRM on March 23
- SRMing implementation not the rules

Remote ID SRM Timeline

March 23
Scope SRM
(Remote ID Team)

(b) (5)

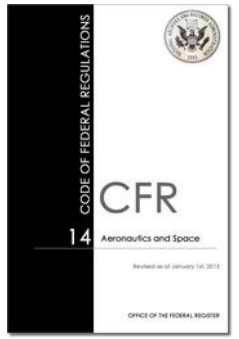
May 1
Provide SRM Panel
Overview/Scope
(AVP)

(b) (5)

September 30
SRMD Signed
(Risk Accepted)

(b) (5)

December 2020
Remote ID Rule
Publication



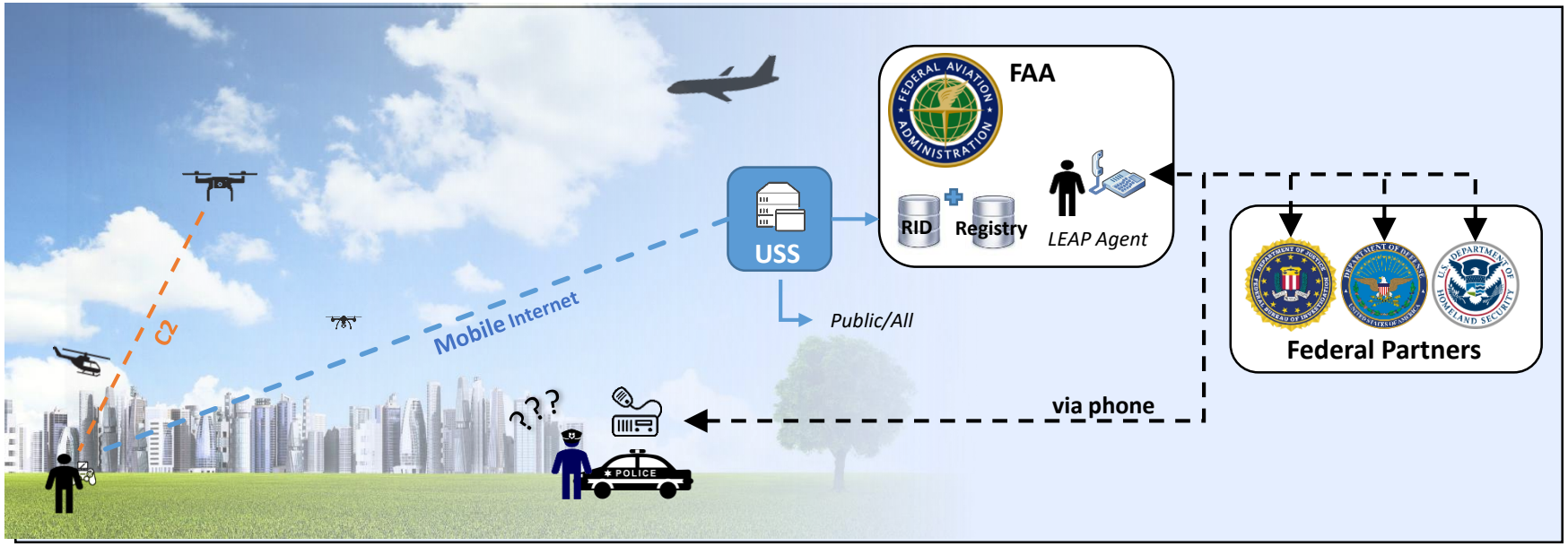
Remote ID Cohort Meeting #1

Effort kicked off Feb 26-27, 2020

Objectives:

- Common understanding of initial Network RID by December 2020
- Assessment of industry's ability and willingness to implement iterative USS solutions
- Presenting and discussing initial technical approach and assessing what is and is not feasible in short-term

RID Concept – MVP Configuration



Highlights

Major Industry Takeaways:

- Desire for a standardized UAS-USS interface
- FAA to adopt ASTM standard for RID (F38) and do as little additional work as possible
  - Resistance to concept of low fidelity data stream
  - Desire for simplification of as much as possible
  - Potential gap: Federal partners did not participate in development of F-38 standard, unlikely to meet their needs.

FAA Assumptions of viable USS business models are at risk:

- Industry appetite to provide RID services may not be as high as anticipated
- Expression of concern that providing public RID services did not fit business needs

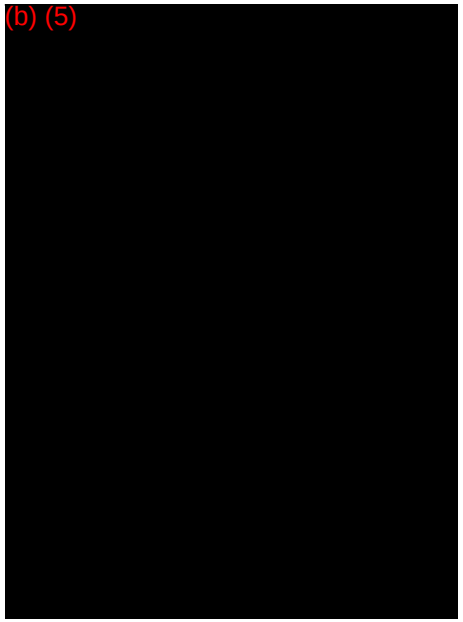
UAM Activities

UAM Executive Roundtable Updates

(b) (5)

UAM Gap Analysis

(b) (5)



AUS Identified Initial Gaps

GAP Analysis not validated

GAP Analysis Identifies FAA Activities needed

Benefit of a UAM Gap Analysis

- Identify regulatory requirements to achieve UAM operational objectives.
- It's low lying fruit that provides higher level accountability that messages internal, cross agency alignment on UAM

Ask:

Support/concurrence to engage your UAM focal and other SMEs

Executive Updates

Open Discussion

AGENDA

UAS Executive Working Group
January 17, 2020
1:00PM – 2:30PM, 8th floor Conference Room 8ABC

I. Remote ID (15 min.)
   - Rulemaking update - Brandon
   - ATO Implementation Plan – Maureen

II. Status of UTM Implementation Plan (Manny, 5 min.)

III. FAA Roles in JARUS and the ICAO RPAS Panel (Chris, 15 min.)

IV. IPP Annual Report Update (Laura, 5 min.)

V. New Twitter Handle - @FAADroneZone (Jeannie, 5 min.)

VI. Handling Reports from Consumer Product Safety Commission (Lorelei, 15 min.)

VII. APO Demo (Michael Lukacs and Dipasis Bhadra, 20 min.)

VIII. Open Discussion (5 min.)

Attachments:
Slide Deck:
- Remote ID – ATO Implementation Plan
- Status of UTM Implementation Plan
- FAA Roles in JARUS and the ICAO RPAS Panel

AGENDA

UAS Executive Working Group
February 7, 2020
10:30AM – Noon, 7th floor Conference Room 7B

I. Remote ID Team Update (Manny, 15 min.)

II. Responses to DAC Recommendations (Jay, 15 min.)

III. UAM Roundtable (Jay, 5 min.)

IV. IPP Updates (30 min.)
- Post IPP Plan (Joe)
- UTM Tabletop Feedback (Joe)
- IPP Annual Report (Laura)

V. UAS Technical Workshop for Africa Region (Mike, 10 min.)

VI. Symposium Update (Erik, 5 min.)

VII. Open Discussion (5 min.)

Attachments:
DAC Taskings & FAA Responses to DAC Recommendations
DAC Activities Update
Slide Deck:

- Remote ID Team Update
- Responses to DAC Recommendations
- IPP Updates
- UAS Technical Workshop for Africa Region
- Symposium Update

AGENDA

UAS Executive Working Group
March 6, 2020
10:30AM – Noon, 10th Floor MacCracken Huerta Conf. room

Please record your attendance on the sign-in sheet.

I. Remote ID Updates (30 min.)
- Rulemaking (Brandon)
- Safety Risk Acceptance (Jarrett/Manny)
- Cohort (Mark Denicuolo)

II. UAM Activities (Jim Herrera, 15 min.)
- Roundtable
- Gap Analysis

III. Executive Updates (10 min.)
- RRTF (Brandon)
- Update on the Executive Order (Josh/Leesa)

IV. NTSB Presentation – Drone Collisions: Myths and Reality (Bill English, 30 min.)

V. Open Discussion (5 min.)

Attachments:
Meeting Slide Deck
- Remote ID – Safety Risk Acceptance
- Remote ID - Cohort
- UAM Activities – Roundtable
- UAM Activities – Gap Analysis

AGENDA

UAS Executive Working Group
April 17, 2020
Zoom Video Conference

(b) (5)

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I. Covid-Related Activities (Joe Morra, 10 min.)

II. Update on Upcoming Meetings/Events (Erik Amend, 5 min.)
- DAC on June 19 (virtual)
- FAA UAS Symposium

III. Remote ID
- Implementation Plan (Ann Cihon, 15 min.)
- AIT Remote ID Supporting Projects (Chris Foster, 10 min.)

IV. UTM Draft Implementation Plan and Coordination (Jarrett Larrow, 15 minutes)

V. IPP
- Tabletop Exercises (Rachel Carlstrom, 10 min.)
  - FAA Team Recommendations on NC Open Questions
  - Postponement of Reno Tabletop
- FY19 Annual Report Status (Laura Brown, 5 min.)
- Communications Plan (Laura Brown, 5 min.)

VI. Open Discussion (5 min.)

Attachments:

Meeting Slide Deck
- Covid-Related Activities
- Remote ID
- UTM Draft Implementation Plan and Coordination
- IPP