FAA UAS Certification and Policy Roadmap

Chiayi, Taiwan

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Agenda

- **Path for UAS operations**
  - Exemptions
  - Type Certification
  - BVLOS Rulemaking
- **Automation approach**

Workstream	Objective	Timeframe
§44807 Exemptions	Gain BVLOS operational experience to inform rulemaking	Rolling
Type Certification	Streamline TC process for D&R UAS projects through lessons learned	Rolling
Part 108	Enable BVLOS operations in the National Airspace (NAS)	Target: FY25

- Aircraft eligibility determined using criteria for 44807 complex operations
- Requirements outlined in Criteria for Making 44807 Determinations include:
  - Safe continued operation
  - Data collection
  - Configuration control

- Leverage designees
- Incorporate post-TC fleet monitoring via AED/FS
- Provide standardized approach for amending type designs
- Simplified RPA process (AEE)

- Utilize experience from §44807 operations to ensure the proposed rulemaking meets industry goals and enables commercial operations
- Adapt and iterate where needed if gaps are identified through §44807 operations

Categorizing Task Automation

Automation performs a task or combination of tasks: this classification is generic and can be used for any single task. A single system of automation may perform tasks in different classes (eg, an FMS provides both information and control automation).

Aircraft typically have many automated systems of different types and categories

Categories of Automation for the Task

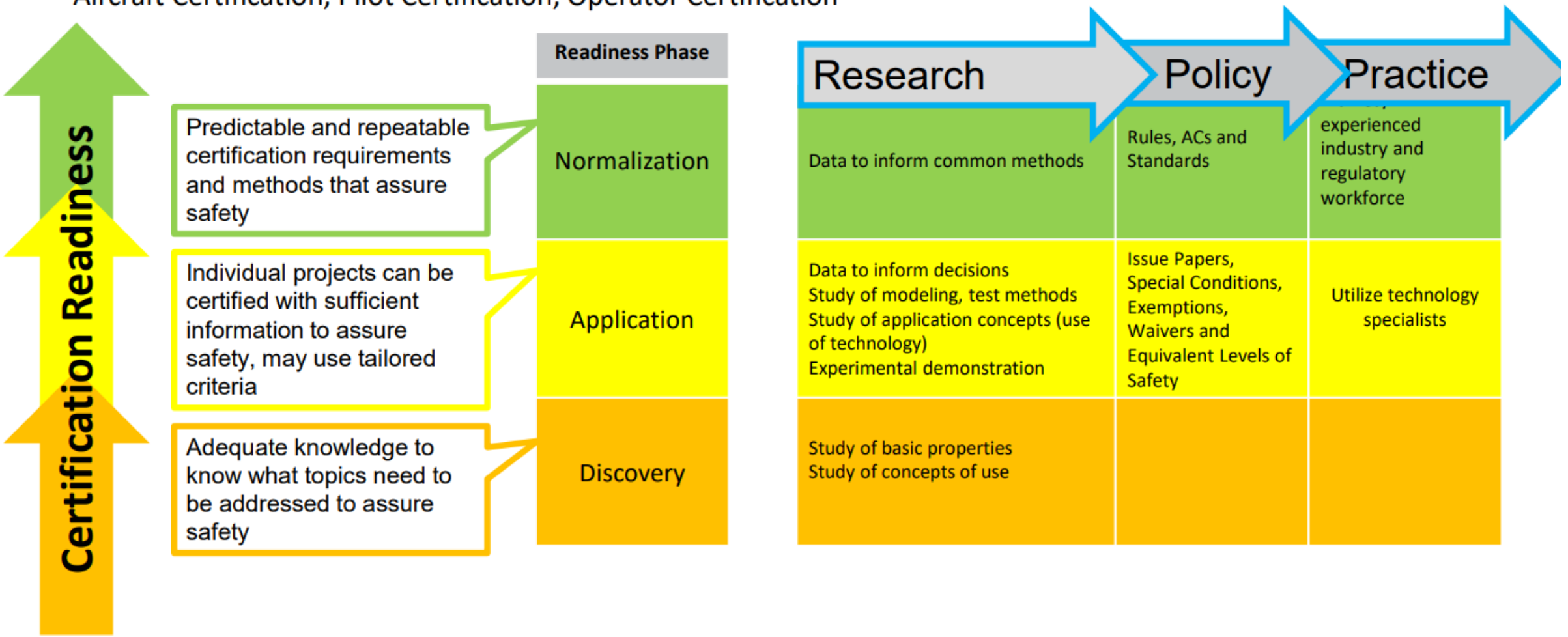
Examples: Task:System

Type of Task that is Automated	Assisting Assist the human in performing the task	Supervised May perform the task under supervision by a human, human may also perform the task	Alternative May perform the task without supervision; human may also perform the task	Autonomous Performs the task: human has no means to perform the task
Control Automation	Move control surfaces: Motors of a fly-by-wire system	Land aircraft: Autoland	Fly aircraft on a heading: autopilot	Prevent out-of-envelope flight: Envelope protection limits
Information Automation	Information automation processes and presents information, such as a moving map display or EICAS. Categories have not been proposed for information automation.			

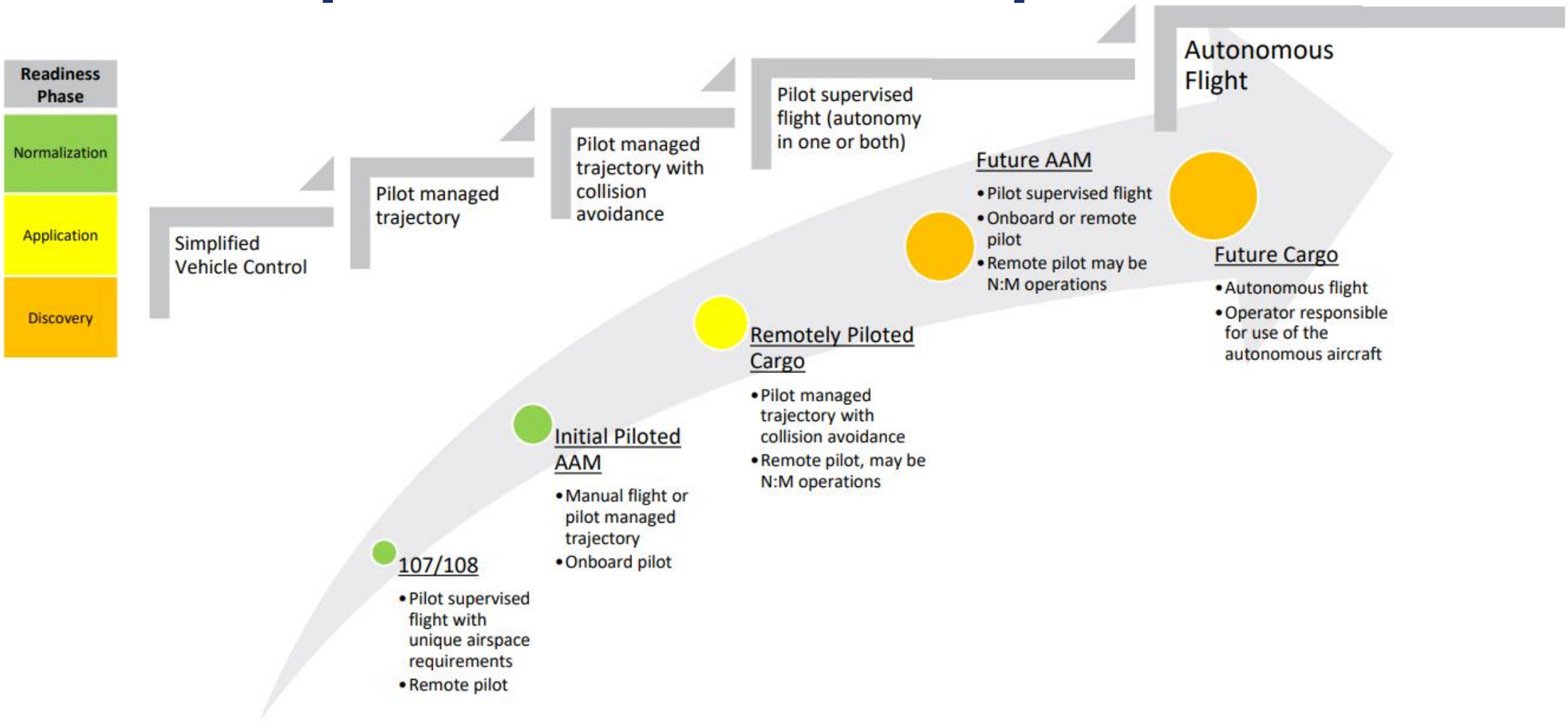
Pilot Resp for Task				
	Perform task	Perform task Manage auto	Perform task Manage auto Monitor auto	Perform task Manage auto
				Manage auto

Certification Readiness

Aircraft Certification, Pilot Certification, Operator Certification



Roadmap to Autonomous Operations



Questions?

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Incoming FAA AIR Senior Representative for Asia Pacific