AIRCRAFT GOVERNANCE

Who Certifies Aircraft and Determines Whether They Are Safe to Fly?

Aircraft certification is one of the most federally controlled areas of aviation. The Federal Aviation Administration (FAA) is responsible for establishing airworthiness standards, evaluating aircraft designs, certifying manufacturers, and determining whether aircraft can legally operate within the National Airspace System.

This applies to both traditional aviation and emerging aircraft types, including:

- electric conventional takeoff and landing aircraft (eCTOL),
- electric short takeoff and landing aircraft (eSTOL),
- electric vertical takeoff and landing aircraft, or powered-lift (eVTOL),
- small unmanned aircraft systems (sUAS),
- and larger unmanned cargo aircraft.

Many emerging aircraft concepts are being integrated into existing aviation certification frameworks rather than through entirely new systems. Existing FAA certification pathways for airplanes, rotorcraft, and operational rules continue to shape how these aircraft are evaluated and approved.

Different aircraft categories may operate under different certification and operational frameworks. This is one reason it can be misleading to treat all AAM operations as a single category. A small unmanned aircraft operating under Part 107 may involve very different operational requirements than a passenger-carrying aircraft operating under Part 135, and both may create different infrastructure, airspace, and community considerations.

Utah-specific operating conditions may also influence which aircraft concepts become practical in different parts of the state. Density altitude, mountainous terrain, weather variability, wildfire response needs, and long regional travel distances may affect aircraft performance, operational suitability, and infrastructure requirements.

Passenger AAM concepts continue to receive significant investment and development attention. However, certification timelines, operational economics, infrastructure readiness, environmental performance, and aircraft capabilities within Utah's operating environment may influence how quickly different aircraft concepts become operationally viable.

Responsible | Primary Regulatory or Operational Lead

FAA

The FAA is primarily responsible for:

- aircraft certification,
- airworthiness standards,
- certification pathways,
- aviation safety oversight,
- and pilot and operator certification frameworks.

The FAA determines whether aircraft designs meet federal safety standards and whether aircraft can legally operate within the National Airspace System.

Accountable | Primary Entity Responsible for Compliance or Implementation

Aircraft Manufacturers and Operators

Aircraft manufacturers, often referred to as Original Equipment Manufacturers (OEMs), are responsible for navigating FAA certification processes and demonstrating compliance with applicable federal standards.

Operators are responsible for operating aircraft in accordance with FAA operational rules, aircraft limitations, maintenance requirements, and safety procedures.

Consulted | Organizations or Stakeholders Typically Engaged During Planning, Review, or Operations

Organizations that may participate through technical coordination, industry collaboration, standards development, or operational input may include:

- operators,
- airports,
- industry associations,
- training organizations,
- state aviation agencies,
- local governments,
- and emergency responders.

Local governments may also participate through planning discussions, infrastructure coordination, emergency preparedness, and public engagement processes.

Informed | Stakeholders Commonly Affected, Notified, or Engaged

Stakeholders commonly informed or affected may include:

- communities,
- policymakers,
- planners,
- airport sponsors,
- utilities,

- emergency responders,
- businesses,
- and the general public.

Public awareness and stakeholder understanding often become increasingly important as new aircraft types begin operating closer to communities, infrastructure, and populated areas.

Important Distinctions

Local governments do not:

- certify aircraft,
- approve aircraft airworthiness,
- establish pilot licensing requirements,
- or independently determine whether aircraft are safe to operate.

Local governments may still play important roles related to:

- land use,
- zoning,
- emergency response,
- infrastructure compatibility,
- utility coordination,
- public engagement,
- and community planning.

Key References

- 49 U.S.C. § 40103
- 14 CFR Part 21
- 14 CFR Part 23
- 14 CFR Part 25
- 14 CFR Part 27
- 14 CFR Part 29
- FAA Powered-Lift SFAR
- GAO-24-106451, *Advanced Air Mobility: Legal Authorities and Issues to Consider for Operations*
- FAA Fact Sheet: *State and Local Regulation of Unmanned Aircraft Systems (UAS)*