

FAA Airport Certification Regulation - Part 139

Aerodrome Manual

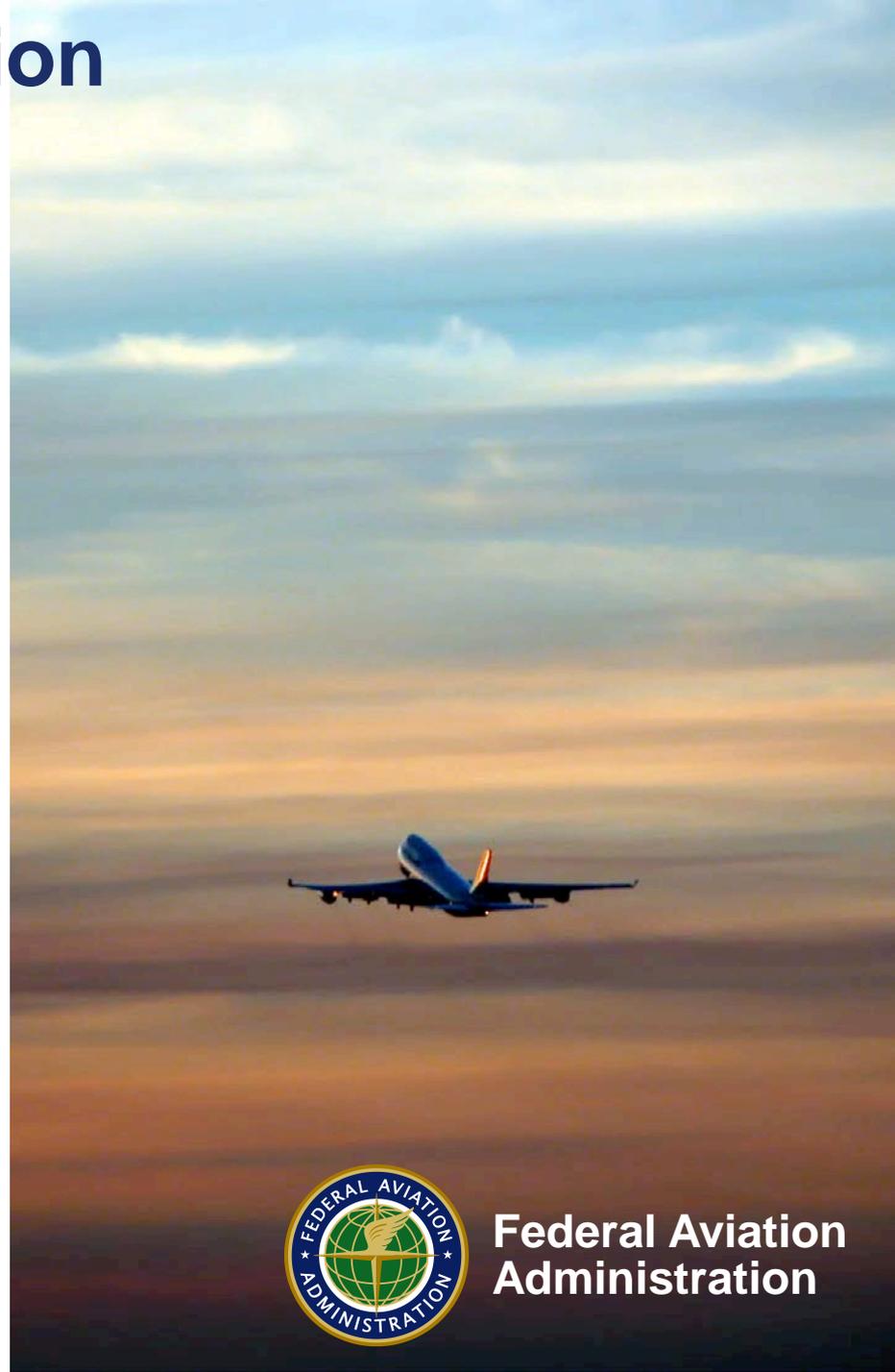
Presented to: RST/ASA –ICAO Costa Rica

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Date: October 22, 2019



**Federal Aviation
Administration**



Content of presentation

- **Annex 14 and Document 9774**
- **Identify the content required for the ICAO Aerodrome Manual**
- **Introduce content required for FAA Airport Certification Manual**

Development of state standards

- **Annex 14 contains SARPS**
- **States should evaluate and decide what will be “standards” and “recommendations”**

ICAO Annex 14 - Section 1.4

- **ICAO Annex 14 requires States to certify airports with international operations and recommends the same for any public use airport**



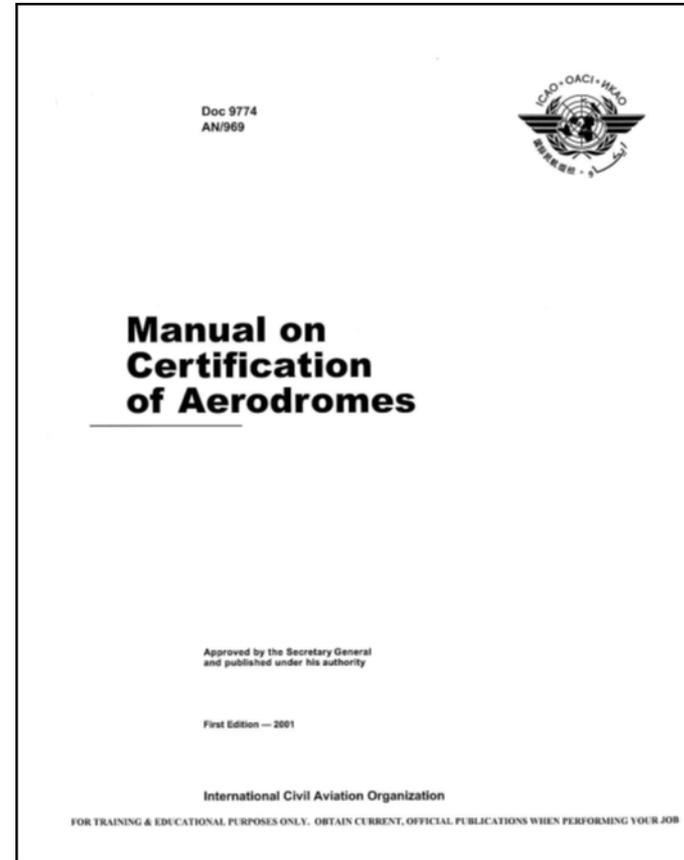
ICAO Annex 14 - Section 1.4.4

- **Aerodrome Manual includes all pertinent information:**
 - a) the aerodrome site**
 - b) facilities**
 - c) Services**
 - d) equipment**
 - e) operating procedures**
 - f) organization and management**
 - g) including a safety management system**

Aerodrome Manual

Doc 9774 - sec. 3A.2 Definition of Manual

“The manual that forms part of the application for an aerodrome certificate pursuant to these regulations, including any amendments thereto accepted / approved by the CAA.”



Aerodrome Manual

Aerodrome Operator manual requirements and Amendments

- **Must provide CAA complete and current copy**
- **Must keep at least one complete and current copy at Aerodrome and one at place of business if offsite**
- **Manual must be available for CAA inspection**
- **AO must alter or amend when required to maintain accuracy**
- **CAA may issue written directive to AO requiring alteration or amendment**
- **AO must notify CAA of changes as soon as practicable and allow for CAA acceptance and approval**

Aerodrome Manual

Preparation

- **WHO** is responsible for duties or task?
- **WHAT** is the information, task or procedure?
- **WHEN** or in what circumstance is the operating procedure to be activated?
- **WHERE** is the procedure to be performed?
- **HOW** is the task or procedure to be performed ?

- (specify the number of qualified personnel required, equipment, tools, etc.)

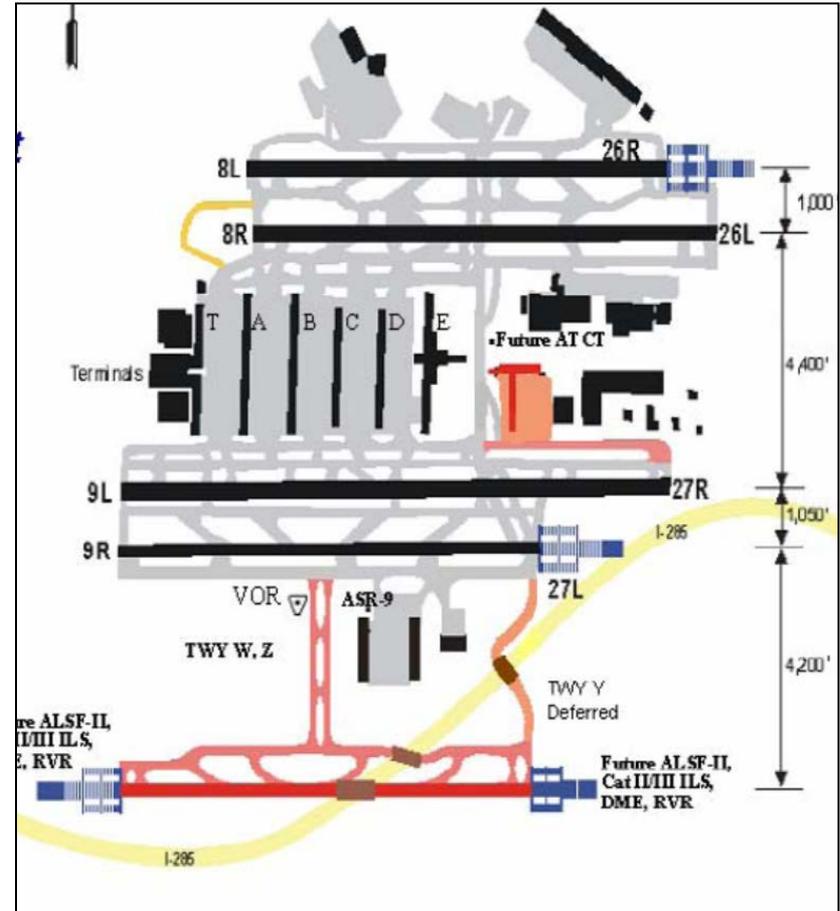
Aerodrome Manual Contents

PART 1: General Information

- **Purpose & Scope**
- **Cite legal requirement for manual & certificate from national regulation**
- **Statement for condition of use based on equal terms and conditions for all**
- **Available AIS & circulation procedures**
- **System for recording aircraft movement**
- **Responsibility and name of the AO**

Aerodrome Manual Contents

- **PART 2:
Aerodrome Site**
- Aerodrome plan showing:
 - Facility Layout
 - Boundaries
 - Distance to nearest populous area and location of aerodrome facilities equipment outside the boundaries
- Title Information



Aerodrome Manual Contents - PART 3: AIS Data

- 1. Aerodrome Name**
 - 2. Aerodrome Location**
 - 3. Geographic Coordinates**
 - 4. Aerodrome Elevation**
 - 5. Runway Elevation**
 - 6. Aerodrome Reference Temperature**
 - 7. Aerodrome Beacon Details**
 - 8. AO Name, Address & 24/7 Contact Info**
- 1. Runways – Bearing, Designation, Dimensions, Displacement, Surface, Type & OFZ for PIR**
 - 2. Dimensions and Surface of Runway Strip, End Safety Areas & Stopways**
 - 3. Dimensions and Surface of Taxiways**
 - 4. Apron Surface & Aircraft Stands**
 - 5. Clearway Length & Ground Profile**

PART 3: AIS Data

1. **Lighting – Visual Aids, Edge, Centerline, Stop Bars, Visual Docking Guidance & Availability of Standby Power**
2. **Frequency / Location VOR Checkpoint**
3. **Location / Designation of Standard Taxi Route**
4. **Geo-Coordinates of each threshold**
5. **Geo-Coordinates of applicable taxiway center line points**
6. **Geo-Coordinates of each aircraft stand**

1. **Obstruction Chart**
2. **Pavement surface type and bearing strength**
3. **One or more pre-flight altimeter check locations & elevations**
4. **Declared Distances**
5. **Disabled aircraft removal plan (contact #s & local capabilities)**
6. **Rescue & Firefighting (RFF) Category & normally available amounts of ext. agent**

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Aerodrome Manual Contents

PART 4: Aerodrome Operating Procedures & Safety Measures

- Aerodrome Reporting (Part 4.1)
- Movement Area Access (Part 4.2)
- Aerodrome Emergency Plan (Part 4.3)
- (Review ICAO Doc 9137, Part 7)
- Rescue & Fire-Fighting (RFF) (Part 4.4)
- Inspecting Movement Areas & Obstacle Limitation Surfaces (Part 4.5)
- Inspecting Visual Aids & Aerodrome Electrical Systems (Part 4.6)
- Movement Area Maintenance (Part 4.7)



PART 4: Aerodrome Operating Procedures & Safety Measures

- **Aerodrome Works (part 4.8)**
- **Apron Management (part 4.9)**
- **Apron Safety Management (part 4.10)**
- **Airside Vehicle Control (part 4.11)**
- **Wildlife Hazard Management (Part 4.12)**
- **Obstacle Control (Part 4.13)**
- **Removal**
- **Handling Hazardous Materials (Part 4.15)**
- **Low-Visibility Operations (part 4.16)**
- **Protection of Radar & NAVAIDS**

Aerodrome Manual Contents

PART 5: Aerodrome Administration & Safety Management System

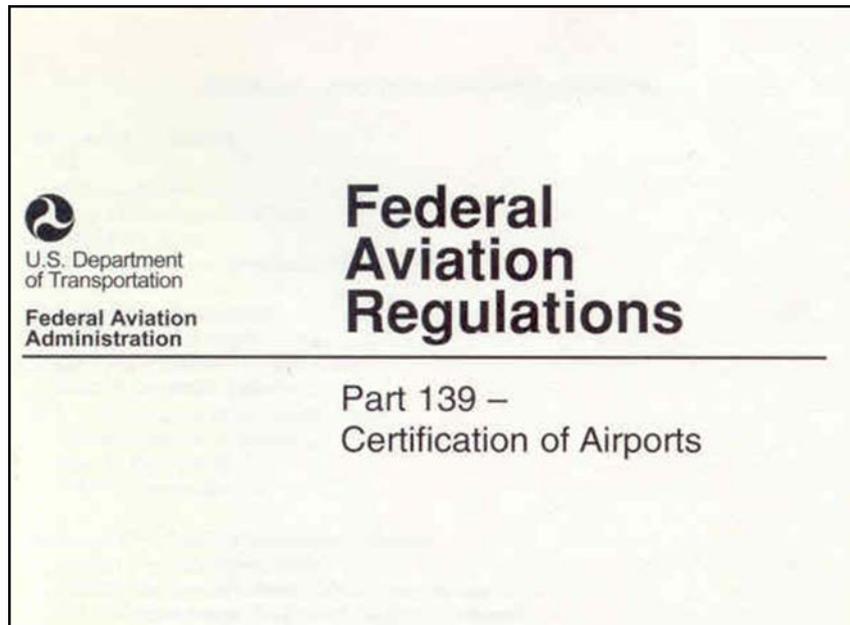
- Aerodrome Administration
- Safety Management System (SMS)



Airport Certification Manual

FAA Part 139

The ACM is an extension of the regulation and the contents are legally enforceable.



Types of Airport certification

Aircraft side

- **Large aircraft: More than 30 seats available for passengers**
- **Small aircraft: more than 9 available seats for passenger**

Aircraft operations:

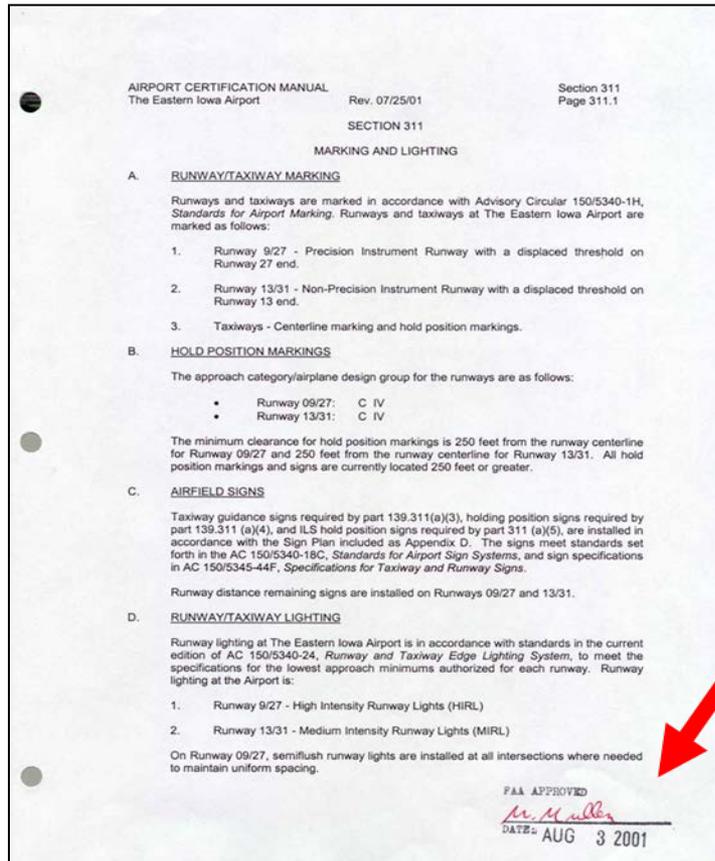
Class I – Scheduled large aircraft

Class II –schedule small and/or non schedule large aircraft

Class III – scheduled operations of small aircraft (no large aircraft)

Class IV – unscheduled operation of large

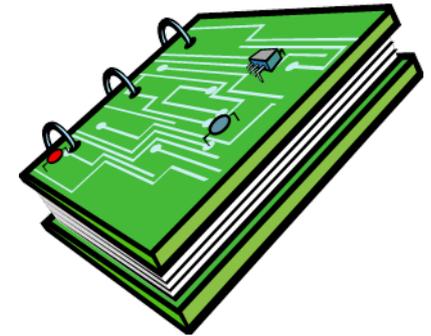
Airport Certification Manual



Each page of the ACM is signed and dated by an airport certification safety inspector

Airport Certification Manual

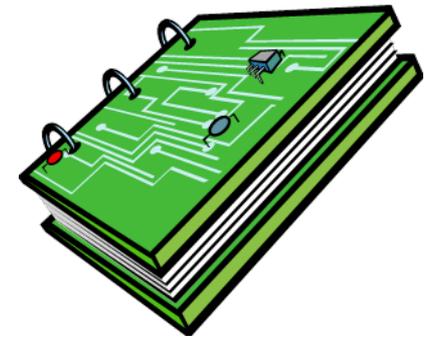
ACM Contents Part 139.203



Manual elements	Airport certificate class			
	Class I	Class II	Class III	Class IV
1. Lines of succession of airport operational responsibility	X	X	X	X
2. Each current exemption issued to the airport from the requirements of this part	X	X	X	X
3. Any limitations imposed by the Administrator	X	X	X	X
4. A grid map or other means of identifying locations and terrain features on and around the airport that are significant to emergency operations	X	X	X	X
5. The location of each obstruction required to be lighted or marked within the airport's area of authority	X	X	X	X
6. A description of each movement area available for air carriers and its safety areas, and each road described in § 139.319(k) that serves it	X	X	X	X

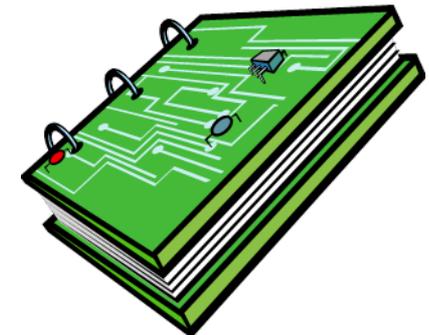
ACM Contents Part 139.203

Manual elements	Airport certificate class			
	Class I	Class II	Class III	Class IV
7. Procedures for avoidance of interruption or failure during construction work of utilities serving facilities or NAVAIDs that support air carrier operations	X	X	X	
8. A description of the system for maintaining records, as required under § 139.301	X	X	X	X
9. A description of personnel training, as required under § 139.303	X	X	X	X
10. Procedures for maintaining the paved areas, as required under § 139.305	X	X	X	X
11. Procedures for maintaining the unpaved areas, as required under § 139.307	X	X	X	X
12. Procedures for maintaining the safety areas, as required under § 139.309	X	X	X	X
13. A plan showing the runway and taxiway identification system, including the location and inscription of signs, runway markings, and holding position markings, as required under § 139.311	X	X	X	X
14. A description of, and procedures for maintaining, the marking, signs, and lighting systems, as required under § 139.311	X	X	X	X
15. A snow and ice control plan, as required under § 139.313	X	X	X	
16. A description of the facilities, equipment, personnel, and procedures for meeting the aircraft rescue and firefighting requirements, in accordance with §§ 139.315, 139.317, and 139.319	X	X	X	X
17. A description of any approved exemption to aircraft rescue and firefighting requirements, as authorized under § 139.111	X	X	X	X



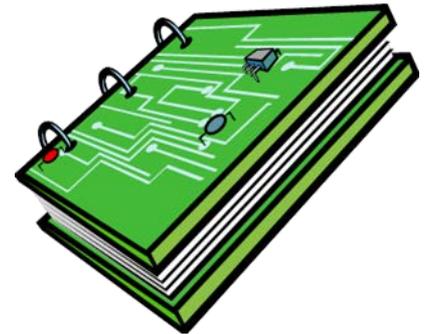
ACM Contents Part 139.203

Manual elements	Airport certificate class			
	Class I	Class II	Class III	Class IV
18. Procedures for protecting persons and property during the storing, dispensing, and handling of fuel and other hazardous substances and materials, as required under § 139.321	X	X	X	X
19. A description of, and procedures for maintaining, the traffic and wind direction indicators, as required under § 139.323	X	X	X	X
20. An emergency plan as required under § 139.325	X	X	X	X
21. Procedures for conducting the self-inspection program, as required under § 139.327	X	X	X	X
22. Procedures for controlling pedestrians and ground vehicles in movement areas and safety areas, as required under § 139.329	X	X	X	
23. Procedures for obstruction removal, marking, or lighting, as required under § 139.331	X	X	X	X
24. Procedures for protection of NAVAIDs, as required under § 139.333	X	X	X	
25. A description of public protection, as required under § 139.335	X	X	X	
26. Procedures for wildlife hazard management, as required under § 139.337	X	X	X	
27. Procedures for airport condition reporting, as required under § 139.339	X	X	X	X
28. Procedures for identifying, marking, and lighting construction and other unserviceable areas, as required under § 139.341	X	X	X	
29. Any other item that the Administrator finds is necessary to ensure safety in air transportation	X	X	X	X



Airport Certification Manual

1. **Easy to revise**
2. **Submitted in duplicate**
3. **Signed by certificate holder**
4. **Each page stamped & dated by approver**
5. **Kept current at all times**
6. **Distributed to personnel with duties in the ACM**
7. **Structure mirrors ICAO requirements**



Types of Inspections

- **Initial inspection:** Once the ACM to conform with the regulation a filed inspection to verify information is conducted before “approving” the ACM and issuing certificate
- **Periodic Inspection:** FAA policy once every 12 months. There are consideration to inspect airports on 18-36 month depending type of certificate
- **Surveillance inspections:** focused on an specific item



Questions

