Jacqueline Cochran Regional Airport
Preliminary Evaluation Part 139 Certification

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Preliminary Evaluation of Jacqueline Cochran Regional Airport Part 139 Certification

Introduction

Title 14 Code of Federal Regulations (CFR) Part 139 (herein referred to as Part 139) prescribes the rules governing the certification and operation of small and large air carrier aircraft at Class I, II, III and IV airports.

- A Class I airport is certificated to serve scheduled operations of large air carrier aircraft that can also serve unscheduled passenger operations of large air carrier aircraft and/or scheduled operations of small air carrier aircraft.
- A Class II airport is certificated to serve scheduled operations of small air carrier aircraft and the unscheduled passenger operations of large air carrier aircraft. A Class II airport cannot serve scheduled large air carrier aircraft.
- A Class III airport is certificated to serve scheduled operations of small air carrier aircraft. A Class III airport cannot serve scheduled or unscheduled large air carrier aircraft.
- A Class IV airport is certificated to serve unscheduled passenger operations of large air carrier aircraft. A Class IV airport cannot serve scheduled or unscheduled large air carrier aircraft.

The Jacqueline Cochran Regional Airport would most likely start out as a Class II airport. The provisions of this part mandate that the airport must obtain a Part 139 Class II Certificate if the airport serves any of the following:

- Scheduled passenger-carrying operations of an air carrier aircraft designed for more than nine passenger seats; and/or
- Unscheduled passenger-carrying operations of an air carrier designed for at least 31 passenger seats.

This evaluation report includes three subsections of Part 139. Each section evaluated has related findings made during an airport site visit and gap analysis associated with Jacqueline Cochran Regional Airport:

- Subpart B – Certification
- Subpart C – Airport Certification Manual
- Subpart D – Operations

Recommendations for a pathway to compliance with Part 139 standards depend upon the type and scale of commercial air service to be offered and must wait until an air carrier letter of intent is filed with the Airport and Federal Aviation Administration (FAA). The findings indicate areas in which the Airport would be found deficient during a Part 139 inspection. The findings are a summary review to indicate where additional effort would be needed and is not intended to be a full accounting of noncompliance because records were not available for: Airport Certification Manual (ACM) [as it does not exist yet]; Airport fixed base operator (FBO) and tenant ground vehicle training programs; emergency plans; wildlife hazard plans; security plans; notice to

airmen (NOTAM) records; lease agreements; fueling staff certifications and fuel storage facility inspections, and; aircraft rescue and firefighting (ARFF) facilities and equipment. Specific recommendations to achieve compliance are presented in the sections that follow.

Subpart B – Certification

The Part 139 General Requirements, Section 139.101, states that "…no person may operate an airport specified under § 139.1 of this part without an Airport Operating Certificate or in violation of that certificate, the applicable provisions, or the approved Airport Certification Manual." To obtain an Airport Operating Certificate, the airport must prepare and submit an application to the FAA's Regional airports division manager, along with copies of its *Airport Certification Manual*. An applicant for an airport operating certificate is entitled to a certificate if the following conditions are met:

- The applicant provides written documentation that air carrier service will begin on a date certain;
- The applicant meets the provisions of Section 139.103 (Application for Certificate);
- The FAA administrator finds the applicant is properly and adequately equipped and able to provide a safe airport operating environment in accordance with:
    - Any limitation the administrator finds necessary to ensure safety in air transportation:
    - The requirements of the *Airport Certification Manual*;
    - Any other Part 139 provisions that the administrator finds necessary to ensure safety in air transportation; and
    - The administrator approves the *Airport Certification Manual*.

Findings: The application process has not begun yet. Further determination of specific needs will be based on the air carrier letter of commitment, which is not yet received.

Subpart C – Airport Certification Manual

Air carrier airports are required to maintain a current Airport Certification Manual (ACM). The ACM represents the Airport's agreement with the FAA and specifies how the Airport will meet the conditions of Part 139. Part 139 requires these ACM elements for a Class II airport:

- Lines of succession of airport operational responsibility;
- Each current exemption issued to the airport from the requirements of Part 139;
- Any limitations imposed by the administrator;
- A grid map or other means of identifying locations and terrain features on and around the airport that are significant to emergency operations;
- The location of each obstruction is required to be lighted or marked within the airport's area of authority;
- A description of each movement area available for air carriers and its safety areas, and each road described in Part 139.319(k) that serves the Airport;
- Procedures for avoidance of interruption or failure during construction work of utilities serving facilities or navigational aids (NAVAIDs) that support air carrier operations;

- A description of the system for maintaining records, as required under § 139.301;
- A description of personnel training, as required under § 139.303;
- Procedures for maintaining the paved areas, as required under § 139.305;
- Procedures for maintaining the unpaved areas, as required under § 139.307;
- Procedures for maintaining the safety areas, as required under § 139.309;
- 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;
- A description of, and procedures for maintaining, the marking, signs, and lighting systems, as required under § 139.311;
- A snow and ice control plan, as required under § 139.313;
- A description of the facilities, equipment, personnel, and procedures for meeting the ARFF requirements, in accordance with §§ 139.315, 139.317 and 139.319;
- A description of any approved exemption to aircraft rescue and firefighting requirements, as authorized under § 139.111;
- 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;
- A description of, and procedures for maintaining, the traffic and wind direction indicators, as required under § 139.323;
- An emergency plan as required under § 139.325;
- Procedures for conducting the self-inspection program, as required under § 139.327;
- Procedures for controlling pedestrians and ground vehicles in movement areas and safety areas, as required under § 139.329;
- Procedures for obstruction removal, marking, or lighting, as required under § 139.331;
- Procedures for protection of NAVAIDS, as required under § 139.333;
- A description of public protection, as required under § 139.335;
- Procedures for wildlife hazard management, as required under § 139.337;
- Procedures for airport condition reporting, as required under § 139.339;
- Procedures for identifying, marking, and lighting construction and other unserviceable areas, as required under § 139.341; and
- Any other item that the administrator finds is necessary to ensure safety in air transportation.

The ACM can be prepared by airport administrative staff; however, a significant amount of time could be involved in coordination with community agencies and resources specifying roles and responsibilities in supporting airport operations and emergency responses. Additional time will be involved in coordinating the FAA approval process and in preparing the manual.

Findings: The ACM effort has not begun yet. Further determination of specific needs will be based on the air carrier letter of commitment, which is not yet received. Components of an ACM are in place as a general aviation airport, but documentation and formal programs are not prepared.

Subpart D – Operations

Records (Part 139.301)

The Records section of Part 139 certification requires the airport operator to maintain and present for inspection records for the following:

- **Personnel training**. Twenty-four consecutive calendar months for personnel training records, as required under §§ 139.303 and 139.327.
- **Emergency personnel training**. Twenty-four consecutive calendar months for aircraft rescue and firefighting and emergency medical service personnel training records, as required under § 139.319.
- **Airport fueling agent inspection**. Twelve consecutive calendar months for records of inspection of airport fueling agents, as required under § 139.321.
- **Fueling personnel training**. Twelve consecutive calendar months for training records of fueling personnel, as required under § 139.321.
- **Self-inspection**. Twelve consecutive calendar months for self-inspection records, as required under § 139.327.
- **Movement areas and safety areas training**. Twenty-four consecutive calendar months for records of training given to pedestrians and ground vehicle operators with access to movement areas and safety areas, as required under Sec. 139.329.
- **Accident and incident**. Twelve consecutive calendar months for each accident or incident in movement areas and safety areas involving an air carrier aircraft and/or ground vehicle, as required under § 139.329.
- **Airport condition**. (NOTAMS) Twelve consecutive calendar months for records of airport condition information dissemination, as required under § 139.339.
- Make and maintain any additional records required by the administrator, this part, and the ACM.

Findings: The airport operations records could not able to be reviewed during the site visit. Documentation for the specific areas listed above has not yet begun. Documented administrative organization for scheduling inspections, training, and document reviews not in evidence.

Personnel Training (Part 139.303)

The requirements under this section mandate that the certificate holder must train, equip, and maintain sufficient and qualified personnel to comply with the requirements of its ACM. At least one person would have to be designated to conduct a Part 139 Self-Inspection of the airport facilities daily to meet compliance. This person would have to be trained in the identification of

deficiencies and necessary reporting techniques to report deficiencies. This training must be completed prior to the initial performance of such duties and at least once every 12 consecutive calendar months. The curriculum for initial and recurrent training must include at least the following areas:

- Airport familiarization, including airport marking, lighting, and signs system.
- Procedures for access to, and operations in, movement areas and safety areas, as specified under § 139.329.
- Airport communications, including radio communication between airport traffic and personnel using the common traffic advisory frequency and procedures for reporting unsafe airport conditions.
- Duties required under the ACM and the requirements of Part 139.
- Any additional subject areas required under §139.319, 139.321, 139.327, 139.329, 139.337, and 139.339, as appropriate.

The airport sponsor is also required to make a record of all training completed by individuals. The record must include, at a minimum, a description and date of training received. Such records must be maintained for 24 consecutive calendar months after completion of training and must comply with the following training requirements:

- Aircraft rescue and firefighting: Operational requirements, § 139.319;
- Handling and storage of hazardous substances and materials, § 139.321;
- Self-inspection program, § 139.327;
- Pedestrians and Ground Vehicles, § 139.329;
- Wildlife hazard management, § 139.337;
- Airport condition reporting, §139.339; and
- Use an independent organization, or designee, to comply with the requirements of its ACM and the requirements of Part 139 only if:
    - Such an arrangement is authorized by the Administrator;
    - A description of responsibilities and duties that will be assumed by an independent organization or designee is specified in the ACM; and
    - The independent organization or designee prepares records required under Part 139 in sufficient detail to assure the certificate holder and the Administrator of adequate compliance with the ACM and the requirements of Part 139.

Many of these duties could be conducted by the Airport administrative and operations staff; however, additional personnel would be required to perform the maintenance and repairs necessary to correct any deficiencies to remain in compliance with 14 CFR Part 139 regulations. The need to add one new operations staff member is anticipated.

Findings: Airport operations staffing is not sufficient to meet the daily inspections, operations oversight, airport tenant training (ground vehicle operators, access control, fuel delivery training, standards compliance etc.) and meet airfield maintenance standards for a Part 139 airport. For an airport of this size, complexity, and level of activity, an additional full-time on-site staff member will be required to manage Part 139 requirements.

Paved Areas (Part 139.305)

This section provides that the certificate holder must maintain and promptly repair the pavement of each runway, taxiway, loading ramp and parking area that is available for air carrier use on the airport. The section also includes specifications for pavement conditions. At the Airport, Runway 17-35 would be the designated air carrier runway. The runway is in good-excellent condition. For air carrier operations, a new parallel taxiway would be required to provide connection with a new air carrier aircraft parking apron on the airport's east side. The pavement strength of Runway 17-35 accommodates large air carrier aircraft up to and including the Boeing B-737 class.

New air carrier facilities design and extents will depend upon available space, aircraft fleet mix, and operational capacities. Start-up commercial air service for a community is typically done with smaller aircraft between 9 and 30 seats, on shorter routes to regional destinations. The Airport can expect to have occasional use by larger legacy air carrier aircraft as service volumes and longer routes develop.

The requirements under this section mandate that the certificate holder must maintain, and promptly repair, the pavement of each runway, taxiway, loading ramp, and parking area that is available for air carrier use on the airport as follows:

- The pavement edges must not exceed 3 inches difference in elevation between abutting pavement sections and between pavement and abutting areas.
- The pavement must have no hole exceeding 3 inches in depth nor any hole the slope of which from any point in the hole to the nearest point at the lip of the hole is 45 degrees or greater, as measured from the pavement surface plane, unless, in either case, the entire area of the hole can be covered by a 5-inch diameter circle.
- The pavement must be free of cracks and surface variations that could impair directional control of air carrier aircraft, including any pavement crack or surface deterioration that produces loose aggregate or other contaminants.
- Mud, dirt, sand, loose aggregate, debris, foreign objects, rubber deposits, and other contaminants must be removed promptly and as completely as practicable.
- Any chemical solvent used to clean any pavement area must be removed as soon as possible.
- The pavement must be sufficiently drained and free of depression to prevent ponding that obscures markings or impairs safe aircraft operations.

Unpaved Areas (Part 139.307)

Each certificate holder must maintain and promptly repair the surface of each gravel, turf, or other unpaved runway, taxiway, or loading ramp and parking area available for air carrier use on the airport as follows:

- No slope from the edge of the full-strength surfaces downward to the existing terrain must be steeper than 2:1.
- The full-strength surfaces must have adequate crown or grade to assure sufficient drainage to prevent ponding.
- The full-strength surfaces must be adequately compacted and sufficiently stable to prevent rutting by aircraft of the loosening or build-up of surface material, which could impair directional control of aircraft or drainage.
- The full-strength surfaces must have no holes or depressions that exceed 3 inches in depth and are of a breadth capable of impairing directional control or causing damage to an aircraft.
- Debris and foreign objects must be promptly removed from the surface.

Findings: Paved areas on the airport operations area (AOA) surfaces (runways and taxiways) are in good repair. Some areas had minor cracking, but the overall condition of paved surfaces complies with Part 139 standards. Small gravel and wind-blown debris were evident along the outer third of runways. A sweeper or broom truck could eliminate the foreign object debris accumulation.

The primary non-compliance areas are pavement shoulders and transitions to unpaved areas. Wind and water erosion have created greater than 3-inch lips on pavement edges, light fixtures, utility access hatches, and water run off drainage fixtures.

The unpaved areas adjacent the taxiways and runways have notable erosion swales, trenches, and gullies worn into the safety area surfaces. The dips and grooves exceed 3 inches deep, 5 inches across, and greater than 45° slopes on the edges. **Exhibit 1** shows erosion along the runway edge and utility access hatch with greater than 3-inch lip and trenching.

Exhibit 1: Runway 17-35 Pavement Edge and Utility Access Erosion

Safety Areas (Part 139.309)

Runways and taxiways identified for air carrier use are required to maintain safety areas in compliance with 14 CFR Part 139. Each safety area requires clearing and grading of all potentially hazardous ruts, humps, depressions or other surface variations exceeding 3 inches. Safety areas must also be drained by grading or storm sewers to prevent water accumulation during rain storms or construction projects. Each safety area must be capable under dry conditions of supporting ARFF equipment and of supporting the occasional passage of aircraft without causing major damage to the aircraft. No objects can be located within the safety areas, except for those that must be there because of their function (e.g. runway lights, precision approach path indicators [PAPIs], instrument landing system [ILS] equipment, etc.). Those objects located by necessity within the safety areas must be mounted on frangible structures with the frangible point no higher than 3 inches above grade.

All safety areas must be cleared and maintained free of any obstacles. Runway 17-35 has adequate safety area dimensions to comply with Part 139 but must be inspected and maintained daily.

Findings: Runway and taxiway safety area surfaces do not meet grade and surface requirements for Part 139. A light aircraft that has a runway excursion will lose directional control and most likely be damaged by the pavement edge drops, vehicle ruts, water run off channels, and uneven surfaces. Runway End 17 approach safety area does not meet slope grading standards for safety areas. Slopes around the storm water drainage system fixtures within the safety area near Runway End 35 also exceed grade requirements. See **Exhibits 2** and **3** for example of erosion, trenching, and edges greater than 3 inches.

Runway 12-30 and Taxiway G safety areas are generally in better condition than Runway 17-35 but are developing similar erosion and pavement edge lip compliance deficiencies.

Airport wide, the unpaved areas in the runway infields and safety areas are comprised of soft, sandy soil unable to support the weight of a vehicle or aircraft without causing rutting and possible damage to aircraft.

Exhibit 2: Erosion in Safety Areas at Runway End 35

Note: Burrowing Owls nesting under the concrete slab.

Exhibit 3: Erosion Around Taxiway Light Can

Marking, Signs and Lighting (Part 139.311)

All runways to be used for air carrier operations require markings meeting the specifications for takeoff and landing minimums for each runway. Runways 12 and 17 are currently marked as visual runways. Runways 30 and 35 are currently marked as non-precision instrument runways.

Taxiway centerline, taxiway edge lines, signs identifying the taxiing routes on the movement areas, and surface painted runway holding position signs and signage are also required.

Markings
Each certificate holder must provide and maintain marking systems for air carrier operations that are authorized by the administrator and consist of at least the following:

- Runway markings meeting the specifications for takeoff and landing minimums for each runway;
- A taxiway centerline;
- Taxiway edge markings, as appropriate;
- Holding position markings; and
- ILS critical area markings.

Signs
Each certificate holder must provide and maintain sign systems for air carrier operations that are authorized by the administrator and consist of at least the following:

- Signs identifying taxiing routes on the movement area;

- Holding position signs;
- ILS critical area signs.

Unless otherwise authorized by the administrator, the signs required by paragraph (b)(1) of this section must be internally illuminated at each Class I, II, and IV airport.

Lighting
Each certificate holder must provide and maintain lighting systems for air carrier operations when the airport is open at night, during conditions below visual flight rules (VFR) minimums. These lighting systems must be authorized by the administrator and consist of at least the following:

- Runway lighting that meets the specifications for takeoff and landing minimums, as authorized by the administrator, for each runway;
- One of the following taxiway lighting systems:
    - Centerline lights,
    - Centerline reflectors,
    - Edge lights, or
    - Edge reflectors;
- An airport beacon;
- Approach lighting that meets the specifications for takeoff and landing minimums as authorized by the administrator for each runway, unless provided and/or maintained by an entity other than the certificate holder; and
- Obstruction marking and lighting as appropriate on each object within its authority that has been determined by the FAA to be an obstruction.

Maintenance
Each certificate holder must properly maintain each marking, sign, or lighting system installed and operated on the airport. As used in this section, to ‘‘properly maintain’’ includes cleaning, replacing, or repairing any faded, missing, or nonfunctional item; keeping each item unobscured and clearly visible; and ensuring that each item provides an accurate reference to the user.

Lighting interference
Each certificate holder must ensure that all lighting on the airport, including that for aprons, vehicle parking areas, roadways, fuel storage areas, and buildings, is adequately adjusted or shielded to prevent interference with air traffic control and aircraft operations.

Findings: Markings for Runway 17-35 and associated taxiways are faded and need repainting. Runway 17-35 centerline and runway numbers are partially obscured due to rubber build up in the center section of the runway. Surface painted runway holding position signs are not in place at intersecting taxiway and holding lines on Runway 17-35.

Runway 35 blast pad chevron markings do not reach within 5 feet of the pavement edge. Blast pad markings on Runway 17 are correct.

Runway 12-30 markings are in better repair and meet standards for Runway 12 as a visual runway, and Runway 30 as a non-precision runway.

Non-standard markings are used to delineate sections of apron from Taxiway A. A double taxiway edge marking, or vehicle control line is required along the border of an active taxiway and apron. No vehicle control line or apron edge lines are in place along Taxiway F and the GA apron to demark where vehicle access is restricted. **Exhibit 4** shows the non-standard apron edge markings.

Exhibit 4: Non-standard Apron Edge/Vehicle Control Markings

Findings: Signs on Runway 12-30 are in good repair and meet placement and layout standards. Runway 17-35 signs are not consistent in application, are faded, and need replacement panels. Taxiway location signs are not in place for Runway 17-35 intersections with Taxiway A and Taxiway F. See **Exhibit 5** for sign at Taxiway A missing the taxiway location sign at the runway holding position. See **Exhibit 6** for the taxiway directional sign with faded panels. The color of the panel should be the same as the panel divider. Runway exit signs and taxiway directional signs are also absent at intersections on the north half of the runway. A sign plan update is recommended.

Findings: Runway 17-35 lighting is functional but is comprised of many fixture and Fresnel lens types. Runway 17 visual approach slope indicator (VASI) lights are faded and may be difficult for pilots to see during the day. Taxiway F edge lights are also a mix of fixture types and Fresnel lens types. A lighting system component upgrade to make light fixtures consistent is recommended.

Runway 12-30 lighting is consistent and in good condition.

Exhibit 5: Taxiway A Location Sign Absent

Exhibit 6: Taxiway Directional Sign Faded Panels

Snow and Ice Control (Part 139.313)

Findings: This section of 14 CFR Part 139 does not pertain to Jacqueline Cochran Regional Airport due to the negligible amount of snow and ice conditions the Airport experiences. However, if snow and ice conditions were to occur at the airport after certification, all air carrier operations would be required to cease until the airport complies with this section of the regulations.

Aircraft Rescue and Firefighting: Index determination (Part 139.315)

Jacqueline Cochran Regional Airport is currently not required to maintain an ARFF capability. A Riverside County Fire Station is located on the airport, but it is not ARFF equipped or staffed. To comply with Part 139 certification requirements, an ARFF capability would have to be developed. This would require specialized ARFF vehicles and trained ARFF personnel. ARFF facilities must also be in a location that allows a response to the midpoint of the farthest runway (serving air carrier aircraft) to begin application of foam, dry chemical, or halon 1211 within three minutes of an alarm.

An index is required by paragraph (c) of this section for each certificate holder. The index is determined by a combination of:

- The length of air carrier aircraft; and
- Average daily departures of air carrier aircraft.

For the index determination, air carrier aircraft lengths are grouped as follows:

- Index A includes aircraft less than 90 feet in length;
- Index B includes aircraft at least 90 feet but less than 126 feet in length;
- Index C includes aircraft at least 126 feet but less than 159 feet in length;
- Index D includes aircraft at least 159 feet but less than 200 feet in length; and
- Index E includes aircraft at least 200 feet in length.

Except as provided in Part 139.319(c), if there are five or more average daily departures of air carrier aircraft in a single Index group serving that airport, the longest aircraft with an average of five or more daily departures determines the required index. When there are fewer than five average daily departures of the longest air carrier aircraft serving the airport, the required index will be the next lower index group than the index group prescribed for the longest aircraft. The minimum designated index shall be Index A.

For planning purposes, until a confirmed air carrier with specified aircraft equipment and flight frequency is known, it is recommended that Jacqueline Cochran Regional Airport plan for an Index A capacity. As a Class II airport, Jacqueline Cochran Regional Airport would serve scheduled operations by small air carrier aircraft (i.e. from 10-30 seats) and unscheduled operations (i.e. charter flights) by large aircraft (31 or more passenger seats). The unscheduled air carrier (charter) operations would determine the ARFF Index to be used because they would use the longer aircraft. Charter operations are unlikely to generate an average of five or more daily departures. In that case, the ARFF index is adjusted downward to the next lower index from that which would otherwise be required. For example, if the longest air carrier aircraft was a B-737-500 (Index B), then the required ARFF index would be Index A. However, if the longest aircraft was a B-757-200 (Index C), then the required ARFF index would be Index B.

Aircraft Rescue and Firefighting: Equipment and Agents (Part 139.317)

Unless otherwise authorized by the administrator, the following ARFF equipment and agents are the minimum required for the indexes referred to in § 139.315:

- **Index A.** One vehicle carrying at least:
  - 500 pounds of sodium-based dry chemical, halon 1211, or clean agent; or
  - 450 pounds of potassium-based dry chemical and water with a commensurate quantity of aqueous film forming foam (AFFF) to total 100 gallons for simultaneous dry chemical and AFFF application.

- **Index B.** Either of the following:
  - One vehicle carrying at least 500 pounds of sodium-based dry chemical, halon 1211, or clean agent and 1,500 gallons of water and the commensurate quantity of AFFF for foam production; or
  - Two vehicles:
    - One vehicle carrying the extinguishing agents as specified in paragraphs (a)(1) or (a)(2) of this section; and
    - One vehicle carrying an amount of water and the commensurate quantity of AFFF so the total quantity of water for foam production carried by both vehicles is at least 1,500 gallons.

- **Index C.** Either of the following:
  - Three vehicles:
    - One vehicle carrying the extinguishing agents as specified in paragraph (a)(1) or (a)(2) of this section; and
    - Two vehicles carrying an amount of water and the commensurate quantity of AFFF so the total quantity of water for foam production carried by all three vehicles is at least 3,000 gallons; or
  - Two vehicles:
    - One vehicle carrying the extinguishing agents as specified in paragraph (b)(1) of this section; and
    - One vehicle carrying water and the commensurate quantity of AFFF so the total quantity of water for foam production carried by both vehicles is at least 3,000 gallons.

During the medium- and long-term planning period, it is unlikely that the Airport will reach requirements for ARFF Index D and E. Therefore, these categories are not included here.

Foam discharge capacity.
Each ARFF vehicle used to comply with Index B, C, D, or E requirements with a capacity of at least 500 gallons of water for foam production must be equipped with a turret. Vehicle turret discharge capacity must be as follows:

- Each vehicle with a minimum rated vehicle water tank capacity of at least 500 gallons, but less than 2,000 gallons, must have a turret discharge rate of at least 500 gallons per minute, but not more than 1,000 gallons per minute.

Agent discharge capacity
Each ARFF vehicle required to carry dry chemical, halon 1211, or clean agent for compliance with the index requirements of this section must meet one of the following minimum discharge rates for the equipment installed:

- Dry chemical, halon 1211, or clean agent through a hand line—5 pounds per second; or
- Dry chemical, halon 1211, or clean agent through a turret—16 pounds per second.

AFFF quantity requirements
Each vehicle required to carry AFFF must carry AFFF in an appropriate amount to mix with twice the water required to be carried by that vehicle.

Aircraft Rescue and Fire-fighting: Operational Requirements (Part 139.319)

Each certificate holder must provide on the airport during air carrier operations at least the ARFF capability specified for the index required by § 139.317

Increase in Index
If an increase in the average daily departures or the length of air carrier aircraft results in an increase in the index required by paragraph (a) of this section, the certificate holder must comply with the increased requirements.

Reduction in rescue and firefighting
During air carrier operations with only aircraft shorter than the index aircraft group required by paragraph (a) of this section, the certificate holder may reduce the ARFF to a lower level corresponding to the index group of the longest air carrier aircraft being operated.

Vehicle communications
Each vehicle required under § 139.317 must be equipped with two-way voice radio communications that provide for contact with at least:

- All other required emergency vehicles;
- The air traffic control tower;
- The common traffic advisory frequency when an air traffic control tower is not in operation or there is no air traffic control tower; and

- Fire stations, as specified in the airport emergency plan.

Vehicle marking and lighting
Each vehicle required under § 139.317 must:
- Have a flashing or rotating beacon; and
- Be painted or marked in colors to enhance contrast with the background environment and optimize daytime and nighttime visibility and identification.

Vehicle readiness
Each vehicle required under § 139.317 must be maintained as follows:
- The vehicle and its systems must be maintained to be operationally capable of performing the functions required by this subpart during all air carrier operations;
- If the airport is in a geographical area subject to prolonged temperatures below 33 degrees Fahrenheit, the vehicles must be provided with cover or other means to ensure equipment operation and discharge under freezing conditions; and
- Any required vehicle that becomes inoperative to the extent that it cannot perform as required by paragraph (g)(1) of this section must be replaced immediately with equipment having at least equal capabilities.
    - If replacement equipment is not available immediately, the certificate holder must so notify the Regional Airports Division Manager and each air carrier using the airport in accordance with § 139.339.
    - If the required Index level of capability is not restored within 48 hours, the airport operator, unless otherwise authorized by the administrator, must limit air carrier operations on the airport to those compatible with the index corresponding to the remaining operative ARFF equipment.

Response requirements
With the ARFF equipment required under this part and the number of trained personnel that assure an effective operation, each certificate holder must:
- Respond to each emergency during periods of air carrier operations; and
- When requested by the administrator, demonstrate compliance with the response requirements specified in this section.

The response required by paragraph (h)(1)(ii) of this section must achieve the following performance criteria:
- Within three minutes from the time of the alarm, at least one required ARFF vehicle must reach the midpoint of the farthest runway serving air carrier aircraft from its assigned post or reach any other specified point of comparable distance on the movement area available to air carriers and begin application of extinguishing agent; and
- Within four minutes from the time of alarm, all other required vehicles must reach the point specified in paragraph (h)(2)(i) of this section from their assigned posts and begin application of an extinguishing agent.

Personnel

In addition to specified ARFF vehicle requirements, Part 139 also requires that the certificate holder ensure all ARFF personnel are properly clothed, trained and equipped to carry out their duties. Each certificate holder must ensure the following:

- All ARFF personnel are equipped in a manner authorized by the administrator with protective clothing and equipment needed to perform their duties; and
- All ARFF personnel are properly trained to perform their duties in a manner authorized by the administrator. Such personnel must be trained prior to initial performance of rescue and firefighting duties and receive recurrent instruction every 12 consecutive calendar months.

The curriculum for initial and recurrent training must include at least the following areas:

- Airport familiarization, including airport signs, marking, and lighting;
- Aircraft familiarization;
- ARFF personnel safety;
- Emergency communications systems on the airport, including fire alarms;
- Use of the fire hoses, nozzles, turrets, and other appliances required for compliance with this part;
- Application of the types of extinguishing agents required for compliance with this part;
- Emergency aircraft evacuation assistance;
- Firefighting operations;
- Adapting and using structural rescue and firefighting equipment for aircraft rescue and firefighting;
- Aircraft cargo hazards, including hazardous materials/dangerous goods incidents;
- Familiarization with firefighters' duties under the airport emergency plan.

All ARFF personnel must participate in at least one live-fire drill prior to initial performance of rescue and firefighting duties and every 12 consecutive calendar months thereafter.

At least one individual, who has been trained and is current in basic emergency medical services, must be available during air carrier operations. This individual must be trained prior to initial performance of emergency medical services.

Training must be at a minimum 40 hours in length and cover the following topics:

- Bleeding;
- Cardiopulmonary resuscitation;
- Shock;
- Primary patient survey;
- Injuries to the skull, spine, chest, and extremities;
- Internal injuries;
- Moving patients;
- Burns; and
- Triage.

A record is maintained of all training given to each individual under this section for 24 consecutive calendar months after completion of training. Such records must include, at a minimum, a description and date of training received.

Sufficient ARFF personnel are available during all air carrier operations to operate the vehicles, meet the response times, and meet the minimum agent discharge rates required by this part.

Procedures and equipment are established and maintained for alerting ARFF personnel by siren, alarm, or other means authorized by the administrator to any existing or impending emergency requiring their assistance.

Hazardous materials guidance
Each ARFF vehicle responding to an emergency on the airport must be equipped with, or have available through a direct communications link, the *North American Emergency Response Guidebook* published by the U.S. Department of Transportation or similar response guidance to hazardous materials/dangerous goods incidents.

Emergency access roads
Each certificate holder must ensure that roads designated for use as emergency access roads for ARFF vehicles are maintained in a condition that will support those vehicles during all-weather conditions.

Findings: ARFF equipment, staffing, and access to the runway environment have not been addressed and do not meet Part 139 requirements. Records were not available for review of mutual aid agreements or memoranda of understanding to demonstrate emergency response support and expectations.

Aircraft Rescue and Fire Fighting (ARFF) Facilities

To best meet the response time requirements under Part 139.319 paragraph (h)(1)(ii), the recommendation is that the ARFF building be located on the east side of the primary runway approximately mid-field. The ARFF building should have three vehicle bays of 3,500 square feet each, and a building footprint of approximately 3,400 square feet. The building use can be combined as a joint use facility with ARFF, maintenance and operations vehicles, equipment, and materials storage included.

The ARFF index of an airport determines ARFF personnel, equipment, extinguishing agent, readiness and response requirements. Because currently no air carrier aircraft has an average of five departures per day from TRM, the Airport will be initially designated as an ARFF Index A airport.

Findings: The ARFF facility landside development concept should reserve a preferred site for a new ARFF facility. The location for a future ARFF facility is based on several considerations, but

the primary issue is the readiness and response of emergency vehicles. To this end, the location of the ARFF building must allow at least one ARFF vehicle to reach the midpoint of the farthest commercial service runway and initiate discharge of extinguishing agent within three minutes of alarm. The planned location for an ARFF response vehicle and staff at an existing County fire department building located to the east of the airport is not capable of meeting the three-minute-to-runway-center standard. ARFF access to the airport is through two gates and more than a mile from the runway.

Airport Equipment Maintenance and Storage

Findings: The Airport equipment maintenance and storage is adequate for current operations and maintenance. However, additional equipment and materials will be required to maintain a Part 139 standard. Expansion of existing facilities is possible. A longer-term solution worth consideration is to reduce operational costs and increase equipment and personnel efficiencies consideration through a new airport equipment maintenance and materials storage space combined with a new ARFF building.

Aircraft Rescue and Fire Fighting (ARFF) Training

40 Hour ARFF Basic Certification Course description
(source: San Bernardino Regional Emergency Training Center Curriculum and pricing)
The pre-requisite for class is a State Firefighter I certificate. The goal of the class is to prepare students to safely and competently work in the airport environment. This class will meet or exceed the required topics outlined in FAA Part 139.319 (j)(2) and the State of California Fire Training Fire Control 5. The class is typically a five-day interactive lecture with hands on activities to: familiarize with aircraft, airport familiarization, communications, fire tactics and strategy, use of foam and application of chemical agents, safety and associated gear, specialized vehicles, jet engine fires, interior fire operations, cargo fire operations, rescue, use of structural apparatus for aircraft accidents, forcible entry to aircraft, and incident command.

The cost is $995 for Index A-B burn, and $1250 for Index C-D-E burn. The price includes instruction, live fire burns, SCBA's (self-contained breathing apparatus), proximity gear, the textbook, workbook, handouts, and a CA Fire Control 5 certificate.

Index "A" and "B" Airport Re-certification Burn
This course consists of six hours of burns, including specialized rescue training, aircraft familiarization, tactics and strategy topics such as approach, fire attack with hand lines, safety and communications. Training is scenario-based and will meet FAA part 139 requirements for re-certification.

The cost is $750 per person. Proximity gear and breathing apparatus are required for this course, but are not provided.

Emergency Vehicle Operators Course

This three-day emergency vehicle operator's course for ARFF drivers includes interactive lecture, thorough truck familiarization, driving, and live fire truck operations. Participants engage in intensive academic and practical training in all aspects of ARFF emergency driving and apparatus operations. The operators receive scenario-based training and instruction in off-road operations, high speed maneuvering, safe handling, snozzle penetration work, and fire ground mass application.

The pre-requisites for this course are:

- FAA Approved Basic/Initial ARFF Training Program (an in-house program is acceptable if verified by a copy of a course certificate or letter from a fire department or airport operator).
- Employment as a full-time Firefighter II at an airport, or a driver or relief driver with a California Class B (Firefighter) Commercial Driver's License or equivalent.

The cost is $1500 per person. The annual Part 139 recertification for the driver operator is included. Proximity gear is typically provided or participants bring their own.

Findings: ARFF staff training records were not available from County fire. Records for training and certifications would need to be created when ARFF staff are on-site as a Part 139 facility.

Handling and Storing of Hazardous Substances and Materials (Part 139.321)

Each certificate holder that serves as a cargo handling agent must establish and maintain procedures for the protection of persons and property on the airport during the handling and storing of any material regulated by the Hazardous Materials Regulations (49 CFR, Part 171 through 180) intended to be transported by air. These procedures must provide for at least the following:

- Designated personnel to receive and handle hazardous substances and materials;
- Assurance from the shipper that the cargo can be handled safely, including any special handling procedures required for safety; and
- Special areas for storage of hazardous materials while on the airport.

Additionally, the certificate holder must establish and maintain standards acceptable to the FAA administrator for protection against fire and explosions in storing, dispensing, and otherwise handling fuels, lubricants, and oxygen on the airport. These standards must cover facilities, procedures, and personnel training and must address at least the following:

- Bonding;
- Public protection;
- Control of access to storage areas;
- Fire safety in fuel farm and storage areas;
- Fire safety in mobile fuelers, fueling pits, and fueling cabinets; and
- Training of fueling personnel in fire safety.

- The fire code of the public body having jurisdiction over the airport.

Each certificate holder must comply with and require all other fueling agents operating on the airport to comply with the Part 139 standards and must perform reasonable surveillance of all fueling activities on the airport with respect to those standards. Each certificate holder must also inspect the physical facilities of each airport tenant fueling agent at least once every three consecutive months for compliance and maintain a record of that inspection for at least 12 consecutive calendar months.

Training must include at least the following:

- At least one supervisor with each fueling agent must have completed an aviation fuel training course in fire safety authorized by the administrator. Such an individual must be trained prior to initial performance of duties or enrolled in an authorized aviation fuel training course that will be completed within 90 days of initiating duties, and receive recurrent instruction at least every 24 consecutive calendar months; and
- All other employees who fuel aircraft, accept fuel shipments, or otherwise handle fuel must receive at least initial on-the-job training and recurrent instruction every 24 consecutive calendar months in fire safety.

Each certificate holder must obtain a written confirmation once every 12-consecutive calendar months from each airport tenant fueling agent that the required training has been accomplished. This written confirmation must be maintained for 12 consecutive calendar months. Unless otherwise authorized by the administrator, each certificate holder must require each tenant fueling agent to take immediate corrective action whenever the certificate holder becomes aware of noncompliance with standards. The certificate holder must notify the appropriate FAA regional airports division manager immediately when noncompliance is discovered, and corrective action cannot be accomplished within a reasonable period.

Findings: Airport fuel storage and mobile delivery trucks were inspected for compliance in markings, signage, equipment maintenance, site preparedness, spill clean up kits and overall safety. The airport permits each vendor to control their fuel storage and delivery trucks and standards vary between FBOs as to how well they maintain and service the facilities. Spill containment appears in compliance with containment walls and swales around tanks and truck loading sites. Discrepancies noted included mobile fuel trucks parked without wheel chocks in place, trash around storage tanks, 55-gallon drums stored outside of spill containment and protective bollards, and faded markings.

One jet fuel storage tank was found with incorrect color markings. Jet fuel storage markings are black with white letters or black on white background. **Exhibit 7** shows the jet storage tank markings in red. Avgas tanks and pipes are labeled in blue.

The one notable safety compliance item is associated with the fuel storage tanks at Thermal Aviation. A propane fuel barbeque and picnic eating area is located within 100 feet of the

AVGAS storage tank. Fumes from venting tank during high heat conditions presents a fuel air mixture source to be ignited by the flame source of the barbeque.

Exhibit 7: Jet Fuel Storage Color Markings (should be black)

Traffic and Wind Indicators (Part 139.323)

A certificated airport must maintain a wind cone that provides surface wind direction information visually to pilots. Supplemental wind cones must be installed at each runway available for air carrier use where the primary wind cone is not visible to the pilot on final approach or takeoff. If the airport is open to air carrier operations at night, the wind direction indicators must be lighted. Airports serving air carrier operations when there is no air traffic control tower operating require the installation of a segmented circle around one wind cone, a landing strip indicator and a traffic pattern indicator for each runway with a right-hand traffic pattern. Jacqueline Cochran Regional Airport currently has a segmented circle, and lighted wind cone and supplemental wind cones at each end of Runway 17-35.

Findings: Wind indicators at runway ends and in the center of the airfield are faded. The wind cones should be bright orange and given the exposure to UV, heat and weather elements, it is recommended that wind cones be changed on biannually. The large wind cone associated with the rotating beacon tower is shredded and needs immediate replacement.

Survey of the segmented circle and wind cone was not possible due to soft soil conditions in the infield area.

Airport Emergency Plan (Part 139.325)

The certificate holder must develop an airport emergency plan that would minimize the possibility and extent of personal injury and property damage on the airport in various emergency situations. These situations include providing for response to an emergency involving the largest air carrier aircraft serving the airport and the ability to respond to fires at fuel farms or fuel storage areas. The plan required by this section must contain instructions for response to the following:

- Aircraft incidents and accidents;
- Bomb incidents, including designation of parking areas for the aircraft involved;
- Structural fires;
- Fires at fuel farms or fuel storage areas;
- Natural disaster;
- Hazardous materials/dangerous goods incidents;
- Sabotage, hijack incidents, and other unlawful interference with operations;
- Failure of power for movement area lighting; and
- Water rescue situations, as appropriate.

Jacqueline Cochran Regional Airport, in coordination with medical support facilities, would also be required to develop and maintain emergency medical procedures. Airport and supporting medical facilities are required to review the plan once every 12 months. The procedures required by this section must address or include:

- To the extent practicable, provisions for medical services, including transportation and medical assistance for the maximum number of persons that can be carried on the largest air carrier aircraft that the airport reasonably can be expected to serve;
- The name, location, telephone number, and emergency capability of each hospital and other medical facility and the business address and telephone number of medical personnel on the airport or in the communities it serves who have agreed to provide medical assistance or transportation;
- The name, location, and telephone number of each rescue squad, ambulance service, military installation, and government agency on the airport or in the communities it serves that agrees to provide medical assistance or transportation;
- An inventory of surface vehicles and aircraft that the facilities, agencies, and personnel included in the plan under paragraphs (c)(2) and (3) of this section will provide to transport injured and deceased persons to locations on the airport and in the communities it serves;
- A list of each hangar or other building on the airport or in the communities it serves that will be used to accommodate uninjured, injured, and deceased persons;
- Plans for crowd control, including the name and location of each safety or security agency that agrees to assist in crowd control in the event of an emergency on the airport; and

- Procedures for removing disabled aircraft, including, to the extent practical, the name, location, and telephone numbers of agencies with aircraft removal responsibilities or capabilities.

In addition, each certificate holder is required to:

- Coordinate the plan with law enforcement agencies, rescue and firefighting agencies, medical personnel and organizations, the principal tenants at the airport, and all other persons who have responsibilities under the plan;
- To the extent practicable, provide for participation by all facilities, agencies, and personnel specified in Part 139 in the development of the plan;
- Ensure that all airport personnel having duties and responsibilities under the plan are familiar with their assignments and are properly trained; and
- At least once every 12 consecutive calendar months, review the plan with all the parties with whom the plan is coordinated to ensure that all parties know their responsibilities and that all the information in the plan is current.

Each airport subject to applicable FAA and Transportation Security Administration security regulations must ensure that instructions for response in the airport emergency plan are consistent with its approved airport security program.

Findings: An airport emergency plan was not available for review so overall compliance could not be determined. Emergency plans were reviewed for the local airshow event and showed a thorough level of planning, roles and responsibilities assignments, and scenario responses for incidents and accidents that may occur. Additional emergency plan components will need development in conjunction with local aid and support agencies.

Self-Inspection Program (Part 139.327)

Jacqueline Cochran Regional Airport would be required to inspect its airport facilities daily to remain in compliance with 14 CFR Part 139 regulations. Inspections are required after construction activities, an unusual weather condition, and immediately following any incident or accident.

Each certificate holder must also provide the following:

- Equipment for use in conducting safety inspections of the airport;
- Procedures, facilities, and equipment for reliable and rapid dissemination of information between the certificate holder's personnel and air carriers; and
- Procedures to ensure qualified personnel perform the inspections. Such procedures must ensure personnel are trained and receive initial and recurrent instruction every 12 consecutive calendar months in at least the following areas:
    - Airport familiarization, including airport signs, marking and lighting;
    - Airport emergency plan;
    - NOTAM notification procedures;

- Procedures for pedestrians and ground vehicles in movement areas and safety areas;
- Discrepancy reporting procedures; and
- A reporting system to ensure prompt correction of unsafe airport conditions noted during the inspection, including wildlife strikes.

This section also requires the certificate holder to provide initial and recurrent training for personnel conducting airport self-inspections. Training records must be kept for 24 months. Inspection information must be maintained for at least 12 months and must be made available for review by the FAA administrator upon request.

Findings: Airfield maintenance personnel conduct airport inspections when they are on site, but this is not every day as maintenance staff are also responsible for two other airports in the area. Self-inspection program documentation and records keeping will need to be established.

Pedestrians and Ground Vehicles (Part 139.329)

The airport is required to limit the access of pedestrians and ground vehicles in movement areas and safety areas to only what is necessary for airport operations. The Airport would need to establish and implement procedures for the safe and orderly access by pedestrians and ground vehicles to and operation in movement areas and safety areas, including provisions identifying the consequences of noncompliance with the procedures by all persons:

- Measures authorized by the administrator for controlling pedestrians and vehicles, such as signs, signals, or guards, when two-way radio communications between the tower and the pedestrian, vehicle, or escort are not operationally practical;
- When an air traffic control tower is not in operation, or there is no air traffic control tower, provide adequate procedures to control pedestrians and ground vehicles in movement areas or safety areas through two-way radio communications or prearranged signs or signals;
- Ensure that all persons are trained on procedures required under paragraph (b) of this section prior to the initial performance of such duties and at least once every 12 consecutive calendar months, including consequences of noncompliance, prior to moving on foot, or operating a ground vehicle, in movement areas or safety areas; and
- Maintain the following records:
    - A description and date of training completed by each individual in compliance with this section.
    - A record for each individual kept for 24 consecutive months after the termination of an individual's access to movement areas and safety areas.
    - A description and date of any accidents or incidents in the movement areas and safety areas involving air carrier aircraft, a ground vehicle, or a pedestrian.
    - Records of each accident or incident kept for 12 consecutive calendar months from the date of the accident or incident.

Findings: Airfield access and familiarization is provided by maintenance staff when coordinated in advance. However, formal training for ground vehicle operators and tenants does not appear to be in place. Vehicles from FBOs and airport tenants were observed driving on taxiways between aprons, without beacons or announcement on Unicom frequency. Access control systems for electric gates and apron access are in place. However, changing of gate codes is done infrequently and unauthorized access is not positively controlled.

Obstructions (Part 139.331)

Certificate holders must ensure that all objects in each area (within its authority) that exceed any of the heights (or penetrate the imaginary surfaces described in 14 CFR Part 77) be removed, marked or lighted. The necessary requirements must be determined by an approved FAA aeronautical study.

Findings: Obstructions to Part 77 transition slopes have trees that have grown in the infields between runways as well as along the primary runway to the east. An AGIS survey currently underway (June 2018) will positively identify penetrations of the Part 77 surfaces and plan an obstacle removal program.

Airport owned lighted X's stored near Runway End 30 may also be penetrations to the transition areas. The recommendation is to relocate the trailers further from the runway environment.

Protection of NAVAIDs (Part 139.333)

The certificate holder must prevent the construction of facilities on its airport that, as determined by the FAA administrator, would derogate the operation of an electronic or visual NAVAID and air traffic control facilities on the airport. The certificate holder must also assist in protecting all NAVAIDs against vandalism and theft and protect against the interruption of the visual or electronic signals of the associated NAVAID.

Jacqueline Cochran Regional Airport is equipped with a Very High Frequency Omnidirectional Range Tactical Air Navigation System (VORTAC) at the airport. In addition, visual approach aids (e.g. PAPIs and VASIs) should be periodically inspected to assure no degradation in service.

Findings: Airport NAVAIDs appear to be well protected and free of visual obstructions. The lights for the Runway 17 VASI are faded and changing of light bulbs is recommended.

Public Protection (Part 139.335)

The certificated airport must provide the following:

- Safeguards to prevent inadvertent entry to the movement area by unauthorized persons or vehicles; and
- Reasonable protection of persons and property from aircraft blast.
    - Fencing that meets the requirements of applicable FAA and Transportation Security Administration security regulations in areas subject to these regulations is acceptable for meeting the requirements of paragraph (a)(l) of this section.

Findings: Public protection fencing around the Airport perimeter appears in good repair, except for the south fence along Avenue 60 adjacent to the Runway End 35 runway protection zone. The south fence is obscured by thick brush and windblown weeds. The buildup of material is a potential wildfire hazard and serves as cover for wildlife, increasing risks for animal and bird strikes with aircraft.

Protection from jet blast effects and prevention of inadvertent admission onto the airport are in place. Maintenance or replacement of older fence sections is recommended. Addition of three strand barb wire extensions to the top of fence is also recommended where it is currently absent.

Wildlife Hazard Management (Part 139. 337)

Under this section, each certificate holder must take immediate action to alleviate wildlife hazards whenever they are detected. The Airport must conduct a wildlife hazard assessment when any of the following events occurs on or near the airport:

- An air carrier aircraft experiences multiple wildlife strikes;
- An air carrier aircraft experiences substantial damage from striking wildlife (substantial damage means damage or structural failure incurred by an aircraft that adversely affects the structural strength, performance, or flight characteristics of the aircraft and that would normally require major repair or replacement of the affected component);
- An air carrier aircraft experiences an engine ingestion of wildlife; or
- Wildlife of a size, or in numbers, capable of causing an event as described above is observed to have access to any airport flight pattern or aircraft movement area.

The wildlife hazard assessment required above must be conducted by a wildlife damage management biologist who has professional training and/or experience in wildlife hazard management at airports or an individual working under direct supervision of such an individual. The wildlife hazard assessment must contain at least the following:

- An analysis of the events or circumstances that prompted the assessment;
- Identification of the wildlife species observed and their numbers, locations, local movements, and daily and seasonal occurrences;
- Identification and location of features on and near the airport that attract wildlife;
- A description of wildlife hazards to air carrier operations; and
- Recommended actions for reducing identified wildlife hazards to air carrier operations.

The wildlife hazard assessment required under this section must also be submitted to the FAA administrator for approval and determination of the need for a wildlife hazard management plan. In reaching this determination, the administrator will consider:

- The wildlife hazard assessment;
- Actions recommended in the wildlife hazard assessment to reduce wildlife hazards;
- The aeronautical activity at the airport, including the frequency and size of air carrier aircraft;
- The views of the certificate holder;
- The views of the airport users; and
- Any other known factors relating to the wildlife hazard of which the administrator is aware.

When the administrator determines a wildlife hazard management plan is needed, the certificate holder must formulate and implement a plan using the wildlife hazard assessment as a basis. The plan must:

- Provide measures to alleviate or eliminate wildlife hazards to air carrier operations;
- Be submitted to, and approved by, the administrator prior to implementation;
- As authorized by the administrator, become a part of the ACM; and
- Include at least the following:
    - A list of the individuals having authority and responsibility for implementing each aspect of the plan.
    - A list prioritizing the following actions identified in the wildlife hazard assessment and target dates for their initiation and completion:
        - Wildlife population management;
        - Habitat modification; and
        - Land use changes.
    - Requirements for and, where applicable, copies of local, State, and Federal wildlife control permits.
    - Identification of resources that the certificate holder will provide to implement the plan.
    - Procedures to be followed during air carrier operations that at a minimum include:
        - Designation of personnel responsible for implementing the procedures;
        - Provisions to conduct physical inspections of the aircraft movement areas and other areas critical to successfully manage known wildlife hazards before air carrier operations begin;
        - Wildlife hazard control measures; and
        - Ways to communicate effectively between personnel conducting wildlife control or observing wildlife hazards and air traffic control.
    - Procedures to review and evaluate the wildlife hazard management plan every 12 consecutive months or following an event described in paragraphs (b)(1), (b)(2), and (b)(3) of this section, including:

        - The plan's effectiveness in dealing with known wildlife hazards on and in the airport's vicinity; and
        - Aspects of the wildlife hazards described in the wildlife hazard assessment that should be reevaluated.
    - A training program conducted by a qualified wildlife damage management biologist to provide airport personnel with the knowledge and skills needed to successfully carry out the wildlife hazard management plan required by paragraph (d) of this section.

Findings: Evidence for wildlife on the airport was seen during the inspection, mostly in the form of burrowing owls under concrete slabs and washed out drainage fixtures. Evidence of coyotes was also seen with footprint tracks in the safety area at Runway End 35. The large areas of vegetation and trees between aprons and runways provides cover for wildlife and may present a source for wildlife hazards on the airport.

Airport Condition Reporting (Part 139.339)

The certificate holder is responsible for the collection and dissemination of information to air carriers serving the airport regarding the conditions at the airport. The airport must use the NOTAM system to report any deficiencies in airport conditions that may affect the safe operations of air carrier activity at the airport. In addition, any construction activity associated with the airport should be reported through the NOTAM system. Also, each certificate holder must provide information on the following airport conditions that may affect the safe operations of air carriers:

- Construction or maintenance activity on movement areas, safety areas, or loading ramps and parking areas;
- Surface irregularities on movement areas, safety areas, or loading ramps and parking areas;
- Snow, ice, slush, or water on the movement area or loading ramps and parking areas;
- Snow piled or drifted on or near movement areas contrary to Part 139.313;
- Objects on the movement area or safety areas contrary to Part 139.309;
- Malfunction of any lighting system, holding position signs, or ILS critical area signs required by part 139.311;
- Unresolved wildlife hazards as identified in accordance with Part 139.337;
- Non-availability of any rescue and firefighting capability required in Part 139.317 or 139.319; and
- Any other condition as specified in the ACM or that may otherwise adversely affect the safe operations of air carriers.

Each certificate holder must also prepare and keep, for at least 12 consecutive calendar months, a record of each dissemination of airport condition information to air carriers prescribed by this section.

Findings: The Airport staff issue NOTAMs for maintenance closures and airfield conditions and activities as needed. Records for the previous 12 months were not available for review, however, so it is unknown if records keeping complies with Part 139 standard.

Identifying, Marking, and Reporting Construction and Other Unserviceable Areas (Part 139.341)

All construction areas on or areas adjacent to any movement area must be properly marked or lighted to prevent any unsafe operating conditions around these areas. The construction areas should be inspected during the daily self-inspection and when construction activities cease for the day. The locations should be described and noted in the daily inspection, and a NOTAM should be issued informing all airport users of the conditions at the airport. Part 139 requires the certificate holder ensure that the following be lighted and/or marked in an appropriate manner:

- Each construction area and unserviceable area on or adjacent to any movement area or any other area of the airport on which air carrier aircraft may be operated;
- Each item of construction equipment and each construction roadway, which may affect the safe movement of aircraft on the airport; and
- Any area adjacent to a NAVAID that, if traversed, could cause derogation of the signal or the failure of the NAVAID.

The certificate holder must also provide procedures, such as a review of all appropriate utility plans prior to construction, for avoiding damage to existing utilities, cables, wires, conduits, pipelines, or other underground facilities.

Findings: Airside construction areas were marked and barricaded appropriately to prevent inadvertent incursions into the work sites. Lighted X systems in storage were viewed, but not checked for operational conditions.

Noncomplying Conditions (Part 139.343)

If the certificated airport cannot maintain compliance with Part 139 requirements, the holder of the certificate must limit the number of air carrier operations to portions of the airport not affected by the noncompliant areas.

Findings: This is not applicable at this time as the Airport is not Part 139 certificated and does not have commercial service.

Part 139 Findings Summary

A 14 CFR Part 139 Class II Certification for Jacqueline Cochran Regional Airport would mean that the airport could accommodate scheduled passenger operations by small air carrier aircraft (10 to 30 passenger seats) and unscheduled (charter) operations by large air carrier aircraft

(more than 31 seats). The previous Airport Master Plan examined the potential use of air carrier and air cargo aircraft at Jacqueline Cochran Regional Airport and found such use to be feasible. The current master plan update supports this conclusion but does not foresee such service in the near future. For this reason, the current master plan update sets aside areas for the development of air passenger and air cargo facilities but does not provide any detailed site information.

Any application for Part 139 certification must await formal application for scheduled or unscheduled air passenger service consistent with the requirements of Part 139.

FUNDING ELIGIBILITY

Presumably, a significant portion (up to 90-95 percent of eligible costs) of the 14 CFR Part 139 initial startup costs could potentially be funded by the FAA. However, the FAA would participate in funding the eligible components only if a serious commitment is demonstrated on the part of a prospective air carrier.

The Airport sponsor must compete with other airports within the region each year for the available Airport Capital Improvement Program (ACIP) discretionary funds. Additionally, there are no guarantees for federal funding. After establishing an operational certificate and regular air carrier service, additional revenues to cover operational and administrative requirements of Part 139 should be derived from facility lease agreements, fuel flowage fees, vehicle parking charges, and landing fees for air carriers. Passenger facility charges (PFCs) are an additional means of raising revenue to help offset these costs.