

Michigan Department of Transportation Airport Manager Examination Study Guide

Michigan Department of Transportation
Aeronautics
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This examination is administered by the Michigan Department of Transportation, Bureau of Aeronautics, to determine the qualifications of persons desiring to be licensed as Airport Managers in the State of Michigan. Each question is worth two points. Successful completion of the exam requires a score of 70 percent or greater.

The examination is not an open book examination.

Notes, books, and similar materials are not to be taken into the examination area when applicants complete this examination.

Persons appearing to take the exam will be required to have a photo identification.

Applicants have one hour to complete the examination.

You may keep this study guide for future reference.

1. Aircraft Registration [Michigan Aeronautics Code section 259.76 - 259.79a]

Aircraft tied down, moored, hangared, or based in Michigan for more than 90 days must be registered annually with the Michigan Aeronautics Commission and a registration fee paid.

- The registration fee is \$.01 per pound gross weight.
- Aircraft registration fees shall be in lieu of all property taxes on the aircraft, either general or local.

Aircraft not subject to the registration provisions are:

- A. Aircraft owned by the United States government.
- B. An aircraft of a resident of another state.
- C. Aircraft of a resident of this state that is based in another state, having complied with the registration requirements of that state, and operating within this state for a period of not more than 90 days in a calendar year.
- D. An aircraft which, in the opinion of the commission, is in a condition that would reasonably preclude its operation during the registration period.

When the owner of a registered aircraft sells, transfers, or assigns his or her interest, the registration certificate shall be returned to the commission within 15 days. Within 15 days, the purchaser shall apply for the transfer of the registration certificate. The fee for the transfer of the registration certificate shall be \$5.00.

2. Flying Clubs [Michigan Aeronautics Code Section 259.91]

A **flying club** means any group of persons owning, leasing, or operating 1 or more aircraft, not for profit or reward, and using the aircraft for the purpose of providing its members with an aircraft for their personal use and enjoyment.

Ownership of a flying club aircraft shall be vested in the name of the flying club or owned in equal shares by all of its members

3. Flight Schools [Michigan Aeronautics Code section 259.85]

Flight schools are required to be licensed by the Bureau of Aeronautics.

Definition: A flight school is any person providing or offering to provide flight training leading to pilot or flight instructor certification, for hire or compensation, and engaged in any of the following:

- Advertising or calling oneself a flight school or anything equivalent to a flight school.
- Hiring, contracting, or otherwise using 1 or more flight instructors.
- Providing aircraft for the purpose of flight training.

Aircraft Requirements: Each aircraft used for flight instruction must:

- Have a valid airworthiness certificate.
- Be properly registered with the Michigan Aeronautics Commission.
- Have the equipment and performance characteristics appropriate to the curriculum and the airport to be used.

Flight School Requirements: A flight school must:

- Be operated from an airport properly licensed by the commission.
- Have a written curriculum, including lesson plans.
- Have a flight instructor available to dispatch and supervise each student pilot solo flight.
- Have a copy of the airport and flight school regulations available to the students enrolled in the school.

Operating Agreement with the Airport: A flight school operator shall secure from the airport manager a written agreement to operate commercially from the airport at which the flight school is based.

Surety Bond: If the flight school accepts prepayment equal to or in excess of \$1,000, it must file with the Michigan Aeronautics Commission a corporate surety bond payable to the State of Michigan in the sum of \$5,000 conditioned on the faithful performance of all contracts and agreements with students.

4. Airport Facilities - Tampering [Michigan Aeronautics Code Section 259.181]

It is unlawful for any person to tamper with, alter, destroy, remove, carry away, or cause to be carried away, any objects used for the marking of airports, landing fields, or other aeronautical facilities, or in any way change their position or location, except by the direction of the proper authorities charged with the maintenance and operation of such facilities. Any person violating these provisions shall be guilty of a misdemeanor.

5. Animals [Michigan Aeronautics Code Section 259.182]

It is unlawful for anyone to allow domestic animals to run at large and enter or be upon any premises constituting an airport, landing field or other aeronautical facility.

6. Aircraft - Tampering/theft [Michigan Aeronautics Code Section 259.183]

A person who shall willfully and without authority take possession of or use an airplane, or unlawfully remove or take any component parts of an airplane, and a person who shall assist in, or be a party to taking illegal possession of or use of an airplane or component parts belonging to another, and a person who willfully and unlawfully makes an aircraft unsafe, and a person who assists in, or is a party to making an aircraft unsafe, is guilty of a felony, punishable by imprisonment in the state prison for not more than 5 years.

7. **Trespassing** [Michigan Aeronautics Code Section 259.184]

A person who trespasses upon the area within the boundary of an approved or licensed airport, landing field, or other aeronautical facility, or operates or causes to be operated a vehicle or device, or who conducts an activity upon or across an airport, unless that operation or activity is authorized by the airport management, is guilty of a misdemeanor.

8. **Commercial Operations** [Michigan Aeronautics Code]

Commercial activity or operations means an activity or operation such as the sale of gasoline or oil, the soliciting or engaging in charter flying or flight instruction, the provision of shelter or the tie-down of an aircraft, the overhaul or repair of an aircraft or of engines, or other activity or operation that offers aeronautic facilities or services to the public.

Commercial operations may not be performed on any landing area other than a certificated landing area (Section 259.86 (9)). [Commercial aeronautical activities may not be conducted on private use landing areas.]

No person shall use an airport or landing area as a base or terminal for the carrying on of commercial aviation, the transportation of passengers, freight, express or mail, student flying, or private purposes of transportation without first securing a permit from the manager or assistant manager and paying the fees.

9. **Aircraft Accidents/incidents** [NTSB 830]

The National Transportation Safety Board (NTSB) is responsible for the investigation of aircraft accidents. Occasionally, on minor accidents, that authority is delegated to the Federal Aviation Administration. NTSB regulation 830 outlines the requirements for notification to the NTSB of accidents or incidents. [The NTSB field offices are listed under U.S. Govt. the telephone directories -- see West Chicago, IL.]

Part 830 is summarized below.

Definitions:

Aircraft accident: an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight and all such persons having disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage.

Civil aircraft: any aircraft other than a public aircraft.

Fatal injury: any injury which results in death within 30 days of the accident.

Incident: an occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

Operator: any person who causes or authorizes the operation of an aircraft, such as the owner, lessee, or bailee of an aircraft.

Serious injury: any injury which: (1) requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; (2) results in a fracture of any bone (except simple fractures of fingers, toes, or nose); (3) causes severe hemorrhages, nerve, muscle, or tendon damage; (4) involves any internal organ; or (5) involves second or third degree burns, or any burns affecting more than 5 percent of the body surface.

Substantial damage: damage or failure which adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component.

The following is not considered substantial damage: Engine failure or damage limited to an engine if only one engine fails or is damaged, bent fairings or cowling, dented skin, small puncture holes in the skin or fabric, ground damage to rotor or propeller blades, and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wingtips.

Notification Requirements *[Note: Although not specifically stated in the NTSB regulations, the FAA and NTSB have agreed that the best way to contact the NTSB is by calling the FAA Flight Service Station. When advising FSS of an accident or incident, they will contact the FAA Flight Standards District Office and the NTSB.]*

The operator of any civil aircraft shall immediately, notify the nearest NTSB field office when:

- A. An aircraft is overdue and is believed to have been involved in an accident.
- B. An aircraft accident or any of the following listed incidents occur:
 1. Flight control system malfunction or failure
 2. Inability of any required flight crew member to perform normal flight duties as a result of injury or illness
 3. Failure of structural components of a turbine engine excluding compressor and turbine blades and vanes
 4. In-flight fire or
 5. Aircraft collide in flight
 6. Damage to property, other than the aircraft, estimated to exceed \$25,000 for repair (materials and labor) or fair market value in the event of total loss, whichever is less
 7. For large multi-engine aircraft (more than 12,500 pounds max. takeoff wt)
 - A. In-flight failure of electrical systems which requires the sustained use of an emergency bus powered by a backup source such as a battery, auxiliary power unit, or air driven generator to retain flight control or essential instruments
 - B. In-flight failure of hydraulic systems that results in sustained reliance on the sole remaining hydraulic or mechanical system for movement of flight control surfaces
 - C. Sustained loss of the power or thrust produced by two or more engines and
 - D. An evacuation of an aircraft in which an emergency egress system is utilized

Information to be given in notification:

2. Type, nationality, and registration marks of the aircraft
2. Name of owner and operator of the aircraft
3. Name of the pilot in command
4. Date and time of the accident
5. Last point of departure and point of intended landing of the aircraft
6. Position of the aircraft with reference to a geographical point
7. Number of persons aboard, number killed, and number seriously injured
8. Nature of the accident, the weather and the extent of damage to the aircraft
9. Description of any explosives, radioactive materials, or other dangerous articles carried

Preservation of aircraft wreckage, mail, cargo, and records.

- A. The operator of an aircraft involved in an accident or incident for which notification must be given is responsible for preserving to the extent possible any aircraft wreckage, cargo, and mail aboard the aircraft, all records, including all recording mediums of flight, maintenance, and voice recorders, pertaining to the operation and maintenance of the aircraft and the airmen until the NTSB takes custody thereof or a release is granted.
- B. Prior to the time the NTSB or its authorized representative takes custody of aircraft wreckage, mail, or cargo, such wreckage, mail, or cargo may not be disturbed or moved except to the extent necessary:
 1. To remove persons injured or trapped;
 2. To protect the wreckage from further damage; or
 3. To protect the public from injury.
- C. Where it is necessary to move aircraft wreckage, mail, or cargo, sketches, descriptive notes, and photographs shall be made, if possible, of the original positions and condition of the wreckage and any significant impact marks.
- D. The operator of an aircraft involved in an accident or incident shall retain all records, reports, internal documents, and memoranda dealing with the accident or incident, until authorized by the NTSB to the contrary.

Reports and statements to be filed:

- A. **Reports.** The operator of a civil, public, or foreign aircraft shall file a report on NTSB Form 6120.1/2 (OMB No. 3147-0001) within 10 days after an accident, or after 7 days if an overdue aircraft is still missing. A report on an incident for which immediate notification is required by Sec. 830.5(a) shall be filed only as requested by an authorized representative of the NTSB. [Forms are available from the NTSB field offices (see footnote 1), from NTSB headquarters in Washington, DC, and from the Federal Aviation Administration Flight Standards District Offices.]
- B. **Crew member statement.** Each crew member, if physically able at the time the report is submitted, shall attach a statement setting forth the facts, conditions, and circumstances relating to the accident or incident as they appear to him. If the crew member is incapacitated, he shall submit the statement as soon as he is physically able.
- C. **Where to file the reports.** The operator of an aircraft shall file any report with the field office of the NTSB nearest the accident or incident.

10. Disposal of Wrecked Aircraft [MAC Rule 259.80c]

An aircraft owner, pilot or authorized agent is responsible for the prompt disposal of a wrecked aircraft and its parts to avoid interference with aircraft operations, unless specifically directed by the airport manager, commission, state police, or appropriate federal agency to delay removal pending investigation.

Participants in an accident at or near a licensed aeronautical facility shall report to the airport manager or responsible authorities as soon after an accident as possible.

11. Traffic Patterns [Aeronautical Information Manual - AIM]

The standard traffic pattern around an airport is **left** traffic; i.e. all turns are made to the left.

Airports with non-standard traffic patterns (i.e. right traffic instead of standard left traffic) must have a segmented circle with traffic pattern indicators showing non-standard traffic.

Standard traffic pattern altitudes are **1000'** AGL. At one time in Michigan, traffic patterns were 800' AGL; however, the Federal Aviation Administration (in the Aeronautical Information Manual) recommends 1000' AGL as the standard traffic pattern altitude. In 1996, the Michigan Aeronautics Code was revised to conform to federal recommendations.

Some airports may have a different pattern altitude established by the local authorities to stay below controlled airspace that may overlay that airport.

12. Minimum Altitudes [Michigan Aeronautics Code ACT 327, Section 259.80e]

Except when necessary for takeoff or landing, an aircraft shall not be flown at the following locations:

- Over any congested area of a city or village at an altitude below that which, if a power unit fails, will permit an emergency landing without undue hazard to persons or property on the surface, and in no case less than 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet from the aircraft.
- Over any other area at an altitude of less than 500 feet above the surface, except over open water or sparsely populated areas, in which case the aircraft shall not be operated less than 500 feet from any person, vessel, vehicle, or structure.
- A helicopter may be flown at altitudes less than the minimums prescribed in subsection (1), if the operation is conducted without hazard to persons or property on the surface.

Note: Federal Aviation Regulations [FAR 91] provides that, except when landing or taking off, aircraft must maintain an altitude of at least 500 feet from persons or occupied buildings.

13. Responsibility of Airport & Asst. Manager [Michigan Aeronautics Code Section 259.86c]

The Michigan Aeronautics Code provides for certain duties and responsibilities of the airport manager.

Those responsibilities include:

- Compliance with the airport requirements for the class under which the airport is licensed and maintained
- The authority to take action authorized by law as may be necessary in the handling, conduct, and management of the public at the airport.

An airport manager or assistant manager is empowered to enforce the rules and regulations of the commission.

An airport manager or assistant manager is empowered to determine that all pilots operating on the airport have appropriate and effective valid certificates issued by the appropriate state and federal agencies.

14. Aircraft Fueling & Fire Safety [NFPA 407 Standard for Aircraft Fuel Servicing]

Fueling aircraft in hangars is not permitted under any condition.

Aircraft fuel servicing shall be done outdoors. (NFPA 407 3-10.1).

The dispensing, transfer or storage of flammable or combustible liquid shall not be permitted inside of or upon any building or structure (NFPA section F-800.2.).

Fuel servicing may not be done on an aircraft with an engine operating. (NFPA 407 3-5.1)

The engines of any aircraft shall not be run in any aircraft hangar except in approved engine-test areas (NFPA section 802.6.).

A person shall not clean any aircraft, engine or part of an aircraft or engine with any Class I flammable liquid (NFPA section 802.2).

Smoking shall be prohibited on loading and servicing ramps or within 50 feet of any parked aircraft (NFPA section 802.5.).

A "No Smoking" sign shall be posted prominently in the cab of every aircraft fuel servicing vehicle. (NFPA 407 2-3.11.1)

Entrances to fueling areas shall be posted with "No Smoking" signs (NFPA 407 3-8.1)

Personnel shall not carry lighters or matches on their person while engaged in fuel servicing operations. (NFPA 407 3-8.5)

Lighters or matches are prohibited on or in fueling equipment. (NFPA 407 3-8.6)

Fuel servicing operations shall be suspended when there are lightning flashes in the immediate vicinity of the airport. (NFPA 3-9.1)

Each aircraft fuel servicing tank vehicle shall have two listed extinguishers each having a rating of at least 20B, mounted one on each side of the vehicle (NFPA 401 2-3.9.1)

Only authorized personnel trained in the safe operation of the equipment they use, in the operation of emergency controls, and in procedures to be followed in an emergency shall fuel or defuel aircraft (NFPA 407 3-1.1)

A provision for bonding shall be incorporated in the design of fuel servicing vehicles and systems to prevent differences in electrostatic potential (NFPA 407 2-1.2.1)

Prior to making any fueling connection to the aircraft, the fueling equipment shall be bonded to the aircraft by use of a cable to provide a conductive path to equalize potential between the fueling equipment and the aircraft. (NFPA 3-4.1)

15. NOTAMs [Advisory Circular AC 150-5200-28]

The Notice To Airmen (NOTAM) system disseminates information on unanticipated or temporary changes to components of, or hazards in, the National Airspace System until the associated aeronautical charts and related publications have been amended. The NOTAM system is not intended to be used to advertise data already published or charted.

The management of a civil airport is expected to make known, as soon as practical, any condition on or in the vicinity of the airport which would prevent, restrict, or present a hazard to arriving or departing aircraft.

Airport operators are responsible for providing the appropriate Air Traffic Control facility (normally the Flight Service Station) with a list of employees authorized to furnish NOTAM data. Notice To Airmen (NOTAM) information is filed with the FAA Flight Service Station.

16. Alcohol [Michigan Aeronautics Code Section 259.185]

Section 259.186 of the aeronautics code states in part: "The owner of an aircraft or the person in charge or in control of an aircraft shall not knowingly permit the aircraft to be operated...by a person who is under the influence of intoxicating liquor or a controlled substance...that renders a person incapable of safely operating an aircraft." "...It shall be presumed that the operator was under the influence of intoxicating liquor if the person's blood at the time contained 0.02 grams or more per 100 milliliters of blood."

It is unlawful for a person to operate an aircraft within the state of Michigan if they have consumed an intoxicating liquor or controlled substance within 8 hours before operating an aircraft.

17. Property Taxes [Act 206 of 1893 section 211.7y.]

On privately owned, public use airports, certain portions of the airport are exempt from personal property tax. A landing area for which a fee [airport license fee] was paid is exempt from taxation.

Landing area means that portion of a privately owned, public use airport which is properly cleared and regularly maintained and made available to the public without charge for use by aircraft and not used for commercial, residential or agricultural purposes. This includes runways, taxiways, and stopways.

18. Seller Disclosure Act [Act 92, PA 1993]

A person selling property in Michigan must disclose to the purchaser information concerning the proximity of an airport under the following conditions:

- if the property is within 3 miles of an airport that has scheduled passenger airline service
- if the property is within 2 miles of all other airports.

19. Underground Storage Tanks [Act 423, PA 1984 and Act 151, PA 1989]

Underground storage tank system means a tank or combination of tanks, including underground pipes connected to the tank or tanks, which is, or may have been, used to contain an accumulation of regulated substances.

An owner of an underground storage tank must register the storage tank system with the Department of Environmental Quality (DEQ).

The owner of an underground storage tank system shall notify the Department of Environmental Quality (DEQ) of the removal of an underground storage tank system from service.

If there is a suspected or confirmed release from an underground storage tank system, the owner or operator of the underground storage tank system shall notify the Department of Environmental Quality (DEQ).

20. Airport Marking [AC 150/5340]

Pavement markings on runways, including displaced threshold markings, are white. Pavement markings on taxiways are yellow. A temporarily closed runway may be marked with yellow crosses or "X" markers

21. Airports & Licenses [Michigan Aeronautics Code Section 259.86a]

Airport: any location, either on land or water, that is used for the landing or take-off of aircraft, including the building and facilities, if any, on that location.

Airport manager: any individual who is properly appointed and designated by the airport owner as the airport manager, and who is responsible for the supervision and operation of the airport to the airport owner.

Landing field: any location, either on land or water, that is used for the landing or take-off of aircraft.

Landing area: an area of an airport, landing field, or other aeronautical facility used or intended for use in landing, taking off, or taxiing of aircraft, excluding area and facilities for shelter, servicing, or repair of aircraft or for receiving or discharging passengers or cargo.

Private landing area: any location, either on land or water, that is used for the take-off or landing of aircraft and is to be used by the owner or persons authorized by the owner. Commercial operations shall not be conducted on private landing areas.

Public use facility: an airport, landing field, or other aeronautical facility that is available for use by the general public without prior approval of the owner or operator.

Michigan airport licensing requirements:

Public use airports in Michigan must be licensed by the Bureau of Aeronautics. Licenses are issued at the time of inspection. Unless otherwise stated on the airport license or suspended for non-compliance with licensing requirements, airport licenses expire December 31 each year.

The State of Michigan has **three license classes** for public use airports:

1. Air Carrier
2. General Utility
3. Basic Utility

All state licensed airports, open for public use, must have:

1. a permanent monument on the runway centerline,
2. a licensed airport manager,
3. a windsock.

Approach requirements:

The operator of a licensed airport in Michigan must maintain runway approaches to provide adequate clearance for aircraft operating on that runway. The minimum allowable approach clearance to the runway threshold or displaced threshold is as follows:

APPROACH TYPE	APPROACH SLOPE REQUIREMENT
Visual runway (ex.: no instrument approach or visual approach , i.e. VOR A)	20:1
Non precision instrument runway (ex.: NDB RWY 36, VOR RWY 8)	34:1
Precision instrument runway (ex.: ILS RWY 23)	50:1

Visual runways must have a clear 20:1 approach means to either the runway end or displaced threshold: i.e. for every 20 feet of distance from the runway, one foot of elevation is allowed.

Non-precision instrument runways must have a clear 34:1 approach slope.

Precision instrument runways must have a clear 50:1 approach slope.

The table below for the requirements for each class of airport.

STATE AIRPORT LICENSE REQUIREMENTS	Basic Utility	General Utility	Air Carrie
Annual License Fee	\$25	\$50	\$100
Runway			
Minimum landing length (each direction)	1,200'	1,800'	
Unpaved - minimum width	50'	100'	
additional area on each side clear of obstruction	25'		
Paved - minimum width	25'	35'	
additional area on each side clear of obstruction	38'	107.5'	
State primary surface width minimum (no less than runway width)	100'	250'	
Crosswind rwy must meet requirements for basic aprt	yes	yes	
APPROACH SURFACE Begins at runway end on unpaved runways. Begins 200' from the runway end on paved runways.			
Approach surface shape	rectangle	trapezoid	
Length	5000'	5000'	
Width at primary surface end minimum (no less than rwy width)	100'	250'	
Width at opposite end	100'	1200'	
Approach slope ⁽¹⁾	20:1	20:1	
clearance over road	15'	15'	
clearance over interstate highway	17'	17'	
clearance over railroad	23'	23'	
clearance over property line	25'	25'	
OTHER REQUIREMENTS			
Licensed manager	yes	yes	yes
Permanent monument on runway centerline (C/L)	yes	yes	
Pilot aids:			
Runway surface marking on paved runways	Yes, must conform to FAA standards.	C/L & rwy numbers meet FAA stds.	
Runway marking on unpaved runways		Must meet commission stds.	

STATE AIRPORT LICENSE REQUIREMENTS	Basic Utility	General Utility	Air Carri
Wind cone	yes	yes - must be lighted	
Runway lighting	Not required. If available, meet FAA color & layout	Required. Must conform to FAA color & layout stds	
Segmented circle	Req'd if right traffic	Req'd if right traffic	
Services required:			
Administration building w/sanitary facilities	no	yes	
Adequate means to deter unauthorized/inadvertent access to aircraft operations area	no	yes	
Phone avail. 24 hrs/day. Location indicated	no	yes	
Emergency serv. plan adopted by the airport owner	no	yes	
Airport rules & regulations adopted & available to the public	no	yes	
Aircraft parking & tie downs, including ropes, chains or equivalent	no	yes	
Valid airport operating certificate (FAR 139)	no	no	yes

22. Tall Structures

Federal Aviation Regulation (FAR) Part 77 requires that anyone proposing to construct anything which may obstruct the use of airspace by aircraft to provide a notice to that effect to the FAA. Generally, construction proposals in the vicinity of airports may obstruct airspace. Notice is required for anything which may affect landing areas, either existing or planned, which are open to the public, or are operated by one of the armed forces.

Michigan's Tall Structure Act (Michigan Aeronautics Code, Act 259 of 1959) requires anyone proposing to construct anything which may obstruct airspace to obtain a Tall Structure Permit from Michigan DOT's Bureau of Aeronautics. The criteria for requiring a Tall Structure Permit are virtually identical to the FAR Part 77 criteria for notice to the FAA.

Permit filing requirements: Most applications for a Tall Structure Permit are copies of the FAA Form 7460-1 "Notice of Proposed Construction or Alteration" that are forwarded to MDOT Bureau of Aeronautics by FAA. However, MDOT Bureau of Aeronautics requests each proponent submit a separate copy to MDOT Bureau of Aeronautics when submitting to FAA.

When to file a permit application: This is a guide for preparation of FAA's Form 7460-1 and its use as an application for a Tall Structure Permit.

If the proposed construction or alteration meets the following criteria, FAA Form 7460-1 should be submitted:

Anything over 200' AGL (above the ground at its site).

Proposals in the vicinity of an airport, if the proposal would be higher than a slope from the nearest point on a runway and increasing its elevation at a ratio of:

<u>Longest runway length</u>	<u>Proximity to closest runway</u>	<u>Slope</u>
More than 3200 feet	Within 20,000 ft.	100 to 1
3200 feet or less	Within 10,000 ft.	50 to 1
For a Heliport	Within 5,000 ft.	25 to 1

23. Aeronautical Advisory Stations (UNICOMS) [Federal Communications Commission (FCC) Regulations 47 CFR Sub part G]

An aeronautical advisory (Unicom) station is an aeronautical station used for advisory and Civil Defense communications primarily with private aircraft stations.

A station license must be obtained from the Federal Communications Commission (FCC) for operation of an aeronautical advisory (Unicom) station by filing an application with the FCC.

An applicant for a Unicom license, renewal or modification of frequency assignment at an airport which does not have a control tower, RCO or FAA flight service station must notify in writing the owner of the airport and all aviation service organizations located at the airport.

Only one Unicom frequency will be assigned at any one airport. The FCC will assign a frequency based on maximum geographic channel separation.

An aeronautical advisory station (Unicom) must provide service to any aircraft station upon request and without discrimination. A Unicom must provide impartial information concerning available ground services.

Unicom transmission must be limited to the necessities of safe and expeditious operation of aircraft, such as condition of runways, types of fuel available, wind conditions, weather information, dispatching, or other necessary information. At any airport at which a control tower, control tower remote communications outlet station (RCO), or FAA Flight Service Station (FSS) is located, Unicoms must not transmit information pertaining to the conditions of runways, wind conditions, or weather information during the hours of operation of the control tower, RCO or FAA FSS.

Unicoms must not be used for Air Traffic Control (ATC) purposes other than to relay ATC information between the pilot and air traffic controller.

Only one unicom will be authorized to operate at an airport which does not have a control tower, RCO or FAA flight service station.

24. State and Federal Regulations

Often, during the course of his or her duties, an airport manager needs to refer to various federal aviation regulations (FARs), state regulations and advisory circulars. It is not reasonable to expect a person to thoroughly know the contents of each and every regulation, however, airport personnel are expected to be generally familiar with the regulations and the areas covered by each.

Following are examples of situations that may be encountered by an airport manager. Knowing where to find the regulation pertaining to the situation and a familiarity with the regulation will be beneficial to the manager in resolving problems.

1. Airport leases sometimes prohibit mechanical work on aircraft in hangars except for that permitted by an aircraft owner under federal regulations. A listing of the maintenance tasks that may be performed by an aircraft owner are found in FAR Part 43.
2. A manager receives a complaint from an nearby resident regarding low flying aircraft. The manager should be familiar with provisions in FAR Part 91 which governs how aircraft are to be operated and under what conditions a pilot may deviate from minimum altitude requirements.
3. A pilot requests the airport allow construction of a new hangar on the airport. The notification requirements are contained in FAR Part 157.
4. A radio antenna is proposed for construction near the airport. The proponent of the antenna is required to notify both the FAA and the Michigan Bureau of Aeronautics. Regulations concerning how the antenna may be allowed is and how notification shall be made is contained in FAR Part 157 and in the Michigan Tall Structures Act. Marking requirements for the tower, if it is determined to be a hazard are contained in FAR Part 77.

Federal Aviation Regulations The following federal regulations will be used most often by airport personnel.

- 43 Aircraft Maintenance, Preventive Maintenance** - Describes maintenance aircraft owners may perform on their aircraft.
- 61 Certification of Pilots and Flight Instructors** - Describes pilot certificate requirements.
- 77 Objects Affecting Navigable Airspace** - Covers construction of objects on or near airports that may be a hazard to air navigation.
- 91 General Operating and Flight Rules** - The rules governing flying.
- 103 Ultra light Vehicles** - Pertains to recreational aircraft that weigh less than 254 pounds and have a fuel capacity not exceeding 5 U.S. gallons.
- 105 Parachute Jumping** - Regulations pertaining to skydiving.
- 121 Air Carrier Operators** - Pertains to the operation of commercial air carriers.
- 135 Air Taxi Operators and Commercial Operators** - Regulations pertaining to “on demand” or “charter” air transportation.
- 139 Operation of Air Carrier Airports** - Regulations for airports that generally have FAR Part 121 air carrier traffic, although some smaller airports have a FAR 139 certificate but do not have a regular air carrier.
- 151 Federal Aid to Airports** - Regulations pertaining to receiving federal assistance for construction or development on airports.
- 157 Notice of Construction, Alteration, Activation, and Deactivation of Airports** (Outlines requirements for notifying the FAA when an airport is established, closed, or abandoned or when structures are constructed on or near an airport.

Advisory Circulars (available from: U.S. Dept. of Transportation, Publications Section, M-494.1, Washington, D.C. 20590)

Technical information concerning airport construction, marking, and airport operations are contained in several advisory circulars. To assist in the administration of their airport, airport manager's are advised to secure copies of the most pertinent circulars:

AC 70/7460-2 Proposed Construction/Alteration of Objects that may affect the Navigable Airspace
AC 150/5200-18 Airport Safety Self Inspections
AC 150/5200-28 Notices to Airman (NOTAMS) for Airport Operators
AC 150/5230-4 Aircraft Fuel Storage, Handling, and Dispensing on Airports
AC 150/5300-13 Airport Design Guide
AC 150/5340-1 Marking of Paved Areas on Airports

Acronyms And Abbreviations

AC Advisory Circular
Acft Aircraft
AFSS Automated Flight Service Station (FAA)
ADO Airports District Office (FAA)
AGL Above Ground Level
AIM Aeronautical Information Manual
Amgr Airport manager
AOPA Aircraft Owners and Pilots Association
Arpt Airport
ATC Air Traffic Control
ATCT Air Traffic Control Tower
BRL Building Restriction Line
C/L Center line
CTAF Common Traffic Advisory Frequency (used at airports without control tower)
DEQ Department of Environmental Quality
FAA Federal Aviation Administration
FAR Federal Aviation Regulation
FBO Fixed Base Operator
FCC Federal Communications Commission
FSDO Flight Standards District Office (FAA)
FSS Flight Service Station (FAA)
GPS Global Positioning System
HIRL High Intensity Runway Lights
Hwy Highway
IFR Instrument Flight Rules
ILS Instrument Landing System
LIRL Low Intensity Runway Lights
MAC Michigan Aeronautics Commission
METAR Aviation Weather Report (Meteorological Aviation Report)
MDOT Michigan Department of Transportation
MIRL Medium Intensity Runway Lights
MSL Mean Sea Level
NDB Non Directional Radio Beacon
NFPA National Fire Protection Association
NOTAM Notice To AirMen

NTSB	National Transportation Safety Board
OMB	Office of Management and Budget (Federal)
PAPI	Precision Approach Path Indicator (lights)
RCO	Remote Communications Outlet
REIL	Runway End Identifier Lights
req'd	Required
RWY	Runway (also sometimes RY)
stds	Standards
TWR	Tower
TXY	Taxiway (also sometimes TY)
VASI	Visual Approach Slope Indicator (lights)
VFR	Visual Flight Rules
VOR	Very High Frequency Omni Range (sometimes VORTAC - adds "TACAN")
UNICOM	Aeronautical Advisory Station