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1. Authority (Law)
2. General Regulations.
3. Airport, Landing Field and
Emergency Landing Strip Reg-
ulations.
4. Air Instruction Regulations.
5. Air Traffic Rules.
6. Exemptions.

AUTHORITY: LAW

"Airport" means any area, either of land or water, which is used or which is made available for the landing and take-off of aircraft, and which provides facilities for the shelter, supply and repair of aircraft, and which, as to size and design, has at least 1,800 feet of effective landing length in all directions, with clear approaches, and which field shall be in good condition for landing at all times, or has landing strips not less than 500 feet wide, permitting landing in at least six directions at all times, with at least one landing strip aligned with the general direction of the prevailing wind, the landing strip not to cross or converge at angles of less than 40 degrees, nor any one of the landing strips to be less than 1800 feet in effective length with clear approaches, or has two landing strips, one aligned with the general direction of the prevailing wind, permitting at least 4-way landing at all times and having clear approaches, the landing strips to be at least 500 feet wide and at least 2,500 feet in effective length, and not to cross or converge at any angle less than 80 degrees; and which, in any case hereinbefore mentioned, meets the minimum requirements as to surface, marking, equipment, and management as may from time to time be provided, by the Minnesota Aeronautics Commission.

"Landing Field" means any area, either of land or water, which is used or which is made available for the landing and take-off of aircraft, which may or which may not provide facilities for the shelter, supply and repair of aircraft, and which meets the minimum requirements as to size, design, surface marking, equipment and management as may from time to time be provided by the Minnesota Aeronautics Commission.

"Emergency Landing Strip" means an area, either of land or water, which is available for the landing and take-off of aircraft, having not less than 200 feet of usable width and not less than 1,000 feet of usable length, the use of which shall, except in case of emergency, be only as provided from time to time by the regulations of the Minnesota Aeronautics Commission.

"Air Instruction" means the imparting of aeronautical information in any air school, flying club, or by any aviation instructor.

Any person engaged in giving instruction, or offering to give instruction in aeronautics - either in flying or ground subjects, or both - for or without hire or reward, and advertising, representing, or holding himself or itself out as giving or offering to give such instruction, shall be termed and considered an "Air School".

Any person (other than an individual) who, neither for profit nor reward, owns, leases, or uses one or more aircraft for the purpose of instruction, pleasure, or both, shall be termed and considered a "Flying Club".

"Aviation Instructor" means any individual engaged in giving instruction, or offering to give instruction, in aeronautics - either in flying or ground subjects, or both - for or without hire or reward, without advertising such occupation, without calling his facilities an "Air School" or anything equivalent thereto, or without employing or using other instructors. (ACT TO REGULATE AERONAUTICS, SEC. 1)

The commission shall have supervision over the aeronautical activities and facilities within the State, which authority shall include supervision and control over all airports, landing fields, emergency landing strips, air instruction.....Accordingly the commission is empowered to prescribe such reasonable rules and regulations as it may deem necessary and advisable for the public safety and for the promotion of aeronautics governing the designing, laying out, location, building, equipping, and operation, and use, of all airports, landing fields, or emergency landing strips. The commission is further empowered to prescribe such reasonable rules and regulations as it may deem necessary governing the curriculum, equipment, personnel, and operation and management of all air instruction for the purpose of protecting the health and safety of students receiving or to receive such instruction, and insuring, so far as may be, the public safety through the proper training and instruction of student aviators.....The commission is further empowered to prescribe such

reasonable air traffic rules and other regulations as it shall deem necessary for public safety and the safety of those engaged in aeronautics, and for the promotion of aeronautics;.....(ACT TO REGULATE AERONAUTICS, SEC. 10)

All owners and/or operators of all airports, landing fields, air schools, and flying clubs.....shall make application to the commission for its approval of such airport, landing field, air school, flying club.....All proposed airports, landing fields, air schools, flying clubs,.....shall first be approved by the commission before they or any of them shall be so used or operated. It shall be unlawful for any airport, landing field, air school, flying club.. ..to be used or operated without the approval of the commission; and it shall be unlawful for any aircraft, except in case of emergency, to land upon or take off from any area in the State of Minnesota, other than an airport, landing field, or emergency landing strip;..... The commission is hereby authorized to issue a certificate of its approval in each case and to make the following charges therefor:

For issuance of each annual airport license.....\$10.00
 For issuance of each annual landing field license.\$10.00
 For issuance of each annual air school license....\$10.00
 For issuance of each annual flying club license, no fee shall be charged.

(ACT TO REGULATE AERONAUTICS, SEC. 12)

Any person failing to comply with the requirements of, or violating any of the provisions of this Act, or the rules and regulations for the enforcement of this Act made by the Minnesota Aeronautics Commission, shall be guilty of a misdemeanor and punishable by a fine of not more than five hundred dollars, or by imprisonment for not more than ninety days or both. (ACT TO REGULATE AERONAUTICS, SEC. 20).

GENERAL REGULATIONS

1. AIRCRAFT FROM OTHER STATES:

(1) Federally licensed aircraft and pilots from states other than Minnesota will not be required to register their licenses with the State of Minnesota for

a period of 30 days unless

- (a) Commercial intrastate operations are to be conducted within the State of Minnesota, in which case registration is required before the conducting of such commercial intrastate operations.
- (2) Aircraft flying within the State of Minnesota in interstate operations not scheduled, will not be required to register with the State of Minnesota.
- (3) All aircraft flying within the State of Minnesota, shall observe the Minnesota Rules and Regulations, pertaining to Aircraft.

II. LICENSES:

- (1) The State of Minnesota will not inspect any aircraft or examine any pilot for the purpose of granting a state license. The Federal licenses issued by the Department of Commerce of the United States are required by state statute and are the only ones so required or recognized.
- (2) Federally licensed pilots and persons holding federally issued student permits shall enjoy the privileges conferred and observe the restrictions imposed upon them by the holding of such pilot's license or student permit.

III. SALE OF LICENSED AIRCRAFT:

- (1) In the event of sale or transfer of title of licensed aircraft, the recorded owner shall fill in the reverse side of his Aircraft Registration Certificate and mail to the Minnesota Aeronautics Commission, State House, St. Paul. The purchaser will be sent a new application form and upon receipt of this, properly executed, the Minnesota Aeronautics Commission will send him a new Certificate of Registration.

IV. REPAIRS TO AIRCRAFT:

- (1) A licensed aircraft which has been damaged and which still retains its license, shall not be flown until it

has been fully repaired and such repairs approved and logged by a federally licensed mechanic.

- (2) A licensed aircraft with newly installed engines, and aircraft upon which major repairs have been made to the plane structure, shall be first test flown solo before carrying passengers.

V. RESPONSIBILITY OF OWNER:

- (1) The owner of a licensed aircraft shall not permit the same to be flown by any person other than a licensed pilot who is qualified for the type of operation involved.

VI. OTHER SYMBOLS AND MARKS:

- (1) No design, mark, character, symbol, material or description shall be placed upon aircraft if said design, etc., modifies, adds to, or subtracts from or confuses the assigned numbers and letters or impairs or destroys their visibility.

VII. ACCIDENTS AND ACCIDENT REPORTS:

- (1) REMOVAL OF AIRCRAFT: No aircraft involved in an accident in this State, in which there is structural damage and in which there is serious injury to any person, or which results in death, shall be removed from the scene of the accident, nor shall its condition be altered, until it has been inspected or its removal or operation authorized by the Minnesota Aeronautics Commission or its duly authorized representative.
- (2) ACCIDENT REPORTS: Where serious injury to person or property is suffered or where death results from the operation of aircraft, the recorded owner and/or pilot of such aircraft shall immediately report, by telegraph or telephone, to the Minnesota Aeronautics Commission, the license number of the aircraft and the time and place of the accident.

All other accidents in the operation of aircraft within this State which result in injury to the air-

8.

craft shall be reported without delay by the recorded owner and/or pilot of such aircraft to the Minnesota Aeronautics Commission. The preceding sentence shall not apply to gliders except when serious injury or death occurs.

AIRPORT, LANDING FIELD AND EMERGENCY LANDING STRIP REGULATIONS.

1. LICENSING STANDARD: MINIMUM REQUIREMENTS*

(1) AIRPORT AND LANDING FIELD: SIZE

AIRPORT:

- (a) An airport shall have at least 1,800 feet of effective landing length in all directions, with clear approaches, and which field shall be in good condition for landing at all times, or shall have landing strips not less than 500 feet wide, permitting landing in at least six directions at all times, with at least one landing strip aligned with the general direction of the prevailing wind, the landing strip not to cross or converge at angles of less than 40 degrees, nor any one of the landing strips to be less than 1800 feet in effective length with clear approaches, or has two landing strips, one aligned with the general direction of the prevailing wind, permitting at least 4-way landing at all times and having clear approaches, the landing strips to be at least 500 feet wide and at least 2,500 feet in effective length, and not to cross or converge at any angle less than 80 degrees....
- (b) LANDING FIELD: A landing field shall have at least 1200 feet of effective landing length in all directions, with clear approaches, and the field shall be in good condition for landing at all times; or it shall have landing strips not less than 500 feet wide, permitting landing in at least six directions

at all times, with at least one landing strip aligned with the general direction of the prevailing wind, the landing strips not to cross or converge at angles less than 40 degrees, nor any one of the landing strips to be less than 1200 feet in effective length, with clear approaches; or, it shall have two landing strips, one aligned with the general direction of the prevailing wind, permitting at least 4-way landing at all times and having clear approaches, the landing strips to be at least 500 feet wide and at least 1,800 feet in effective length, and not to cross or converge at an angle less than 60 degrees.

(c) EMERGENCY LANDING STRIP: An emergency landing strip, except in case of emergency, shall be used for purposes of taking off or landing only when its longitudinal axis lies in the general direction of the wind at the time of use.

(2) LANDING AREA: In order to receive a license from the Minnesota Aeronautics Commission, an airport or landing field shall meet the following minimum requirements as to landing area:

(a) SURFACE: An airport or landing field shall afford a smooth, well-drained landing area, sufficiently firm to permit the safe operation of aircraft under all ordinary weather conditions, approximately level, and free from obstructions or depressions presenting hazards in the taking off, or landing, of aircraft.

The landing surface, whether natural, artificial, or a combination of the two, shall be sufficiently smooth to permit driving over any part thereof in a light weight automobile at a speed of at least 30 miles per hour without discomfort to the occupants.

No grass, weeds, or other vegetation, of a height sufficient to be a hazard to normal take-offs or landings, shall be allowed to exist at any time in the effective landing area.

(b) OBSTRUCTIONS: For the purpose of calculating reductions in effective landing lengths due to the presence of obstructions at or near an airport, the accepted gliding ratio over these obstructions shall be not less than 7 to 1.

(3) EQUIPMENT: In order to receive a license from the Minnesota Aeronautics Commission, an airport or landing field shall meet the following minimum requirements as to equipment:

(a) DAY MARKING: The landing area or an adequate hangar roof surface shall be marked by means of a circle at least 50 feet in diameter, having a band not less than 3 feet wide, which circle must be so designed, constructed, and maintained as to be plainly visible from an altitude of 2,000 feet.

Any portion of the landing area which is permanently unsuitable and/or unsafe for the landing or taking off of aircraft shall be clearly marked with red flags at least 2 feet square and/or other equally visible red markers.

(b) WIND DIRECTION INDICATOR: The airport or landing field shall be equipped with a wind-direction indicator of a type approved by the Federal Department of Commerce.

(c) OTHER FACILITIES: The airport or landing field shall be provided with facilities for

supplying an aircraft with fuel, oil and water.

Drinking water shall be available also.

The airport shall also be provided with a first aid kit.

- (4) PERSONNEL: In order to receive a license from the Minnesota Aeronautics Commission, an airport or landing field shall meet the following minimum requirements as to personnel.

- (a) MANAGER: An airport or landing field shall have a designated manager, whose name shall be so filed with the Minnesota Aeronautics Commission. The manager, or some other designated authority, shall be in attendance by day, or available on call by telephone. In the latter case, a directory and full instructions for reaching said manager, shall be available in the telephone booth, or receptacle, or be prominently posted.

2. AIRPORT OR LANDING FIELD OPERATIONS

- (5) SUPERVISION OF AERONAUTICAL ACTIVITIES: All aeronautical and other activities taking place at the airport shall be supervised by the manager, in the interests of public safety.
- (6) GENERAL REGISTER: The manager shall keep a register including the following information:
- (a) Federal Department of Commerce license number and type of all licensed aircraft using the airport or landing field as an operating base, together with the names and addresses of the owners of said aircraft:
- (b) Federal Department of Commerce Identification number, if any, or description of all aircraft not identified by the

Federal Department of Commerce which are kept on the airport or landing field, together with the names and addresses of the owners thereof;

(c) The names and addresses of the manager and assistant manager or managers.

- (7) LANDING AREA: FREEDOM FROM OBSTRUCTIONS: The manager shall not permit any repairs to aircraft or engines to be made on the landing area, nor shall he permit any disabled aircraft to remain on said landing area, unless the removal of such aircraft would be in violation of the Minnesota Air Traffic Rules.
- (8) RESTRICTED AREAS: The manager, in the interest of public safety, shall designate, plainly mark, and maintain a boundary line (preferably a fence) beyond which he shall not permit unauthorized persons to pass.
- (9) NIGHT LIGHTING: The manager shall, in the event that the airport is equipped with night lighting facilities, maintain such equipment at all times in proper working order. Such night lighting facilities, if not in all night operation, shall be available upon reasonable request.

In the event that airport boundary lights are provided, obstruction lights shall be provided also. Boundary or obstruction lights shall never be displayed alone, but always in conjunction with each other.

- (10) TEMPORARY MARKINGS: The manager shall clearly mark, with chrome yellow or red flags at least 2 feet square, all portions of the landing area temporarily unsafe for landing or which, for any other cause, are not available for use. In case the airport or landing field is equipped with

night lighting facilities, the boundary of such dangerous area shall be clearly marked with lights during the period from sunset to sunrise.

- (11) AIRPORT FIELD RULES: The manager shall prescribe and post local field rules.
- (12) AIRPORT ALTERATION REPORT: The manager shall report to the Minnesota Aeronautics Commission all major alterations of the landing area and all work in progress which affects the use of any major portion of the landing area.
- (13) NOTIFICATION OF AIR MEETS: The manager shall notify the Minnesota Aeronautics Commission at least forty-eight hours before the holding of any air show, meet, race or carnival.
- (14) ACCIDENT REPORTS: The manager shall immediately report, by telegraph or telephone, to the Minnesota Aeronautics Commission all accidents occurring at or near the airport wherein serious injury to person or property is suffered, or wherein death results, from the operation of aircraft.
- (15) POSTING OF COMMISSION RULES: The manager shall post, in a prominent place on the airport, all current rules and regulations promulgated by the Minnesota Aeronautics Commission.

NOTE: *Airports or landing fields for use by lighter-than-aircraft, seaplanes, autogiros or other unusual types of aircraft are not included in or covered by these provisions. Until otherwise provided by regulation, the licensing of airports for such aircraft shall be in accordance with special orders of the Minnesota Aeronautics Commission promulgated in connection with each application.

This note should appear in small type as a footnote to this section heading

AIR INSTRUCTION REGULATIONS

For the proper interpretation of rules and regulations pertaining to air instruction, flying schools, and flying clubs see "Act to Regulate Aeronautics", 1933 Session Laws, Chapter 430, S. F. No. 1684:

Section 1. (h.) Definition of "Person".

(i.) "Air Instruction".

(j.) "Any Person" and "Air School".

(k.) "Flying Club".

(l.) "Aviation Instructor" as compared with "Air School".

Section 10. The powers and duties of the Commission.

Section 12. Licenses and fees.

Section 17. Inspection of air schools and flying clubs.

1. GROUND SCHOOLS: MINIMUM REQUIREMENTS: In order to receive an air school license from the Minnesota Aeronautics Commission, ground schools shall meet and maintain at least the following minimum requirements:

(a) Each school licensed for ground instruction shall be equipped with at least one class room for each 100 students enrolled, capable of seating at least 10 students. Each school licensed for ground instruction shall be equipped with at least two types of airplanes in current use, and at least two types of aircraft motors in current use, one of which shall be radial air-cooled.

(b) If specific ground courses are offered, they shall be Amateur Pilot, Private Pilot, Limited Commercial/^{or}Transport, and shall afford sufficient experience necessary to give proper training so that graduates of the school would be able to meet the Federal Department of Commerce requirements for a license in their respective classes.

2. FLYING SCHOOLS: MINIMUM REQUIREMENTS: In order to receive an air school license from the Minnesota Aeronautics Commission, flying schools shall meet and maintain at least the following minimum requirements:

- (a) Each school licensed for flying instructions shall use, for all take-offs and landings, an airport or landing field licensed by the Minnesota Aeronautics Commission.
- (b) If specific flying courses are offered, they shall be Amateur Pilot, Private Pilot, Limited Commercial, or Transport, and shall afford sufficient experience necessary to give proper training so that graduates of the school would be able to meet the Federal Department of Commerce requirements for a license in their respective classes.
3. DISPLAY OF LICENSE AND REGULATIONS: Each ground and/ or flying school shall post in a prominent place the air school license issued to it by the Minnesota Aeronautics Commission, together with a copy of the Minnesota Air Law and other current rules and regulations of said commission.
4. FLYING INSTRUCTION: No person shall give, for or without hire or reward, any flying instructions within the State of Minnesota unless said person shall hold a current effective transport pilot's license issued by the Federal Department of Commerce and which license has been registered with the Minnesota Aeronautics Commission.
5. SPIN INSTRUCTION: All students shall be given dual flight instruction in the recovery from stalls and spins prior to first solo.
6. EXAMINATION: RECORDS: Each ground and/ or flying school and flying club and all aviation instructors not associated with any air school, shall keep individual performance records of all their students.
7. ACROBATICS: During flight involving acrobatic students and instructors must have approved parachutes.

AIR TRAFFIC RULES

TAKE-OFF AND LANDING RULES

1. METHOD OF TAKING OFF AND LANDING: Take-offs and landings shall be made upwind when practicable. The take-offs shall not be commenced until there is no risk of collision with landing aircraft.

Aircraft, when taking off or landing, shall use the traffic lanes indicated by the field rules or signals and, further, shall

observe all signals of the traffic control system in use at the particular airport.

2. COURSE OF FLIGHT WHEN LANDING: When within one thousand feet horizontally of the leeward side of any airport upon which a landing is to be made, the aircraft shall follow, so far as it is practicable, a direct course toward the landing zone.

3. RIGHT OF WAY WHEN LANDING: A landing aircraft has the right of way over aircraft moving on the ground or taking off, but this shall not excuse the pilots of either or both such aircraft from the exercise of due care and diligence.

4. GIVING WAY WHILE LANDING: When more than one aircraft are landing and/or maneuvering in preparation to land, the aircraft at the greater height shall avoid the aircraft at the lower height and shall, as regards landing, observe the rules governing overtaking aircraft.

5. DISTRESS LANDINGS: An aircraft in distress shall be given the right of way in making a landing.

FLYING RULES - RULES GOVERNING ALTITUDE

6. MINIMUM SAFE ALTITUDES OF FLIGHT: The following minimum safe altitudes of flight are prescribed:

- (a) The minimum safe altitudes of flight, in taking off or landing and while flying over the property of another in taking off or landing, are those at which such flights by aircraft may be made without such aircraft being in dangerous proximity to persons or property on the land or water beneath, or without being unsafe to the aircraft.
- (b) Minimum safe altitudes of flight over congested parts of cities, towns, or settlements are those sufficient to permit a reasonably safe emergency landing, but in no case less than one thousand feet.
- (c) The minimum safe altitudes of flight in all other cases shall be not less than five hundred feet.

7. HEIGHT OVER CONGESTED AND OTHER AREAS: Exclusive of taking off

from, or landing upon, an airport, aircraft shall not be flown:

- (a) Over the congested parts of cities, towns or settlements, except at a height sufficient to permit a reasonably safe emergency landing, which in no case shall be less than one thousand feet;
- (b) Over certified high explosive danger areas except at a height sufficient to permit a reasonably safe emergency landing, outside of the certified danger area, which in no case shall be less than one thousand feet;
- (c) Elsewhere at a height less than five hundred feet.

8. HEIGHT OVER ASSEMBLY OF PERSONS: No flight under 1,000 feet in height shall be made over any open air assembly of persons.

9. HEIGHT OVER FEDERAL OR STATE PENAL INSTITUTION: No intentional flight at any height whatsoever shall be made over any Federal or State penal institution, or over any State hospital or asylum for the insane or feebleminded.

10. RIGHT SIDE TRAFFIC: Aircraft flying in an established airway or following a highway, railroad track, or other ground course at an altitude of less than three thousand feet, shall, when safe and practicable, keep to the right side of such airway, highway, railroad track or other ground course.

11. COURSE OF FLIGHT AT OR NEAR AIRPORT: When an aircraft is circling an airport following a take-off, before a landing, or at any other time, all circles shall be made to the left, unless otherwise specified by the local field rules. All aircraft flying within three thousand feet horizontally of the nearest point of the landing area shall conform to this circuit rule unless flying at a height in excess of two thousand feet.

12. GIVING-WAY ORDER: Aircraft shall give way to each other in the following order:

- (a) Airplanes
- (b) Gliders
- (c) Airships
- (d) Balloons, fixed or free.

An airship not under control is classed as a free balloon.

13. GIVING-WAY DUTIES: Aircraft required to give way shall keep a safe distance, having regard to the circumstances of the particular situation, which distance shall, in no case, be less than three hundred feet. If the circumstances permit, the aircraft which is required to give way shall avoid crossing ahead of the other.

The aircraft having right of way may maintain its course and speed, provided that no engine-driven aircraft may pursue its course if it would thereby come within three hundred feet of any other aircraft.

14. PROXIMITY IN FLIGHT: No aircraft, other than military aircraft of the State or United States engaged in military maneuvers, shall fly at any time, closer than three hundred feet to any other aircraft in flight.

15. CROSSING: When two engine-driven aircraft are on crossing courses, the aircraft which has the other on its right side shall keep out of the way.

16. APPROACHING: When two engine-driven aircraft are approaching head-on, or approximately so, and there is danger of collision, each shall alter its course to the right so that each will pass on the left side of the other at a distance of at least three hundred feet, provided that the provisions of this rule shall not apply to cases where aircraft will, if each maintains its course, pass more than three hundred feet from each other.

17. OVERTAKING: An overtaking aircraft is one which, by virtue of its superior speed, is approaching another aircraft directly behind, or approximately so. An overtaking aircraft shall keep clear of the overtaken aircraft by altering its own course to the right so as to pass said overtaken aircraft at a distance of at least three hundred feet, but no change of course to effect a passing shall be made in the vertical plane.

In case of doubt as to whether an aircraft is a crossing or overtaking aircraft, it shall be assumed that said aircraft is an

overtaking aircraft.

RULES GOVERNING ACROBATICS

18. PROHIBITED ACROBATIC FLYING: Acrobatic flying means any maneuver or maneuvers not necessary to aerial navigation, and shall include parachute jumping.

No person shall acrobatically fly an aircraft at any height whatsoever.

- (a) Over a congested area of any city, town, or settlement; or
- (b) Over any open air assembly of persons; or
- (c) Over any airport or within one thousand feet horizontally thereof.

No person shall acrobatically fly an aircraft.

- (a) Below a height of two thousand feet over an established airway; or
- (b) Below a height of fifteen hundred feet over any other place.

19. OTHER PROHIBITED ACROBATIC FLYING: No person shall acrobatically fly any aircraft carrying any other person or persons for or without hire and/or reward, provided, however, that the provisions of this rule shall not apply to the giving of instruction in acrobatic flying to licensed student pilots or to other licensed pilots by a licensed transport pilot.

20. PARACHUTES: When performing acrobatics not prohibited by these rules and regulations, each person in the aircraft shall be properly equipped with a parachute of a type and design which has been tested, approved and maintained in accordance with the then current Federal regulations and requirements relative to parachutes.

21. PARACHUTE JUMPS: Parachute jumpers making exhibition, test, training or demonstration jumps, shall wear an auxiliary parachute so arranged that it can be operated should the first parachute fail to function or become fouled. Both such parachutes shall be of a type and design which has been tested, approved and maintained in accordance with the then current Federal regulations and requirements relative to parachutes.

No exhibition parachute jump shall be made from an altitude of less than fifteen hundred feet, and, further, a parachute jumper

shall not delay opening the parachute more than is necessary to properly and safely clear the aircraft.

MISCELLANEOUS RULES.

22. SUPERVISION OF RUNNING MOTORS: Blocks, equipped with ropes or other suitable means of pulling them, shall always be placed in front of the wheels before starting the engine, or engines, unless aircraft is provided with adequate brakes.

No aircraft engine shall be started or run unless a licensed pilot or competent mechanic is in the cockpit attending the controls.

23. AIRCRAFT ON WATER: Seaplanes on the water shall navigate according to the laws and regulations of the United States, and of the State of ~~Minnesota~~ and its political subdivisions, governing the control, navigation, and operation of watercraft.

24. TRANSPORTING OF FIREARMS AND EXPLOSIVES: No armament, ammunition, poison gas, or explosives shall be carried by or in any aircraft; provided that the provisions of this rule shall not apply to proper signalling or safety equipment (such as a Very's pistol or landing flares) nor to the aircraft fuel; and provided, further, that the provisions of this rule shall not apply to public aircraft.

25. LIQUOR, NARCOTICS, AND DRUGS: No person shall navigate aircraft while under the influence of, using, or having personal possession of intoxicating liquor, cocaine, or other habit-forming drugs, nor shall such person carry any other person who is, or persons who are, obviously under the influence of intoxicating liquor, cocaine, or other habit-forming drugs.

26. TOWING OF AIRCRAFT: The towing of aircraft by other aircraft, or the towing of any device or object by aircraft, is prohibited.

27. DROPPING OF OBJECTS OR THINGS: No object or thing, other than fine sand or water which has been carried as ballast, shall be dropped or released by any person from an aircraft in flight. The pilot, or person in charge of the aircraft, shall be responsible for the observance of this rule by all persons in the aircraft.

28. DAY MARKS OF MASTS, ETC.: By day, balloon and airship mooring cables shall be marked with conical streamers not less than twenty

inches in diameter and seven feet long, colored with solid color of chrome yellow. The object to which the balloon or airship is moored on the ground shall have the same kind of streamers, which must be in the same position as the lights specified herein.

LIGHTS

29. ANGULAR LIMITS: The angular limits laid down in the following rules relating to lights will be determined as when the aircraft is in normal flying position.

30. AIRPLANE LIGHTS: Between sunset and sunrise, all airplanes in flight must show the following lights:

(a) On the right side a green light and on the left side a red light, each showing unbroken light between two vertical planes whose dihedral angle is one hundred and ten degrees when measured to the left and right, respectively, from dead ahead. These lights shall be visible at least two miles.

(b) At the rear, and as far aft as possible, a white light shining rearward, visible in a dihedral angle of one hundred and forty degrees bisected by a vertical plane through the line of flight and visible at least three miles.

Between sunset and sunrise, aircraft engaged in carrying any person or persons, other than pilot and crew, for or without hire and/or reward, shall be equipped with adequate and approved electric landing lights and approved parachute type of flares, or approved equivalent, in addition to the navigation lights required by the provisions of this rule.

31. AIRSHIP LIGHTS: Between sunset and sunrise, airships shall carry and display the same lights that are prescribed for airplanes, except that the side lights shall be doubled vertically. Lights in a pair shall be at least seven feet apart.

32. BALLOON LIGHTS: Between sunset and sunrise, a free balloon shall display one white light not less than twenty feet below the car, visible for at least two miles. A fixed balloon, or airship, shall

carry three lights - red, white, and red - in a vertical line, one over the other, visible at least two miles. The top light shall be not less than twenty feet below the car, and the lights shall be not less than seven, nor more than ten, feet apart.

33. LIGHTS WHEN STATIONARY: Between sunset and sunrise, all aircraft which are on the surface of water and not under control, or which are moored or anchored in navigation lanes, shall show a white light visible for at least two miles in all directions.

Between sunset and sunrise, balloon and airship mooring cables shall show groups of three red lights at intervals of at least every one hundred feet, measured from the basket. The first light in the first group shall be approximately twenty feet from the lower red balloon light. The object to which the balloon is moored on the ground shall have a similar group of lights to mark its position.

SIGNALS

34. DISTRESS SIGNALS: The following signals, separately or together, shall, where practicable, be used in case of distress:

- (a) The international signal, S O S by radio;
- (b) The international code flag signal of distress, NC;
- (c) A square flag having either above or below it a ball, or anything resembling a ball.

35. SIGNAL WHEN FORCED TO LAND: When an aircraft is forced to land at night at an airport, it shall signal its forced landing by making a series of short flashes with its navigation lights, if practicable to do so.

36. FOG SIGNALS: In fog, mist, or heavy weather, an aircraft on the water in navigation lanes, when its engines are not running, shall signal its presence by a sound device emitting a signal for about five seconds in two-minute intervals.

37. NON-OBSERVANCE OF AIR TRAFFIC RULES; EMERGENCY; EXEMPTION:

A partial or total disregard of the Minnesota air traffic rules will be sanctioned in the following cases only:

- (a) When special circumstances render non-observance necessary to avoid immediate danger, or when such non-

observance is required because of stress of weather conditions or other unavoidable causes; provided, however that aircraft carrying any person or persons other than the pilot, shall not disregard the air traffic rules pertaining to minimum altitudes of flight because of stress of weather conditions.

- (b) When an exemption has been granted by the Minnesota Aeronautics Commission as provided by these rules and regulations, which exemption specifically confers temporary authority for such non-observance of a rule or rules.

EXEMPTIONS

1. EXEMPTIONS; REQUEST FOR: The Minnesota Aeronautics Commission may grant exemption from compliance with the provisions and requirements of these rules and regulations, or any one of them, or part thereof, when, in its discretion, the particular facts justify such exemption. Every exemption granted will be issued for a limited time only and for a specific purpose, and the action of the Minnesota Aeronautics Commission in granting said exemption shall be evidenced by a writing signed by a member of the Minnesota Aeronautics Commission or its Secretary, which writing shall specifically set forth the subject matter of the exemption and the time limits allowed. Any exemption granted shall be strictly construed.

Requests for exemption from compliance with the provisions and requirements of any of the foregoing rules or regulations shall be addressed to the Minnesota Aeronautics Commission, and any request for exemption must reach the Minnesota Aeronautics Commission, or member thereof, or its Secretary, at least forty-eight hours before the proposed exemption is to take effect.

11. SUSPENSION, MODIFICATION OR REVOCATION: The Minnesota Aeronautics Commission may, in its discretion and within the authority granted to it by the Minnesota Aeronautics Act approved April 22, 1933, at any time, suspend, modify or revoke any of the foregoing rules and regulations.

111. VIOLATIONS: PENALTY THEREFOR: Any person failing to comply with the requirements of the foregoing rules and regulations, or any part thereof, except as provided for in Rule No. 37, shall be guilty of a misdemeanor and punishable by a fine of not more than five hundred dollars, or by imprisonment for not more than ninety days, or both.

For the purpose of enforcement, each infraction of the foregoing rules and regulations shall be considered a separate offense, and each day of continuation of any infraction shall be considered a separate offense.

By order of the Minnesota Aeronautics Commission, this 18th day of December, 1933.

L. H. Brittin, Chairman
John D. Akerman, Commissioner
Richard L. Griggs, Commissioner
W. A. McCadden, Commissioner
Ray S. Miller, Commissioner