



# Portland Barnstormers Model Flying Club

## Field Guidelines

### Revision History

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One Page Summary: If you only have time to read a single page,  
this is it!

1. These are guidelines not rules. They are to be followed not “enforced.”
2. If someone fails to follow the guidelines, talk to them in a friendly peer-to-peer way and explain what they should do to follow the guidelines.
3. Only members, guests of members can fly at the field. Everyone flying must be a member of the AMA, MARC, or equivalent organization if they are visiting the USA. Introductory flights can be given to non-AMA members.
4. All pilots must follow the AMA Safety Code.
5. Flying hours: 10:00am to civil twilight, Monday to Friday. Noon to civil twilight, Sunday.
6. All pilots must self-assess whether they are fit to fly (consider illness, medication, alcohol, marijuana, etc.)
7. Minimize distractions out by the pilot stations for pilots flying. No shouting at pilots flying!
8. Pilots must self-assess their own skills to determine whether they are capable of flying a particular aircraft. If in doubt, seek help.
9. First member at the field unlocks the padlock (scramble the lock number) and opens the gate. Last pilot out locks the gate closed (scramble the lock number).
10. Emergencies: Consult the notices on the field for medical and other emergencies. Do it before there is an emergency so you know beforehand!
11. Camping is not allowed at the air field.
12. Please do not fly gas turbine jets and other very noisy aircraft. We need to be good neighbors.
13. Our lease requires all aircraft weigh less than 35 lbs.
14. Please do not overfly the town of Butteville or the hop fields to the west. All aircraft must stay below 400 feet above ground.
15. Please do not overfly people and the pits to the west of the runway.
16. Use the surfaced runway or the grass runway for take-offs and landings not the taxiways.
17. Stop motors and engines before East to West crossing of the white lines on the taxiways.
18. Please no unleashed pets on the airfield -- they are at risk of injury and potentially a danger to pilots flying aircraft.
19. Call out your intentions re: take-offs, landings, go-arounds, low passes, touch-and goes. Use left/right not North/South for directions.
20. A call of dead-stick, or emergency, reserves the runway immediately.
21. Please wait to fly if there are already five aircraft in the pattern.
22. FPV pilots need to have a visual observer standing next to them.
23. Pilots still using 72Mhz, use the impound board.
24. In case of a crash be sure to retrieve the battery/batteries to avoid fire.
25. All pilots should have a fire extinguisher in their vehicles.

## Definitions

1. When a definition is used in the body of this document, it will be used with initial capital letters. For example, “Pilot Flying” makes inherent reference to the definition for that phrase.

### Club Member

2. An individual who has paid the Barnstormer’s annual dues and has been accepted as a club member.

### Model Aircraft

#### The Academy of Model Aeronautics’ Definition

3. The AMA’s definition is:

A model aircraft is a non-human-carrying device capable of sustained flight within visual line of sight of the pilot or spotter(s). It may not exceed limitations of this code [the AMA Model Aircraft Safety Code] and is intended exclusively for sport, recreation, education and/or competition. All model flights must be conducted in accordance with this safety code and related AMA guidelines, any additional guidelines specific to the flying site, as well as all applicable laws and regulations.

See AMA Model Aircraft Safety Code at

<https://www.modelaircraft.org/sites/default/files/105.pdf> .

#### The FAA’s Definition

4. Paragraph number in the following quotations is as in the original:

6. (1) 49 USC § 40102 defines an aircraft as “any contrivance invented, used, or designed to navigate, or fly in, the air.” 14 CFR § 1.1 defines an aircraft as “a device that is used or intended to be used for flight in the air.”

6. (2) Public Law 112-95 defines unmanned aircraft as an aircraft that is operated without the possibility of direct human intervention from within or on the aircraft.

6. (3) Section 336 of P.L. 112-95 defines a model aircraft as an unmanned aircraft that is capable of sustained flight in the atmosphere, flown within visual line of sight of the person operating the aircraft, and flown only for hobby or recreational purposes.

6. c. Determination of “Model Aircraft” Status. Whether a given unmanned aircraft operation may be considered a “model aircraft operation” is determined with reference to section 336 of Public Law 112-95:

(1) The aircraft is flown strictly for hobby or recreational use;

(2) The aircraft operates in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization (CBO);  
[Note: This means the Academy of Model Aeronautics.]

(3) The aircraft is limited to not more than 55 pounds, unless otherwise certified through a design, construction, inspection, flight test, and operational safety program administered by a CBO;

(4) The aircraft operates in a manner that does not interfere with, and gives way to, any manned aircraft; and

(5) When flown within 5 miles of an airport, the operator of the model aircraft provides the airport operator or the airport air traffic control tower (when an air traffic facility is located at the airport) with prior notice of the operation. Model aircraft operators flying from a permanent location within 5 miles of an airport should establish a mutually agreed upon operating procedure with the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport).

See FAA Advisory Circular AC 91-57A, September 2, 2015.

[https://www.faa.gov/regulations\\_policies/advisory\\_circulars/index.cfm/go/document.information/documentID/1028086](https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/1028086) (the same link as above).

5. Note that Barnstormers' airfield is 3.51 statute miles from Aurora State Airport (UAO).

#### Pilot Flying

6. A Club Member on-site at Barnstormers' airfield currently operating a model aircraft by means of radio control regardless of whether that aircraft is on the ground or in the air. A pilot whose transmitter has lost communication with an aircraft is still a Pilot Flying.

7. A guest of a Club Member can also be a Pilot Flying provided that the Club Member is also on-site and supervising the guest's activities.

#### Pilot Not Flying

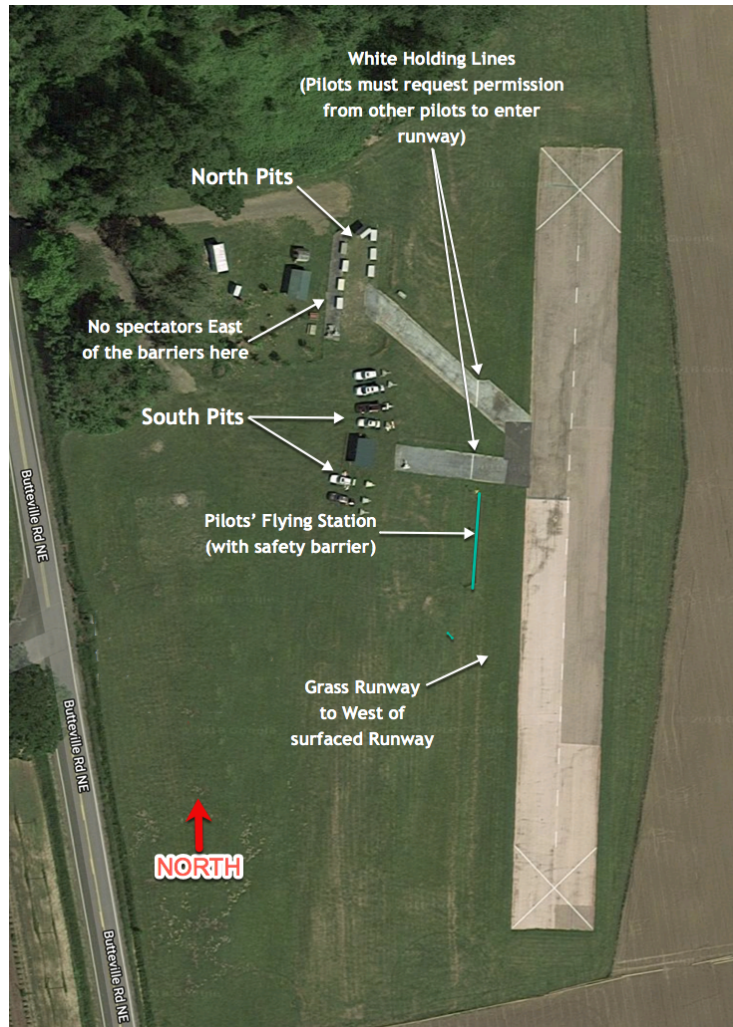
8. A Club Member on-site at Barnstormers' airfield but currently not operating a model aircraft.

#### Spotter

9. A pilot standing next to a Pilot Flying and assisting the Pilot Flying to meet the requirements of the FAA Regulation to "See and Avoid" manned aircraft.

10. The spotter must have been briefed by the Pilot Flying as to how best to communicate the necessary information to avoid manned aircraft.

## Map of the Airfield



### Airfield Features

11. The airfield has the following features:
  - a) There are two parallel runways, the surfaced runway and the grass runway. Both are oriented essentially north/south and can be used in either direction.
  - b) There are also two taxiways, the north and south taxiways. The north taxiway is oriented northwest/southeast, the south taxiway is oriented West/East.
  - c) There are two pit areas, north and south, for Club Members to work on their aircraft.
  - d) There are two approach roads, the north road running west/east, and the south road running northwest/southeast.
  - e) There is an ADA accessible Port-a-Potty on the airfield.
  - f) There is also non-potable water available from an on-site well.



## Use of the Barnstormer's Airfield

### Members and Guests of Members

12. All Pilots Flying aircraft must be a Club Member, or the guest of such a member.

### Hours of Operation

13. Aircraft must only be flown between 10:00 am and the end of Civil Twilight, Monday to Saturday and Noon to the end of Civil Twilight on Sundays.

14. Civil Twilight is defined to end in the evening when the center of the Sun is geometrically 6 degrees below the horizon. This is the limit at which twilight illumination is sufficient, under good weather conditions, for terrestrial objects to be clearly distinguished, the horizon is clearly defined, and the brightest stars are visible under good atmospheric conditions in the absence of moonlight or other illumination. (From the definition at [http://aa.usno.navy.mil/faq/docs/RST\\_defs.php](http://aa.usno.navy.mil/faq/docs/RST_defs.php) .)

### Parking

15. Members and guests of members must use the areas just to the west of the North and South Pits. The South Pits parking is accessible only by taking the south fork of the access road.
16. Spectators who come uninvited, while being welcome, must be guided to the appropriate parking spot.

## Pilot Requirements

### Current AMA Members Only

17. Only Club Members with a current membership in the Academy of Model Aeronautics can fly at the field.

### Introductory Pilots per AMA Requirements

18. The AMA permits clubs such as Barnstormers to give introductory flights to non-AMA members provided that (a) the Barnstormer instructor supervising the flights has registered with the AMA (see <https://www.modelaircraft.org/sites/default/files/917.pdf> which also includes the instructor registration form) and (b) all such introductory flights occur within 60 calendar days of the first such flight.

19. Provided that Barnstormers complies with the AMA Introductory Flight Program, all liability insurance provided by the AMA is extended to the Introductory Pilot.

### Civil Air Patrol Model Aircraft and Remote Control (MARC)

20. MARC members are not required to join Barnstormers.

## Pilot Readiness

### Illness or Medication

21. It is imperative that Club Members, before flying, assess whether they are fit to fly. If a Club Member is ill, or on medication that might impair their reflexes or judgment, then they must not fly.

### Distractions

22. Pilots Flying must minimize distractions when flying. If there is any other distraction, a Pilot Flying must land the aircraft and eliminate the distraction.

### Choice of Aircraft

23. Club Members must assess whether they are competent to fly a given aircraft or whether it is too complex or has flight characteristics that exceed their abilities. If there is any doubt, Club Members must seek the assistance of a club instructor or a Club Member who already has demonstrable skill with that aircraft type to assist with the flight operations.

## Field Regulations

### Access to the Field

24. The first Club Member to arrive at the field will have to unlock the combination lock and open the gate.

25. Once the padlock is unlocked, the Club Member must leave it unlocked, but rotate the tumblers on the padlock to obscure the combination.

### Last Pilot to Leave the Field

26. The last Club Member to leave the field must close the gate and lock the padlock.

27. Once the padlock is locked, the Club Member must rotate the tumblers to ensure that the no digits of the unlock combination are in the unlock position.

## Emergencies

### Medical

#### 911 Information

28. <Field location and address to be provided.> <Charlie Hagen's comment: Safety Officers will be preparing several copies of a weather resistant placard that will list emergency info, including field address, urgent care and hospital details.>

Other useful numbers (nearest urgent care and hospitals)

<To be provided.>

#### First Aid Kit

29. <Insert details of the location of the first aid kit.>

### Fire

#### Requirement for Fire Extinguishers

30. All pilots flying aircraft that use lithium polymer batteries must have a fire extinguisher in their vehicles that is accessible in case of a battery fire.

*Water Jugs in Case of Fire*

31. Water jugs are stored at each end of the pilots' flying station. The first pilot to fly must ensure that these jugs are full of water.

*If Fire Cannot be Extinguished Immediately*

32. Club Members must not hesitate to call 911 and request the Fire Department. It will take several minutes for a fire truck to arrive and depending on how dry the ground and vegetation are, along with the wind, a fire can quickly grow out of control.

## Interaction with Manned Aviation (e.g. Air-miss, Mid-Air)

*Reporting Procedures*

33. <To be supplied.>

## Police

*Trespassers or Vandalism*

34. <Number to call>

35. <Field location and address>

## Camping

36. Overnight camping is not allowed at the field.

37. The Barnstormers' club president may waive this guideline for specific occasions, such as for someone to be at the field overnight on July 4 to prevent the field being used for fireworks.

## Prohibited Acts

## Flying Jet Turbine Aircraft

38. No jet turbine aircraft are allowed to fly at the field.

## Using Gas/Nitro Engines Larger Than 0.049 Without Mufflers

39. All aircraft using a engine larger than 0.049 must use mufflers.

40. In addition, the maximum sound level permitted is 95 dBA, as measured by a commercial sound-level meter using the 'fast' and 'A-scale' sound meter scale setting, and it is consistent with AMA, FAA, and ISO standards. Measurements are taken pointing the microphone at and about level with the exhaust side of the aircraft (running at full throttle) with the (microphone) 3 meters (about 10 feet) away. Testing preferably takes place at the field Test Bench for Safety reasons.

## No Aircraft with a Maximum Takeoff Weight of More than 35 lbs.

41. The club's lease prohibits the operation of aircraft weighing more than 35 lbs.

## Distracting Pilots While They Are Flying

42. It is dangerous for anyone to distract a pilot while they are flying. This may well constitute a felony under 49 U.S. Code Section 46504 (which assumes that even model aircraft are "aircraft" as defined by the FAA). See <https://www.law.cornell.edu/uscode/text/49/46504> (note that a key phrase is "an individual **on an aircraft**" – it remains to be seen whether this wording excludes someone on the ground).

## Flight Outside Designated Airspace

43. No intentional flying outside the designated airspace is permitted. The designated airspace is defined in a later section.

## Allowing Unsupervised Children

44. No unsupervised children are allowed on the field.

#### Pets

45. No pets are allowed on the field. <Charlie Hagen’s comment: change this to “No unleashed pets are allowed on the field.”>

#### Smoking

46. No smoking (tobacco or marijuana) is permitted in the pits or at the pilots’ stations. During the summer months when the grass is brown and presents a fire risk no smoking is permitted anywhere on the field.

#### Setting Off Fireworks

47. No fireworks are permitted on the field at any time.

#### Alcohol and Drugs

48. The club’s lease requires that no alcohol or drugs are to be consumed or taken on the field at any time. No pilot who is under the influence of alcohol or drugs may fly at the field.

#### Trash

49. All trash must be taken away by Club Members. There is no trash collection service and there are no trash receptacles at the field.

## Flight Regulations

### All Pilots Flying Must Comply with the AMA Safety Code

50. Pilots Flying must comply with the AMA Safety Code, which can be found at <https://www.modelaircraft.org/sites/default/files/105.pdf> as modified by these Field Guidelines (e.g. no turbine-powered aircraft are allowed at Portland Barnstormers).

### All Pilots Flying Must Comply with the AMA “See and Avoid” Guidance

51. All Pilots Flying must be familiar with and comply with the AMA “See and Avoid” Guidance found at <https://www.modelaircraft.org/sites/default/files/540-D.pdf>. The most salient aspects of this guidance are: (a) pilots are unlikely to be able to estimate the height of an approaching manned aircraft, (b) pilots, unless they have telemetry, are also unlikely to be able to estimate the height of their own aircraft, (c) therefore, the most reliable way to avoid a manned aircraft is to note its course and increase the angular separation (a.k.a. “blue sky”) between the pilot’s aircraft and the manned aircraft (if there is blue sky between the manned aircraft and the model aircraft there cannot be a mid-air collision). Only Pilots Flying or Student Pilots Are Allowed at the Pilot Stations

52. Only Pilots Flying, their spotters, or student pilots are permitted to stand at the pilot stations. An exception to this guideline can be made by Barnstormers Lead Instructor in the case of introductory flights.

### Guests and Spectators

53. All non-members must remain to the west of the safety barrier to the west of the North Pits unless they are under the direct supervision of a Portland Barnstormers Club Member.

### Impound/Frequency Board: Placing AMA Membership Card

#### 72 Mhz Transmitters

54. Pilots must take their transmitters to the impound area as soon as they arrive at the field. Pilots must clip their AMA card to their channel number on the impound board. Pilots may

retrieve their transmitter from the impound area when their channel clip is available. <Charlie Hagen's comment: Suggest this article is unnecessary. Also don't believe we have an impound area.>

55. Pilots must display the channel number clip they obtained so other pilots can see which channel or frequency type is in use.

56. When a pilot has finished flying, the channel number clip must be put back on the impound board to show that the channel is available.

#### 900 Mhz and 2.4 Ghz Transmitters

57. Both 900 Mhz and 2.4 Ghz transmitters are digital and thus bound to a specific receiver – which both use frequency hopping to avoid radio frequency contention.

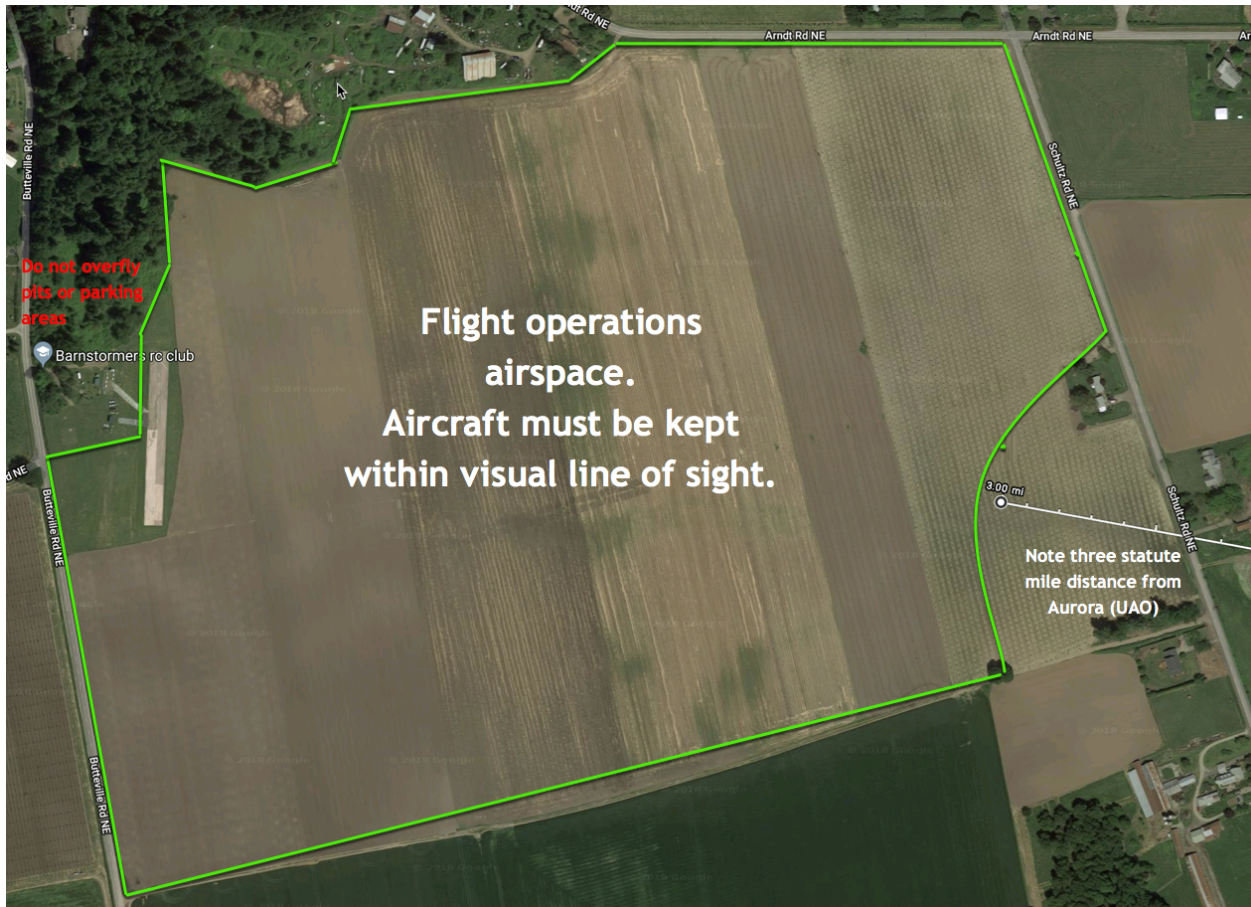
58. Therefore, Pilots Flying must clip their AMA card to the impound board and take a correspondingly numbered clip and display it so that other pilots know that they are using either 900 Mhz or 2.4 Ghz (and not 72 Mhz).

59. When a Pilot Flying is about to leave the airfield, the numbered clip must be put back on the impound board and the pilot's AMA card removed.

#### Designated Flight Operations

##### Horizontal Limitations

60. The following diagram defines the horizontal boundaries of the flight operations airspace. Note that intentional overflying of the pits, the visitor and non-flying pilots' area, and the parking areas is strictly prohibited.



Vertical Limitations

61. Club policy is that flight operations will generally be conducted below 400 feet above ground level, however, for sailplanes the club has an agreement with the Aurora Air Traffic Control Tower that permits flight operations above 400 feet above ground level. This agreement requires that the designated Manned Aviation Liaison Club Member notify the control tower prior to flying above 400 feet, and when all such flight operations have finished.

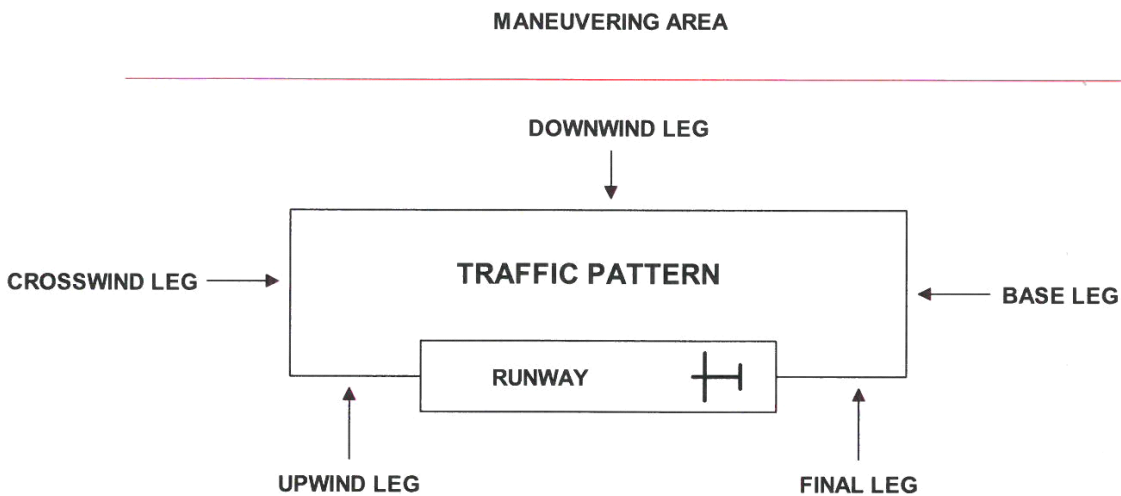
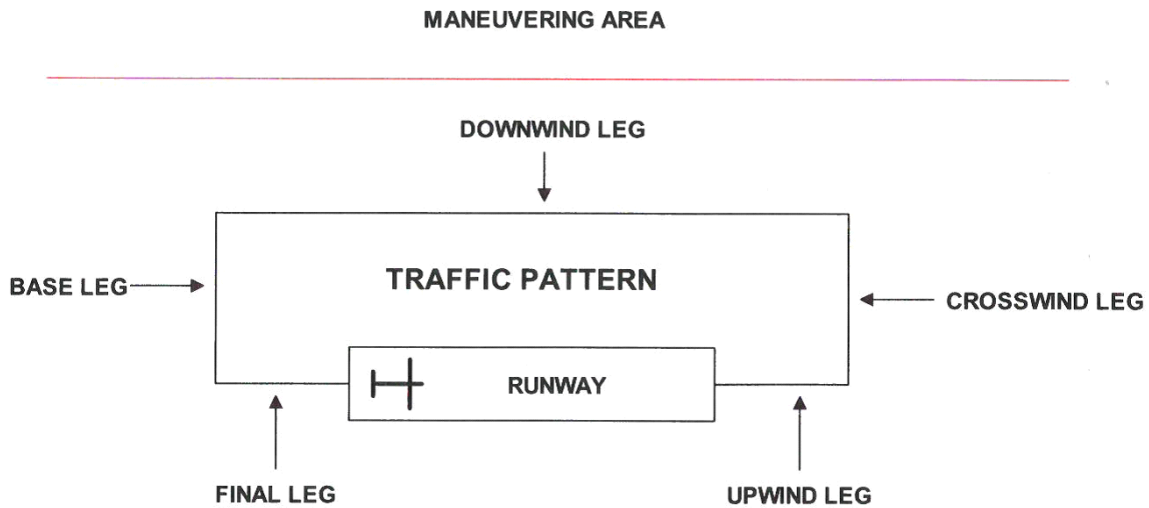
62. The current Manned Aviation Liaison person can be found at <http://www.portlandbarnstormers/contact/>.

63. All pilots intending (or likely) to fly their aircraft above 400 feet AGL must therefore contact the designated Manned Aviation Liaison Club Member preferably an hour prior to starting flying **and** when they have stopped flying. The designated Manned Aviation Liaison Club Member can then contact the Aurora control tower who will then amend the automated radio broadcast that manned aircraft operating around Aurora airfield use.

Airfield Patterns

64. There are two patterns, one for takeoffs/landings to the South, one to the North. These are shown in the diagrams below (note North is to the left of these diagrams):





65. The recommended pattern height is approximately 50' to 100' above ground level such that aircraft in the pattern stay clear of aircraft in the maneuvering area.

66. It is preferable that aircraft rejoining the pattern from the maneuvering area do so at the midpoint of the downwind leg.

67. Pilots Flying must maintain awareness of other aircraft in the pattern and make every effort to avoid overtaking or cutting in front of other aircraft in the pattern unless they have coordinated that with the other Pilot(s) Flying.

**Pattern Direction**

68. Whether a left-hand or right-hand pattern is flown around the runways is a choice made by the first Pilot Flying. Subsequent Pilots Flying must fly the pattern in the same direction.

69. If all the Pilots Flying agree, the pattern direction can be reversed while there are aircraft in the air – this would typically be because of a change in the surface wind direction.

#### Aerobatics

70. Unless all Pilots Flying with aircraft in the pattern agree, aerobatic maneuvers must be performed in the maneuvering area to the East of the runways and not in the pattern.

#### Maneuvering Area

71. Pilots Flying their aircraft in the maneuvering area must maintain verbal communication and fly their aircraft in a way that will minimize the risk of a mid-air collision.

#### Rotorcraft Operations (Single or Multirotor)

72. All rotorcraft must take off and land either on the helipad near the western boundary of the airfield, or on the surfaced runway (subject to the following restrictions). <Charlie Hagen's comment: Change to read: "All rotorcraft must take off and land on the surfaced runway (subject to the following restrictions).">

73. When taking off or landing on the helipad, the Pilot Flying must stand near or on the helipad and the rotorcraft must be kept away from the runways and the maneuvering area. <Charlie Hagen's comment: Delete this paragraph.>

74. The Pilot Flying the rotorcraft on the runway must communicate with all other Pilots Flying as though they were flying a fixed wing aircraft.

75. The rotorcraft must be started on the runway unless the helicopter has a means to disengage the rotors while the engine is running. <Charlie Hagen's deletions.>

76. Rotorcraft must not be operated on either of the taxiways.

77. Work on a helicopter may be performed in either of the pit areas however working on a running engine is limited to rotorcraft which can disengage the rotors. <Charlie Hagen's deletion.>

78. No rotorcraft take-offs from or landings in the pit areas are permitted.

#### Pit Area Operations

79. The North Pits consist of permanent mounted flight tables while the South Pits are available for members parking on the grass opposite the South Taxiway.

80. Both parts are designated for flight preparation, repair and general operations before and after flying an aircraft.

81. Only Club Members are allowed in the Pits. Club Members must escort and supervise guests if the guests enter the Pits. The Club Member must inform the guest of all pit area safety procedures and ensure the guest does not put themselves, other Club Members, or aircraft at risk.



82. All aircraft powered up in the pits must be physically held and restrained by the pilot or the pit stand to prevent any accidents in the pit area. This applies to electrically powered aircraft too.

83. Club Members must exercise caution when they are tuning liquid fueled engines that are started up and running in the pits. Club Members must ensure bystanders are not standing in front of the aircraft or near the test stand/table. If necessary, another Club Member should restrain the aircraft while it is being tuned.

84. All powered-up aircraft must be hand-carried to a taxiway if the Pilot Flying intends to taxi to the runway or perform a taxi test on a taxiway. Taxiing in the pits is strictly forbidden.

### Preflight Checks

85. Every time an aircraft is assembled for the first flight of the day, or any time any repairs are performed, the Pilot Flying must perform appropriate pre-flight checks to avoid putting people and property at risk. Even minor discrepancies can lead to catastrophic results.

### Arrival and Departure from the Pits

#### No Taxiing in the Pits

86. As stated previously, no aircraft can be taxied in the pits. Aircraft being taxied towards the pits must have their engines stopped before the pit entrance.

#### White Hold Line on the Taxiways

87. The white line on the two taxiways is a hold point. The Pilot Flying, when taxiing the aircraft out to the runway, must hold on the pits' side of the white line and ask other Pilots Flying "OK to come out?" and wait to hear their collective approval before crossing the white lines.

#### No Taxiing Near Pilots Flying

88. No taxiing near Pilots Flying at the pilot's stations is allowed as this is extremely distracting.

### Communication with Other Pilots When Flying

#### Only Pilots Flying Should Communicate with Other Pilots Flying

89. To avoid the risk of distracting Pilots Flying, only pilots at pilots' stations should communicate with other Pilots Flying.

90. This means that there must be no shouting at Pilots Flying from the pit areas or anywhere else.

### Communication Procedures

#### Pilots Entering or Exiting the Runway

91. Pilots and escorted guests or students may only walk on the surfaced runway or grass runway after first verifying that no aircraft are likely to be taking off or landing in the immediate future and announcing to all Pilots Flying "on the runway."

#### Aircraft Entering or Exiting the Runway

92. Prior to taxiing an aircraft on the runway, the Pilot Flying must call out "coming out" to warn other Pilots Flying that the runway is occupied.

93. Conversely, when taxiing off the runway, the Pilot Flying must call out “clear” to tell other Pilots Flying that the runway is now available.

*Specifying Directions (left to right/right to left)*

94. To avoid ambiguity (and the increased safety hazard), Pilots Flying should always qualify their intentions regarding takeoffs, landings, taxiing, back-taxiing, etc. using either “left to right” or “right to left.”

95. Pilots must avoid saying “to the left (or right),” “from the left (or right)” as these can be ambiguous.

96. Directly across the runway is identified as either “straight out” or “across the runway.”

*Taking Off*

*No Takeoffs are Permitted if Any Person is On the Runway*

97. Prior to calling “taking off” and moving the aircraft with the intent to fly, it is imperative that the Pilot Flying visually confirm that there is nobody on, or about to be on, either of the two runways.

*Rolling on the Ground (ROG)*

98. The Pilot Flying must call out “taking off” followed by either “left to right,” “right to left,” or “straight out” (meaning across the runway in line with one of the taxiways).

99. Other Pilots Flying must acknowledge the callout of “taking off” by calling “OK,” or “Go ahead” or indicating to the contrary that it is not safe for the Pilot Flying to proceed with the takeoff.

100. Take offs across the runway are permitted if the Pilot Flying calls out “OK to take off across the runway,” and all other Pilots Flying indicate it is OK to do so.

*Hand Launching*

101. Prior to hand launching an aircraft, the Pilot Flying must call out “hand launching” followed by either “left to right,” “right to left,” or “straight out” (or “across the runway”).

102. Hand launching across the runway is permitted if the Pilot Flying calls out “OK to hand launch across the runway,” and all other Pilots Flying indicate it is OK to do so.

*Vertical Takeoff*

103. Rotorcraft must be placed on the runway, so the Pilot Flying must call out “on the runway” and follow that, when ready, by “vertical takeoff on the runway.”

*Touch-and-Go*

104. If a Pilot Flying intends to perform a touch-and-go, then the Pilot Flying must call “touch and go” instead of “landing,” followed by either “left to right” or “right to left.”

Touch and goes across the runway are not permitted for safety reasons.

*Low Passes*

105. If a Pilot Flying intends to perform a low pass above the runway, the Pilot Flying must call out “low pass,” followed by “left to right” or “right to left.” Optionally the Pilot Flying may also call “slow” or “fast” to alert other Pilots Flying.

*Landing*

*Rolling on the Ground*

106. When a Pilot Flying intends to land the aircraft then they must call out when the aircraft is on the base leg or on finals, “landing” followed by “left to right,” or “right to left,” optionally followed by “on the runway” or “on the grass” and, if the Pilot Flying intends to exit the runway after landing, followed by “full stop.”

107. The Pilot Flying who calls “landing” must do so sufficiently loudly that all other Pilots Flying can hear the call (especially if liquid fueled aircraft are flying or it’s windy). Other Pilots Flying must acknowledge the call with “OK,” or “go ahead.”

108. When the aircraft has landed and the aircraft has been taxied to the taxiway, the Pilot Flying must call “clear” so that other Pilots Flying know the runway is available.

*Full Stop Landings*

109. If a full stop landing results in the aircraft being beyond the taxiways, the pilot must call “back taxiing on the runway” before calling “clear.”

*Vertical Landing*

110. Vertical landings are only permitted on the surfaced runway. Pilots Flying must call “vertical landing on the runway,” and then “on the runway” when they retrieve the aircraft.

*Hand Catch Landings*

111. Hand catching an aircraft (assuming that the aircraft type permits hand catching without exposing the Pilot Flying to any danger from propellers), may be performed on the runway, but the Pilot Flying must call both “landing,” followed by “left to right” or “right to left,” and then add “hand catching on the runway.”

112. After the aircraft has been caught, and the Pilot Flying has moved off the runway, the Pilot Flying must then call “clear” to tell other Pilots Flying that the runway is now available.

*Landing Priority**Gliders or Deadstick*

113. Unpowered gliders or powered aircraft whose engines cannot be started (failure, out of fuel/power) will have landing priority over all other aircraft.

114. If a Pilot Flying therefore calls “landing, deadstick” all other pilots must give right of way to the deadstick landing.

*Radio Control Problems*

115. If a Pilot Flying experiences radio control problems, then they should declare “radio problems” and attempt to land the aircraft on one of the two runways.

*Normal Priority*

116. The first Pilot Flying to call “landing” will have reserved the runway until their aircraft lands, back taxis if necessary, and clears the runway (calling “clear”) or until they call “going around.”

*Aborted Landings / Go Arouns*

117. If the Pilot Flying decides not to continue with the approach to landing or touch-and-go, or to abandon the low pass, the Pilot Flying must call out “going around” to alert the other Pilots Flying.

*Limit of Five Aircraft Flying at Any One Time*

118. A maximum of five aircraft can be flying at the same time. If additional pilots wish to fly, they must wait until the aircraft flying have landed.

119. An exception to this guideline is if there are aircraft flying that are well clear of the pattern (e.g. gliders soaring, or aircraft flying to the east of the field beyond the pattern). They are not included in the count of five.

#### Yielding to Pilots Waiting to Fly

120. Pilots Flying, when they land their aircraft, must allow any other pilot waiting to fly to do so.

#### First Person View (FPV) Flying

121. The AMA defines FPV as “the operation of a Radio Control model aircraft using an onboard camera’s cockpit view to orient and control the aircraft” (see <https://www.modelaircraft.org/sites/default/files/100.pdf> page 9).

122. FPV operations are permitted at the field provided that pilots comply with the AMA document *Unmanned Aircraft Operation Utilizing First-Person View* (see <https://www.modelaircraft.org/sites/default/files/550.pdf>).

123. The most relevant requirements in the above document are:

- a) Pilots flying FPV aircraft must be sufficiently experienced to operate the aircraft without using FPV (in case the FPV system fails).
- b) If the FPV system experiences a drop-out that is longer than momentary, the Pilot Flying must abandon the use of FPV and revert to visual line of sight flying.
- c) The FPV aircraft must remain below 400 feet AGL.
- d) The Pilot Flying must be assisted by another pilot acting as a spotter to allow the Pilot Flying to comply with the FAA’s “see-and-avoid” requirement for manned aircraft and to ensure the safety of people and property on the ground.

#### Retrieval of Crashed Aircraft

##### Fire Prevention: Aircraft with LiPo Batteries

124. Lithium Polymer batteries are known to self-ignite if damaged (the damage causes an internal short circuit). Since farm equipment can easily damage LiPo batteries months after a crash, and thus cause a fire, the pilot MUST recover the crashed battery as soon as possible. <Charlie Hagen’s insertion.>The lithium itself burns out fairly quickly, leaving the electrolyte and the plastic battery container burning. Thus, conventional fire extinguishers and/or water can be used to extinguish the fire. An additional risk is posed by the LiPo causing the surrounding vegetation to ignite. A small fire can grow rapidly, so if in doubt call 911 and get the Fire Department’s assistance.

##### Within the Field Boundary

125. The pilot who was flying the crashed aircraft, either by him or herself may retrieve the aircraft following the normal protocol to enter or cross the surfaced runway. Other pilots not flying may assist.

126. If the first person/people to arrive at the crash site are not the pilot of the aircraft that crashed, they must not move the wreckage unless there is a risk of electrical fire (e.g. smoke coming from a LiPo battery). The pilot of the crashed aircraft may want to inspect the wreckage to determine the cause of the crash and/or to retrieve components.

127. The pilot of the crashed aircraft should mark the crash site using sticks/small stones so that pilot can return to the crash site if there is any dispute about where the crash site is located or if it is subsequently discovered that there are additional parts that were not recovered.

Outside the Field Boundary (e.g. Farmer's Crop Fields)

128. The pilot who was flying the crashed aircraft must take a visual bearing to establish the direction and likely location of the crash site.

129. The first priority is to approach the farmer and request permission to go onto that farmer's land. The farmer has every right to refuse that permission, so the aircraft may be irrecoverable.

130. The second priority is to eliminate or minimize all crop damage: only one or two people should go onto the farmer's land, no vehicles should drive on to the farmer's land except if there are well established vehicle tracks and the farmer has granted permission for the vehicle.

131. Do not walk across the direction of the crop – move to the end of the field and walk in via the furrows or crop rows. If need be, establish cell phone contact with other pilots still on the airfield to find the likely location of the crash site using the visual bearing.

132. Having recovered the aircraft, the pilot who crashed the aircraft must contact the farmer and thank him or her for allowing access to the land for the recovery.

\* \* \* END \* \* \*