

# KAMLOOPS MODEL AIRPLANE SOCIETY



## TOLKO FIELD ORIENTATION & SAFETY CHECKLIST

At the completion of this document, a new member will be aware of all MAAC and CLUB safety rules, field/lake procedures and field/lake orientations for our two Sanctioned Sites. The member shall be conversant with the pre-flight checklist and understand flight patterns at the field/lake. We will also cover the entry, safety features and security of the Tolko Field, on exit.

This document is comprised of five (5) sections:

- RPAS (Remotely Piloted Aircraft Systems) requirements by Transport Canada;
- MAAC and KMAS Safety Guidelines;
- Tolko Field;
- Goose Lake Float Fly area;
- 2 Signature areas. The person being reviewed and the reviewer sign both areas. The person being reviewed, retains this document with the first signature page. The second signature sheet gets detached and put in the Field Orientation and Safety Checklist folder in the Tolko Field Hangar folder, for the club Secretary.

### **RPAS REQUIREMENTS BY TRANSPORT CANADA**

All persons flying Remotely Piloted Aircraft Systems, must have the following and follow CARS Part IX (Canadian Aviation Regulations):

- An RPAS licence issued by Transport Canada;
- A Logbook that includes the required fields as laid out by Transport Canada;
- All the Remotely Piloted Aircraft they intend to fly, have to be registered with Transport Canada;
- The registration number issued in accordance with section 901.05 is clearly visible on all the remotely piloted aircraft.

### **MAAC AND KMAS FLIGHT SAFETY GUIDELINES**

The complete **MAAC Safety Guidelines** is available on the MAAC website under Documents at [www.maac.ca](http://www.maac.ca)

***Warning: Key conditions in our insurance policy, rely on everybody following these Rules. Insurance coverage can be denied if you do not follow these Rules.***

Safety Guidelines change from time to time; while MAAC and KMAS circulate updates regularly it is entirely your responsibility to remain current, so please be sure to familiarize yourself with the most current Guidelines.

## MAAC SAFETY GUIDELINES

- All members shall review and comply with the MAAC safety Code, the specific rules of any special interest category, and any rules established for the specific Flying site/or event.
- The Safety Code and its attachments may be amended from time to time. All members shall review these documents for any such change.
- No member shall operate a model aircraft in a careless, reckless or otherwise dangerous manner that may pose a hazard to persons or property.
- No member shall operate a model aircraft while under the influence of alcohol or judgement impairing drugs.
- No member shall operate a model aircraft in Canada weighing more than 25 kilograms (55.11 pounds) including fuel and payload.
- No member shall operate a model aircraft at a location where prohibited by law.
- No member shall allow projectiles to be launched from the ground with the intent of damaging or destroying a model aircraft.

## KMAS FIELD SAFETY GUIDELINES

- No Intentional Flying over any general area where field workers or equipment are active. Note: The presence of active field workers could easily require that no flying take place at all.
- If a pilot needs to cross the runway to retrieve a plane on the Grass Runway while other planes are flying, the pilot retrieving shall obtain verbal permission from all other flying pilots, prior to proceeding.
- If a pilot needs to go out into the long grass or wooded areas, they will wait until all planes have landed, then place the Traffic Safety Cone in the centre of the runway (Tolko Field), before proceeding. Once they have returned and retrieved the Traffic Safety Cone, flying may commence. At no time will pilots fly when the cone is on the runway.
- Pilots should loudly announce their intention to take off, the direction they are taking off to, landing, touch and go, etc. and other pilots on the flight line should acknowledge the announcement.
- No Flying or landing behind the Flight Line, no matter how far away from the runway. See the maps at the end of this document for clarification of where the Flight Line is.
- Under normal circumstances, a maximum of five (5) aircraft may be flying at one time at Tolko Field and three (3) aircraft at Goose Lake. Three or more at the same time require spotters for all aircraft.
- Recommended flight time is a maximum of 15 minutes per flight. Gliders may be exempt if they maintain sufficient height and distance from motorized planes.
- Unaccompanied spectators (any observer who is not a club member unless invited) and animals should stay out of the pit area. Pets should be under control of the owners at all times.
- No breaking in engines in the pit area while other members are flying.
- For everyone's safety, pilots at Tolko Field, should not allow their aircraft to become airborne until it has passed the last flight station. And likewise, when landing.
- No taxiing in the pit area. Engines off when clear of runway after landing.

- Smoking is not permitted anywhere beyond the spectator fence and is strongly discouraged elsewhere.

## CHECK LIST:

We recommend that all pilots get into the habit of using a Radio & Pre-Flight checklist: just like full-scale pilots, before each flying session. The purpose of pre-flight checks is to ensure that your RC plane is in a fit condition to fly, and that everything is working as it should be. Exact pre-flight checks might differ from plane to plane, but there are some fundamental checks that all RC airplanes need to have done, immediately before flight.

If you neglect to carry out the pre-flight checks before you fly your RC airplane, and something is badly amiss, then an avoidable crash is very likely. Many RC pilots have lost their beloved aircraft seconds after take-off, simply because they didn't do the checks!

## PRE-START

- All servos are secure, and linkages to servo and control surfaces are secure.
- Servo horns and control horns are secure and not loose.
- Servo linkages are able to move freely and are not binding.
- All servo connections to the receiver, battery pack and ESC are secure and correct.
- Receiver Battery - Voltage Check
- The receiver and motor battery pack are securely fixed and cannot move during flight.
- Receiver antenna (aerial) is correctly positioned and not damaged.
- The propeller nut is tight and spinner is secure.
- The wing and tail plane (and fin) are secured properly, as per the instructions (i.e. with the correct method of fixing; rubber bands or wing nuts etc.)
- All control surface hinges are secure i.e. you can't pull the control surface away from its respective flying surface.

## STARTUP

- Aircraft Secure
- All Clear - Ahead (prop) and Behind.
- Radio Transmitter On, Radio Receiver On and Checked for Interference (All control surfaces stable.)
- Run Up - Mixture Set (engine testing to take place in testing area)
- Idle (gas) – Reliable, the motor power works correctly.
- Fail Safe Check completed - engine running - secure aircraft - Turn transmitter off - best practice is to set the failsafe to put the aircraft into a flat spin or auto-rotation (heli) condition, so it does not fly away but comes down as gently as possible as close as possible to the location where signal was lost.
- Transmitter Operation Check - Aircraft Control surfaces checked for correct direction. All control surfaces move in the correct sense e.g. moving the rudder stick left moves the rudder to the left.
- Throttle set.

## RANGE CHECK

The purpose of the range check is to make sure the radio signal from transmitter to receiver is strong, so that you can fly your RC airplane at a normal distance away from you, without it going out of radio range. If your plane does go out of range, then you lose all control. A Range Check should always be performed prior to the first flight of **Each** plane, each day.

**Note:** 2.4GHz transmitters need to be switched to their Low Output Power mode (approximately 10%) to properly conduct the test. For 72 MHz transmitters, retracting the antenna to its minimum length diminishes the output power in the same manner. If equipped with an RF Meter, a low reading may indicate a weak signal.

Perform a range check with a radio system thus:

- Switch on the transmitter then the receiver and walk at a distance of 30-36 paces (meters) or so away from the plane. Verifying full control at ranges up to and exceeding 30-36 paces before Loss of Signal (LOS) occurs, will indicate proper transmitter and receiver function.
- While observing the plane, test the movement of all control surfaces for full movement. If you have difficulty seeing the control surfaces, have a fellow member watch and indicate movement, or lack of. If the surfaces start 'twitching' or not responding properly to your stick movements, do not fly. Check the batteries of the radio gear, they may need replacing - low batteries in the transmitter drastically reduce the radio range. Also check for loose connections to the receiver etc., and also the condition of the antenna(s).
- If the batteries and connections are OK but, the control surfaces still don't respond properly, then other people may be using your frequency nearby. Again, do not fly if this is the case. Interference is a big killer of RC airplanes, and you need to be sure that your frequency is clear before you get airborne.
- Always take a few minutes to perform these RC airplane pre-flight checks before you commence your flying session. Get in to the habit of pre-flying your plane every time; the checks take just a couple of minutes to do and will save you the grief of a crashed airplane, if something is amiss.

## PRE-TAKEOFF AT PILOT STATION

- Fly over area clear of people & vehicles – Safety Cone is not on the Runway (Tolko Field).
- Engine check - Full Power - Performance O.K. At Goose Lake, this is performed while the plane is in the water and a second person holding the tail
- Controls - Free and Correct
- Rate Switches - Set
- Trims - Set for Take-off
- Timer - On
- Wind Sock/direction - Checked
- Runway - Clear
- "Announce" - loudly announce your intention to take off and the direction you are taking off to. Other pilots should respond to verify they have heard your intention.

## PRE-LANDING

- Pilots should make every attempt to land into the wind, in order to control the speed of their airplane and should be aware of Cross Winds, that may cause your plane to veer towards other pilot stations;
- "Announce" - loudly announce your intention to land and the direction you will be landing your airplane from, e.g. "From the Right or From the Left". Other pilots should respond to verify they have heard your intention.

## TOLKO FIELD

Tolko field is located at 6500 Old Highway 5, Kamloops, BC V2H 0B7. The Map Coordinates are: N50 degrees 50 minutes 26.20 seconds; W120 degrees 16 minutes 6.23 seconds. The airspace is Class "E", uncontrolled up to 400 feet above ground level according to Nav Canada's *Designated Airspace Handbook* <https://www.navcanada.ca/en/>. The elevation is 1375 feet AMSL. Directions with photos can be found at <http://kmasrc.ca/Club%20Location.html>

## ACCESS TO TOLKO FIELD

Entrance to Tolko Field is made through a locked gate off Old Highway #5 East. The KMAS gate lock is secured by the bottom padlock on the Lock Tree. This padlock is keyed for over 40 members keys and is changed each year. If you are the first person to enter and unlock the padlock, please relock the padlock back on the tree, after opening the gate. This is a very expensive padlock and we need to protect it from vandals taking it.

If you are the last person leaving the Field please:

- Make sure all chairs and stools are put inside the Hangar;
- The fan in the left corner of the first room is unplugged, if on;
- If you used the tractor or opened the tractor doors, check that both doors are latched and locked with the padlock, making sure the rain cover is over the end of the padlock;
- If you used any keys from the Key Lock Box, return these to the Lock Box;
- The inner door is closed and locked with the padlock;
- The outer door is closed and locked with the padlock;
- The gate is closed and locked with the padlock.

On the table in the first room of the Hangar, there are two binders/folders. The first is the Attendance Logbook for persons to sign-in, prior to using the field. Please remember to sign-in so we know who is in attendance should any questions arise. The second folder, contains copies of this document.

## FIRE PROTECTION AND FIRST AID

Battery Fires - There are two white sand pails for battery fires. They are under the sun shade against the wooden posts, one on each side. If there is a battery fire, simply pour sand from one of the pails on the battery, until it is completely covered and the oxygen supply is cut off.

If the fire is the result of a crash and is in the long grass or wooded area, another member should also respond with a fire extinguisher, in case the grass catches fire. There is a fire extinguisher on

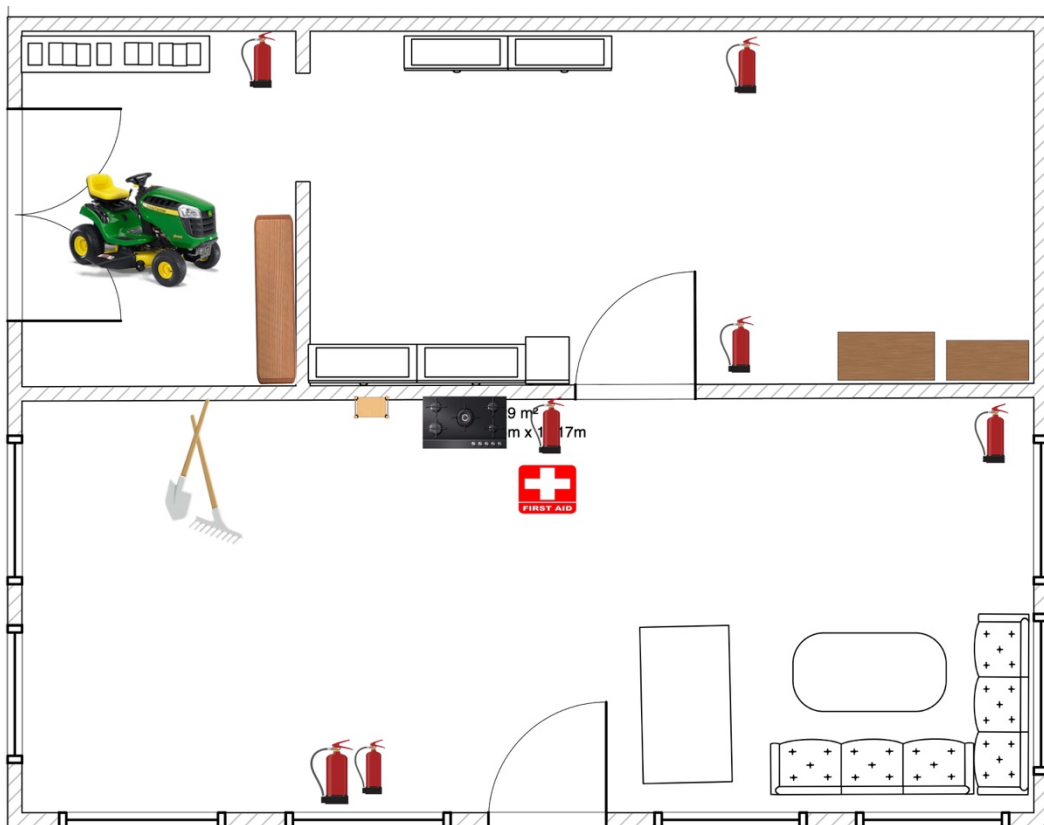
one of the poles under the sun shade with the sand pails. There is also a dedicated Fire Rake and Shovel to the left in the first room, on the wall, as shown on the diagram.

Using a Fire Extinguisher:

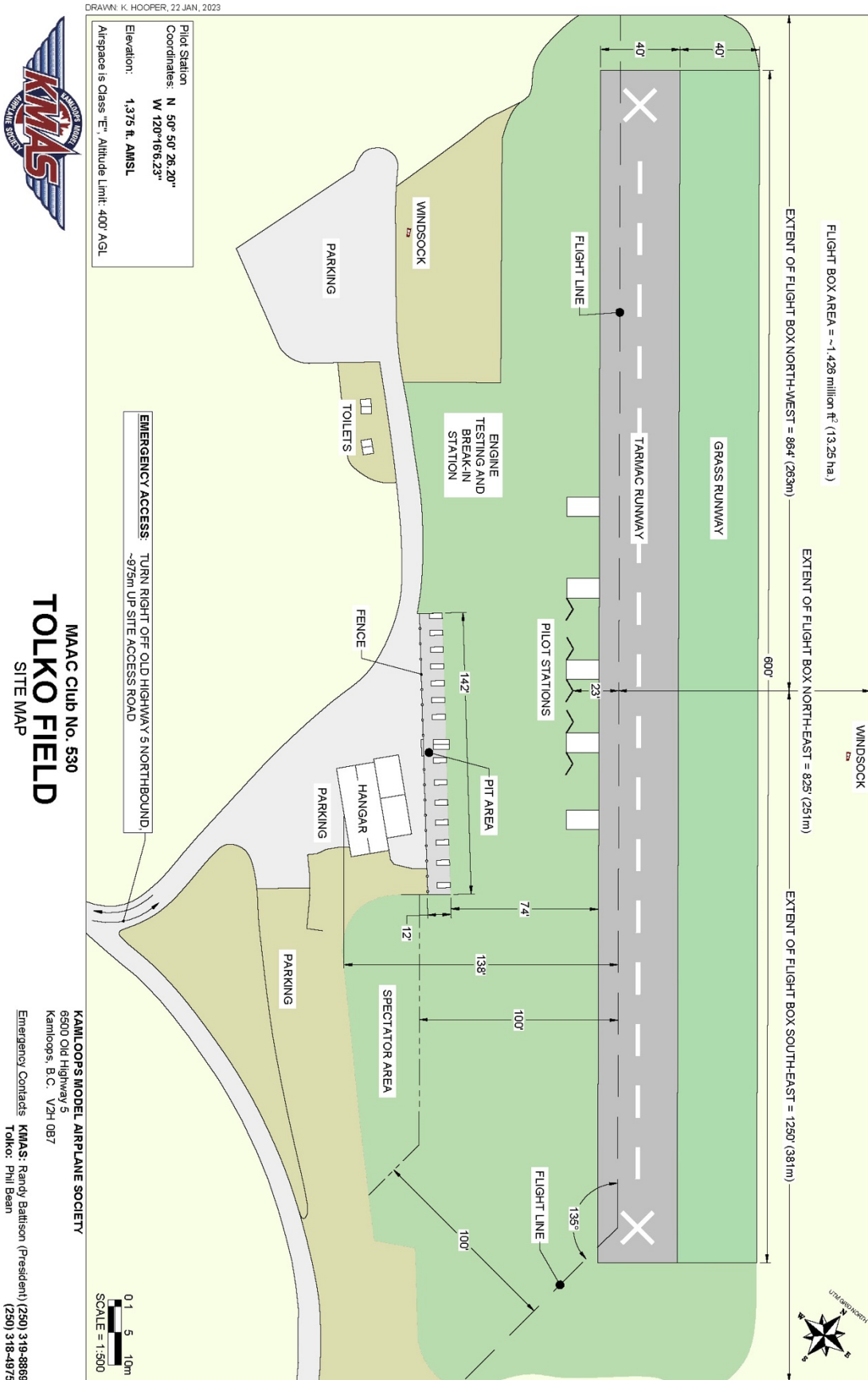
- Pull the pin. Hold the extinguisher with the nozzle pointing away from you and release the locking mechanism.
- Aim low. Point the extinguisher at the base of the fire.
- Squeeze the lever slowly and evenly.
- Sweep the nozzle from side-to-side.

**Note:** If there is a grass fire and it is obviously out of your control, please call Phil Bean at Tolko 250-318-4975 and 1-800-663-5555 or (\*5555 from a cell phone) as soon as possible and report the fire.

The diagram below shows the Hangar locations for Exits, Fire Extinguishers and First Aid Kit. The Double Tractor Garage doors are secured on the outside and shouldn't be considered an Exit when closed.



# TOLKO FIELD FLIGHT MAP

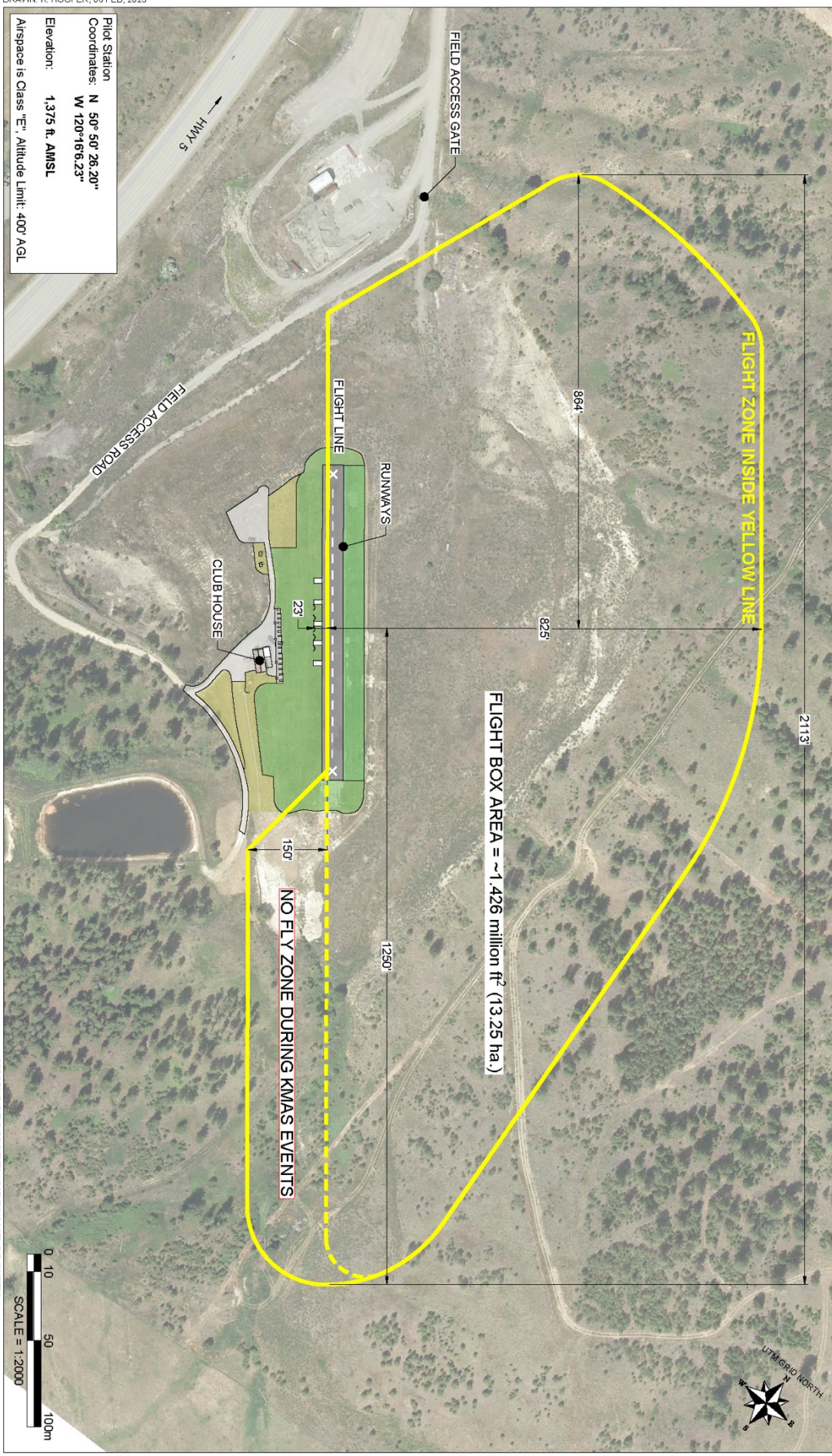




Pilot Station  
 Coordinates: N 50° 50' 26.20"  
 W 120° 16' 6.23"  
 Elevation: 1,375 ft. AMSL  
 Airspace is Class "E". Altitude Limit: 400' AGL

**MAAC Club No. 530  
 TOLKO FIELD  
 FLIGHT BOX**

**KAMILCOOPS MODEL AIRPLANE SOCIETY**  
 6500 Old Highway 5  
 Kamloops, B.C. V2H 0B7  
 Emergency Contacts **KMAS:** Randy Battison (President) (250) 319-8866  
 Tolko: Phil Bean (250) 318-4975







## **KAMLOOPS MODEL AIRPLANE SOCIETY**

### **GOOSE LAKE FLOAT FLY SAFETY RULES**

#### **ADMINISTRATIVE**

Goose Lake is one of KMAS's Sanctioned Sites for RPAS operation only. A copy of these rules must be available to any member who is operating an RPAS. The club will endeavor to keep a copy at the flying site.

All persons operating RPAS at this site must:

1. Be MAAC members in good standing.
2. Be members of the KMAS club, or an invited guest and
3. Agree to follow the MAAC Safety Code and all other club rules.

In the event of an emergency, phone 9-1-1 and provide the following address information:

There are two routes you can take to reach Goose Lake. One via Lac le Jeune Rd. and one via Long Lake Rd. off highway 5A S – Princeton Kamloops Highway.

#### **Route #1 via Lac le Jeune Rd. - 21.1km total from the Trans-Canada Highway**

To get to the lake, traveling west from Kamloops, on the Trans-Canada Highway, take the exit #366 and turn left to Copperhead Dr. Staying West on Copperhead Dr., stay to the right and turn right on Lac le Jeune Rd. Travel through the tunnel and continue on Lac le Jeune Rd. for 15.7km until you come to Goose Lake Rd., on your left. Continue 5.4km on Goose Lake Road, which will take you to the lake, parking and prep area. Directions with photos can also be found at <http://kmasrc.ca/Goose%20Location.html>

#### **Route #2 via Highway 5A S and Long Lake Rd. - 13.4km total from the Trans-Canada Highway but very winding road.**

Long Lake Rd. is accessed from Highway 5A - South Princeton Kamloops Hwy. If you are traveling West on the Trans Canada #1 highway, take exit #368 and turn left at the light. Continue on Hillside Way, which turns into 5A South - Princeton Kamloops Hwy, for 4.4km. Turn right onto Long Lake Rd. Travel on Long Lake Rd. for 1.6km until you come to Goose Lake Rd. on your right. Turn right onto Goose Lake Rd. and travel for 7.4km until you reach the Pilot Station location. Refer to the Site map for the Pilot Station location. Directions with photos can also be found at <http://kmasrc.ca/Goose%20Location.html>

## GOOSE LAKE OPERATING AND SAFETY RULES

The pilot station Coordinates are 50°34'55.1"N 120°23'33,3"W. The airspace is Class “G”, uncontrolled up to 700’ AGL (feet above ground level). The altitude limit for RPAS operation is to remain below 400’agl, unless otherwise authorized by MAAC in writing.

1. All members shall follow the Canadian Aviation Regulations for RPAS.
2. A fire extinguisher must be present for all powered model operations.
3. All pre-flight inspections or assembly shall be done in the designated area.
4. Batteries shall not be connected to electric powered models unless the model is restrained in the start-up area – no exceptions.
5. Gas/glow/turbine models must be restrained and started in the start-up stands or similar, located in the start-up area. Do not conduct prolonged tuning if other pilots are flying.
6. A catch container must be used during fueling gas type airplanes, to prevent fuel spillage.
7. Engine check - Full Power - At Goose Lake, this is performed while the plane is in the water, pointing away from spectators and a second person is holding the tail
8. The direction of take-off landing, and traffic pattern will be determined by the prevailing winds. If there is no wind, all take-offs etc. shall be to the left of the pilot stations.
9. Hand launching and bungee launching shall be done in agreement with any pilots flying – normally off to one side of the pilot stations.
10. No plane is to take off when the recovery boat is in use and all planes must land before the boat is launched.
11. All planes must land when a recreational type watercraft (canoe, kayak, etc.) is launched on the lake by other parties using the lake. No planes are to be flown until the watercraft has exited the water.
12. Under normal circumstances, a maximum of three (3) aircraft may be flying at one time at Goose Lake. Three at the same time require spotters for all aircraft. When a spotter is assisting, their responsibility is to advise the pilot, who they are spotting for, of any aircraft that may be in proximity or on a converging course.
13. Our flying area is as depicted in the attached diagrams.
14. Pilots must restrict their take-offs, flying and landings to the area of the lake at least 30.5 meters (100 feet) from the pilot stations. This 30.5 meters (100 foot) point establishes a safety line, parallel to the shore, that you are not allowed to fly behind.
15. No person is to fly over or past the road which will be on your left!
16. Do not encroach on or harass any of the wildlife in the area, (ducks, geese, turtles, eagles)
17. Visual observers are optional at our site. The following are club procedures for ensuring full scale aviation safety:
  - When any member or other person spots a full-scale airplane that might come near the site, they are to yell out “AIRPLANE” in a loud voice or use the airhorn in the club house or ring the bell.
  - ALL Pilots must immediately descend to as low an altitude as possible and then land as soon as safely able.
  - When the full-scale airplane is no longer a threat, the person who gave the warning shall yell “ALL CLEAR”, or the pilots may make that determination themselves, and resume flying.

18. No RPA or other model aircraft flying will occur below the Club mandated weather minimum. Members may determine the weather themselves with direct observation or use any other source:

- If cloud is present below 1000' above the model flying area
- a horizontal visibility requirement of less than 3sm around the flying area, and
- if there are other obscuring conditions (fog, smoke, haze etc.) which could make spotting full-scale aircraft difficult.

#### Adjacent Aerodromes

The nearest aerodromes are 7nm north of our site, and no special procedures are required.

#### Emergency Procedures

If there is a grass fire and it is obviously out of your control, please call 1-800-663-5555 or (\*5555 from a cell phone) as soon as possible and report the fire. In the case of an emergency, the property lease holder is Dr. Jason McGillivray and can be contacted at 250-319-6925.

If there is any type of near miss or safety concern between a full-scale aircraft and our RPA, ALL FLYING SHALL cease immediately. The members involved should fill out a MAAC reportable occurrence report and submit that to MAAC and the Club executive and follow MAAC policy with the following exceptions:

1. If the member(s) involved believe the risk was very minimal, they may complete their own self declaration or risk assessment using the MAAC form. Submit a copy of the form to the club executive when able and recall you must keep this form for one year (CAR901.49 (2)). Resume flying when done.
2. If the member or Club executive deems the event serious, flying will not resume until members are given permission by the Club executive – in writing.
3. If there is actual contact between an aircraft and a MAAC RPAS – all flying will cease until MAAC confirms we may resume operations.
4. This process is for your protection.

There are no other risk mitigating strategies required at KMAS Goose Lake site. The MAAC “see and avoid” technique has been determined to be adequate to ensure aviation safety.

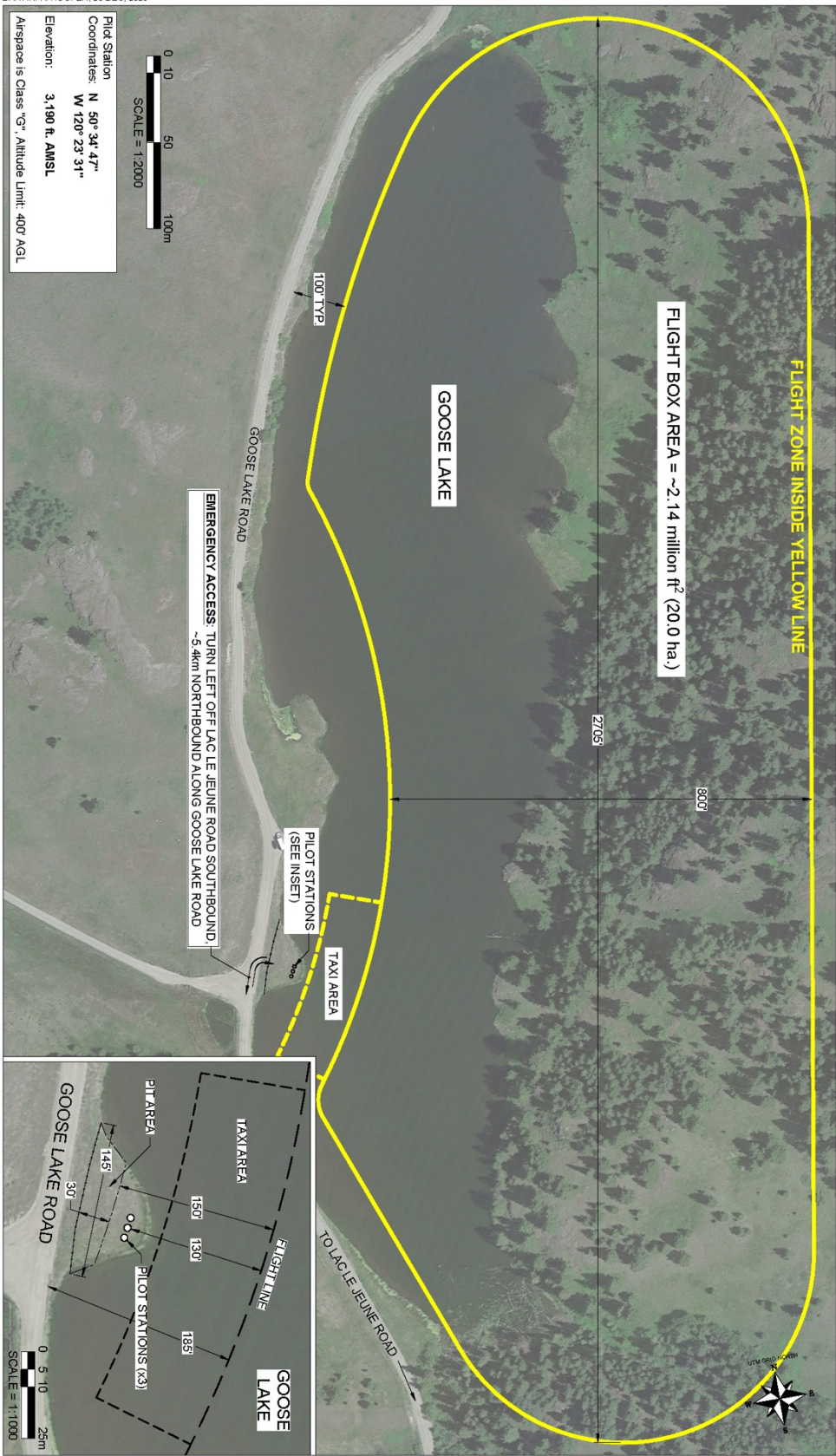
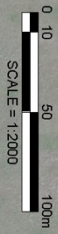
The Club executive will review these rules at least once a year.

# GOOSE LAKE FLIGHT AREA

DRAWN: K. HOOPER, 29 DEC, 2023

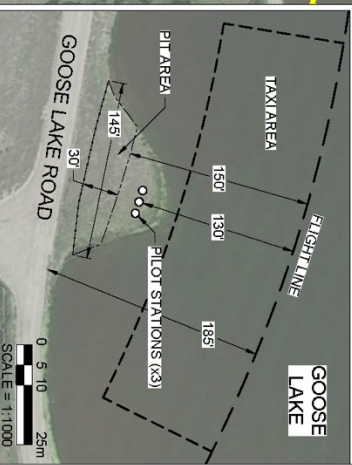


Pilot Station  
Coordinates: N 50° 34' 47"  
W 120° 29' 31"  
Elevation: 3,190 ft. AMSL  
Airspace is Class "G", Altitude Limit: 400' AGL



MAAC Club No. 530  
**GOOSE LAKE**  
FLIGHT BOX

**KAMIILOOPS MODEL AIRPLANE SOCIETY**  
Western shore of Goose Lake, ~5.4km North along Goose Lake Road  
(Off Lac le Jeune Road, south out of Kamiloops)  
Thompson-Nicola, B.C. V0E 2N0  
Emergency Contacts: **KMAS:** Randy Battison (President) (250) 319-8889  
Goose Lake: Dr. Jason McGillivray (250) 319-8925





## KAMLOOPS MODEL AIRPLANE SOCIETY

### FIELD ORIENTATION & SAFETY CHECKLIST SIGNATURE SHEET

This Certifies the Field Orientation & Safety Checklist contained in this document, has been reviewed with the undersigned.

This date: \_\_\_\_\_.

\_\_\_\_\_  
Member's Name (print)

\_\_\_\_\_  
Member's Signature

\_\_\_\_\_  
MAAC #

Reviewed with the Member by:

\_\_\_\_\_  
Member's Name (print)

\_\_\_\_\_  
Member's Signature

\_\_\_\_\_  
MAAC #

Directions: The member being given the review and the member giving the review, both sign the first signature page in the handout and the second signature page. The reviewed member retains the handout with the first signature page, as proof of their review. The second signature page is detached and given to the Club Secretary to be kept on file as proof of the review.

**This page blank**



## KAMLOOPS MODEL AIRPLANE SOCIETY

### FIELD ORIENTATION & SAFETY CHECKLIST SIGNATURE SHEET

This Certifies the Field Orientation & Safety Checklist, has been reviewed with the undersigned.

This date: \_\_\_\_\_.

\_\_\_\_\_  
Member's Name (print)

\_\_\_\_\_  
Member's Signature

\_\_\_\_\_  
MAAC #

Reviewed with the Member by:

\_\_\_\_\_  
Member's Name (print)

\_\_\_\_\_  
Member's Signature

\_\_\_\_\_  
MAAC #

Directions: The member being given the review and the member giving the review, both sign the first signature page in the handout and the second signature page. The reviewed member retains the handout with the first signature page, as proof of their review. The second signature page is detached and given to the Club Secretary to be kept on file as proof of the review.