

Thunder Bay Model Airplane Remote Control Club Lakehead Aeromodellers Boulevard Lake Guidelines

Location: N48°27'49" W89°11'42"

Revised / Updated July 2023

Section 1 - General / Administration

- 1.1 All flying is restricted to current club members, holding both current year Club and MAAC memberships.
- 1.2 Club's guests qualified pilots are welcome to use the field a maximum of (3) times in the calendar year. They must also hold a current year MAAC membership.
- 1.3 Club's guest flights are only allowed under the direct supervision of a qualified pilot member.
- 1.4 Proof of current year MAAC membership must be made available, if requested by any member of the club executive.
- 1.5 Thunder Bay Model Airplane Remote Control Club / Lakehead Aeromodellers Boulevard Lake guidelines and MAAC Safety Code must be observed at all times.
- 1.6 Members are required to report all incidents or accidents between Club models and other aircraft or persons on the ground, that are not members of MAAC, to a member of the club executive or the Zone D, Zone Director.
- 1.7 If there is an accident requiring emergency services, cellular service is adequate to call 911. The civic address is 381 Lyon Boulevard East, Thunder Bay, Ontario, P7A 1A7.
- 1.8 Allowed categories of Modeling: (This list will be referenced as "*Models*" in this document)
 - a) Fixed Wing on Floats
 - b) Helicopters on Floats
 - c) FPVs of the above categories
- 1.9 No member shall operate any category of *model* while under the influence of alcohol / recreational drugs or other judgment impairing drugs.
- 1.10 All pets must be leashed, under control and remain in the parking / spectator area. (See appendix B)
- 1.11 Everyone must remove their own garbage from the field at the end of their flying day.

- 1.12 A copy of these rules must be available to all RPAS pilots while using this site, either electronically or in print. The club will endeavor to provide a copy at the site. As such, these rules can be found on the club's website (<https://lakeheadrc.ca>) and a hard copy can also be found in the pit area.
- 1.13 The club executive shall review these rules at least once a year prior to the AGM.

Section 2 - Normal Operating Procedures and Club Safety Rules

See appendixes A and B for Flying Area and Field Layout

2.1 Transmitter & Frequency Control

- 2.1.1 Thunder Bay Model Airplane Remote Control Club/Lakehead Aeromodellers allows the use of both narrow band 72 MHz and 2.4 GHz transmitters.
- 2.1.2 Upon arrival at the site, all 72 MHz transmitters must be placed on the impound table located in the pit area, and ONLY removed from the impound table, when the pilot has verified the frequency is open (not in use) and proper frequency pin had been placed on the frequency control panel located nearby the impound table.
- 2.1.3 All 72 MHz transmitters must be turned off unless the pilot has the frequency properly pinned. Note: Only narrow band 72 MHz transmitters are approved for use at this site.
- 2.1.4 All 72 MHz transmitters must be returned to the impound table after every flight, frequency pin removed from control panel, turned off and stored in the impound table until required for further flights.
- 2.1.5 Additional frequencies may be properly pinned off, if pilots are performing set up activities on their aircraft, in the pit areas, for engine set ups, control surface checks and adjustment.

2.2 Engine Control & Safety

- 2.2.1 A fire extinguisher and sand bucket must be readily available for all powered and electric model operation.
- 2.2.2 Mufflers are required on all engines over 0.156 cu. in displacement. No flow through mufflers are allowed.
- 2.2.3 Engine run-ups are only allowed in the start-up areas.

2.2.4 Starting of stalled *Models* in the flying area is prohibited. In these instances, the *Models* must be moved to shore area for restart or returned to the pit area for adjustments.

2.3 Pit, Start-Up and Shutdown Areas

2.3.1 Model assembly and setup shall be completed in the designated pit area.

2.3.2 Batteries shall not be connected to electric models unless the model is restrained in the start-up area – **no exceptions**.

2.3.3 Gas/glow/turbine models must be restrained and started in the start-up area. Do not conduct prolonged tuning if other pilots are flying.

2.3.4 All *Models* must be facing the water when in the start-up area.

2.3.5 Once start-up or battery connection is completed, pick up your model safely and bring it to the shoreline where it can be water taxied into position for take-off. Bear in mind that you might not be alone in the start-up area.

2.3.6 Once flying is completed, shutdown or battery disconnection shall be made as soon as the model hits the shoreline. The model can then be carried out to the pit area.

2.4 Aircraft Control / Flight Parameters

2.4.1 The pilot stations are located at the following latitude and longitude:
N48°27'49"/W89°11'42".

2.4.2 The Thunder Bay Model Airplane Remote Control Club/Lakehead Aeromodellers Boulevard Lake site flying area is an irregular pentagon shape. The Boulevard Lake flying area as measured from the centre of the pilot stations is extending 125m to the left, 150m to the right and 200m straight out. See appendix A

2.4.3 All flying must be performed within the defined Flying Area. All other areas are defined as No Fly Zone.

2.4.4 No flying permitted for any *Models* behind the Flight Line.

2.4.5 All *Models* take offs and landings are to be made from the flying area (water), as defined by the prevailing wind direction. Changes to the circuit direction will be made as required and shall be announced.

2.4.6 All *Model* flying, take offs and landings must be performed from the pilot stations. If required for training or for maiden of a new or repaired *Model*, take off may be

performed while standing behind the aircraft. Permission or approval must be obtained from all actively flying pilots prior to entering the runway.

- 2.4.7 Boat recovery of models that landed or crashed off in the water but in the flying area will be done in agreement with any pilots flying.
- 2.4.8 Hand-launching of smaller models from the shoreline is permitted but shall be done in agreement with any pilots flying.
- 2.4.9 All landings and take offs shall be “Called” to notify active pilots of intentions.
- 2.4.10 Low flying over water landing area “Low Pass” is allowed as long as the pilots at the pilot stations are made aware and see no objection.
- 2.4.11 3D flying is not permitted at the Boulevard Lake site.
- 2.4.12 Dead stick landings take priority – Active pilots to be advised of dead stick landings via a “Call out” from the unlucky pilot.
- 2.4.13 Maiden of a new or rebuilt *Model* requires a second qualified pilot to act as an observer. This applies when other pilots or spectators are present. Exclusive airspace is preferred, otherwise all active pilots at the pilot stations are to be notified prior to flight.
- 2.4.14 Maximum flying altitude is set to 400 feet above ground level (AGL).
- 2.4.15 Pilots may fly in formation provided they previously agreed to do so.
- 2.4.16 There is no limit on the number of airborne models.
- 2.4.17 Night flying is not permitted at the Boulevard Lake site.
- 2.4.18 No flying will commence until sunrise and will end at sunset. These times are available on the Weather Network App using the City of Thunder Bay.

Section 3 – Nearby Aerodrome

- 3.1 If you are the first pilot of the day and have printed a RPAS Wilco site survey, please leave it at the impound table for fellow modellers to reference.
- 3.2 Thunder Bay Model Airplane Remote Control Club/Lakehead Aeromodellers Boulevard Lake Site operates within 3nm of an aerodrome as listed in the CFS or CWAS and is required to provide all members with the following information:

- a) The aerodrome name is Thunder Bay (Water Aerodrome) (CKE6) and it is located 1.0 nautical miles east southeast of our modelling site. (See Appendix C)
- b) The water aerodrome is home to a private general aviation aircraft.
- c) Our modeling site is clear of the established water aerodrome traffic pattern. There are possibilities where aircraft departing west could overfly our site. Normally, these float planes will fly well above our site to meet the CARS requirement when flying over built up areas. Additionally, other aircrafts may also be transiting in the area at 1000' AGL or above as Thunder Bay international airport (CYQT) is approximately 6NM southwest of our site.
- d) CKE6 has currently no Canada Water Aerodrome Supplement (CWAS) RPA procedures and no other CWAS PRO comments that affect our modelling site. (See appendix D)
- e) In the event of a “fly-away” towards CKE6, you may call the water aerodrome operator at 807-683-8081 and advise them of the issue. Our site is in uncontrolled airspace so there is no requirement to notify ATC.
- f) Thunder Bay Model Airplane Remote Control Club/Lakehead Aeromodellers members should check for CKE6 related NOTAM either using the [NAV CANADA NOTAM](https://plan.navcanada.ca) (<https://plan.navcanada.ca>) website or the RPAS Wilco app.
- g) When completing the site survey using the Wilco RPAS app, members should review CWAS entries for any new information, procedures (PRO) or Caution that might have been added for CKE6. Members are reminded that the CWAS is updated every 56 days. (See appendix D)
- h) The club executive has contacted the operator (OPR) of CKE6, and they have expressed no issues with our RPAS site.

Section 4 - Full-Scale traffic avoidance and reporting

4.1 Visual observers are **optional** at our site unless you are flying a First Person View (FPV) *model* as per MAAC requirement. In these instances, please refer to Section 6 of this document.

4.2 The following are club procedures for ensuring full scale aviation safety:

- a) When any member or other person spots a full-scale airplane that might come near the site, they are to yell out “AIRPLANE” three times in a loud voice or use the airhorn located on site.

- b) ALL Pilots **must** immediately descend as low as possible and then land as soon as safely able.
- c) When the full-scale airplane is no longer a threat, the person who gave the warning shall yell out “ALL CLEAR” three times, or the pilots may make that determination themselves, and resume flying.

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

- a) 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. The form can be found on the MAAC website in the “Resources” section. Submit a copy of the form to the club executive when able and remember, you must keep this form for one year (CAR901.49 (2)). Resume flying when done.
- b) 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.
- c) If there is actual contact between an aircraft and a MAAC RPAS – all flying will cease until MAAC confirms we may resume operations.
- d) This process is for **your** protection.

4.4 There are no other risk mitigating strategies required for the Thunder Bay Model Airplane Remote Control Club/Lakehead Aeromodellers.

Section 5 - Weather requirements

5.1 No *Models* flying will occur below the club mandated weather minimum:

- a) If clouds are present below 1000 feet AGL over the club designated flying area,
- b) a horizontal visibility requirement of less than 3 statute mile around the club designated flying area, and
- c) if there are other obscuring conditions (fog, smoke, haze, etc.) which could make spotting full-scale aircraft difficult.

Section 6 – Training

- 6.1 Instructors and their students always have priority over other member's flights. This goes also for frequency allocation of 72MHz transmitters.
- 6.2 When flight training is under way, the designated flying area becomes a priority to student pilots. Open flying and flight training will be permitted concurrently with the approval of the instructor **and** student.

Section 7 – Visual Observer for FPV flights

- 7.1 Definition: *Visual Observer* – means a person, 14 years of age or older, who is assigned the sole task of actively scanning the sky in 360 degrees, for purposes of detecting and alerting RPAS pilots and modelers of any approaching full-scale aircraft. While they do not need to be a MAAC member or a RPAS license holder, that is preferred.
- 7.2 Thunder Bay Model Airplane Remote Control Club/Lakehead Aeromodellers requires visual observers for any First Person View (FPV) flights.
- 7.3 When visual observers are required, they shall proceed as follows:
- a) The sole role is to scan the sky for approaching full scale aircraft – do not watch the model. Pay particular attention to the east southeast where Thunder Bay (Water Aerodrome) is located.
 - b) The visual observer should stand or sit close to the flying pilot flying the FPV model. Be close enough so they can hear you.
 - c) When spotting a full-scale aircraft conflict – yell “AIRPLANE” three times in a clear loud voice.
 - d) When you believe the full-scale aircraft is no longer a problem yell – “ALL CLEAR” three times.
- 7.4 Whenever a visual observer is required, all other club members present must keep unnecessary ambient noise to a minimum. No engine tuning or prolonged run-ups allowed.

LAM CLUB - FLYING AREA
Boulevard Lake Site
APPENDIX A

NO FLY ZONE

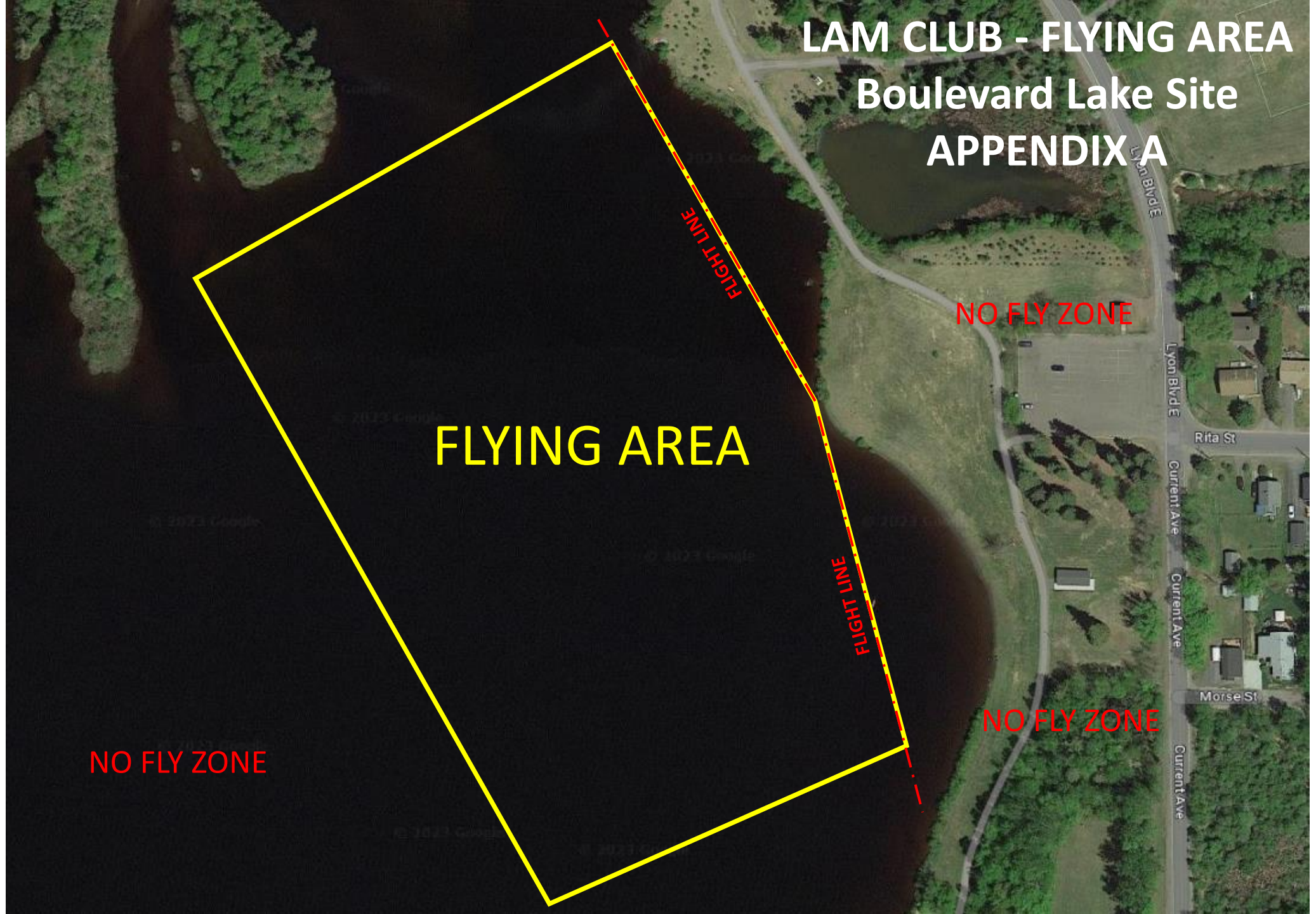
FLYING AREA

NO FLY ZONE

NO FLY ZONE

FLIGHT LINE

FLIGHT LINE



LAM CLUB - LAYOUT

Boulevard Lake Site

APPENDIX B

FLYING AREA

NO FLY ZONE

40m

13m

10m

40m

NO FLY ZONE



Spectator/Parking Area

Lynch Blvd E

LAM CLUB - NEARBY AERODROME

Boulevard Lake Site

APPENDIX C

Lakehead
Aeromodellers
Boulevard Lake Site

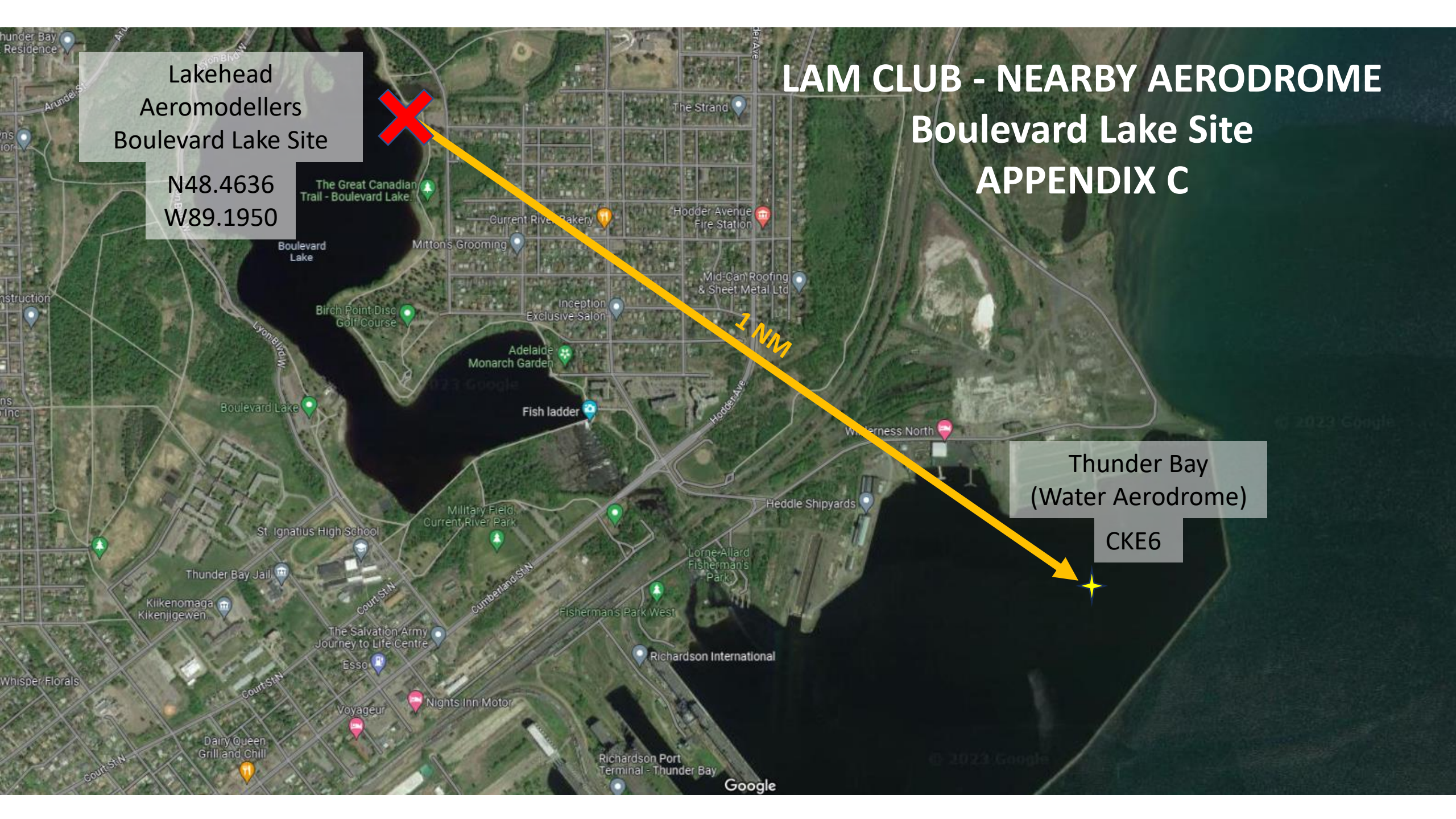
N48.4636
W89.1950



1 NM

Thunder Bay
(Water Aerodrome)

CKE6



LAM CLUB - NEARBY AERODROME

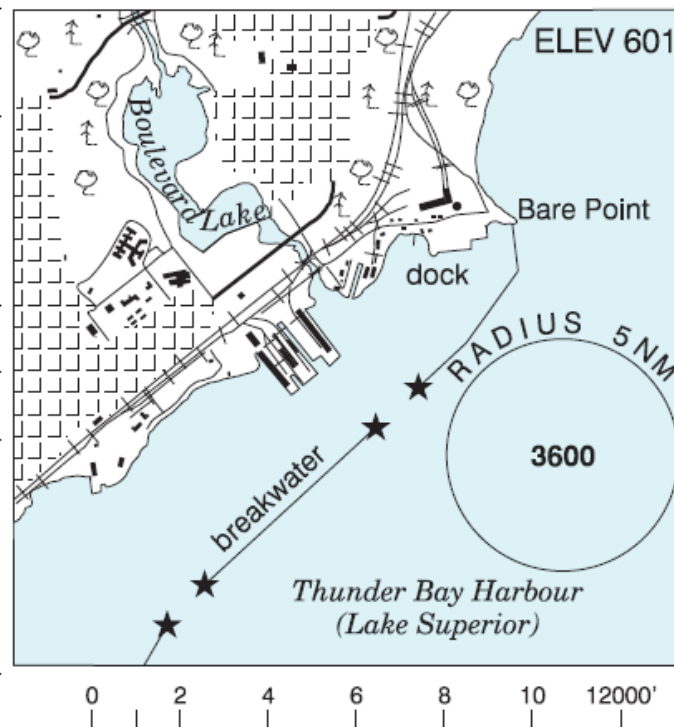
Boulevard Lake Site

APPENDIX D

THUNDER BAY ON

CKE6

REF	N48 27 W89 10 Adj NE 3°W UTC-5(4) Elev 601' A5001 A5008
OPR	Lakehead Aviation 807-683-8081 Reg; Wilderness North Air 807-983-2047 Reg; Harbour Comm 807-344-3594
PF	B-1 C-2,3,4,5,6
CUST	AOE/15 888-226-7277
FLT PLN	Pilots to open/close VFR flt plan with London rdo, FISE or by phone
FIC	London 866-WXBRIEF (Toll free within Canada) or 866-541-4104 (Toll free within Canada & USA)
SERVICES	
FUEL	100LL
OIL	All
S	2,3,5
A/D DATA	Open water mid May-mid Nov. Mud bottom, wharfs. Skiplanes in win.
COMM	
ATF	tfc 122.8 5NM 3600 ASL excluding Thunder Bay CZ
NAV	
NDB	QT 332 (M) N48 20 47 W89 26 02
VOR/DME	YQT 114.1 Ch 88 N48 15 14 W89 26 15 (1641')
CAUTION	Heavy swells. Land A/D 7.8NM SW. Exposed to S & E winds with heavy seas. Extv flt tng within 35NM W & N of CYQT CZ to 6000 ASL.





Flight Plan & Site Survey

Created using **RPAS Wilco**[®]

Operation Name:

Pilot Name:

Pilot Certificate:

Flight Start:

Flight End:

Flight Area (Latitude):

Flight Area (Longitude):

Altitude - Radius:

Airspace:

FIR - Contact:

Guidelines

[REDACTED]

[REDACTED]

July 20, 2023 10:31 AM

July 20, 2023 11:59 PM

48° 27' 50.06" N (48.464)

89° 11' 42.50" W (-89.195)

Alt: 400 ft - **Rad:** 926.0 m (0.5 nm)

UNCONTROLLED

CZWG - 204-983-8338

Please ensure you received all required authorizations prior to flight.

Disclaimer

This Site Survey was created using RPAS Wilco by AIM Robotics. The flight plan contained is intended only for RPAS flights on the date/time and location specified. The user accepts all responsibility for the accuracy and completeness of the information contained.

For the complete Terms & Conditions, see

<https://rpswilco.com/#/tnc>

Included

Site Survey

Obstacles (if available)

Nearby Aerodromes

Canadian Aviation Regulations

GFA

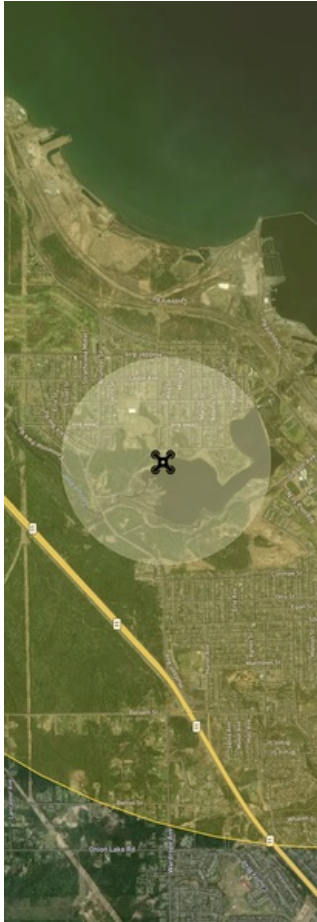
Aerodrome Supplements

-METAR & TAF (if available)





-NOTAMS

-CFS

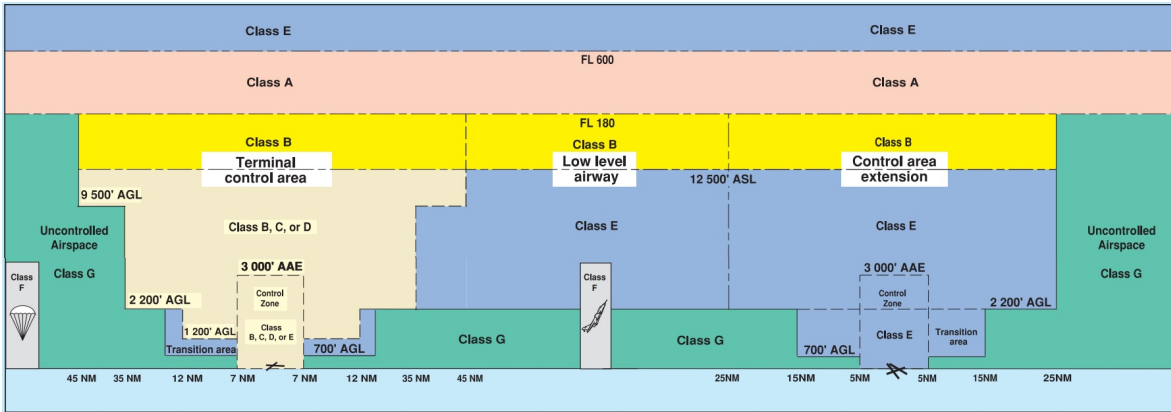
Flight Map



MAP Details

	Latitude	Longitude
 MODEL	48° 27' 50.06" N (48.464)	89° 11' 42.50" W (-89.195)
 Pilot	()	()
 Payload Op.	()	()
 Observer	()	()
Latitude		Longitude
Latitude		Longitude

Airspace Classification



Overlying Airspaces

No Airspace Info Available

Nearest Aerodromes & Distance from Operation

THUNDER BAY (CKE6 - WATERDROME - Reg)	Lat: 48.45	Long: -89.167	2.588 KM	1.4 NM
THUNDER BAY (HEALTH SCIENCE CENTRE) (CTB2 - HELIPIPORT - Cert)	Lat: 48.423	Long: -89.27	7.154 KM	3.86 NM
THUNDER BAY (CYQT - AERODROME - Cert)	Lat: 48.372	Long: -89.322	13.86 KM	7.48 NM
TWO ISLAND LAKE (CTI2 - WATERDROME - Reg)	Lat: 48.687	Long: -89.36	27.613 KM	14.91 NM

Canadian Aviation Regulations

Division III — General Operating and Flight Rules

For full listing please visit : <https://laws-lois.justice.gc.ca/eng/regulations/SOR-96-433/FullText.html#s-901.27>

Visual Line-of-sight

- **901.11 (1)** Subject to subsection (2), no pilot shall operate a remotely piloted aircraft system unless the pilot or a visual observer has the aircraft in visual line-of-sight at all times during flight.
- **(2)** A pilot may operate a remotely piloted aircraft system without the pilot or a visual observer having the aircraft in visual line-of-sight if the operation is conducted in accordance with a special flight operations certificate — RPAS issued under section 903.03.

Procedures

- **901.23 (1)** No pilot shall operate a remotely piloted aircraft system unless the following procedures are established:
 - **(a)** normal operating procedures, including pre-flight, take-off, launch, approach, landing and recovery procedures; and
 - **(b)** emergency procedures, including with respect to
 - **(i)** a control station failure,
 - **(ii)** an equipment failure,
 - **(iii)** a failure of the remotely piloted aircraft,
 - **(iv)** a loss of the command and control link,
 - **(v)** a fly-away, and
 - **(vi)** flight termination.
- **(2)** If the manufacturer of the remotely piloted aircraft system provides instructions with respect to the topics referred to in paragraphs (1)(a) and (b), the procedures established under subsection (1) shall reflect those instructions.
- **(3)** No pilot shall conduct the take-off or launch of a remotely piloted aircraft unless the procedures referred to in subsection (1) are reviewed before the flight by, and are immediately available to, each crew member.
- **(4)** No pilot shall operate a remotely piloted aircraft system unless the operation is conducted in accordance with the procedures referred to in subsection (1).

Site Survey

901.27 No pilot shall operate a remotely piloted aircraft system unless, before commencing operations, they determine that the site for take-off, launch, landing or recovery is suitable for the proposed operation by conducting a site survey that takes into account the following factors:

- **(a)** the boundaries of the area of operation;
- **(b)** the type of airspace and the applicable regulatory requirements;
- **(c)** the altitudes and routes to be used on the approach to and departure from the area of operation;
- **(d)** the proximity of manned aircraft operations;
- **(e)** the proximity of aerodromes, airports and heliports;
- **(f)** the location and height of obstacles, including wires, masts, buildings, cell phone towers and wind turbines;
- **(g)** the predominant weather and environmental conditions for the area of operation; and
- **(h)** the horizontal distances from persons not involved in the operation.

Operations at or in the Vicinity of an Aerodrome, Airport or Heliport

- **901.47 (1)** No pilot shall operate a remotely piloted aircraft at or near an aerodrome that is listed in the *Canada Flight Supplement* or the *Water Aerodrome Supplement* in a manner that could interfere with an aircraft operating in the established traffic pattern.
- **(2)** Subject to section 901.73, no pilot shall operate a remotely piloted aircraft at a distance of less than
 - **(a)** three nautical miles from the centre of an airport; and
 - **(b)** one nautical mile from the centre of a heliport.
- **(3)** No pilot shall operate a remotely piloted aircraft at a distance of less than three nautical miles from the centre of an aerodrome operated under the authority of the Minister of National Defence unless the operation is conducted in accordance with a special flight operations certificate — RPAS issued under section 903.03.

Records

- **901.48 (1)** Every owner of a remotely piloted aircraft system shall keep the following records:
 - **(a)** a record containing the names of the pilots and other crew members who are involved in each flight and, in respect of the system, the time of each flight or series of flights; and
 - **(b)** a record containing the particulars of any mandatory action and any other maintenance action, modification or repair performed on the system, including
 - **(i)** the names of the persons who performed them,
 - **(ii)** the dates they were undertaken,
 - **(iii)** in the case of a modification, the manufacturer, model and a description of the part or equipment installed to modify the system, and
 - **(iv)** if applicable, any instructions provided to complete the work.
- **(2)** Every owner of a remotely piloted aircraft system shall ensure that the records referred to in subsection (1) are made available to the Minister on request and are retained for a period of
 - **(a)** in the case of the records referred to in paragraph (1)(a), 12 months after the day on which they are created; and
 - **(b)** in the case of the records referred to in paragraph (1)(b), 24 months after the day on which they are created.
- **(3)** Every owner of a remotely piloted aircraft system who transfers ownership of the system to another person shall, at the time of transfer, also deliver to that person all of the records referred to in paragraph (1)(b).