

Gatineau Gliding Club (GGC)



Fleet Maintenance Manual

April 2018

Manual Owner:
Maintenance Director

Approved by [Name]

Revision 4

REVISION RECORD

REVISION NO.	AFFECTED PAGES	DESCRIPTION	ISSUE DATE	INITIAL
0	All	Initial draft release	January 2005	RH
1	“	Formal release	April 2005	RH
2	“	Figure 1 updated.	Feb. 2006	RH
“	“	Assembly photos for L13 and L33 added.	“ “	RH
“	“	SGS 1-26 assembly instructions added	“ “	RH
3		References to pilot manuals added	Sept 2012	RH
4	Fig. 1	Updated	April 2018	RH
“	Section 5	Information updated for current fleet	“ “	RH

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1. OVERVIEW

This document has been generated to describe the Fleet Maintenance procedures employed at GGC to ensure the continuing airworthiness of club owned gliders and towplanes. This document should be reviewed by all club members.

The objectives of this process are :

- Increase members awareness of their role in maintaining the GGC fleet
- Ensure that lessons learned during assembly and disassembly of gliders are captured and passed throughout the membership.

This Fleet Maintenance Manual forms part of the overall GGC Operational Manuals as shown in Figure 1. Detailed tow rope fabrication/maintenance information is given in the the Tow Rope Maintenance Guide.

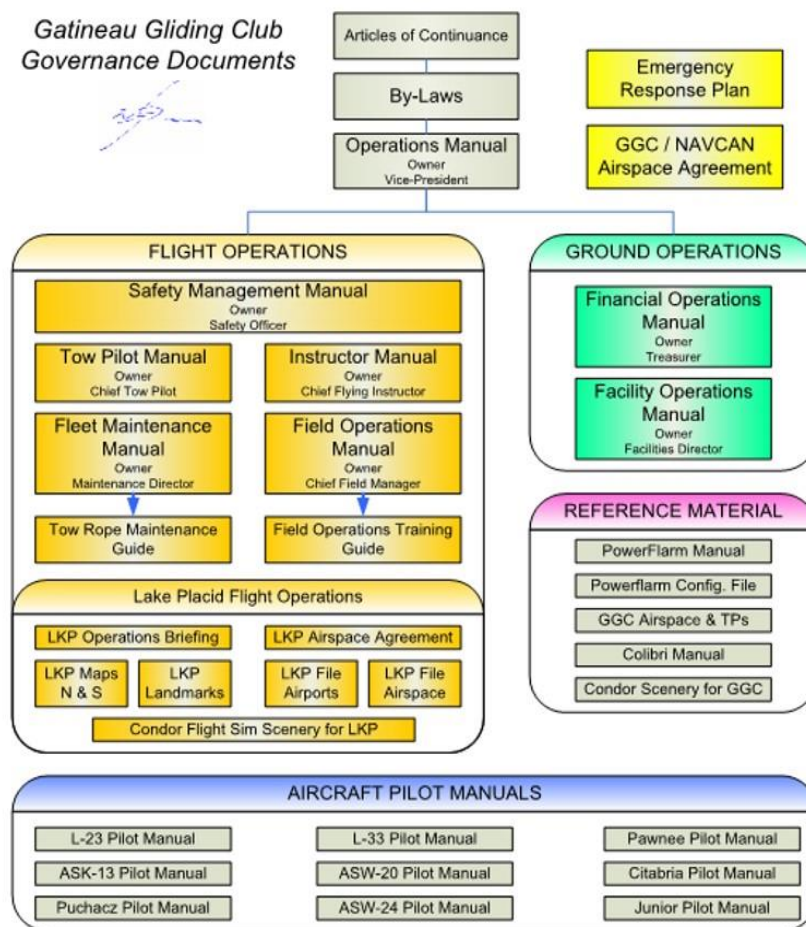


Figure 1 – GGC Operational Manuals

2. APPLICABLE STANDARDS, REFERENCES & DEFINITIONS

2.1 Standards & References

- Canadian Aviation Regulations (CARs)
<http://www.tc.gc.ca/civilaviation/regserv/Affairs/cars/menu.htm>

2.2 Definitions

- Scheduled Maintenance: maintenace required by the CARs as part of ongoing airworthiness requirements for the aircraft
- Unscheduled Maintenance: maintenace required due to unplanned component failure or degradation of the aircraft

3. DUTIES AND RESPONSIBILITIES

3.1 Maintenance Director Appointment & Reporting

At GGC, the Maintenance Director is nominated by and confirmed by the Board of Directors.

3.2 Maintenance Director Duties

The duties of the Maintenance Director include:

- Updating and maintaining the accuracy of the GGC Fleet Maintenance Manual
- Scheduling of aircraft for annual inspections
- Co-ordination with AME(s) regarding the maintenance/repair work performed on club aircraft.
- Point of contact for Airworthiness Directives issued for club aircraft
- Submitting applicable incident reports the Safety Officer Report for the club's Annual Report.

4. CONTINUING MAINTENANCE

A white board is installed in the Lacasse hangar which should be used to status the airworthiness of club gliders and tow planes. Members are encouraged to report any recurring snags on this board and to the Maintenance Director. Under no circumstances are club member to perform any maintenance work on any club aircraft without the approval of the Fleet maintenance Director.

4.1 Scheduled Maintenance

Annual inspections of the gliders and towplanes is currently set for the months of September/October. Please consult the specific logbooks for each aircraft for the exact date. The Fleet Maintenance Director will coordinate the annual inspection schedule with the AME and will interface directly with the AME regarding any maintenance issues.

4.2 Unscheduled Maintenance

If a glider or tow plane become U/S, this should be written in the appropriate section of the whiteboard and in DI book for that aircraft. A written U/S note should be attached to the canopy of the aircraft and the maintenance director contacted at the earliest opportunity so as to expediate any repairs.

4.3 Airworthiness Directives & Notices

The point of contact for any ADs or ANs that are issued against any of the club aircraft is the fleet maintenance director. He will coordinate any actions that are required as a result of these directive or notices.

4.4 Daily Inspections (DI)

Regardless of whether the glider has just been assembled or stored in the hangar, all gliders must undergo a DI before they are flown. A DI book is located in the side cockpit pouch of each glider. The DI pilot should review the book for any existing .snags. and follow the checklist given in the book. Students may perform a DI but it must be verified/signed by a licenced glider pilot. If the DI pilot is unsure of what to look for he/she should ask a pilot/instructor that is familiar with that type of glider. An inspecting pilot should not allow him/herself to be distracted when performing an inspection. Pleasant conversation and verifying that an aircraft is airworthy do not mix. A page scan of the DI book is given in Figure 2.

Any unserviceability issues that are uncovered during a DI should follow the process described in section 4.2 . Unscheduled Maintenance of this manual. It is the responsibility of the inspecting pilot to report to the Fleet Maintenance Director, CFI or Chief Tow Pilot as appropriate any incident or unserviceability which occurs to that aircraft. It is the responsibility of all members to report any ground damage, hangar rash, etc. on any aircraft, to the Fleet Maintenance Director, CFI or Chief Tow Pilot.



Daily Aircraft Inspection Check List

The following items must be inspected daily before flying aircraft. Clearly check all items passed. Comment on any discrepancies. Leave this list in the book.

Cockpit

- General Condition
- Free of Foreign Objects
- Travel & Freedom of Controls
- Instruments, Radio, Battery
- Condition of Harnesses
- Parachute
- Brake, Tow Release Operation
- Safety of Attachments:
Wing Roots, Control Tubes,
Bolts, Locking Devices

Wings

- General Condition
- Remove Control Locks
- Flaps, Ailerons, Spoilers
- Locking Devices

Snags

Fuselage

- General Condition
- Canopy Attachment
- Static, Pitot, TE Tubes
- Yaw String
- Skid Wear, Tow Hook
- Wheel, Tire, Landing Gear
- Locking Devices

Empennage

- General Condition
- Remove Controls Locks
- Rudder, Elevators, Trim
- Tail Wheel Assembly or Skid
- Locking Devices

Completed by:

Name (Print):

Date:

Figure 2 - DI Book

5. GLIDER ASSEMBLY AND DISASSEMBLY

Once a club glider has been assembled or disassembled, this should be entered into the journey log of that glider.

Once glider has been assembled, the assembly should be independently verified by another pilot who is familiar with that aircraft. Only after this independent verification is the glider ready for a Positive Control Check and Daily Inspection (DI).

5.1 ASK-13

For general assembly and disassembly procedures, consult the Pilot Operating Handbook (POH) for the ASK-13 at the “Procedures” page of the GGC website:

http://www.gatineauglidingclub.ca/assets/ASK13_Manual.pdf

Recommendations to ease assembly are found below.

5.1.1 ASK-13 Assembly & Disassembly Recommendations

- Clean and grease the bolts and holes.
- First put in the left wing from the side and put in the rear bolt. Do not tilt the fuselage.
- Put in the right wing from the side and put in rear bolt. Do not tilt the fuselage.
- Insert the tapered pins (lower one first) and screw on the nut. Slightly shaking the the wing may make this easier to perform.
- Secure the tapered pins with a safety needle.
- Secure the rear pins with safety hooks
- Connect the aileron and airbrake linkages and secure by safety needles.
- Attach the horizontal stabilizer/elevator by lowering onto the fuselage being careful to ensure that the bell-crank is properly inserted into the pushrod counterpart. Incorrect alignment of the bell-crank could bend the push rod.
- Once the horizontal stabilizer/elevator is properly positioned, the front screw should be fastened using a wrench. Safety the front screw with a clip pin.
- Connect the pushrod of the trim tab to the tab bell crank by a pin, washer and safety clip pin.
- Disassembly is the opposite of the previously described steps.

5.2 L23 Super Blanik

For assembly and disassembly procedures, consult the Pilot Operating Handbook (POH) for the L23 at the “Procedures” page of the GGC website:

http://www.gatineauglidingclub.ca/assets/L23_Super_Blanik_Manual.pdf

5.3 Puchacz

For assembly and disassembly procedures, consult the Pilot Operating Handbook (POH) for the Puchacz at the “Procedures” page of the GGC website:

http://www.gatineauglidingclub.ca/assets/Puchacz_Manual.pdf

5.4 Junior

For assembly and disassembly procedures, consult the Pilot Operating Handbook (POH) for the SZD 51-1 Junior at the “Procedures” page of the GGC website:

http://www.gatineauglidingclub.ca/assets/SZD51_1_Junior_Manual.pdf

5.5 ASW-24

For assembly and disassembly procedures, consult the Pilot Operating Handbook (POH) for the ASW-24 at the “Procedures” page of the GGC website:

http://www.gatineauglidingclub.ca/assets/ASW24_Manual.pdf

5.6 ASW-20

For assembly and disassembly procedures, consult the Pilot Operating Handbook (POH) for the ASW-20 at the “Procedures” page of the GGC website:

http://www.gatineauglidingclub.ca/assets/ASW20_Pilot_Manual.pdf