MD – RA

Minister's Delegates - Recreational Aviation
Représentants du Ministre - Aviation de loisir

Inspection Service Service d'inspection

MDRA C20 MANUAL of PROCEDURES for INSPECTION of *MAJOR PORTION, (51%)*
AMATEUR-BUILT AIRCRAFT, INSPECTION AND TECHNICAL INFORMATION RECORD

BUILDER :			**MD-RA REGISTRY NUMBER:**	
SURNAME:			**GIVEN NAME(S):**	
ADDRESS:				
CITY:	**PROVINCE:**		**POSTAL CODE:**	
HOME TELEPHONE:	**BUSINESS TELEPHONE:**		**FACSIMILE:**	
EMAIL:				
A/C MAKE:	**MODEL:**		**SERIAL NO.:**	
PRESSURIZED ☐	**PISTON ENGINE** ☐		**TURBINE** ☐	
MAXIMUM TAKE- OFF WEIGHT			_____**Lb** ☐ **Kg** ☐	
WOOD ☐	**METAL** ☐	**TUBE/ FABRIC** ☐	**COMPOSITE** ☐	**GYROCOPTER/HELICOPTER** ☐
KIT REQUIRING MAJOR PORTION, (51%) INSPECTION ☐				
DATE CONSTRUCTION STARTED:				
NAME of DESIGNER or SOURCE of PLANS, KIT and/or MATERIALS (ATTACH LIST IF REQUIRED):				
ADDRESS:				

CHANGE OF OWNERSHIP ☐ **OR ADDRESS** ☐		**DATE:**
SURNAME:		**GIVEN NAME(S)**
ADDRESS:		**CITY:**
PROVINCE:	**POSTAL CODE:**	**TELEPHONE:**

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RECORD OF INSPECTIONS					
Job number	Type	Inspector Name (Print)	Obs. Sheet No.	Date	Signature

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Section 1.8 MAJOR PORTION EVALUATION- AMATEUR BUILT AIRCRAFT

Builder Name:	Address:
Aircraft Make:	Model:
Serial No.:	Parts List Date: **(Commercial Evaluation Only)**

FUSELAGE	**Other**	**Builder**
1. Fabricate special tools or fixtures		
2. Fabricate longitudinal members, Cores, or Shells		
3. Fabricate bulkheads or cross- members		
4. Assemble fuselage basic structure		
5. Fabricate brackets and fittings		
6. Install brackets and fittings		
7. Fabricate flight control system components		
8. Install flight control system components		
9. Fabricate cables, wires and lines.		
10. Install cables, wires and lines		
11. Fabricate fuselage cover or skin		
12. Install fuselage covering or skin		
13 Fabricate windshield, windows, canopy		
14. Install windshield, windows, canopy		
WINGS	**Other**	**Builder**
1. Fabricate special tools or fixtures		
2. Fabricate wing spars		
3. Fabricate wing ribs or cores		
4. Fabricate wing leading and trailing edges		
5. Fabricate drag/anti drag truss members.		
6. Fabricate wing brackets and fittings		
7. Fabricate wing tips		
8. Assemble basic wing structures		
9. Install wing leading/trailing edge and tips		
10. Install wing ailerons		
11. Align ailerons and aileron controls		
12. Install wing drag/anti drag truss		
13. Fabricate wires, cables and lines		
14. Install cables, wires and lines		
15. Fabricate flight control system components		
16. Install flight control system components		
17. Fabricate wing covering or skin		
18. Install wing covering or skin		
19. Fabricate wing struts /wires		
20. Install and rig wings and struts		
21. Fabricate wing flaps and spoilers		
22. Install wing flaps and spoilers		

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AILERONS	Other	Builder
1. Fabricate Aileron Spars		
2. Fabricate Aileron Ribs or cores		
3. Fabricate Aileron Leading and Trailing edge		
4. Fabricate Aileron brackets and fittings		
5. Assemble basic aileron structure		
6. Install leading/trailing edge and tips		
7. Install aileron fittings		
8. Fabricate aileron covering or skin		
9. Install aileron covering or skin		
PROPULSION	**Other**	**Builder**
1. Fabricate special tools or fixtures		
2. Fabricate engine mount		
3. Fabricate engine cooling system/baffles		
4. Fabricate induction system		
5. Fabricate exhaust system		
6. Fabricate engine controls		
7. Fabricate brackets and fittings		
8. Fabricate cables, wires, and lines		
9. Assemble engine		
10. Install engine and items listed above		
11. Fabricate engine cowling		
12. Install engine cowling		
13. Fabricate propeller		
14. Install propeller		
15. Fabricate fuel tank		
16. Install fuel tank		
17. Fabricate fuel system components		
18. Install fuel system components		
HELICOPTER MAIN ROTOR DRIVE SYSTEMS & CONTROL MECHANISMS	**Other**	**Builder**
1. Fabricate special static and dynamic main rotor rigging tools		
2. Fabricate / assemble main rotor drive train		
3. Install main rotor drive train assembly		
4. Fabricate / assemble main rotor shaft and hub assembly		
5. Install main rotor shaft and hub assembly		
6. Align main rotor shaft drive train, shaft and hub assembly		
7. Fabricate main rotor rotating controls		
8. Install main rotor rotating controls		
9. Fabricate main rotor non-rotating controls		
10. Rig main rotor rotating and non-rotating controls		
11. Fabricate main rotor blades		
12. Install main rotor blades on rotor hub.		
13. Statically balance and rig main rotor system		
14. Dynamically track and balance main rotor system		

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HELICOPTER TAIL ROTOR DRIVE SYSTEMS AND CONTROL MECHANISMS	Other	Builder
1. Fabricate special static tail rotor rigging tools		
2. Fabricate vertical trim fin		
3. Install vertical trim fin		
4. Fabricate horizontal trim fin.		
5. Install horizontal trim fin		
6 Fabricate tail rotor drive system		
7. Install tail rotor drive system		
8. Fabricate tail cone or frame		
9. Install tail cone or frame		
10. Rig vertical and horizontal fins.		
11. Fabricate tail rotor shaft and hub assembly.		
12. Install tail rotor shaft and hub assembly.		
13. Fabricate tail rotor rotating and non-rotating controls		
14. Rig tail rotor rotating and non-rotating controls.		
15. Fabricate /Assemble tail rotor blades		
16. Install tail rotor blades		
17. Statically balance and rig tail rotor system		
18. Dynamically track and balance tail rotor system.		
EMPENNAGE	**Other**	**Builder**
1. Fabricate special tools or fixtures		
2. Fabricate spars		
3. Fabricate Ribs or cores		
4. Fabricate Leading and Trailing edges		
5. Fabricate tips		
6. Fabricate brackets and fittings.		
7. Assemble empennage structure		
8. Install wing leading /trailing edge and tips		
9. Install fittings		
10. Fabricate Cables, wires, and lines.		
11. Install cables, wires and lines		
12. Fabricate empennage covering or skin		
13. Install empennage covering or skin.		
14. Install and rig empennage.		
CANARD	**Other**	**Builder**
1. Fabricate Canard		
2. Assemble Canard		
3. Install and Rig canard.		
LANDING GEAR	**Other**	**Builder**
1. Fabricate special tools or fixtures.		
2. Fabricate struts		
3. Fabricate braking systems		
4. Fabricate retraction system		
5. Fabricate cables, wires, and lines.		
6. Assemble wheels, brakes, tires, and landing gear		
7. Install landing gear components above.		

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COCKPIT / INTERIOR	Other	Builder
1. Fabricate instrument panel		
2. Install instrument panel and instruments		
3. Fabricate Seats		
4. Install seats.		
5. Fabricate electrical system controls / switches		
6. Install electrical system controls / switches.		
TOTALS	A	B
Enter the numerical scores in the boxes below to arrive at the builder's percentage score.		

	÷		X	100	=	%
(B)		(A+B)			Builder score	

Does this aircraft meet the requirements of Chapter 549? Yes □ No □

Note: Results of the evaluation must be recorded on a separate MDRA form C 21- AMATEUR BUILT AIRCRAFT INSPECTION REPORT

Note: Results of this evaluation are subject to audit to ensure compliance with regulatory requirements. Confirmation of acceptance will be forwarded under separate cover. If the builder deviates from the current plan, the project must be re-evaluated to confirm continued compliance.

End of Section 1.8

Has builder been notified of your findings? On site? ❑ By mail? ❑

Date of Inspection: _____
(yyyy-mm-dd)

Signatures: _____ _____
Inspector Builder

Print Names_____ _____
Inspector Builder

Print Names_____ Date of Review: _____
Peer Reviewer (yyyy-mm-dd)

Signature: _____
Peer Reviewer

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