

**SUPPLEMENTAL TYPE INSPECTION REPORT**

**General Instruction**

This form provides a means whereby inspectors may record the results of inspections and/or tests, on modified products presented for supplemental type certificates, accomplished in accordance with instructions contained in the Type Inspection Authorization (TIA).

- A. Answer each question on this form by placing a check in the appropriate "YES" , "NO", or "NA" (Not Applicable) block, or by filling in the answer, as appropriate. When an answer requires an explanation, record the explanation under "REMARKS" or on page 4 (TIA comments).
- B. The applicant's weight and balance report may be used in lieu of the weight and dimensional page of this form, provided it contains all the information requested. Weight and balance should be included in attachment section of report, when required.
- C. Original FAA Form 8130-9 (317) and FAA Form 8100-1 should be part of the attachments section of this report.

**Table of Regulations\***

14CFR			CAR					Subject		
	Balloon	Cert'n	N.U.A	T-Cat	Glider	N-Rotor	T-Rotor	Eng.	Prop	
21.31			3.14 <sup>2</sup>	4b.14 <sup>2</sup>		6.14 <sup>2</sup>	7.14 <sup>2</sup>			Type Design
21.33		1.15(a)	3.15	4b.15	5.15	6.15	7.15	13.15	14.15	Insp. & Tests
21.35			3.16(b)	4b.16	5.16	6.16	7.			Flight Tests
.29			3.72 <sup>2</sup>	4b.104		6.104	7.104			Empty Wt. & C.G.
.31		3.72	31.51	4b.105		6.105	7.105			Removable Ballast
.605	31.35		3.293	4b.302		6.302	7.302			Fabrication Method
.871			3.401	4b.391		6.390	7.390			Leveling Means
.1301(a)(4)			3.652							Equipment - Label
.1301(b)				4b.601(b)		6.601(b)	7.601(b)			Equipment - Label
.1301(c)				4b.601(c)		6.601(c)	7.601(c)			Equipment Install
.1351(b)(1)			3.681			6.617				Elec - Haz & Prot'n
.1351(b)(2)	31.71(b)			4b.622(b)(2)			7.622(b)(2)			Elec - Haz/ Mal. Fail
.1431			3.721							Elec - Hazard
.1431(a)							7.653(a)			Elec - Hazard
.1431(b)							7.653(b)			Electronic Effect
.1431(c)				4b.650(c)						Electronic Effect

\* All regulations are those in effect on or preceding date of recodification.

1 For airworthiness standards, except balloons, a missing FAR denotes a generic requirement, e.g. 14 CFR parts 23, 25, 27, 29.

2 In part, see CFR Re-Designation Tables



### SUPPLEMENTAL TYPE INSPECTION REPORT (STIR)

Project No.	Date
Product	
Make	
Model	
Identification and Serial No.	
Serial Nos. Eligible	
Product Specification Or TC Data Sheet	Rev No.
Certification Basis (Part and Amendments)	
Applicant	
Address	
Modifier	
Address	
Description of Modifications	
Attachments	
Inspection Conducted by	Date
Report Prepared by	Date
Report Reviewed by	Date
Report Approved by	

### Administrative Data

- A. Period of inspect from: \_\_\_\_\_ to: \_\_\_\_\_
  
- B. Where conducted?
  
  
- C. Number of conformity inspections conducted and recorded on FAA Form 8100-1 and recorded in project file.
  
- D. Were design changes needed to correct deficiencies revealed by FAA Inspection?  
*If yes, identify changes on page 4 (TIA comments), or on attachment.*       Yes       No
  
- E. Have all products/articles subjected to inspections and/or tests been properly recorded by part numbers(s), serial number(s), or registration number(s), as appropriate, on page 1 or in attachment?       Yes       No
  
- F. Does the applicant have on file inspection records showing conformity to the type design and acceptable quality of the product?       Yes       No
  
- G. Check appropriate block(s) for any FAA forms that have been submitted by the applicant prior to, or at the time of application.  

<input type="checkbox"/> FAA Form 8110-12	Date: _____	<input type="checkbox"/> FAA Form 8130-6	Date: _____
<input type="checkbox"/> FAA Form 337	Date: _____	<input type="checkbox"/> FAA Form 8130-9 (317)	Date: _____
  
- H. Is supplemental type approval recommended?       Yes       No

Remarks:

*If "Yes", items should be explained under appropriate TIA comments.*

## TIA Comments

The following comments are made with respect to special inspections and/or tests conducted by reason of instructions contained in Section 12 of the TIA, and are identified in accordance with TIA numbering. Additional pages may be used as needed. Item 12 - Part I

### 1.0 Empty Weight and Corresponding Center of Gravity

**1.1 Describe Leveling Marks or Means**

**1.2 Location of Datum**

Ref: § .871

- 1.3** Horizontal Distance (inches) from Datum to average Front Main Scale CL  
 Horizontal Distance (inches) from Datum to average Rear Main Scale CL  
 Horizontal Distance (inches) from Datum to Auxiliary Scale CL

**4.1 Empty Weight**

	Scale Reading	Tare	Net Weight
Forward Left Main Scale			
Forward Right Main Scale			
Rear Left Main Scale			
Rear Right Main Scale			
Auxiliary Scale			
Empty Weight			

NOTE: *The empty weight and corresponding center of gravity must be determined by weighing the aircraft with --*  
 (1) *Fixed Ballast*  
 (2) *Unusable Fuel*  
 (3) *Full operating fluids, including (i) oil (ii) hydraulic fluid and (iii) other fluids required for normal operation of aircraft systems, except potable water, lavatory precharge water, and water intended for injection in the engines.*

Center of Gravity is      inches      Forward            Aft of Datum

Ref: § .29

### 2.0 Removable Ballast

- 2.1 If removable ballast is used to show compliance with the flight requirements, is the place for carrying ballast installed and marked in accordance with the change to the type design?  Yes  No  N/A

Ref: §.31

### 3.0 Fabrication Process

- 3.1 a. Has the applicant shown that materials, products, parts, processes, construction, and assemblies conform to the specifications and drawings shown in the change to the type design?  Yes  No  N/A
- b. Has the product been changed between the time it was shown to comply with item 3.1.a. of this report and the time it was presented for FAA Inspection? Record any changes on FAA Form 8100-1.  Yes  No  N/A
- c. Has the applicant made all inspections and tests necessary to determine
- (1) Compliance with the applicable airworthiness and noise/emission requirements;  Yes  No  N/A
  - (2) That the materials and products conform to the specifications in the changed type design;  Yes  No  N/A
  - (3) That the parts of the product conform to the drawings in the changed type design;  Yes  No  N/A
  - (4) That the manufacturing processes, construction, and assembly conform to those specified in the type design?  Yes  No  N/A

Ref: § 21.33

- 3.2 Has the suitability and durability of materials used for parts, the failure of which could adversely affect safety:
- a. Been established by experience or tests?  Yes  No  N/A
  - b. Been established through approved specifications that ensure their having the strength and other properties assumed in the design data? and  Yes  No  N/A
  - c. Been evaluated to take into account the affects of environmental conditions, such as temperature and humidity, expected in service?  Yes  No  N/A

Ref: § .603(a)

- 3.3 Have high standards of workmanship been used in the fabrication of parts?  Yes  No  N/A

Ref: §.603(b)

### 4.0 Fuselage and Wing

- 4.1 Are changes to the fuselage or wing in conformity to the change in type design?  Yes  No  N/A

Ref: § 21.31

### 5.0 Control System

- 5.1 Are changes to the control system in conformity to the change in type design?  Yes  No  N/A
- 5.2 Do the control surface travels conform to the change in type design?  Yes  No  N/A

Ref: § 21.31(a)

### 6.0 Personnel and Cargo Accommodations

- 6.1 Are changes to the personnel and cargo compartments in conformity with the change to the type design?  Yes  No  N/A

Ref: § 21.31(a)

### 7.0 Powerplant Installation

7.1 Does the powerplant installation conform to the change in type design?  Yes  No  N/A  
Ref: § 21.31(a)

### 8.0 Equipment

8.1 Are changes to the installed equipment in conformity to the change in type design?  Yes  No  N/A  
Ref: § 21.31(a)

8.2 Is each item of equipment installed in accordance with the change in type design

a. Labeled as to the identification, or operation limitations, or any applicable combination of these factors; and  Yes  No  N/A

b. Installed according to limitations specified for that equipment?  Yes  No  N/A  
Ref. § .1301 (b) and (c)

8.3 Are the electrical, radio, and electronic systems included in or affected by the change in the type design free from hazards in themselves, in their method of operation, and in their effects on other components?  Yes  No  N/A  
Ref. § .1351(b)(1)(i), .1431 or .1431(a)

8.4 Are electrical cables and wire bundles included in or affected by the change in type design protected from fuel, oil, water, and other detrimental substances, and from mechanical damage?  Yes  No  N/A  
Ref. § .1351(b)(1)(ii)

8.5 Are the changes to the radio and electronic equipment, controls, and wiring installed so that operation of any one unit or system of units will not adversely affect the simultaneous operation of any other radio or electronic unit or system of units required by the airworthiness or operation rules?  Yes  No  N/A  
Ref. § .1351(b)(1)(i), .1431 or .1431(a)

### 9.0 Function and Reliability Testing

9.1 Did the change in type design necessitate F & R tests?  Yes  No  N/A  
Ref. § 21.35

9.2 Did the altered systems and installations function satisfactorily during the F & R tests?  Yes  No  N/A  
Ref. § 21.35