

# TYPE INSPECTION REPORT

## Part 1 – Airplane Ground Inspection

### INSTRUCTIONS

This form is to be used to record the results of conformity inspections and investigations of prototype or modified airplane presented for type certification. Many inspections and tests will be witnessed or participated in which are not covered by questions listed herein. All such inspections and tests and changes to the product and/or type design data resulting therefrom must be recorded and made a part of this report.

This form includes references to applicable FAR. Some sections are interrelated, and future FAR revision may modify the requirement of an item. It is essential that the specific FAR's applicable to the airplane involved be reviewed to insure a complete and effective inspection. When this form is used in conjunction with a program which involves an airplane being certificated under a CAR, cross out the FAR reference and enter the equivalent CAR reference.

All entries must be clear, concise, and self-explanatory. Answer questions in this report by checking the appropriate "YES" or "NO" column. When action is required to render the item acceptable, check "ACTION REQ." Use additional pages to list the unsatisfactory conditions found during the inspection with reference to any communication or conformity inspection reports relative to the item. Number the pages with the page number on which the question appears plus a letter, i.e., 10a, 10b, etc. Identify the unsatisfactory condition by using the related item number as it appears on the form; list numerically with sufficient space between each entry to note the corrective action taken. When the item has been reinspected, cross out the previous "NO" answer and enter the new answer. This will be done for each inspection until the item is acceptable and will serve as a record of the number of times the item was inspected prior to acceptance.

When a question is not applicable to the product being inspected, enter "NA" across the "YES" and "NO" columns denoting not applicable. Pages containing only inapplicable questions may be omitted. Indicate by page numbers in the space provided on page 1, the pages submitted (or pages omitted if more convenient) in this report.

When more than one inspector participates in completing a report, each will enter his signature and title on page 1. He will also insert his initials adjacent to the answers and determinations he provides within the report.

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. An equipment list with enough copies for each copy of the type inspection report submitted, setting forth, where pertinent, the make, model, and serial number of each item, must be attached as part of the report. When any part of the list is part of the weight and balance report, the weight of each item and the horizontal distance from the datum line will be shown. This list should include only significant items or accessories; i.e., those of a type that could have an adverse effect on the airworthiness or operational characteristics of the airplane if replaced by other items the acceptability of which have not been determined. For example, this list should include, but not necessarily be limited to, seats, safety belts, fire extinguishers, electronic equipment, electric motors, instruments, wheels and brakes, tires, skis, floats, superchargers, heaters, engines, starters, generators, etc. When concerned with alteration of airplane under the supplemental type certification program, it is especially important to consider this list.

EXAMPLE:

YES	NO	ACTION REQ.
	§	X
X	§	

**DO NOT SUBMIT THIS PAGE WITH REPORT**

<b>TYPE INSPECTION REPORT</b> <b>Part 1 – AIRPLANE GROUND INSPECTION</b>				TIA		
				NO.		
				DATED		
APPLICANT	NAME			ADDRESS (Number, street, city, State, and ZIP code)		
AIRPLANE	MODEL			DATA SHEET NO.		DATED
	SERIAL NUMBERS					
	REGISTRATION MARKS					
BASIS FOR CERTIFICATION	14 CFR PART	DATED		AMENDMENTS		
MODIFIED BY	NAME			ADDRESS (Number, street, city, State, and ZIP code)		
DESCRIPTION OF ALTERATION						
PAGES <input type="checkbox"/> SUBMITTED <input type="checkbox"/> OMITTED <input type="checkbox"/> IN THIS REPORT						
ATTACHMENTS						
INSPECTIONS CONDUCTED BY (Name and identification)						
PREPARED	DATE		BY (Title and signature)			
REVIEWED						
APPROVED						

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<b>ADMINISTRATIVE DATA</b>				
A. INSPECTION PERIOD			B. WHERE INSPECTION CONDUCTED	
FROM	TO			
C. FORM SUBMITTED BY APPLICANT		STATEMENT OF CONFORMITY	DATED	
		MAJOR REPAIR AND ALTERATION FORM	DATED	
D. DOES THE APPLICANT'S INSPECTION SYSTEM ASSURE THAT THE MATERIALS AND PARTS USED IN THE PROTOTYPE AIRCRAFT ARE IN CONFORMITY WITH APPROVED DATA				YES
E. DOES THE APPLICANT MAINTAIN RECORDS OF THE INSPECTION CONDUCTED ON THE PROTOTYPE TO SUBSTANTIATE HIS STATEMENT OF CONFORMITY				NO
F. NUMBER OF FAA CONFORMITY INSPECTIONS			G. NUMBER OF UNSATISFACTORY ITEMS	
CONDUCTED	RECORDED IN PROJECT FILE		RECORDED IN THIS REPORT	
H. DESCRIPTION OF AIRCRAFT INSPECTED				
REMARKS				

# 1. ACTUAL EMPTY WEIGHT AND CENTER OF GRAVITY LOCATION

1.1 Leveling means (14 CFR 23.871, 14 CFR 25.871)

1.2 Location of datum

1.3 Required prior to weighing (14 CFR 23.29, 14 CFR 25.29)

VOLUME (Gals.)	FIXED BALLAST	UNUSABLE FUEL	UNDRAINABLE OIL	ENGINE COOLANT	HYDRAULIC FLUID
WEIGHT (Lbs.)					
1.3.1 Actual empty weight	SCALE POINTS	WEIGHT (Lbs.)	HORIZONTAL DISTANCE FROM DATUM (Inches)		MOMENT (Inch – Lbs.)
	FORWARD LEFT				
	FORWARD RIGHT				
	REAR LEFT				
	REAR RIGHT				
	AUXILIARY				
	<b>TOTAL</b>				
<p>1.3.2 Empty weight c.g. is _____ inches <input type="checkbox"/> forward <input type="checkbox"/> aft of datum</p>					
1.3.3 Aircraft weighed conformed to					AIRCRAFT WEIGHT (Mfgs. Serial No.)
DRAWING LIST NO.	DATED	EQUIPMENT LIST NO.	DATED		

## TIA FINDINGS

Record results of investigations and special tests, such as static, endurance, operational, pressure, functional, and reliability, conducted or witnessed by manufacturing inspectors on the basis of instructions contained in item 18 of the type inspection authorization. Identify by TIA item number and item description; results to follow directly below the item description.

2.0 FABRICATION PROCESSES		Yes	No	Action Req.
2.1	Have the chemical and physical properties of materials used in the fabrication of major and/or critical parts been satisfactorily substantiated to assure conformity with material requirements of the related data <b>14 CFR</b> 21.33 <b>14 CFR</b> 23.605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2	Has the heat treatment of major and/or critical parts been adequately controlled to assure the fabrication of these parts in accordance with pertinent requirements of approved data <b>14 CFR</b> 21.33 <b>14 CFR</b> 23.605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.3	Has welding, brazing, and normalizing of major and/or critical parts been adequately controlled to assure fabrication of these parts in accordance with pertinent requirements of the approved data <b>14 CFR</b> 21.33 <b>14 CFR</b> 23.605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.4	Have special techniques, (i.e., structural shotpeening etching, etc.) on major and/or critical parts been adequately controlled to assure fabrication of these parts in accordance with pertinent requirements of the approved data <b>14 CFR</b> 21.33 <b>14 CFR</b> 23.605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.5	Have special forming processes (explosive, magnetic, etc.) on major and/or critical parts been adequately controlled to assure processing according to related specifications and fabrications in according with pertinent requirements of the approved data <b>14 CFR</b> 21.33 <b>14 CFR</b> 23.605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.6	Have processes for manufacturing or forming of special materials (i.e., plastics, phenolics, fiberglass, etc.) for major and/or critical parts been adequately controlled to assure fabrication of these parts in accordance with pertinent requirements of the approved data <b>14 CFR</b> 21.33 <b>14 CFR</b> 23.605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.7	Has application of protective treatments to major and/or critical parts been adequately controlled to assure conformity with pertinent requirements of the approved data <b>14 CFR</b> 21.33 <b>14 CFR</b> 23.605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.8	Have processes for bonding or gluing of major and/or critical parts been adequately controlled to assure the fabrication of these parts in accordance with pertinent requirements of the approved data <b>14 CFR</b> 21.33 <b>14 CFR</b> 23.605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.9	Have processes for sealing and finishing of major and/or critical parts been adequately controlled to assure conformity with pertinent requirements of the approved data <b>14 CFR</b> 21.33 <b>14 CFR</b> 23.605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.10	List, by specification or drawing number, any special process or fabrication method used that is not covered in this section.			

3.0 INSPECTION - GENERAL		Yes	No	Action Req.
3.1	Are drawings, specifications, equipment lists and other type design data available for inspection of the prototype product <b>14 CFR</b> 21.33 <b>14 CFR</b> 23.605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2	Has a method been established to update these data to show the latest type design changes <b>14 CFR</b> 21.33 <b>14 CFR</b> 23.605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3	Has a method been established to show the status of these changes relative to the prototype article and parts thereof <b>14 CFR</b> 21.33 <b>14 CFR</b> 23.605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.4	Are deviations from the type design data being recorded <b>14 CFR</b> 21.33 <b>14 CFR</b> 23.605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.5	Are parts and assemblies properly stamped, marked or otherwise identified to indicate the inspection status during various stages of fabrication <b>14 CFR</b> 21.33 <b>14 CFR</b> 23.605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.6	Does inspection of procured items show that they are in conformity with the vendor's drawings and/or the applicant's specification drawings <b>14 CFR</b> 21.33 <b>14 CFR</b> 23.605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.7	Have critical castings received 100 percent inspection by visual, radiographic, and magnetic particular penetrant inspection or approved equivalent nondestructive inspection methods <b>14 CFR</b> 23.621      ..... <b>14 CFR</b> 25.621	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.8	Have noncritical castings been inspected in accordance with the following table: <b>14 CFR</b> 23.621 <b>14 CFR</b> 25.621			
	CASTING FACTOR	INSPECTION		
	(a) 2.0 or more	100 percent visual		<input type="checkbox"/>
	(b) Less than 2.0 but More than 1.5	100 percent visual and magnetic particle or penetrant or equivalent nondestructive inspection methods		<input type="checkbox"/>
	(c) 1.25 through 1.50	100 percent visual, magnetic particle or penetrant, and radiographic or approved equivalent nondestructive inspection methods		<input type="checkbox"/>
REMARKS				

4.0 AIRFRAME		Yes	No	Action Req.
4.1	GENERAL			
4.1.1	Are nonmetallic external components protected against erosion 14 CFR 23.609 14 CFR 25.609	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.1.2	Have adequate drainage provisions been provided to prevent the accumulation of fuel, water, hydraulic oil, etc. 14 CFR 23.609 14 CFR 25.609	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.1.3	Have adequate ventilation provisions been provided to prevent the accumulation of fumes, smoke, gases, etc. 14 CFR 23.609 14 CFR 25.609	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.1.4	Have all members of the structure been suitably protected against deterioration or loss of strength in service due to weathering, corrosion, abrasion, etc. 14 CFR 23.609 14 CFR 25.609	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.1.5	Have adequate inspection openings, doors, and access panels been provided to allow close examination of each part requiring recurring inspection, adjustments for proper alignment and function, or lubrication 14 CFR 23.611 14 CFR 25.611	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2	FUSELAGE			
4.2.1	Have rivets been driven in accordance with acceptable standards 14 CFR 23.603, .605 14 CFR 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2.2	Have bolts been installed in accordance with acceptable standards with respect to proper length, washers, nuts, hole size, finish, etc. 14 CFR 23.603, .605 14 CFR 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2.3	Are self-locking nuts used on any bolt subject to rotation during aircraft operation 14 CFR 23.607 14 CFR 25.607	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2.4	Do detail parts fit into subassemblies without being forced or sprung 14 CFR 23.603, .605 14 CFR 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2.5	Do subassemblies fit the fuselage assembly without being forced or sprung 14 CFR 23.603, .605 14 CFR 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2.6	Are major attachment points of the wing, empennage, landing gear, powerplant, etc., adequately controlled to insure proper alignment when mated 14 CFR 23.603, .605 14 CFR 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2.7	Are structural panels such as bulkhead, spar and beam webs, and outside skin panel covering, free from buckles or wrinkles 14 CFR 23.603, .605 14 CFR 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2.8	Do doors, hatches, etc., fit and operate properly 14 CFR 23.603, .605 14 CFR 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2.9	Are there any questionable design items 14 CFR 23.601 14 CFR 25.601	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



4.0 AIRFRAME (Continued)		Yes	No	Action Req.
4.3	WINGS			
4.3.1	Have rivets been driven in accordance with acceptable standards 14 CFR 23.603, .605 14 CFR 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3.2	Have bolts been installed in accordance with acceptable standards with respect to proper length, washers, nut, hole size, finish, etc. 14 CFR 23.603, .605 14 CFR 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3.3	Are self-locking nuts used on any bolt subject to rotation during aircraft operation 14 CFR 23.607 14 CFR 25.607	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3.4	Do detail parts fit into subassemblies without being forced or sprung 14 CFR 23.603, .605 14 CFR 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3.5	Do subassemblies fit the wing assembly without being forced or sprung 14 CFR 23.603, .605 14 CFR 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3.6	Are major attachment points of tabs, flaps, ailerons, slats, spoilers, landing gear and fuselage adequately controlled to insure proper alignment when assembled to corresponding structure 14 CFR 23.603, .605 14 CFR 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3.7	Are structural panels such as spar webs, rib webs, and skin panels, free from buckles or wrinkles 14 CFR 23.603, .605 14 CFR 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3.8	Are adequate inspection openings, doors or access panels been provided to allow close examination of each part requiring recurring inspection, adjustments for proper alignment and function, or lubrication 14 CFR 23.611 14 CFR 25.611	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3.9	Has wing alignment been properly controlled 14 CFR 23.603, .605 14 CFR 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3.10	Do the hinge lines of the ailerons, spoilers, slats, flaps, tabs, etc., match properly when installed 14 CFR 23.603, .605 14 CFR 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3.11	Is there positive clearance between the wing and all moveable surfaces throughout their range of operation 14 CFR 23.683 14 CFR 25.683	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3.12	Are the flight control surface operating means (i.e.. bell cranks, push-pull tubes, chains, cables, operating cylinders, jackscrews, etc.) free from binding and interference 14 CFR 23.683 14 CFR 25.685	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3.13	Are positive stops provided to limit the range of motion of the flight control surfaces 14 CFR 23.675 14 CFR 25.675	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3.14	Are adequate ventilation and drainage provisions provided for the wing and all control surfaces or lift augmentation devices 14 CFR 23.609 14 CFR 25.609	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3.15	Are there any questionable design items 14 CFR 23.601 14 CFR 25.601	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3.16	Is the balance of all control surfaces within the drawing tolerances 14 CFR 23.671 14 CFR 25.671	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4.0 AIRFRAME (Continued)		Yes	No	Action Req.
4.4	EMPENNAGE			
4.4.1	Have rivets been driven in accordance with acceptable standards <b>14 CFR</b> 23.605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4.2	Have bolts been installed in accordance with acceptable standards with respect to proper length, washers, nuts, hole size, finish, etc. <b>14 CFR</b> 23.605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4.3	Are self-locking nuts used on any bolt subject to rotation during aircraft operation <b>14 CFR</b> 23.607 <b>14 CFR</b> 25.607	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4.4	Do Detail parts fit into subassemblies without being forced or sprung <b>14 CFR</b> 23.603, .605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4.5	Do subassemblies fit the empennage assembly without being forced or sprung <b>14 CFR</b> 23.603, .605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4.6	Are major attachment points of tabs, elevator, rudder, horizontal and vertical stabilizer adequately controlled to insure proper alignment when assembled to corresponding structure <b>14 CFR</b> 23.603, .605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4.7	Are structural panels such as spar webs, rib webs, skin panels, etc., free from buckles or wrinkles <b>14 CFR</b> 23.603, .605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4.8	Are adequate inspection opening, doors, and/or access panels provided to allow close examination of each part requiring recurring inspection, adjustments for proper alignment and function, or lubrication <b>14 CFR</b> 23.611 <b>14 CFR</b> 25.611	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4.9	Has horizontal and vertical stabilizer alignment been properly controlled <b>14 CFR</b> 23.603, .605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4.10	Do the hinge lines of the elevator, rudder and tabs match properly when installed <b>14 CFR</b> 23.603, .605 <b>14 CFR</b> 25.605	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4.11	Is there positive clearance between the vertical or horizontal stabilizer, and all movable surfaces throughout their range of operation <b>14 CFR</b> 3.683 <b>14 CFR</b> 25.683	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4.12	Are the flight control surface operating means (i.e., bell cranks, push-pull tabs, chains, cables, operating cylinders, jackscrews, etc.) free from binding and interference <b>14 CFR</b> 23.685 <b>14 CFR</b> 25.685	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4.13	Are positive stops provided to limit the range of motion of the rudder, elevator and stabilizer (when an adjustable stabilizer is employed) <b>14 CFR</b> 23.675 <b>14 CFR</b> 25.675	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4.14	Are adequate drainage provisions provided for the empennage <b>14 CFR</b> 23.609 <b>14 CFR</b> 25.609	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4.15	Are there any questionable design items <b>14 CFR</b> 27.601 <b>14 CFR</b> 29.601	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4.16	Is the balance of all control surfaces within the drawing tolerances <b>14 CFR</b> 23.671 <b>14 CFR</b> 25.671	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5.0 FLIGHT CONTROL SYSTEM		Yes	No	Action Req.
5.1	Do all flight controls operate with ease, smoothness and positiveness throughout their maximum limits <b>14 CFR</b> 23.671 <b>14 CFR</b> 25.671	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.2	Do all flight control surfaces move in the correct direction of travel in response to operation of the cockpit controls <b>14 CFR</b> 23.779, .671 <b>14 CFR</b> 25.779, .671	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.3	Are stops provided for all flight control surfaces and is there positive engagement to limit the control surface travel <b>14 CFR</b> 23.675 <b>14 CFR</b> 25.675	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.4	Is each element of each flight control system designed, or distinctively and permanently marked, to minimize the probability of incorrect assembly that could result in the malfunctioning of the system <b>14 CFR</b> 23.685 <b>14 CFR</b> 25.685	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.5	Where cable systems are used, are provisions provided for the visual inspection of fairleads, pulleys, terminals and turnbuckles <b>14 CFR</b> 23.689 <b>14 CFR</b> 25.689	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.6	Is there a means provided, adjacent to the trim control, to indicate the direction of the airplane motions <b>14 CFR</b> 23.677 <b>14 CFR</b> 25.677	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.7	Is there provided a clearly visible means to indicate the position of the trim device with respect to the range of adjustment <b>14 CFR</b> 23.677 <b>14 CFR</b> 25.677	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.8	Where irreversible trim tab control systems are used. Is the apt from the tab to the attachment of the irreversible unit to the airplane structure rigid <b>14 CFR</b> 23.677 <b>14 CFR</b> 25.677	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.9	Does a functional check show that the control system locks operate as placarded or marked <b>14 CFR</b> 23.679 <b>14 CFR</b> 25.679	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.10	Has a means been provided to prevent the control system lock from engaging in flight <b>14 CFR</b> 23.679 <b>14 CFR</b> 25.679	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.11	Is the flight control system free from jamming, excessive friction. And excessive deflection when the controls are operated from the pilot compartment with:			
	(a) The system loaded to correspond to 80 percent of the limit load specified for the system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(b) <b>14 CFR</b> 25.683			
	(b) The system loaded to correspond to the limit airloads on the appropriate surfaces <b>14 CFR</b> 23.683	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.12	Is the control system protected from jamming, chafing and interference by cargo, passengers, or loose objects <b>14 CFR</b> 23.685 <b>14 CFR</b> 25.685	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5.0 FLIGHT CONTROL SYSTEM (Continued)		Yes	No	Action Req.
5.13	Are means provided in the cockpit to prevent the entry of foreign objects into places where they would jam the control system <b>14 CFR</b> 23.685 <b>14 CFR</b> 25.685	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.14	Are means provided to prevent the slapping of cables or tubes against other parts <b>14 CFR</b> 23.685 <b>14 CFR</b> 25.685	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.15	Are the control pulleys provided with guards to prevent the cables from being misplaced or fouled <b>14 CFR</b> 23.689 <b>14 CFR</b> 25.689	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.16	Do the control pulleys lie in a plane passing through the cable so that the cable does not rub against the pulley flange <b>14 CFR</b> 23.689 <b>14 CFR</b> 25.689	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.17	Are there any fairlead installations which change the cable direction more than 3 degrees <b>14 CFR</b> 23.689 <b>14 CFR</b> 25.689	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.18	Are there any clevis pins in the control system subject to load or motion which are retained only by cotter pins <b>14 CFR</b> 23.689 <b>14 CFR</b> 25.689	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.19	Are turnbuckles and push rods attached to parts having angular motion in a manner that will positively prevent binding or bending throughout the range of travel <b>14 CFR</b> 23.689 <b>14 CFR</b> 25.689	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.20	When the flap control is placed in any selected operational position, will the flap remain in that position unless the control is adjusted <b>14 CFR</b> 23.697 <b>14 CFR</b> 25.697	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
REMARKS				

## 5.0 FLIGHT CONTROL SYSTEM (Continued)

## 5.21 Control Surface Travels

NOTE: The applicant's flight control operational form(s) may be used in lieu of the information requested below if it is considered that it is more pertinent to the system being checked. When other data is used, it should be included as an attachment.

## A. AT BEGINNING OF FAA OFFICIAL FLIGHT TEST

SURFACE		POSITION	ACTUAL MEASURE- MENT (In inches or degrees)	POSITION	ACTUAL MEASURE- MENT (In inches or degrees)	POSITION	ACTUAL MEASURE- MENT (In inches or degrees)	CABLE TENSION (Lbs.) <sup>1</sup>
WING FLAPS		TAKEOFF		APPROACH		LAND		
AILERON	LEFT HAND	UP		DOWN				
	RIGHT HAND	UP		DOWN				
AILERON TRIM TAB		UP		DOWN				
AILERON SERVO TAB	LEFT HAND	UP		DOWN		LAND		
	RIGHT HAND	UP		DOWN		LAND		
SPOILERS	LEFT HAND	UP		DOWN		LAND		
	RIGHT HAND	UP		DOWN		LAND		
STABILIZER (MOVABLE)		UP		DOWN				
ELEVATOR	LEFT HAND	UP		DOWN				
	RIGHT HAND	UP		DOWN				
ELEVATOR TRIM TIB		UP		DOWN				
ELEVATOR SERVO TAB		UP		DOWN		LAND		
RUDDER		LEFT		RIGHT				
RUDDER TRIM TAB		LEFT		RIGHT				
RUDDER SERVO TAB		LEFT		RIGHT		LAND		

## A. AT BEGINNING OF FAA OFFICIAL FLIGHT TEST

SURFACE		POSITION	ACTUAL MEASURE- MENT (In inches or degrees)	POSITION	ACTUAL MEASURE- MENT (In inches or degrees)	POSITION	ACTUAL MEASURE- MENT (In inches or degrees)	CABLE TENSION (Lbs.) <sup>1</sup>
WING FLAPS		TAKEOFF		APPROACH		LAND		
AILERON	LEFT HAND	UP		DOWN				
	RIGHT HAND	UP		DOWN				
AILERON TRIM TAB		UP		DOWN				
AILERON SERVO TAB	LEFT HAND	UP		DOWN		LAND		
	RIGHT HAND	UP		DOWN		LAND		
SPOILERS	LEFT HAND	UP		DOWN		LAND		
	RIGHT HAND	UP		DOWN		LAND		
STABILIZER (MOVABLE)		UP		DOWN				
ELEVATOR	LEFT HAND	UP		DOWN				
	RIGHT HAND	UP		DOWN				
ELEVATOR TRIM TIB		UP		DOWN				
ELEVATOR SERVO TAB		UP		DOWN		LAND		
RUDDER		LEFT		RIGHT				
RUDDER TRIM TAB		LEFT		RIGHT				
RUDDER SERVO TAB		LEFT		RIGHT		LAND		

1. When opposing cables are unequal tension, show tension of each cable and identify.

6.0 LANDING GEAR		Yes	No	Action Req.
6.1	GENERAL			
6.1.1	Is the landing gear structure suitable protected against deterioration or loss of strength in service due to weathering corrosion, abrasion, etc. <b>14 CFR</b> 23.609 <b>14 CFR</b> 25.609	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.1.2	Are fluid lines, cables and electrical wires and switches attached to the landing gear suitably protected against damage by stones, slush, water, ice, etc. <b>14 CFR</b> 23.609 <b>14 CFR</b> 25.609	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.1.3	Are self-locking nuts used on any bolt subject to rotation during landing gear operation <b>14 CFR</b> 23.607 <b>14 CFR</b> 25.607	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.1.4	Are the wheels, brakes, and tires as specified per the related drawings and installed in accordance with this data <b>14 CFR</b> 23.731, .733, .735 <b>14 CFR</b> 25.731, .733, .735	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2	LANDING GEAR INSTALLATION			
6.2.1	Did a retractable landing gear operational ground check show proper functioning of the landing gear and landing gear door installations throughout the retraction and extension cycles <b>14 CFR</b> 23.729 <b>14 CFR</b> 25.729	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2.2	Did the emergency extension system ground check show proper extension of the landing gear <b>14 CFR</b> 23.729 <b>14 CFR</b> 25.729	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2.3	Is a positive means provided to lock the landing gear in the extended position <b>14 CFR</b> 23.729 <b>14 CFR</b> 25.729	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2.4	Is a means provided to indicate to the pilot when the landing gear is secured in the extended or retracted position <b>14 CFR</b> 23.729 <b>14 CFR</b> 25.729	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2.5	Is an aural warning device provided that functions continuously, when one or more throttles are closed, until the landing gear is down and locked <b>14 CFR</b> 23.729 <b>14 CFR</b> 25.729	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2.6	If there is a manual shutoff for the aural warning device, is it installed so that reopening the throttle will reset the warning device <b>14 CFR</b> 23.729 <b>14 CFR</b> 25.729	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2.7	Is an aural warning device provided that functions continuously when the wing flaps are extended beyond the maximum approach position <b>14 CFR</b> 23.729 <b>14 CFR</b> 25.729	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2.8	Is the equipment that is essential to the safe operation of the airplane and that is located in wheel wells protected from damage by a bursting tire or a loose tire tread <b>14 CFR</b> 23.729 <b>14 CFR</b> 25.729	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.3	SKI INSTALLATION			
6.3.1	Are the skis of an approved type <b>14 CFR</b> 23.737 <b>14 CFR</b> 25.737	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.3.2	Are the skis, installed in accordance with the approved data <b>14 CFR</b> 23.737 <b>14 CFR</b> 25.737	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.4	FLOAT INSTALLATION			
6.4.1	Are the floats of an approved type <b>14 CFR</b> 23.751 <b>14 CFR</b> 25.751	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.4.2	Are the floats installed in accordance with approved data <b>14 CFR</b> 23.753 <b>14 CFR</b> 25.753	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.0 PERSONNEL AND CARGO ACCOMMODATIONS		Yes	No	Action Req.
7.1	Are the windshield and window panels in the pilot compartment clear and free of distortions <b>14 CFR</b> 23.773 <b>14 CFR</b> 25.773	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.2	Are internal glass panes of a nonsplintering safety glass <b>14 CFR</b> 23.775 <b>14 CFR</b> 25.775	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.3	Does the windshield and side windows forward of the pilots back when he is seated in the normal flight position have a luminous transmittance value of not less than 70 percent <b>14 CFR</b> 23.775	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.4	Are controls and instrument markings, instructions, and placards in conformance with pertinent specifications and approved data <b>14 CFR</b> 23.777 through 23.781 <b>14 CFR</b> 25.777 through 25.781	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>14 CFR</b> 23.1541 through 23.1567 <b>14 CFR</b> 25.1541 through 25.1567	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5	Is there a door between the pilot and passenger compartments <b>14 CFR</b> 25.771	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6	Does the door, between the pilot and passenger compartment, have a locking means to prevent passengers from opening it without the pilots permission <b>14 CFR</b> 25.771	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7	Is there a means to lock and safeguard each external door against inadvertent opening either by persons or as a result of mechanical failure <b>14 CFR</b> 25.783	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.8	Where inward opening external doors are used, is there a means provided to prevent occupant's from crowding against the door and interfering with the opening of the door <b>14 CFR</b> 25.783	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9	Can the external doors be readily unlocked and opened from the inside or outside <b>14 CFR</b> 25.783	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.10	Is the means of opening the external doors simple, obvious, and so arranged and marked that they can be readily located and operated, even in darkness <b>14 CFR</b> 25.783	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11	Are direct visual inspection means provided to determine whether external doors, for which the initial opening movement is outward, are fully locked <b>14 CFR</b> 25.783	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12	Is a visual means provided to signal to appropriate crewmembers when normally used external doors are closed and fully locked <b>14 CFR</b> 25.783	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13	Is each seat and berth in accordance with approved data <b>14 CFR</b> 25.783	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.14	Is each projected object, that would injure persons seated or moving about the airplane in normal flight, padded <b>14 CFR</b> 25.785	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.0 PERSONNEL AND CARGO ACCOMMODATIONS (Continued)		Yes	No	Action Req.
7.15	Does each berth have an approved safety belt <b>14 CFR</b> 25.785	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.16	Is there a means provided along each aisle to enable occupants to steady themselves while using the aisles in moderately rough air, such as a hand grip or rail along each aisle or a firm hand hold on each seat back <b>14 CFR</b> 25.785	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.17	Is each crew member seat at flight deck stations provided with provisions for a shoulder harness <b>14 CFR</b> 25.785	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.18	Are cargo and baggage compartments placarded in accordance with approved data <b>14 CFR</b> 23.787 <b>14 CFR</b> 25.787	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.19	Are emergency exits openable from the inside and outside of the cabin without undue effort <b>14 CFR</b> 25.809	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.20	Is there a means to lock each emergency exit and to safeguard against its opening in flight, either inadvertently by persons or as a result of mechanical failure <b>14 CFR</b> 25.809	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.21	Is there a means for direct visual inspection of the locking mechanism to determine that each emergency exit, for which the initial opening movement is outward, is fully locked <b>14 CFR</b> 25.809	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.22	Is each landplane emergency exit that is more than six feet from the ground with the landing gear extended and each over-the-wing emergency exit provided with an approved means to assist the occupants in descending to the ground <b>14 CFR</b> 25.809	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.23	Is each passenger emergency exit, its means of access and its means of opening, conspicuously marked <b>14 CFR</b> 23.807 <b>14 CFR</b> 25.811	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.24	Is the identity and location of each emergency exit recognizable from a distance equal to the width of the cabin <b>14 CFR</b> 25.811	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.25	Is the location of each emergency exit operating handle and the instructions for opening marked on or adjacent to the emergency exit <b>14 CFR</b> 23.807 <b>14 CFR</b> 25.811	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.26	Are these markings and instructions required by item 7.25 readable from a distance of 30 inches <b>14 CFR</b> 25.811	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.27	Is a source of light, independent of the main lighting system, installed to illuminate each passenger emergency exit marking <b>14 CFR</b> 25.811	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



7.0 PERSONNEL AND CARGO ACCOMMODATIONS (Continued)		Yes	No	Action Req.
7.28	Is each emergency exit that is required to be openable from the outside, and its means of opening, marked on the outside of the airplane <b>14 CFR</b> 25.811	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.29	Are main aisles and emergency access passageways in accordance with approve data <b>14 CFR</b> 23.807 <b>14 CFR</b> 25.815, .813	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.30	Are the decompression features of personnel and cargo compartments in accordance with approved data <b>14 CFR</b> 25.841	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.31	Is there any feature or characteristic which may prevent the satisfactory decompression of a compartment <b>14 CFR</b> 25.841	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
REMARKS				

8.0 VENTILATION, HEATING AND PRESSURIZATION		Yes	No	Action Req.
8.1	Is the installation of the heating and ventilation system in accordance with related approved data <b>14 CFR</b> 21.22 <b>14 CFR</b> 23.831 <b>14 CFR</b> 25.831	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.2	Are the heating and ventilation controls placarded and marked in accordance with approved data <b>14 CFR</b> 23.1541, .1555 <b>14 CFR</b> 25.1541, .1555	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.3	Is the installation of the pressurization system in accordance with related approved data <b>14 CFR</b> 21.33 <b>14 CFR</b> 23.841 <b>14 CFR</b> 25.841	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.4	Do the pressure relief valves automatically limit the positive pressure differential to the limits established by the approved data <b>14 CFR</b> 23.841 <b>14 CFR</b> 25.841	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.5	Do the reverse pressure differential relief valves limit the negative pressure differential to the limits established by the approved data <b>14 CFR</b> 23.841 <b>14 CFR</b> 25.841	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.6	Is the regulator for maintaining the required internal pressures and airflow rates installed and placarded in accordance with the approved data <b>14 CFR</b> 23.841 <b>14 CFR</b> 25.841	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.7	Are the instruments to indicate to the pilot the pressure differential, the absolute pressure in the cabin and the rate of change of the absolute pressure marked and placarded in accordance with the approved data <b>14 CFR</b> 23.841, .1543 <b>14 CFR</b> 25.841, .1543	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.8	Are warning devices and placards provided to indicate when the approved pressure differential and absolute cabin pressure limits are exceeded <b>14 CFR</b> 23.841 <b>14 CFR</b> 25.841	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.9	Are all pressurization system warning placards in accordance with approved data <b>14 CFR</b> 23.841 <b>14 CFR</b> 25.841	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.10	Does each door and emergency exit operate properly after the pressurization flight test have been completed <b>14 CFR</b> 23.843 <b>14 CFR</b> 25.843	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.11	Are combustion heaters of an approved type and installed in accordance with approved data <b>14 CFR</b> 23.859 <b>14 CFR</b> 25.859	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.12	Are engine exhaust heaters installed in accordance with approved data <b>14 CFR</b> 23.1125 <b>14 CFR</b> 25.833, .1125	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9.0 FIRE PROTECTION – COMPARTMENT INTERIORS		Yes	No	Action Req.
9.1	Are the materials used for compartment interiors in accordance with approved data 14 CFR 23.853 <b>14 CFR</b> 25.853	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2	Does each towel, paper, and waste receptacle have a means for containing possible fires 14 CFR 25.853	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.3	Is there at least one hand fire extinguisher for use by the flight crew members 14 CFR 25.853	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.4	Are the required number of hand fire extinguishers located in the passenger compartments 14 CFR 25.853	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.5	Is the location of each hand fire extinguisher plainly marked 14 CFR 23.1561 <b>14 CFR</b> 25.1561	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.6	Are compartments where smoking is to be prohibited so placarded 14 CFR 25.853	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.7	Are controls, wiring, fluid lines, equipment or accessories whose damage or failure would affect safe operation, protected so that they cannot be damaged by cargo or baggage, and that their breakage or failure will not create a fire hazard 14 CFR 25.855	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.8	Has a means been provided to prevent cargo or baggage from interfering with the functioning of the fire-protective installation for the compartments 14 CFR 25.855	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.9	Are the sources of heat within the compartment shielded and insulated to prevent igniting the cargo or baggage 14 CFR 25.855	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.10	Are the combustion heater fire zones protected from fire 14 CFR 23.859 <b>14 CFR</b> 25.859	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.11	Are the ventilating and combustion air ducts, adjacent to the heater of fire proof material installed in accordance with approved data 14 CFR 25.859	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.12	Do the heater installation fuel drains permit safe drainage clear of the aircraft 14 CFR 25.859	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.13	Is a means provided to prevent the ignition, by any equipment, of flammable fluids or vapors resulting from the leakage of fluid systems or to control any fire resulting from the ignition 14 CFR 25.863	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10.0 POWERPLANT INSTALLATIONS		Yes	No	Action Req.	
10.1 GENERAL					
10.1.1	Is (are) the engine(s) type certificated 14 CFR 23.903 14 CFR 25.903	TYPE CERTIFICATE NO.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.1.2	Is (are) the propeller(s) type certificated 14 CFR 23.905 14 CFR 25.905	TYPE CERTIFICATE NO.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.1.3	Are the powerplant components and accessories installed in accordance with approved data 14 CFR 23.901 14 CFR 25.901		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.1.4	Does a ground operational test show that all powerplant components and accessories are operating satisfactorily 14 CFR 23.901 14 CFR 25.901		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.1.5	Is a means provided to allow the close examination of each part requiring recurring inspection, adjustments for proper alignment and function, or lubrication 14 CFR 23.611, .901 14 CFR 25.611, .901		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.1.6	Are major components of the powerplant installation electrically bonded to other parts of the airplane 14 CFR 25.901		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.1.7	Are any self-locking nuts used on any bolt, subject to rotation in operation 14 CFR 23.607 14 CFR 25.607		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.1.8	Is the radial clearance between the propeller tip and the aircraft structure at least one inch 14 CFR 23.925 14 CFR 25.925		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.1.9	Is the longitudinal clearance between the propeller blades or cuffs and stationary part of the aircraft at least one-half inch 14 CFR 23.925 14 CFR 25.925		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.1.10	Are propeller deicing provisions installed in accordance with approved data 14 CFR 23.901 14 CFR 25.901, .929		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.1.11	Are propeller deicing controls identified and marked with respect to their operation 14 CFR 23.1555 14 CFR 25.1555		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2 FUEL SYSTEM					
10.2.1	Is the fuel system installed in accordance with approved data 14 CFR 23.951 14 CFR 25.951		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.2	Does a ground operational test indicate that the fuel system operates satisfactorily 14 CFR 23.951 14 CFR 25.951		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.3	Are the fuel tanks constructed, installed and sealed in accordance with approved data 14 CFR 23.963 14 CFR 25.963		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.4	Are the spaces adjacent to the fuel tanks ventilated and provided with drain holes 14 CFR 23.967 14 CFR 25.967		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10.0 POWERPLANT INSTALLATIONS (Continued)		Yes	No	Action Req.
10.2	FUEL SYSTEM (Continued)			
10.2.5	Does each tank have a positive locking drain that allows the complete drainage of the fuel tank sump 14 CFR 25.971	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.6	Does the fuel tank sump drain discharge clear of the airplane 14 CFR 25.971	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.7	Does the fuel system have a chamber or sediment bowl located so that water will drain to it from all parts of the fuel tank 14 CFR 23.97	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.8	Can the fuel tank expansion space be filled with the airplane in the normal ground attitude 14 CFR 23.969 14 CFR 25.969	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.9	Is the chamber or sediment bowl accessible for drainage 14 CFR 23.971	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.10	Is each fuel tank filler connection installed in a manner which will prevent the entrance of fuel into any part of the airplane other than the tank 14 CFR 23.973 14 CFR 25.973	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.11	Is each recessed fuel tank filler connection that can retain any appreciable quantity of fuel, provided with a drain that discharges clear of the airplane 14 CFR 23.973 14 CFR 25.973	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.12	Is each fuel filler cover marked on or near, with the word "fuel," the minimum fuel grade or designation approved for the engines and the usable fuel tank capacity 14 CFR 23.973,.1557 14 CFR 25.973,.1557	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.13	Does each filler cap provide a fuel tight seal 14 CFR 23.973 14 CFR 25.973	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.14	Is there any point in any fuel vent line where moisture can accumulate with the airplane in the ground attitude or level flight attitude 14 CFR 23.975 14 CFR 25.975	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.15	Are the vent and drain line outlets located in a position where the discharge of fuel or fumes would not constitute a fire hazard or allow fumes to enter personnel compartments 14 CFR 23.975 14 CFR 25.975	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.16	Are the fuel strainers accessible for inspection and cleaning 14 CFR 23.977 14 CFR 25.977	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.17	Does an operational check of each pressure fueling connection show it to be operating satisfactorily 14 CFR 25.979	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.18	Do the emergency or auxiliary fuel pumps function in accordance with the placards located at the controls 14 CFR 23.991 14 CFR 25.911	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10.0 POWERPLANT INSTALLATIONS (Continued)		Yes	No	Action Req.
10.2	FUEL SYSTEM (Continued)			
10.2.19	Are the fuel lines installed and supported to prevent excessive vibration and motion due to fuel pressure and accelerated flight conditions 14 CFR 23.993 14 CFR 25.993	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.20	Do fuel lines, connected to components of the airplane between which relative motion could exist, have provisions for flexibility 14 CFR 23.993 14 CFR 25.993	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.21	Does each fuel valve have positive stops or suitable index provisions in the "on" and "off" positions 14 CFR 23.995 14 CFR 25.995	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.22	Can the drainage of the fuel system be accomplished by the use of fuel strainer and fuel tank sump drains with the airplane in the normal ground attitude 14 CFR 23.999 14 CFR 25.999	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2.23	Does a ground operational test indicate that the fuel jettisoning system operates satisfactorily 14 CFR 25.1001	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.3	OIL SYSTEM			
10.3.1	Is the oil system installed in accordance with the approved data 14 CFR 23.1011 14 CFR 25.1011	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.3.2	Can the oil tank expansion space be filled with the airplane in the normal ground attitude 14 CFR 23.1013 14 CFR 25.1013	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.3.3	Is each recessed oil tank filler connection that can retain any appreciable quantity of oil have a drain that discharges clear of the airplane 14 CFR 23.1013 14 CFR 25.1013	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.3.4	Is each oil tank filler marked with the word "oil" and the oil capacity 14 CFR 23.1013,.1577 14 CFR 25.1013,.1557	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.3.5	Does each filler cap provide an oil-tight seal 14 CFR 23.1013 14 CFR 25.1013	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.3.6	Are the oil lines and oil tank vents routed so that condensed water vapor that might freeze and obstruct the line, cannot accumulate at any point 14 CFR 23.1013,.1017 14 CFR 25.1013, .1017	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.3.7	Are the oil lines installed and supported to prevent excessive vibration and motion due to oil pressure and accelerated flight conditions 14 CFR 23.1017 14 CFR 25.1017	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.3.8	Do oil lines, connected to components of the airplane between which relative motion could exist, have provisions for flexibility 14 CFR 23.1017 14 CFR 25.1017	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.3.9	Is there at least one accessible oil drain which allows the safe drainage of the entire oil system, and is provided with a positive locking means in the closed position 14 CFR 23.1021 14 CFR 25.1021	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10.0 POWERPLANT INSTALLATIONS (Continued)		Yes	No	Action Req.
10.3	OIL SYSTEM (Continued)			
10.3.10	Does each oil valve have positive stops or suitable index provisions in the "on" and "off" positions 14 CFR 25.1025	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.3.11	Does a ground operational test show that propeller feathering can be accomplished with the amount of trapped oil in the oil tank 14 CFR 23.1027 14 CFR 25.1027	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.4	INDUCTION SYSTEM			
10.4.1	Are all units of the engine air induction system, including icing protection and induction system screens, fabricated and installed in accordance with approved data 14 CFR 23.1091 14 CFR 25.1091	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.4.2	Does the carburetor air preheater installation allow the inspection of exhaust manifold parts that it surrounds, and the critical parts of preheater itself 14 CFR 23.1101 14 CFR 25.1101	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.4.3	Are drains for induction system ducts installed in accordance with approved data, and do they discharge in a location which will not cause a fire hazard 14 CFR 23.1103 14 CFR 25.1103	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.5	EXHAUST SYSTEM			
10.5.1	Are exhaust system components constructed and installed in accordance with approved data 14 CFR 23.1121 14 CFR 25.1121	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.5.2	Are there parts of the airplane that hot exhaust gases could strike or that could be subjected to high temperatures from exhaust system parts constructed of fireproof material or shielded by a fireproof material 14 CFR 23.1121 14 CFR 25.1121	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.5.3	Are exhaust gases discharged near any flammable fluid vent or drain 14 CFR 23.1121 14 CFR 25.1121	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.5.4	Is each exhaust manifold supported to withstand any vibration and inertia load to which it may be subjected 14 CFR 23.1123 14 CFR 25.1123	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.5.5	Has a means been provided for the inspection of critical parts of the exhaust heat exchangers 14 CFR 23.1125 14 CFR 25.1125	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.5.6	Are the exhaust driven turbosupercharger installations in accordance with approved data 14 CFR 23.1127 14 CFR 25.1127	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.5.7	Have adequate provisions been made for the inspection, maintenance, and servicing of the turbosupercharger 14 CFR 23.1127 14 CFR 25.1127	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10.0 POWERPLANT INSTALLATIONS (Continued)		Yes	No	Action Req.
10.6	POWERPLANT CONTROLS AND ACCESSORIES			
10.6.1	Are the powerplant controls constructed, located, installed, adjusted and marked in accordance with approved data <b>14 CFR</b> 23.1141 <b>14 CFR</b> 25.1141	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.6.2	Is there a means to prevent propeller feathering by movement of the propeller pitch or speed control to the feathering position during normal operation <b>14 CFR</b> 23.1151 <b>14 CFR</b> 25.1153	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.6.3	Do the reverse thrust controls have a positive lock or stop at the flight idle position and required a separate and distinct operation to displace the control from the forward thrust position <b>14 CFR</b> 25.1155	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.6.4	Are the fuel jettisoning system controls located apart from any fire extinguisher control or other control used to combat fire, and are guards provided to prevent inadvertent operation <b>14 CFR</b> 25.1161	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.6.5	Are all engine mounted accessories installed in accordance with approved data <b>14 CFR</b> 23.1163 <b>14 CFR</b> 25.1163	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.6.6	Is the electrical equipment that is subject to arcing or sparking installed in a location to minimize the probability of contact with any flammable fluids or vapors <b>14 CFR</b> 23.1163 <b>14 CFR</b> 25.1163	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.6.7	Are the magneto ground wires that lie on the engine side of the fire wall installed, located, or protected, to minimize the probability of simultaneous failure of two or more wires due to mechanical damage, electrical faults, or other cause <b>14 CFR</b> 23.1165 <b>14 CFR</b> 25.1165	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.6.8	Are ground wires for any engine, which are routed through the fire zone of another engine, fire proof <b>14 CFR</b> 25.1165	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.7	POWERPLANT FIRE PROTECTION			
10.7.1	Are all tanks, lines, and fittings which contain flammable fluids or gases in a designated fire zone constructed, installed, and secured in accordance with approved data <b>14 CFR</b> 23.1183 <b>14 CFR</b> 25.1185	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.7.2	Can complete drainage and discharge of each part of each designated fire zones be accomplished to minimize the hazard resulting from the failure of malfunctioning of any component containing flammable fluids <b>14 CFR</b> 25.1187	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.7.3	Is each designated fire zone ventilated to prevent the accumulation of flammable vapors <b>14 CFR</b> 25.1187	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



10.0 POWERPLANT INSTALLATIONS (Continued)		Yes	No	Action Req.
10.7	POWERPLANT FIRE PROTECTION (Continued)			
10.7.4	Are the shut-off valves and controls installed and marked in accordance with approved data 14 CFR 23.1189 14 CFR 25.1189	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.7.5	Are firewalls and shrouds constructed and installed in accordance with approved data 14 CFR 23.1191 14 CFR 25.1191	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.7.6	Are all openings in firewalls and shrouds provided with close fitting fireproof or fire-resistant grommets, brushings, or firewall fittings 14 CFR 23.1191 14 CFR 25.1191	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.7.7	Is each part of the cowlings provided with a means for rapid and complete drainage in the normal ground and flight attitudes 14 CFR 23.1193 14 CFR 25.1193	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.7.8	Is the cowlings and nacelle constructed and installed in accordance with the approved data 14 CFR 23.1193 14 CFR 25.1193	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.7.9	Are fire extinguishing systems, which are provided for designated fire zones installed in accordance with approved data 14 CFR 23.1195 14 CFR 25.1195	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.7.10	Are visual discharge indicators provided at the discharge end of each discharge line of the fire extinguishing system 14 CFR 25.1199	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.7.11	Are all powerplant fire or overheat detector systems installed in accordance with approved data 14 CFR 25.1203	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
REMARKS				

## 11.0 EQUIPMENT

Due to the differences in the minimum equipment requirements of 14 CFR parts 23 and 25, the following list of instruments and equipment items is provided as a means of recording the inspection of these items. The FAR requiring the particular item is indicated beside the item in the applicable FAR column. The answers to the following questions should be noted in the appropriate column.

A. Is the item installed and marked in accordance with approved data

14 CFR 23.1301, .1541

14 CFR 25.1301, .1541

B. Does a ground operational check show that the item operates satisfactorily

14 CFR 23.1301, .1309

14 CFR 25.1301, .1309

C. Is action required as a result of this inspection

11.1 FLIGHT AND NAVIGATIONAL INSTRUMENTS – 14 CFR 23.1303 14 CFR 25.1303

ITEM	14 CFR		A.	B.	C.
	23	25			
A. Airspeed indicator	X	X			
B. Altimeter	X				
C. Altimeter (Sensitive or precision)		X			
D. Clock (Sweep second pointer)		X			
E. Free air temperature indicator		X			
F. Rate-of-turn indicator (Gyroscopically with integral bank or slip indicator)		X			
G. Bank and pitch indicator (Gyroscopically stabilized)					
H. Magnetic direction indicator	X	X			
I. Rate of climb		X			
J. Gyroscopic direction indicator (Directional gyro or equivalent)		X			
K. Machmeter		X			
L. Speed warning device		X			
M. Oxygen quantity indicator		X			
N. Hydraulic pressure indicator		X			
O. Electrical power indicators	X	X			
P. Landing gear position indicator	X	X			
Q. Wing flap position indicator	X	X			
R. Trim position indicator	X	X			
S. Differential pressure indicator		X			
T. Cabin absolute pressure indicator		X			
U. Rate-of-change of cabin absolute pressure		X			

11.0 EQUIPMENT (Continued)					
A. Is the item installed and marked in accordance with approved data 14 CFR 23.1301, .1541 14 CFR 25.1301, .1541					
B. Does a ground operational check show that the item operates satisfactorily 14 CFR 23.1301, .1309 14 CFR 25.1301, .1309					
C. Is action required as a result of this inspection					
11.2 POWERPLANT INSTRUMENTS – 14 CFR 23.1305 14 CFR 25.1305					
ITEM	14 CFR		A.	B.	C.
	23	25			
A. Carburetor air temperature indicator		X			
B. Manifold pressure indicator	X	X			
C. Cylinder head temperature indicator	X	X			
D. Fuel pressure indicator	X	X			
E. Fuel pressure warning device		X			
F. Fuel flowmeter (turbine engine)		X			
G. Fuel mixture indicator (reciprocating engine without auto alt. Mixture control)		X			
H. Gas temperature indicator (turbine)		X			
I. Fuel quantity indicator	X	X			
J. Oil pressure indicator	X	X			
K. Oil pressure warning		X			
L. Oil quantity indicator	X	X			
M. Oil temperature indicator	X	X			
N. Tachometer	X	X			
O. Fire warning indicator		X			
P. Thrust indicator		X			
Q. Torque indicator (turbo prop)		X			
R. Power output indicator (recip.)		X			
S. Propeller blade position indicator		X			
T. Reverse thrust indicator		X			

11.0 EQUIPMENT (Continued)					
A. Is the item installed and marked in accordance with approved data <div style="display: flex; justify-content: space-between; font-size: small;"> <span>14 CFR 23.1301, .1541</span> <span>14 CFR 25.1301, .1541</span> </div>					
B. Does a ground operational check show that the item operates satisfactorily <div style="display: flex; justify-content: space-between; font-size: small;"> <span>14 CFR 23.1301, .1309</span> <span>14 CFR 25.1301, .1309</span> </div>					
C. Is action required as a result of this inspection					
11.3 MISCELLANEOUS EQUIPMENT – 14 CFR 23.1307      14 CFR 25.1307					
ITEM	14 CFR		A.	B.	C.
	23	25			
A. Approved seat for each occupant		X			
B. Approved safety belt for each occupant	X	X			
C. Adequate electrical energy source	X	X			
D. Two-way radio communication		X			
E. Radio navigation system		X			
F. Windshield wiper or equivalent		X			
G. Ignition switch(es)	X	X			
H. Portable fire extinguisher		X			
I. Master switch	X	X			
J. Anti-Collision light	X <sup>1</sup>	X <sup>1</sup>			
K. Electric protective devices	X	X			
REMARKS					
<sup>1</sup> Night operational requirement					

12.0 ELECTRICAL SYSTEM		Yes	No	Action Req.
12.1	Is the electrical system installed in accordance with approved data <b>14 CFR 23.1351</b> <b>14 CFR 25.1351, .1309</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.2	Does a ground operational test show that the electrical system adequately performs its intended function <b>14 CFR 23.1351</b> <b>14 CFR 25.1351, .1309</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.3	Is the electrical system protected from fuel, oil, water, other detrimental substances and mechanical damage <b>14 CFR 23.1351</b> <b>14 CFR 25.1351</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.4	Are all electrical control devices operated by a crew member marked or placarded in accordance with approved data <b>14 CFR 23.1351, .1555</b> <b>14 CFR 25.1351, .1555</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.5	Are electrical system components located in wheel wells protected to prevent a malfunction or failure due to water, slush, ice, or any material which may be thrown by a tire <b>14 CFR 23.1351</b> <b>14 CFR 25.1351</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.6	Is the battery installation provided with adequate drainage and ventilation, and enclosed so that no corrosive fluids or gases may damage the surrounding structure or essential equipment <b>14 CFR 23.1353</b> <b>14 CFR 25.1353</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.7	Are instrument lights installed in accordance with approved data <b>14 CFR 23.1381</b> <b>14 CFR 25.1381</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.8	Are landing lights installed in accordance with approved data <b>14 CFR 23.1383</b> <b>14 CFR 25.1383</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.9	Are the position lights installed in accordance with approved data <b>14 CFR 23.1385 through .1297</b> <b>14 CFR 25.1383 through .1297</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.10	Is the riding light installation in accordance with approved data <b>14 CFR 23.1399</b> <b>14 CFR 25.1399</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.11	Is the anticollision light installation in accordance with approved data <b>14 CFR 23.1401</b> <b>14 CFR 25.1401</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.12	Are parts which are electrically insulated from the basic airframe connected to it through lightning arrestors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.0	SAFETY EQUIPMENT			
13.1	Are the safety equipment release controls, such as automatic liferaft release readily accessible to the crew <b>14 CFR 23.1411</b> <b>14 CFR 25.1411</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.2	Are the emergency equipment items located in an obvious location which is readily accessible <b>14 CFR 23.1411</b> <b>14 CFR 25.1411</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.3	Are the emergency equipment items stowed in a manner that provides protection from inadvertent damage <b>14 CFR 23.1411</b> <b>14 CFR 25.1411</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.4	Are liferafts installed in accordance with approved data <b>14 CFR 23.1411</b> <b>14 CFR 25.1411</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14.0 MISCELLANEOUS EQUIPMENT		Yes	No	Action Req.
14.1	ELECTRONIC SYSTEM			
14.1.1	Is the electronic system installed in accordance with approved data <b>14 CFR</b> 23.1431,.1309 <b>14 CFR</b> 25.1431,.1309	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.1.2	Does a ground operational check show that the electrical system adequately performs its intended function <b>14 CFR</b> 23.1309,.1431 <b>14 CFR</b> 25.1309,.1431	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.1.3	Is the electronic system protected from damage by fuel, oil, water, other detrimental substances and mechanical damage <b>14 CFR</b> 23.1309,.1431 <b>14 CFR</b> 25.1309,.1431	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.1.4	Are all electronic control devices operated by a crew member marked or placarded in accordance with approved data <b>14 CFR</b> 23.1431,.1555 <b>14 CFR</b> 25.1431,.1555	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.1.5	Are the electronic system controls and wiring installed so that the operation of any one unit or system of units will not adversely affect the simultaneous operation of any other unit or systems of units within the aircraft <b>14 CFR</b> 23.1431 <b>14 CFR</b> 25.1431	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.1.6	Are the electronic units properly ventilated <b>14 CFR</b> 23.1431 <b>14 CFR</b> 25.1431	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.1.7	Are shock mounted units provided with adequate clearance between other units or aircraft parts to prevent damage or malfunction <b>14 CFR</b> 23.1431 <b>14 CFR</b> 25.1431	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.2	HYDRAULIC – PNEUMATIC – VACUUM SYSTEMS			
14.2.1	Is the hydraulic system installed in accordance with the approved data <b>14 CFR</b> 23.1435 <b>14 CFR</b> 25.1435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.2.2	Does a ground operational test show that the hydraulic system adequately performs its intended functions <b>14 CFR</b> 23.1301,.1435 <b>14 CFR</b> 25.1301,.1435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.2.3	Is each hydraulic line, fitting and component installed and supported to prevent excessive vibration and damage due to inertia loads <b>14 CFR</b> 23.1435 <b>14 CFR</b> 25.1435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.2.4	Has a flexible means been used to connect points in the hydraulic system between which relative motion or differential vibration exists <b>14 CFR</b> 23.1435 <b>14 CFR</b> 25.1435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.2.5	Is each element of the hydraulic system protected from abrasion, corrosion and mechanical damage <b>14 CFR</b> 23.1435 <b>14 CFR</b> 25.1435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.2.6	Are the hydraulic reservoirs and accumulators installed in accordance with approved data <b>14 CFR</b> 23.1435 <b>14 CFR</b> 25.1435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14.0 MISCELLANEOUS EQUIPMENT (Continued)		Yes	No	Action Req.
14.2	HYDRAULIC – PNEUMATIC – VACUUM SYSTEMS (Continued)			
14.2.7	Are the hydraulic system controls and components labeled as to their identification, function or operating limitations, or any applicable combination of these factors <b>14 CFR</b> 23.1309 <b>14 CFR</b> 25.1309	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.2.8	Is the pneumatic system installed in accordance with approved data <b>14 CFR</b> 23.1309 <b>14 CFR</b> 25.1309	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.2.9	Does a ground operation test show that the pneumatic system adequately performs its intended function <b>14 CFR</b> 23.1309 <b>14 CFR</b> 25.1309	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.2.10	Is each pneumatic system line, fitting and component installed and supported to prevent excessive vibration and damage due to inertia loads <b>14 CFR</b> 23.1309 <b>14 CFR</b> 25.1309	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.2.11	Is each element of the pneumatic system protected from abrasion, corrosion and mechanical damage <b>14 CFR</b> 23.1309 <b>14 CFR</b> 25.1309	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.2.12	Are the pneumatic system controls and components labeled as to their identification, function or operating limitations or any applicable combination of these factors <b>14 CFR</b> 23.1301,.1309 <b>14 CFR</b> 25.1301,.1309	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.2.13	Are the vacuum air system units, components lines and connections installed in accordance with approved data <b>14 CFR</b> 25.1433	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.3	OXYGEN SYSTEM			
14.3.1	Is the oxygen system installed in accordance with approved data <b>14 CFR</b> 25.1441	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.3.2	Does a ground operational test show that the oxygen system adequately performs its intended function <b>14 CFR</b> 25.1441	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.3.3	Are any oxygen equipment or lines located within a designated fire zone <b>14 CFR</b> 25.1451	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.3.4	Are oxygen lines and equipment protected from heat that may be generated in, or escape from, any designated fire zone <b>14 CFR</b> 25.1451	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.3.5	Are the oxygen system components and lines installed so that escaping oxygen cannot cause ignition of grease, fluids, or vapor accumulations that are present in normal operation or as a result of failure or malfunction of any system <b>14 CFR</b> 25.1451	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.3.6	Are the oxygen system controls and components labeled as to their identification , function or operating limitations or any applicable combination of these factors <b>14 CFR</b> 23.1301 <b>14 CFR</b> 25.1301	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14.0 MISCELLANEOUS EQUIPMENT (Continued)		Yes	No	Action Req.
14.3	OXYGEN SYSTEM (Continued)			
14.3.7	Are oxygen pressure tanks and lines between tanks and the shutoff means (a) protected from unsafe temperatures, and (b) located where the probability and hazards of rupture in a crash landing are minimized <b>14 CFR 14 CFR 25.1453</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.3.8	Is each oxygen system line, fitting and component installed and supported to prevent excessive vibration and damage due to inertia loads <b>14 CFR 23.1309 14 CFR 25.1309</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.3.9	Is each element of the oxygen system protected from abrasion, corrosion and mechanical damage <b>14 CFR 23.1309 14 CFR 25.1309</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.3.10	Is the portable oxygen equipment readily accessible to the crew members <b>14 CFR 23.1443 14 CFR 25.1443</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.4	MISCELLANEOUS FLUID DRAINS			
14.4.1	Where fluids subject to freezing are drained overboard in flight or during ground operations, are these drains located to prevent the formation of ice on the airplane <b>14 CFR 25.1455</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.0	AIRCRAFT IDENTIFICATION AND MARKING			
15.1	Is the manufacturer's identification plate fireproof, and attached in an accessible location where it will not likely be defaced during normal service or be lost or destroyed in the event of an accident <b>14 CFR 45.11</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.2	Does the manufacturer's identification plate contain the data required by <b>14 CFR 45.13 14 CFR 45.11</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.3	Are aircraft nationality and registration marks in accordance with approved data <b>14 CFR 45.21 through 45.31</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
REMARKS				