
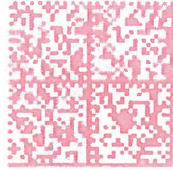


REGISTRATION NOT TRANSFERABLE

DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION CERTIFICATE OF AIRCRAFT REGISTRATION		This certificate must be in the air-craft when operated.
NATIONALITY AND REGISTRATION MARKS N 133RM	AIRCRAFT SERIAL NO. 8103	
MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT MARSH ROY W RAND-ROBINSON KR-25		
ICAO Aircraft Address Code: 50103731		
BOUYEA JOHN M 33570 NW BAGLEY RD HILLSBORO OR 97124-8228		This certificate is issued for registration purposes only and is not a certificate of title. The Federal Aviation Administration does not determine rights of ownership as between private persons.
Individual		
It is certified that the above described aircraft has been entered on the register of the Federal Aviation Administration, United States of America, in accordance with the Convention on International Civil Aviation dated December 7, 1944, and with Title 49, United States Code, and regulations issued thereunder.		
DATE OF ISSUE	October 10, 2017	 ADMINISTRATOR
EXPIRATION DATE	October 31, 2020	



U.S. POSTAGE PITNEY BOWES



ZIP 73169 \$ 000.46⁰
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0001403042 OCT 13 2017

U.S. Department of Transportation
Federal Aviation Administration

Civil Aviation Registry
P.O. Box 25504
Oklahoma City, OK 73125-0504

Official Business
Penalty for Private Use \$300

AC Form 8050-3 (10/2010) Supersedes previous edition

133RM

TO: BOUYEA JOHN M
33570 NW BAGLEY RD
HILLSBORO OR 97124-8228



UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION-FEDERAL AVIATION ADMINISTRATION SPECIAL AIRWORTHINESS CERTIFICATE			
CATEGORY/DESIGNATION Experimental			
PURPOSE Operating amateur-built aircraft			
MANUFACTURER	NAME	N/A	
	ADDRESS	N/A	
FLIGHT	FROM	N/A	
	TO	N/A	
N 133RM	MODEL	RAND-ROBINSON KR-2S	SERIAL NO. 8103
BUILDER MARSH ROY M		DATE OF ISSUANCE 7 AUG 2018	
Unless sooner surrendered, suspended, revoked, or the termination date or Unlimited , this airworthiness certificate is effective under the conditions prescribed in 14 CFR, Part 21, Section 21.181 or 21.217.			
SIGNATURE OF FAA REPRESENTATIVE <i>Gary D. Brown</i> Gary D. Brown		DESIGNATION OR OFFICE NO. DAR-T 073096896	
This airworthiness certificate is issued under the authority of Title 49, United States Code, 4704 and Title 14 Code of Federal Regulations. Any alteration, misuse or reproduction for a fraudulent purpose of this certificate may be punishable by certificate revocation, fine, and / or imprisonment. THIS PORTION OF THE CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT PER THE APPLICABLE REGULATIONS.			

-- Conditions and Limitations --

1. This aircraft does not meet the airworthiness standards of Annex 8 to the Convention on International Civil Aviation. Operations in airspace outside of the United States will require the permission of the applicable foreign authority. That permission must be carried aboard the aircraft together with this U.S. airworthiness certificate and, upon request, be made available to an FAA inspector or the applicable foreign authority in the country of operation. Operations may be further restricted by the applicable foreign authority. This may include not allowing use of an airport, requiring specific routing, and restricting flight over specific areas. The operator must comply with any additional limitation prescribed by the applicable foreign authority when operating in its airspace. (1)
2. These operating limitations do not provide any relief from any applicable law or regulation. This aircraft must be operated per applicable regulations and the additional limitations prescribed herein. Note that a clearance from air traffic control (ATC) is not authorization for a pilot to deviate from any rule, regulation, operating limitation, or minimum altitude, or to conduct unsafe operation of the aircraft. If ATC issues a clearance that would cause a pilot to deviate from a rule, regulation, or operating limitation, or in the pilot's opinion, would place the aircraft in jeopardy, it is the pilot's responsibility to request an amended clearance. These operating limitations are a part of FAA Form 8130-7 and are to be carried in the aircraft at all times and to be available to the pilot in command of the aircraft. (2)
3. This special airworthiness certificate is not in effect during public aircraft operations (PAO). Concurrent public/civil operations are not permitted; the aircraft cannot be operated as a civil aircraft and as a public aircraft at the same time. No weapons or special military mission systems may be added to the aircraft. This airworthiness certificate is not in effect during flights related to providing military services (that is, air combat maneuvering, air-to-air gunnery, target towing, electronic countermeasures simulation, cruise missile simulation, and air refueling). These activities are inherent military, not civil activities. The FAA makes the distinction between the authorized flights for experimental purposes, and PAO. Before operating this aircraft under this special airworthiness certificate following a PAO, the aircraft must be returned to the condition and configuration at the time of inspection for the issuance of this airworthiness certificate. The operator must have written procedures for returning the aircraft to the civil configuration.

This action must be documented in the maintenance records. The maintenance records and entries must clearly differentiate between a civil experimental flight per this certificate and any other flights. (3)

4. Application to amend this certificate must be made to the local Flight Standards District Office (FSDO) or Manufacturing Inspection District Office (MIDO). (4)

5. No person may operate this aircraft for other than recreation and education. (5)

6. The pilot in command must hold airplane category and single-engine land class certificate or privilege. The pilot in command must hold all required ratings or authorizations and endorsements required by part 61. (7)

7. When filing a flight plan, the experimental nature of this aircraft must be listed in the remarks section. (11)

8. This aircraft must not be used for towing, including, but not limited to glider towing, banner towing, target towing, or towing electronic receivers or emitters. This aircraft must not be used for intentional parachute jumping. (13)

9. If aircraft, engine, or propeller operating limitations are exceeded outside of planned test conditions, an appropriate entry will be made in the maintenance records. (14)

10. No person may operate this aircraft unless within the preceding 12 calendar months it has had a condition inspection performed per the scope and detail of part 43, appendix D, manufacturer or other FAA-approved programs, and was found to be in a condition for safe operation. The inspections must be recorded in the aircraft maintenance records showing the following, or a similarly worded, statement: "I certify that this aircraft has been inspected on [insert date] per the [insert either: scope and detail of part 43, appendix D; or manufacturer's inspection procedures] and was found to be in a condition for safe operation." The entry will include the aircraft's total time-in-service (cycles if appropriate), and the name, signature, certificate number, and type of certificate held by the person performing the inspection. (15)

11. An experimental aircraft builder certificated as a repairman for this aircraft under § 65.104, or an appropriately rated FAA-certificated mechanic, may perform the condition inspection required by these operating limitations. (18)

12. The aircraft may not be operated unless the replacement for life-limited articles specified in the applicable technical publications pertaining to the aircraft and its articles are complied with in one of the following manners:

(a) Type-Certificated Products: Replacement of life-limited parts required by § 91.409(e) applies to experimental aircraft when the required replacement times are specified in the U.S. aircraft specifications or type certificate data sheets.

(b) Non-Type-Certificated Products: All articles installed in non-type-certificated products operated under an airworthiness certificate issued for an experimental purpose, in which the manufacturer has specified limits, must include in their program an equivalent level of safety for those articles. These limits must be evaluated for their current operating environment and addressed in the approved inspection program. All articles installed in non-type-certificated products in which the manufacturer has specified limits, must include in their program an equivalent level of safety for those articles. The article must be inspected to ensure the equivalent level of safety still renders the product in a serviceable condition for

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safe operation. (20)

13. For aircraft originally incorporating fatigue life recording systems, the owner/operator must maintain and use the system as prescribed by the aircraft manufacturer and comply with the manufacturer's fatigue life limits. (21)

14. After incorporating a major change as described in § 91.21.93, the aircraft owner is required to reestablish compliance with § 91.319(b) and notify the geographically responsible FSDO of the location of the proposed test area. The aircraft owner must obtain concurrence from the FSDO as to the suitability of the proposed test area. If the major change includes installing a different type of engine (reciprocating to turbine) or a change of a fixed pitch propeller to a controllable propeller, the aircraft owner must fill out a revised FAA Form 8130-6 to update the aircraft's file in the FAA Aircraft Registration Branch, AFS-750. All operations must be conducted under day visual flight rules (VFR) conditions over a sparsely populated area in compliance with § 91.305. The aircraft must remain in flight test for a minimum of 5 hours. The FSDO may require additional time (more than 5 hours) depending on the extent of the modification. Persons nonessential to the flight must not be carried. The aircraft owner must make an aircraft maintenance record entry describing the change before the test flight. Following satisfactory completion of the required number of flight hours in the flight test area, the pilot must certify in the records that the aircraft has been shown to comply with § 91.319(b). Compliance with § 91.319(b) must be recorded in the maintenance records with the following, or a similarly worded, statement: "I certify that the prescribed flight test hours have been completed and the aircraft is controllable throughout its normal range of speeds and throughout all maneuvers to be executed, has no hazardous characteristics or design features, and is safe for operation." (23)

15. This aircraft is prohibited from flight with any externally mounted equipment unless the equipment is mounted in a manner that will prevent in-flight jettison. The aircraft must be configured as documented in the aircraft's flight test records or as allowed in the original manufacturer's, or military operator's aircraft limitations. If relying on the manufacturer's or military data, the aircraft must conform to the manufacturer's design and be maintained to manufacturer's or military instructions. No change in external loading for the aircraft (for example, a change in a pylon, rack, or external store) from configurations approved by the manufacturer or military operator is allowed, except to prevent jettison. Compliance with all manufacturer or original military operator limitations when any external stores or fuel tanks are installed is required. (39)

16. Except for single-place aircraft, the following placard must be displayed in the aircraft in full view of all occupants: "PASSENGER WARNING THIS AIRCRAFT DOES NOT COMPLY WITH FEDERAL SAFETY REGULATIONS FOR STANDARD AIRCRAFT." (41)

17. Kinds of operations authorized:

Day VFR flight operations are authorized (47)

18. Night flight operations are authorized if the instruments specified in § 91.205(c) are installed, operational, and maintained per the applicable requirements of part 91. (48)

19. The pilot in command must not perform any maneuvers that have not been flight tested or operate the aircraft outside the weight, airspeeds, and center of gravity limits tested. (51)

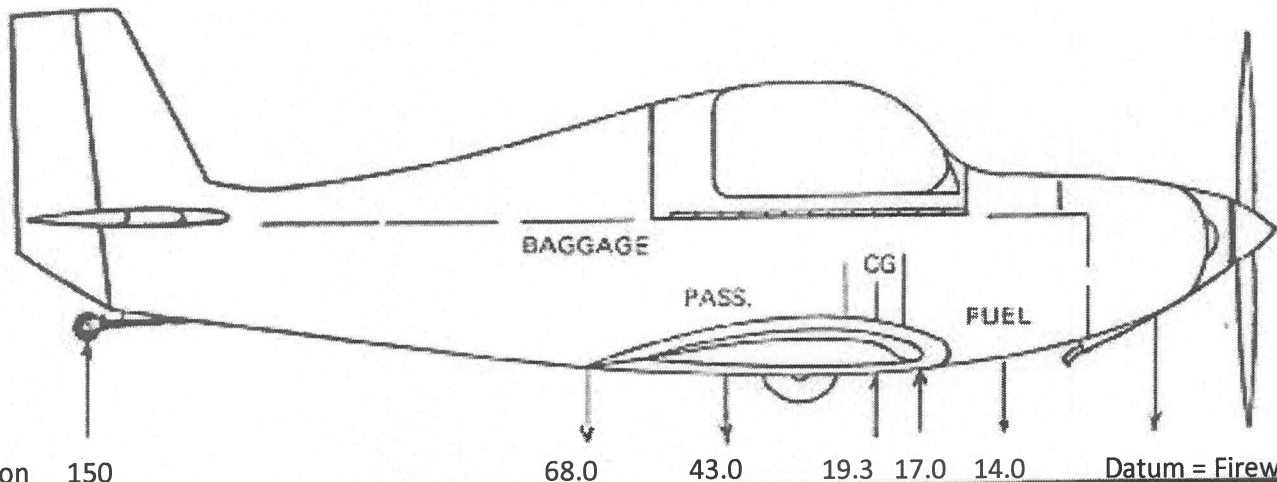
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20. Flight over a densely populated area or in a congested airway is authorized for the purpose of takeoff or landing; or unless sufficient altitude is maintained to make a safe emergency landing in the event of a power unit failure, without hazard to persons or property on the ground. (55)



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Station 150 68.0 43.0 19.3 17.0 14.0 Datum = Firewall

C.G. Range
 (Inches) 22.8 - 29.1

Gross weight = 1100 lbs
 Weighing completed Aug 2, 2018

A.C.N. # N133RM - Serial # 8103
BUILDER: Roy W Marsh
3968 Berwyn Drive
Santa Maria, CA 9345

	A WT. (LBS)	B TARE WT.	C NET WT.	D MOMENT ARM (INCHES)	E MOMENT WT (in /LBS)	
LEFT WHEEL	339		= 339	X 17	= 5763	
RIGHT WHEEL	345		345	17	5865	
TAIL WHEEL	18		18	150	2700	
PLANE EMPTY C.G. (WITH OIL) =			<u>702</u>		<u>14328</u>	$\frac{E}{C} = \underline{20.4}$ station
PLANE EMPTY	702		702	19.3	14328	
PILOT ONLY	170		170	43.0	7310	
HEADER TANK	96		96	14.0	1344	
			<u>968</u>		<u>22982</u>	<u>23.7</u>
						MAX FORWARD C.G. CONDITION
PLANE EMPTY, PILOT & PASS. FUEL	702 290 96		702 290 96	19.3 43.0 14.0	14328 12470 1344	
			<u>1088</u>		<u>28142</u>	<u>25.9</u>
PLANE PILOT & PASS. FUEL LUGGAGE	702 290 96 20		702 290 96 20	19.3 43.0 14.0 68.0	14328 12470 1344 1360	
			<u>972</u>		<u>29502</u>	<u>26.6</u>

