

# Program Letter

Date: October 1, 2007  
To: Honolulu FSDO

In Accordance with section 21.193, I am requesting a Special Airworthiness Certificate for my aircraft for the purpose of operating as an Experimental Light Sport Aircraft. The description of the aircraft is as follows:

Builder: David L. Bigelow	Registration Number: N477DB
Model: Firestar	Serial Number: F-1281
Number of Engines: 1	Engine Serial Number: 101114
Number of Seats: 1	

The aircraft is complete and the following items have been accomplished:

1. Enclosed find FAA Form 8130-6 with Sections I, II, III, complete.
2. I possess Aircraft form 8050-3.
3. Enclosed, find a three view drawing of the aircraft.
4. I have weighed the aircraft to determine that the most forward and aft center of gravity positions are within the established limits. The weight and balance report is available at the aircraft, and a copy is submitted with this application.
5. The marking requirements of Part 45 have been complied with, including permanent attachment of a fireproof identification (data) plate; application of appropriate registration markings; and the word "EXPERIMENTAL" displayed near the entrance to the cockpit.
6. The following placard is displayed in the cockpit in full view of all occupants: "PASSENGER NOTICE: THIS AIRCRAFT IS AN EXPERIMENTAL LIGHT SPORT AIRCRAFT AND DOES NOT COMPLY WITH THE FEDERAL SAFETY REGULATIONS FOR STANDARD AIRCRAFT."
7. The instruments and equipment listed in 14 CFR § 91.205 have been installed, appropriate to the operations which I intend to conduct. I intend to conduct VFR Day Operations only.
8. Instruments range marking and other applicable operating limitations have been installed as required by 14 CFR § 91.9.

The aircraft will be available at the following location, and the directions are as stated:

# Program Letter

67- 1158 Pakila Road, Waiki'i Ranch, Kamuela, HI 96743-5607

Proceed from the Saddle Road intersection with Highway 190 towards Hilo to just past the 49 mile marker. Turn right into Waiki'i Ranch at the gate just south of the highway. The gate combination is xxxxxxx. Turn right at the intersection just inside of the gate and go downhill (west) until reaching the next intersection. Turn left (Pakila Road), and go southbound for about  $\frac{3}{4}$  mile until passing under the only set of power lines in the subdivision. Just past the power lines is a gray house with a detached gray garage on the left. The aircraft will be visible outside the garage.

I request airworthiness certification and initial operating limitations be issued permitting operation of the aircraft within a 25 NM radius of the airstrip located on my property. I request that the final operating limitations include the airspace over the entire Hawaiian Island chain, excluding any airspace requiring a Mode C transponder. Previous flights prior to certification have established good engine reliability and conventional flight control characteristics.

My home phone number is (808) 885-9004, and cell number is (808) 987-4516.

David L. Bigelow  
Owner/Builder

# FAA FORM 8130-6, APPLICATION FOR U.S. AIRWORTHINESS CERTIFICATE

Form Approved  
O.M.B. No. 2120-0018



U.S. Department of Transportation  
Federal Aviation Administration

## APPLICATION FOR U.S. AIRWORTHINESS CERTIFICATE

**INSTRUCTIONS** - Print or type. Do not write in shaded areas; these are for FAA use only. Submit original only to an authorized FAA Representative. If additional space is required, use attachment. For special flight permits complete Sections II, VI and VII as applicable.

<b>I. AIRCRAFT DESIGNATION</b>	1. REGISTRATION MARK	2. AIRCRAFT BUILDER'S NAME (Make)	3. AIRCRAFT MODEL DESIGNATION	4. YR. MFR.	FAA CODING
	5. AIRCRAFT SERIAL NO.	6. ENGINE BUILDER'S NAME (Make)	7. ENGINE MODEL DESIGNATION		
	8. NUMBER OF ENGINES	9. PROPELLER BUILDER'S NAME (Make)	10. PROPELLER MODEL DESIGNATION		11. AIRCRAFT IS (Check if applicable) IMPORT

APPLICATION IS HEREBY MADE FOR: (Check applicable items)															
A	1	STANDARD AIRWORTHINESS CERTIFICATE (Indicate Category)				NORMAL	UTILITY	ACROBATIC	TRANSPORT	COMMUTER	BALLOON	OTHER			
B		SPECIAL AIRWORTHINESS CERTIFICATE (Check appropriate items)													
<b>II. CERTIFICATION REQUESTED</b>	7	PRIMARY													
	9	LIGHT-SPORT (Indicate Class)	AIRPLANE	POWER-PARACHUTE	WEIGHT-SHIFT-CONTROL	GLIDER	LIGHTER THAN AIR								
	2	LIMITED													
	5	PROVISIONAL (Indicate Class)	1	CLASS I											
			2	CLASS II											
	3	RESTRICTED (Indicate operation(s) to be conducted)	1	AGRICULTURE AND PEST CONTROL		2	AERIAL SURVEY		3	AERIAL ADVERTISING					
			4	FOREST (Wildlife Conservation)		5	PATROLLING		6	WEATHER CONTROL					
			0	OTHER (Specify)											
	4	EXPERIMENTAL (Indicate operation(s) to be conducted)	1	RESEARCH AND DEVELOPMENT		2	AMATEUR BUILT		3	EXHIBITION					
			4	AIR RACING		5	CREW TRAINING		6	MARKET SURVEY					
			0	TO SHOW COMPLIANCE WITH THE CFR									7	OPERATING (Primary Category) KIT BUILT AIRCRAFT	
			8	OPERATING LIGHT-SPORT	8A	Existing Aircraft without an airworthiness certificate & do not meet § 103.1									
				8B	Operating Light-Sport Kit-Built										
				8C	Operating light-sport previously issued special light-sport category airworthiness certificate under § 21.190										
	8	SPECIAL FLIGHT PERMIT (Indicate operation(s) to be conducted, then complete Section VI or VII as applicable on reverse side)	1	FERRY FLIGHT FOR REPAIRS, ALTERATIONS, MAINTENANCE, OR STORAGE											
2			EVACUATION FROM AREA OF IMPENDING DANGER												
3			OPERATION IN EXCESS OF MAXIMUM CERTIFICATED TAKE-OFF WEIGHT												
4			DELIVERING OR EXPORTING		5	PRODUCTION FLIGHT TESTING									
6			CUSTOMER DEMONSTRATION FLIGHTS												
C	6	MULTIPLE AIRWORTHINESS CERTIFICATE (check ABOVE "Restricted Operation" and "Standard" or "Limited" as applicable)													

<b>III. OWNER'S CERTIFICATION</b>	A. REGISTERED OWNER (As shown on certificate of aircraft registration)		IF DEALER, CHECK HERE →	
	NAME		ADDRESS	
	B. AIRCRAFT CERTIFICATION BASIS (Check applicable blocks and complete items as indicated)			
	AIRCRAFT SPECIFICATION OR TYPE CERTIFICATE DATA SHEET (Give No. and Revision No.)		AIRWORTHINESS DIRECTIVES (Check if all applicable AD's are compiled with and give the number of the last AD SUPPLEMENT available in the biweekly series as of the date of application)	
	AIRCRAFT LISTING (Give page number(s))		SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated)	
	C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS			
	CHECK IF RECORDS IN COMPLIANCE WITH 14 CFR Section 91.417		TOTAL AIRFRAME HOURS	3 EXPERIMENTAL ONLY (Enter hours flown since last certificate issued or renewed)
D. CERTIFICATION - I hereby certify that I am the registered owner (or his agent) of the aircraft described above, that the aircraft is registered with the Federal Aviation Administration in accordance with Title 49 of the United States Code 44101 et seq. and applicable Federal Aviation Regulations, and that the aircraft has been inspected and is airworthy and eligible for the airworthiness certificate requested.				
DATE OF APPLICATION		NAME AND TITLE (Print or type)		SIGNATURE

<b>IV. INSPECTION AGENCY VERIFICATION</b>	A. THE AIRCRAFT DESCRIBED ABOVE HAS BEEN INSPECTED AND FOUND AIRWORTHY BY: (Complete the section only if 14 CFR part 21.183(d) applies.)					
	2	14 CFR part 121 CERTIFICATE HOLDER (Give Certificate No.)	3	CERTIFICATED MECHANIC (Give Certificate No.)	6	CERTIFICATED REPAIR STATION (Give Certificate No.)
	5	AIRCRAFT MANUFACTURER (Give name or firm)				
	DATE	TITLE		SIGNATURE		

<b>V. FAA REPRESENTATIVE CERTIFICATION</b>	(Check ALL applicable block items A and B)					
	A. I find that the aircraft described in Section I or IV meets requirements for				4	THE CERTIFICATE REQUESTED AMENDMENT OR MODIFICATION OF CURRENT AIRWORTHINESS CERTIFICATE
	B. Inspection for a special permit under Section VII was conducted by:		FAA INSPECTOR		FAA DESIGNEE	
			CERTIFICATE HOLDER UNDER		14 CFR part 65	14 CFR part 121 OR 135
	DATE	DISTRICT OFFICE	DESIGNEE'S SIGNATURE AND NO.	4	FAA INSPECTOR'S SIGNATURE	
					1	

Experimental Light-Sport Aircraft Weight and Balance

Make **David L. Bigelow** Allowable CG Range  
 Model **Firestar** forward **12.8**  
 Serial No. **F-1281 N477DB** aft **22.4**

Owner: **David L. Bigelow**

Datum (Reference point for measuring): **Wing Leading Edge**  
 Arm is the distance from the datum to the cg of the item.

Empty Weight and Balance

Item	Arm	Weight	Moment
Main LH	-6.88	189	-1300.32
Main RH	-6.38	181	-1154.78
Third wheel	194.25	65	12626.25
Fuel	32		0
=====			
		435	10171.15

0 Fuel wt and moment are subtracted to give true empty weight and CG

Empty weight 435  
 Empty CG 23.38195

Equipment List

- Compass
- Air Speed Indicator
- Altimeter
- Vertical Velocity Indicator
- RPM Gauge
- Gyro Horizon Indicator
- EGT/CHT Indicator
- Oil Temp/Pressure Indicator
- Voltmeter
- Fuel Gauge

Item	Arm	Weight	Moment
Empty	23.38195	435	10171.15
Pilot	-6.75	228	-1539
Passenger			0
fuel	32	61.6	1971.2
baggage			0
=====			
	48.63195	724.6	10603.35

Forward Most CG 14.63338

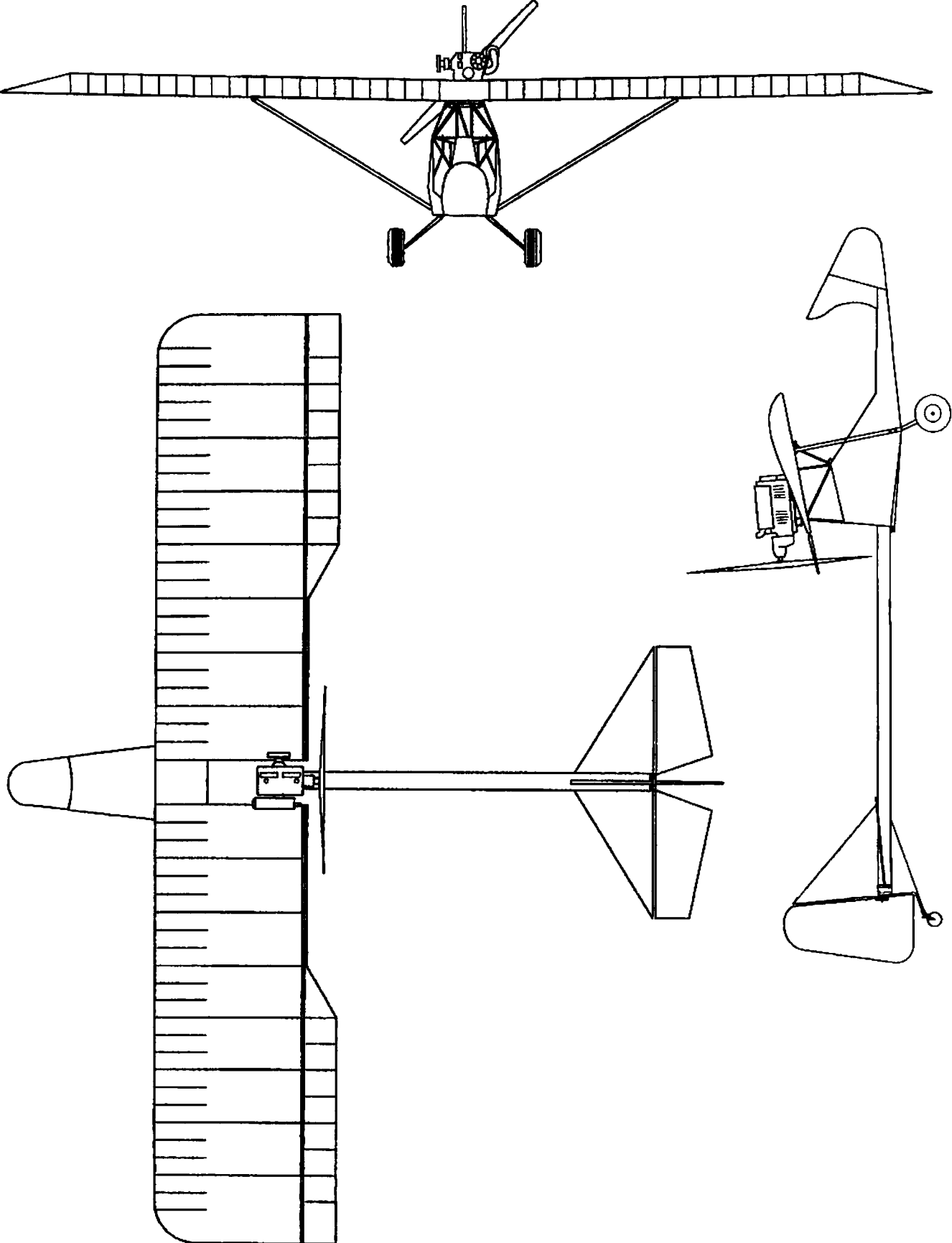
Item	Arm	Weight	Moment
Empty	23.38195	435	10171.15
Pilot	-6.75	100	-675
Passenger			0
fuel	32	61.6	1971.2
baggage			0
=====			
	48.63195	596.6	11467.35

Aft Most CG 19.22117

Item	Arm	Weight	Moment
Empty	23.38195	435	10171.15
Pilot	-6.75	185	-1248.75
Passenger			0
fuel	32	61.6	1971.2
baggage			0
=====			
	48.63195	681.6	10893.6

Flt Test CG 15.98239

DRAWINGS OF KOLB FIRESTAR II.



**REGISTRATION NOT TRANSFERABLE**

UNITED STATES OF AMERICA  
 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**<sub>477DB</sub>

AIRCRAFT SERIAL NO.

F 1281

MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT

BIGELOW DAVID L FIRESTAR

ICAO Aircraft Address Code: 51355550

I  
S  
S  
U  
E  
D  
  
T  
O

BIGELOW DAVID L  
 67-1158 PAKILA RD  
 KAMUELA HI 96743-5607

This certificate is  
 issued for registra-  
 tion purposes only  
 and is not a certifi-  
 cate of title.

The Federal Avia-  
 tion 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.



U.S. Department  
 of Transportation

DATE OF ISSUE

September 13, 2007

*Maria C. Blakey*

ADMINISTRATOR

**Federal Aviation  
 Administration**