DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

3A18
Revision 19
Interceptor
(Aero Commander)
(Meyers)
(Interceptor)
200
200A
200B
200C
200D
400

July 31, 2014

TYPE CERTIFICATE DATA SHEET NO. 3A18

This data sheet, which is a part of Type Certificate No. 3A18, prescribes conditions and limitations under which the type certificate was issued meets the airworthiness requirements of the Civil Air Regulations/Federal Aviation Regulations.

Type Certificate Holder Interceptor Aviation Inc.

6900 NW 63rd Street, Suite 100 Bethany, Oklahoma 73008

Type Certificate ownership Record Company name/address changed to Interceptor Aviation, Inc. 901 Industrial Road,

Augusta, KS 67010 on April 3, 2014.

Company name/address changed from Prop-Jets, Inc., 8901 Whetmore Road,

San Antonio TX 78216 to Interceptor Aircraft Corporation, 29890 Bulverde Lane #14

Bulverde, TX 78163 on October 30 2008

I. Model 200, 4 PCLM (Normal Category), approved March 6, 1958

(The Model 200 may be converted to a Model 200A in accordance with Meyers Drawing A60B005)

Engine Continental O-470-M

Fuel 91/96 minimum grade aviation gasoline Engine limits For all operations, 2600 rpm (240 hp)

Propeller and propeller limits See Note 6

Airspeed limits Never exceed 208 mph (181 knots)

Maximum structural cruising
Maneuvering
132 mph (115 knots)
132 mph (115 knots)
125 mph (109 knots)
125 mph (109 knots)
125 mph (109 knots)
125 mph (109 knots)
165 mph (143 knots)
165 mph (143 knots)
165 mph (143 knots)

C.G. Range (landing gear

extended)

(+31.5) to (+33.8) in. at 3000 lbs. (+24.6) to (+33.8) in. at 2500 lbs. (+23.6) to (+33.8) in. at 2207 lbs.

Straight line variation between points given.

Moment change due to retracting landing gear +655 in.-lb.

Empty Weight C.G. Range None

Maximum Weight 3000 lbs.

No. of Seats 4 (2 at +30, 2 at +70)

Maximum Baggage 200 lb. (+100)

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Fuel Capacity 80 gal. (two 20-gal. wing tanks, 19-gal. usable in each tank, at +22), (two

20-gal. auxiliary wing tanks, 18.5 gal. usable in each tank at +41).

See NOTE 1 for unusable fuel.

Oil Capacity 3 gal. (-23). See NOTE 1 for data on system oil.

Control surface movements Wing flaps Down 40°

Aileron tab Fixed 9.5° Aileron 22° Up Down Elevator tab 3° Down 13° Up Up 32° Elevator Down 20° Rudder Right 21° Left 21°

Serial nos. eligible 251 and 252

II. Model 200A, 4 PCLM (Normal Category), approved June 18, 1959

(The Model 200 may be converted to a Model 200A in accordance with Meyers Drawing A60B005.)

Engine Continental IO-470-D

Fuel 100/130 minimum grade aviation gasoline

Engine limits For all operations, 2625 rpm (260 hp)

Propeller and propeller limits See NOTE 6.

Airspeed limits Never exceed 208 mph (181 knots)

Maximum structural cruising
Maneuvering
132 mph (115 knots)
132 mph (109 knots)
125 mph (109 knots)
125 mph (109 knots)
125 mph (109 knots)
125 mph (109 knots)
165 mph (143 knots)
165 mph (143 knots)
165 mph (143 knots)

C.G. Range (landing gear

extended)

(+31.5) to (+33.8) in. at 3000 lb. (+24.6) to (+33.8) in. at 2500 lb. (+23.6) to (+33.8) in. at 2207 lb.

Straight line variation between points given.

Empty Wt. C.G. Range None

Maximum Weight 3000 lb.

No. seats 4 (2 at +30, 2 at +70)

Maximum Baggage 200 lb. (+100)

Fuel Capacity 80 gal. (two 20 gal. wing tanks, 18.5 gal. usable in each tank at +22), (two 20-gal.

auxiliary wing tanks, 18.5 gal. usable in each tank at +41)

Oil Capacity 3 gal. (-23). See Note 1 for data on system oil.

Control Surface Movements Wing flaps Down 40°

Serial nos. eligible 253 thru 263

III. Model 200B, 4 PCLM (Normal Category), approved March 9, 1961 Model 200C, 4 PCLM (Normal Category), approved September 12, 1963

Engine Continental IO-470-D (see Note 5 for optional engine)

Fuel 100/130 minimum grade aviation gasoline Engine limits For all operations, 2625 rpm (260 hp)

Propeller and propeller limits See NOTE 6

Never exceed Airspace limits 236 mph (205 knots)

Maximum structural cruising 210 mph (182 knots) 132 mph (115 knots) Maneuvering Flaps extended 125 mph (109 knots) Maximum gear retraction speed 125 mph (109 knots) Maximum gear extension speed 170 mph (148 knots) Emergency gear extension speed 210 mph (182 knots) 210 mph (182 knots) Maximum gear extended speed

C.G. range (landing gear

(+31.5) to (+33.8) in. at 3000 lb. extended) (+24.6) to (+33.8) in. at 2500 lb. (+23.6) to (+33.8) in. at 2207 lb.

Straight line variation between points given.

Moment change due to retracting landing gear +655 in.-lb.

Empty Wt. C.G. Range None

Maximum weight 3000 lbs.

No. seats 4 (2 at +30, 2 at +70)

Maximum baggage 200 lbs. (+100)

80 gal. (two 20 gal. wing tanks, 18,5 gal. usable in each tank, at +22), (two Fuel capacity

20 gal. auxiliary wing tanks, 18.5 gal. usable in each tank at +41). See NOTE 1

for unusable fuel.

Oil capacity 3 gal. (-23). See NOTE 1 for data on system oil.

Down 40° Wing flaps Control surface movements

Aileron 22° Down 9.5° Up Down 13° Elevator tab Up 3° $Up \quad 32^{\circ}$ Down 20° Elevator Rudder Right 21° Left 21°

Serial nos. eligible Model 20B: 264 thru 280

Model 20C: 281 thru 289, 291

IV. Model 200D, 4 PCLM (Normal Category), approved November 25, 1964

Continental IO-520-A Engine

Fuel 100/130 minimum grade aviation gasoline Engine limits For all operations, 2700 rpm (285 hp)

Propeller and propeller limits See NOTE 6.

Airspeed limits Never exceed 236 mph (205 knots)

> Maximum structural cruising 210 mph (182 knots) 132 mph (115 knots) Maneuvering Flaps extended 125 mph (109 knots) Maximum gear retraction speed 125 mph (109 knots) 170 mph (148 knots) Maximum gear extension speed 210 mph (182 knots) Emergency gear extension speed 210 mph (182 knots) Maximum gear extended speed

C.G. range (landing gear

extended)

(+31.5) to (+33.8) in. at 3000 lb. (+24.6) to (+33.8) in. at 2500 lb. (+23.6) to (+33.8) in. at 2207 lb.

Straight line variation between points given.

Moment change due to retracting landing gear +655 in.-lb.

Empty Wt. C.G. Range None Maximum Weight 3000 lb.

No. seats 4 (2 at +30, 2 at +70) Maximum baggage 200 lb. (+100)

Fuel capacity 80 gal. (two 20 gal. wing tanks, 18.5 gal. usable in each tank, at +22), (two

20-gal. auxiliary wing tanks, 18.5 gal. usable in each tank at +41). (See Note 1

for unusable fuel.

Oil capacity 3 gal. (-23). See NOTE 1 for data on system oil.

Control surface movements Wing flaps

Aileron Up 22° Down 9.5°

Elevator tele Up 23° Down 12°

Elevator tab Up 3° Down 13° Elevator Up 32° Down 20° Rudder Right 21° Left 21°

Serial nos. eligible 290, 292 and up

V. Model 400, 4 PCLM (Normal Category), approved August 20, 1971

Engine Garrett AirResearch TPE 331-1-101J (P/N 896380)

Fuel Jet fuel conforming to AirResearch Report PE-5064R (Jet A, A-1, B, JP-1,

JP-4, and JP-5) (See NOTE 4.)

Oil MIL-L-23699A (Type II) only, as listed in AirResearch Report No. PE-5065R.

Engine Limits		Torque
	Shaft	Pressure
	Horsenower	(noi)

DIII.	110000110		
<u>Horsepower</u>	<u>(psi)</u>	<u>RPM</u>	EGT (°C)
400	40	2000*	578
400	40**	2000	556
	Horsepower 400	Horsepower (psi) 400 40	<u>Horsepower</u> (psi) <u>RPM</u> 400 40 2000*

^{*}A maximum of 2020 rpm for 5 minutes is allowed.

Propeller and propeller limits

 Hartzell HC-B3TN-5C/T10178H-15 full feathering, reversible, constant speed three-blade propeller.

Diameter: 86 inches (no reduction permitted) Feathered $+86.5 \pm .5^{\circ}$ Flight idle $+6.5 \pm .2^{\circ}$ Full reverse $+10.5 \pm 1.0^{\circ}$ Start locks $+2.5 \pm .2^{\circ}$

b) Hartzell D3434 spinner assembly

Airspeed limits Maximum operating speed 240 mph (208 knots)

Maneuvering speed 155 mph (134 knots)
Flaps extended 125 mph (109 knots)
Maximum landing gear 165 mph (144 knots)

Extension/extended

Maximum landing gear 132 mph (115 knots)

Retraction speed

C.G. range (landing gear

extemded)

(+30.5) to (+33.0) in. at 4005 lb. (+29.1) to (+33.0) in. at 3800 lb.

(+27.0) to (+33.0) in. at 2750 lb.

Straight line variation between points given. Moment change due to retracting

landing gear +580 in.-lbs.

^{**41.2} psi MCP torque pressure permitted in 96% RPM cruise.

Empty Wt. C.G. Range None

Datum Front face firewall

Leveling means Two external screws on left side of fuselage below the horizontal stabilizer.

Maximum weights Ramp 4030 lbs.
Takeoff 4005 lbs.
Landing 3800 lbs.

Zero fuel 3200 lbs.

No. seats 4 (2 at +38, 2 at +70)

Maximum baggage 200 lbs. (+100)

Fuel capacity 155.4 gallons at +35.9 (Two 77.7 gallon tanks, 145 gallons usable). See NOTE 1

for data on system fuel.

Oil capacity 11.5 qts. (-40.5) See NOTE 1 for data on system oil.

Maximum operating altitude 24,000 feet

Control surface movements Wing flaps Down $40^{\circ} \pm .5^{\circ}$

Serial nos. eligible 401 and up

Data Pertinent to all Models (except as listed)

Datum Front face of firewall

Leveling means Two external screws on left side of fuselage below stabilizer.

Certification basis:

Model 200, 200A, 200B, CAR 3 effective May 15, 1956 through Amendment 3-1 effective April 1, 1957.

200C, 200D Type Certificate issued March 6, 1958. Date of application for Type Certificate

April 30, 1957.

Model 400 CAR 3 effective May 15, 1956 through Amendment 3-1 effective April 1, 1957 and

paragraphs 3.197, 3.270,. 3.383, 3.395 and 3.396 of Amendment 3-2 effective August 12, 1957. Special conditions outlined in Docket 9972 dated November 12, 1969. (See NOTE 7) Type Certificate 3A18 issued March 6, 1958. Date of

application for original Type Certificate April 30, 1957.

Production basis None. Prior to original certification of each aircraft an FAA representative must

perform a detailed inspection for workmanship, materials and conformity with

approved technical data and a check of flight characteristics.

Equipment The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following items of equipment are required:

 Pre-stall warning indicator, Safe Flight Instrument Corp. 1-02-000 (Models 200, 200A, 200B, 200C, and 200D)

- 2. (a) Model 200 FAA Approved Airplane Flight Manual dated March 6, 1958
 - (b) Model 200A FAA Approved Airplane Flight Manual dated June 18, 1959
 - (c) Model 200B FAA Approved Airplane Flight Manual dated March 9, 1961.
 - (d) Model 200C FAA Approved Airplane Flight Manual dated Sept 12, 1963.
 - (e) Model 200D FAA Approved Airplane Flight Manual dated Nov 25, 1964.
 - (f) Model 400 FAA Approved Airplane Flight Manual dated August 11, 1971.

Model 400

- (a) Stall warning indicator, Interceptor drawing D69B031.
- (b) See Interceptor Report 60M018 for additional equipment.
- NOTE 1. Current weight and balance report with list of equipment included in certificated empty weight, and loading instructions when necessary must be provided for each aircraft at time of original certification.

Models 200, 200A, 200B, 200C, and 200D: The certificated empty weight and corresponding center of gravity location must include system oil of 1 lb. at -23, and unusable fuel of 18 lb. at +22, with standard wing tanks. Include additional unusable fuel at 18 lb. at -41 when auxiliary wing tanks are installed (Models 200A, 200B, 200C, and 200D).

<u>Model 400</u>: The certificated empty weight and corresponding center of gravity location must include system oil of 5.6 lb at -40.5, and unusable fuel of 69.7 lb. at +40.5.

NOTE 2. The following placard must be displayed on the right side of the instrument panel in clear view of the pilot:

Models 200, 200A, 200B, 200C, 200D: "THIS AIRPLANE MUST BE OPERATED AS A NORMAL CATEGORY IN COMPLIANCE WITH THE OPERATING LIMITATIONS STATED IN THE FORM OF PLACARDS, MARKINGS, AND MANUALS."

Model 400: "THIS AIRPLANE MUST BE OPERATED AS A NORMAL CATEGORY IN COMPLIANCE WITH THE OPERATING LIMITATIONS STATED IN THE FORM OF PLACARDS, MARKINGS AND MANUALS. NO ACROBATIC MANEUVERS INCLUDING SPINS APPROVED. AIRSPEED LIMITATIONS, MAXIMUM LANDING GEAR RETRACTION SPEED - 115 KTS: MAXIMUM LANDING GEAR EXTENSION/EXTENDED SPEED - 144 KTS: MANEUVERING SPEED - 134 KTS."

All placards required to the approved airplane flight manual must be installed in the appropriate locations.

- NOTE 3. <u>Model 400</u>. The following service life limits must be observed:
 - 1. Interceptor Drawing C63R160 Left Pilot's Side window 1000 hours
 - 2. Pressurized Cabin Structure 2000 hours
- NOTE 4. All fuel used in the Model 40 airplane must contain anti-icing additive meeting the requirement of PFA-55MB. Concentration of this additive in the fuel in a loaded fuel tank must not be less than .035% nor more than .15% by volume. See AFM for blending instructions. Use of AV-GAS prohibited.
- NOTE 5. Continental IO-520-A engine may be installed on the Model 200B when the airplane is modified in accordance with Meyers Aircraft Drawing B60B010, Rev A, dated March 30, 1965. Model 200B with Conversion #1 FAA Approved Airplane Flight Manual dated March 19, 1965, is required with this modification. Continental IO-520-A engine may be installed on the Model 200C when the airplane is modified in accordance with Meyers Aircraft Drawing C60B010 dated June 12, 1965. Model 200C with Conversion #1 FAA Approved Flight Manual dated June 12, 1965, is required with this modification.

NOTE 6.	Propellers eli	200	200A	200B	200C	200D	
	McCauley constant speed						
	Propelle	er installation					
	(a) Mc	Cauley hub 2A3C6C18 with 900M-6 blades	X				
	Pite	ch settings at 36 in. sta.:					
	Lo	w 10°, high 25°					
	63	lbs. (-53)					
	(b) Wo	oodward hydraulic governor 210105	X				
	3	lbs. (-45)					
	(c) Mc	Cauley spinner 2A36	X				
	4	lbs. (-53)					

NOTE 6.	Propellers eligible as shown: (cont'd) 2. McCauley constant speed propeller installation	<u>200</u>	<u>200A</u>	<u>200B</u>	<u>200C</u>	<u>200D</u>
	(a) McCauley hub B2A36C31 with 90M-6 blades Diameter: not over 84 in., not under 82 in.		X	X	X	
	Pitch settings at 36 in. sta.: Low 11°, high 27.5° 63 lbs. (-53) (b) Woodward hydraulic governor 210105 or E210345		X	X	X	
	3 lbs. (-45)					
	(c) McCauley spinner 2A36 4 lbs. (-53)		X	X	X	
	3. McCauley constant speed propeller installation (a) McCauley B2A36C31-A hub with 90M-10 blades Diameter: not over 80 in., not under 80 in. Pitch settings at 36 in. sta: Low 11.4°, high 27.5°			X	X	
	63 lb. (-53) (b) Woodward hydraulic governor			X	X	
	210105 or E210345 3 lb. (-45)			Α	Α	
	(c) McCauley spinner 2A36 4 lb. (-53)			X	X	
	 McCauley constant speed propeller installation (a) McCauley D2A36C31-A hub with 90M-10 blades Diameter: not over 80 in., not under 80 in. Pitch settings at 36 in. sta.: Low 11.4°, high 27.5° 			X	X	
	63 lb. (-53)					
	(b) Woodward hydraulic governor 210105 or E2102345 3 lb. (-45)			X	X	
	(c) McCauley spinner D2A36 or McCauley spinner 2A36 with B2792 ring 4 lb. (-53)			X	X	
	 McCauley constant speed propeller installation (a) McCauley D2A36C33 hub with 90M-8 blades Diameter: not over 82 in., not under 80 in. Pitch settings at 36 in. sta.: 			X	X	X
	Low 11.2°, high 27.5° (b) Woodward hydraulic governor 210105 or E210345			X	X	X
	3 lb. (-45)					
	(c) McCauley spinner D2A36 or McCauley spinner 2A36 with B2792 ring 4 lb. (-53)			X	X	X
	6. McCauley constant speed propeller installation (a) McCauley D2A36C33 hub with 90M-10 blades Diameter: not over 80 in., not under 80 in. Pitch settings at 36 in. sta.: Low 11.4°, high 27.5°			X	X	X
	63 lb. (-45) (b) Woodward hydraulic governor 210105 or E210345 3 lb. (-45)			X	X	X
	(c) McCauley spinner D2A36 or McCauley spinner 2A36 with B2792 ring 4 lb. (-53)			X	X	X

NOTE 6.	Propellers eligible as shown (cont'd):	<u>200</u>	<u>200A</u>	<u>200B</u>	<u>200C</u>	<u>200D</u>
	7. Hartzell constant speed propeller installation (a) Hartzell HC-82XF-1DB hub with 8433S blades Diameter: not over 84 in., not under 82.5 in. Pitch settings at 30 in. sta.: Low 12°, high 24° 64 lb. (-53)	X				
	(b) Woodward hydraulic governor 210105 3 lb. (-45)	X				
	(c) Hartzell spinner 835-3 4 lb. (-53)	X				
	8. Hartzell constant speed propeller installation (a) Hartzell HC-A2CF-1A(14) hub with 8433-4 or 8433R-4 blades Diameter: not over 80 in., not under 78 in. Pitch settings at 30 in. sta.:		X	X	X	
	Low 14°, high 26.1° 64 lb. (-53)					
	(b) Woodward hydraulic governor 210105 or E210340 3 lb. (-45)		X	X	X	
	(c) Hartzell spinner 835-13 4 lb. (-53)		X	X	X	
	9. Hartzell constant speed propeller installation (a) Hartzell HC-82XF-1DB hub with 8433-4 blades Diameter: not over 80 in., not under 78 in. Pitch settings at 30 in. sta.: Low 14° (-53)			X	X	
	(b) Woodward hydraulic governor 210105 or E210340			X	X	
	3 lb. (-45) (c) Hartzell spinner 835-3 or 835-13 4 lb. (-53)			X	X	
	 10. Hartzell constant speed propeller installation (a) Hartzell HC-C2YF-1A hub with 8468-4 blades Diameter: not over 80 in., not under 80 in. Pitch settings at 30 in. sta.: Low 14°, high 30.5 ± 1.0° 51.11 (52) 					X
	51 lb. (-53 (b) Woodward hydraulic governor 210105 or E210345					X
	3 lb. (-45) (c) Hartzell spinner 835-22K 3 lb. (-53)					X
	 McCauley constant speed propeller installation (a) McCauley d2A34C58 hub with 90AT-8 blades Diameter: not over 82 in., not under 80 in. Pitch settings at 36 in. sta.: Low 10.3 ± 0.5°, high 27.5 ± 0.5° 			X	X	X
	52 lb. (-53) (b) Woodward hydraulic governor 210105 or E210345			X	X	X
	3 lb. (-45) (c) McCauley spinner D-2771 4 lb. (-53)			X	X	X

Item 11(a), 11(b), and 11(c) are eligible on Models 200B and 200C only when airplane is modified per Note 5.

NOTE 7. The special conditions are only applicable with a 400 hp flat rated engine that is capable of maintaining rated power up to 8000 feet pressure altitude under standard day conditions plus 40°F.