

**RV-7/7A Specifications**

**General Info Specifications Performance**

**RV-7**

**Exterior Dimensions**

Span	25 ft
Length	20 ft 4in.
Height	5 ft 10 in.
Wing Area	121 sq ft

**Weights**

Empty Weight	1061 - 1114 lbs
Gross Weight	1800 lbs

**Loadings**

Wing Loading	14.8 lb/sq ft
Power Loading	12.0 - 9.0 lb/hp

**Powerplant/Systems**

Engine	150-200 hp
Propeller	Fixed or C/S
Fuel Capacity	42 US gal

**Other**

Baggage	100 lbs
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**RV-7A**

**Exterior Dimensions**

Span	25 ft
Length	20 ft 4 in.
Height	7 ft 10 in.
Wing Area	121 sq ft

**Weights**

Empty Weight	1077 - 1130 lbs
Gross Weight	1800 lbs

**Loadings**

Wing Loading	14.8 lb/sq ft
Power Loading	12.0 - 9.0 lb/hp

**Powerplant/Systems**

Engine	150-200 hp
Propeller	Fixed or C/S
Fuel Capacity	42 US gal

**Other**

Baggage	100 lbs
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**Interior Dimensions and Baggage Area**

## RV-7/7A General Information

General Info

Specifications

Performance

About 70% of our customers prefer side by side seating and the RV-7/7A has a roomy cockpit that will easily accept two 6' + adults with sufficient leg, head and elbow room to stay comfortable for three to four hours at a time. The seating arrangement puts both occupants on an equal footing – standard dual controls and optional dual brakes give either occupant full control with equal visibility.

The RV-7/7A retains all the traditional RV virtues. It is an all-around sport airplane, with excellent cross-country capability, fine aerobatic qualities and superior handling. A typical RV-7 can hold two FAA standard pilots, 100 lbs. of baggage and full tanks: 42 gallons. At the aerobatic gross weight of 1600 lbs., the RV-7/7A complies with the +6/-3G standards of the FAA's Aerobatic Category and can still carry two people,



making it possible for a new pilot to get aerobatic instruction before he or she starts rolling and looping.

Both sliding and tip-up canopies are available. Both may be opened for taxi ventilation, and both afford that other RV hallmark – superb visibility.

All RVs are capable of very short take-offs and landings and the RV-7/7A is no exception. Equipped with any Lycoming engine between 150 and 200 hp, and either a fixed-pitch or constant-speed propeller, it will leave the ground quickly and climb at impressive rates. The rugged fixed steel landing gear (tailwheel or tri-gear) makes it possible to operate from almost any



***"The RV-7/7A is Van's most popular current design, Since the RV-7/7A replaced the most popular kit aircraft in history, Van's RV-6/6A, this is probably no surprise."***

It's a fast airplane, too; able to maintain cruise speeds near or even above 200 mph depending on the engine installed. That speed, combined with the endurance and the range possible with the 42 gallon fuel capacity means that you can traverse half the American continent in a day -- more if the winds are right.

The aerodynamically "slippery" airframe also means that while high top speeds are possible, more relaxed cruise speeds can be very economic. Cruising at a sedate 160 mph or so, the RV-7 can achieve better mileage than many of the compact cars it is flying over.



However, simply blazing through the atmosphere is not what RVs are all about. Pilots who fly them rave about the handling qualities and control harmony...qualities that are

difficult to describe with numbers.

Thousands of RV-7/7A kits have shipped to countries all over the world. If you prefer sitting next to your flying partner while you both enjoy one of the nicest-flying airplanes ever...well, you'll like the RV-7/7A.



## AIRSPEED LIMITATIONS

	<b>SPEED</b>	<b>IAS</b>	<b>REMARKS</b>
<b>V<sub>NE</sub></b>	Never Exceed Speed	<b>230 mph</b>	Do not exceed this speed in any operations.
<b>V<sub>NO</sub></b>	Maximum Structural Cruising Speed	<b>193 mph</b>	Exceed this speed only in smooth air.
<b>V<sub>A</sub></b>	Maneuvering Speed	<b>142 mph</b>	Do not make full control movements above this speed. Full elevator deflection will result in a 6g load at this speed.

### **AIRSPEED INDICATOR MARKINGS**

All speeds in statute mph

	<b>RV-4</b>	<b>RV-6/6A</b>	<b>RV-7/7A</b>	<b>RV-8/8A</b>	<b>RV-9/9A</b>	<b>RV-10</b>
<b>Bottom of White Arc</b> (approximate indicated stall speed with full flaps)	54	55	58	58	49	60
<b>Top of White Arc</b> (maximum speed with full flaps)	100	100	100	100	90	100
<b>Bottom of Green Arc</b> (approximate indicated stall speed w/o flaps)	58	59	64	64	56	70
<b>Blue Line</b> (Maneuvering speed. Maximum speed at which full control can be applied. Speed at which full elevator control would impose loads exceeding limits)	134	134	142	142	118	144
<b>Yellow Arc</b> (caution range to be flown only in calm or light turbulence conditions)	180-210	180-210	193-230	193-230	180-210	180-230
<b>Red Line</b> (never exceed speed)	210	210	230	230	210	230