VAN'S AIRCRAFT

TOTAL PERFORMANCE

Specification & Description

RV-12 iS

Exhibit "A"

May 2018

The production S-LSA RV-12iS builds on the experience of hundreds of kit-built RV-12s. This example is equipped with the stabilator tip fairings and canopy shade.

VAN'S AIRCRAFT

TOTAL PERFORMANCE

INTRODUCTION

This Specification and Description is published for the purpose of providing general information about the design, performance, and equipment of the S-LSA RV-12iS.

Also included are the warranties applicable to the RV-12iS aircraft, the Rotax 912 iS Sport engine, Sensenich propeller and the installed avionics. In the event of any conflict or discrepancy between this document and the terms and conditions of the purchase agreement to which it is incorporated, the terms and conditions of the purchase agreement govern.

Due to the time span between the date of this Specification and Description and the scheduled delivery date of the aircraft, Van's reserves the right to revise the "Specification" whenever occasioned by product improvements, government regulations or other good cause.

For additional information contact:

Van's Aircraft
14404 Keil Road NE
Aurora, OR 97002
503-678-6545

GENERAL DESCRIPTION

The Van's RV-12iS S-LSA is an all-metal, single engine piston, low-wing monoplane with a two-person seating capacity including the pilot. Suitable allowance for luggage is provided aft of the seats. The RV-12iS is equipped per FAR 91.205 to meet both Day and Night VFR flight requirements.

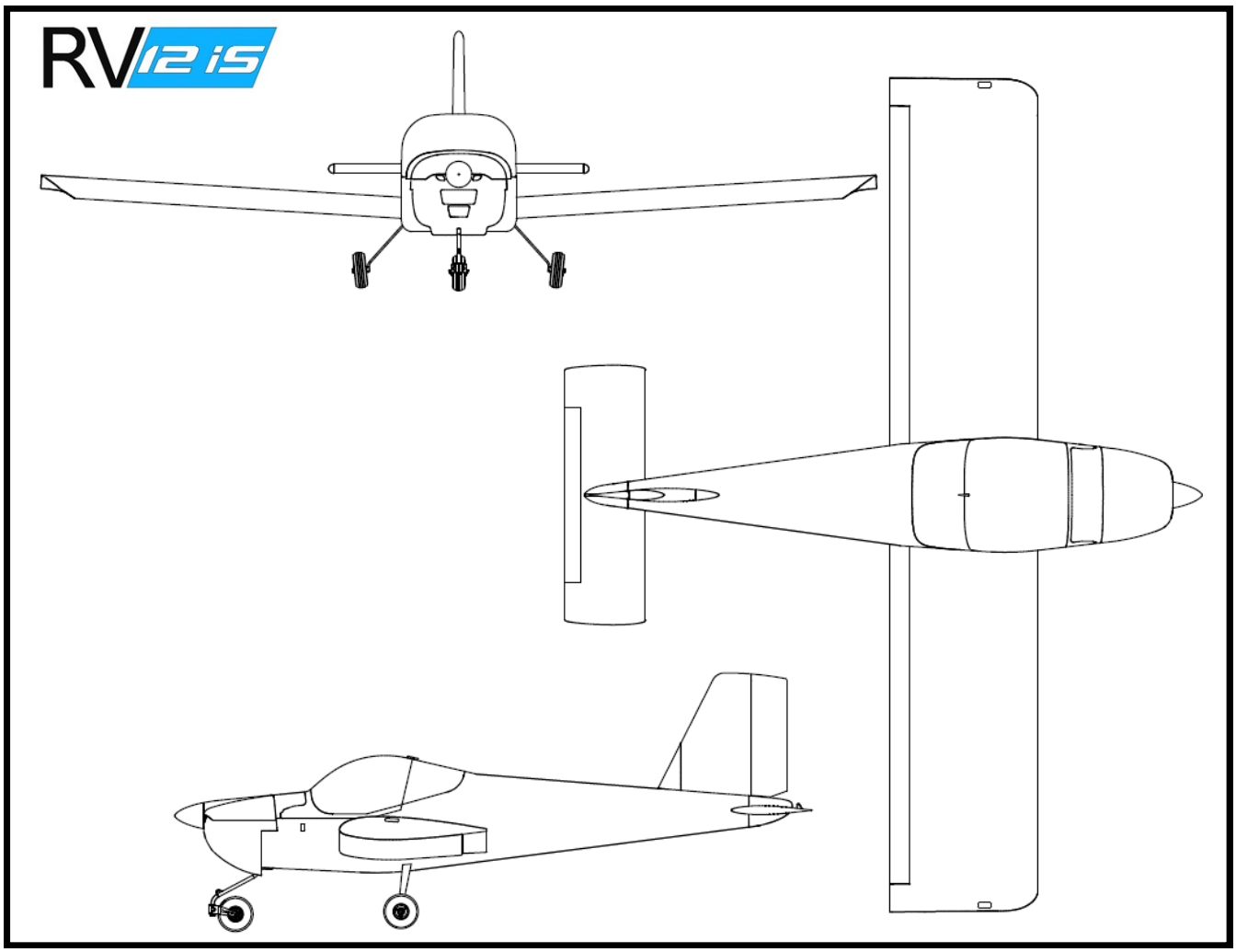
A ready to fly RV-12iS in standard plumage. The buyer may opt for one of several colors.

VAN'S AIRCRAFT

TOTAL PERFORMANCE

APPROXIMATE SPECIFICATIONS

Engine	Rotax 912iS Sport
Horsepower, Max	100 hp at 5800 RPM
Propeller	2-Blade Sensenich Composite Ground Adjustable Fixed Pitch
Absolute Ceiling	19,200 ft
Maximum Gross Weight	1,320 lbs
Standard Empty Weight (Varies with options)	775 lbs
Maximum Useful Load	545 lbs
Maximum Baggage Capacity	75 lbs
Fuel Capacity (Usable)	20 gal
Overall Height	8 ft 4 in
Overall Length	19 ft 11 in
Wing Span	26 ft 9 in
Horizontal Tail Span	8 ft
Cabin Width at Shoulders	43 in



VAN'S AIRCRAFT

TOTAL PERFORMANCE

PERFORMANCE DATA

All performance data is based on the standard aircraft configuration, operating in Standard Atmosphere (ISA) conditions with zero wind. Takeoff and landing field lengths are based on a level, hard surface, dry runway. Actual performance will vary with individual airplanes and other factors such as environmental conditions, aircraft configuration, and operational procedures.

Takeoff Distance S.L. (Ground Roll)	700 ft
Takeoff Distance S.L. (To Clear 50 ft Obstacle)	1397 ft
Max Climb Rate S.L.	1000 fpm
Max Speed S.L.	120 kts
Cruise Speed (5500 rpm at 7,500ft)	118 kts
Cruise Range and Endurance (5500 rpm at 7,500 ft)	630 nm / 5.0 hrs
Landing Distance (Ground Roll)	525 ft
Landing Distance (To Clear 50 ft Obstacle)	1550 ft

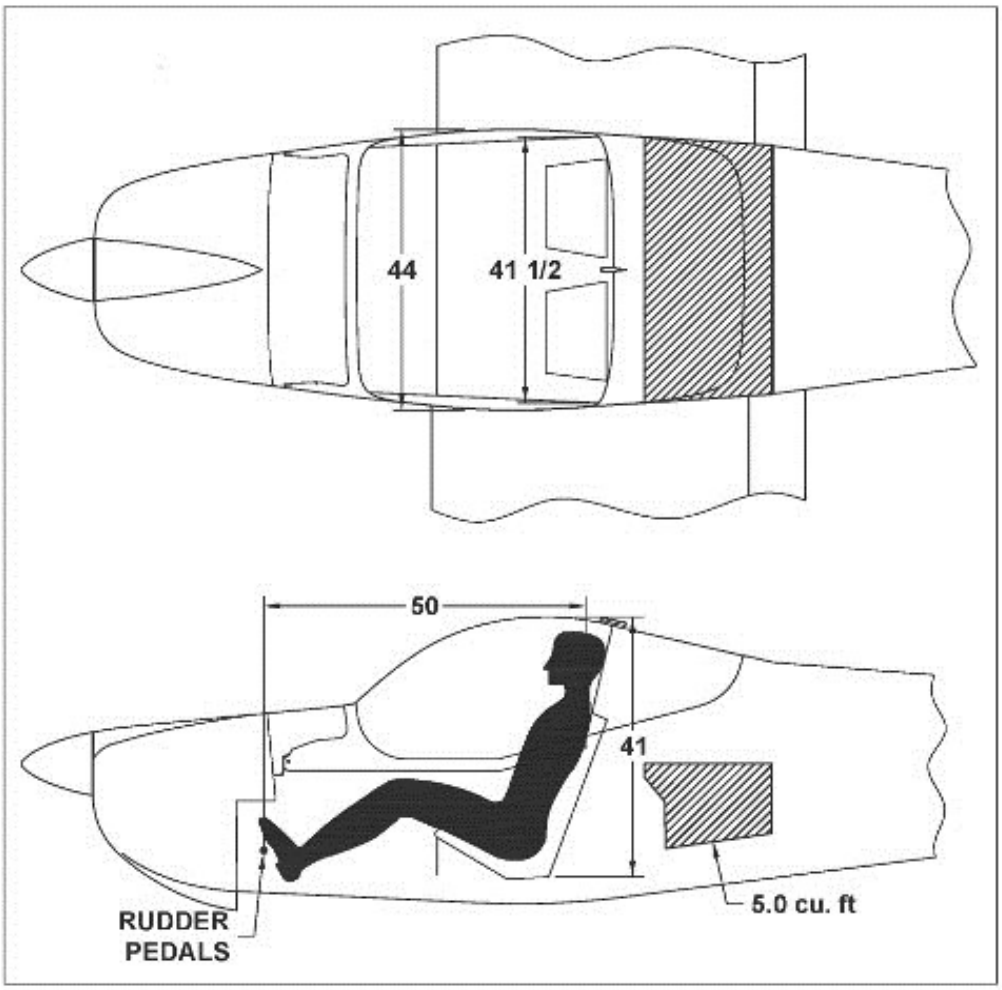
(Performance shown with 30 minutes of fuel reserve at gross weight, 1320 lbs.)

The RV-12iS' "cab-forward" design gives unrivaled visibility in all directions.

VAN'S AIRCRAFT

TOTAL PERFORMANCE

INSIDE THE PREMIUM CABIN: ***A modern glass panel, featuring the Dynon Skyview HDX with Autopilot Button and Knob modules and a Garmin GTR 200 comm radio/ intercom.***



VAN'S AIRCRAFT

TOTAL PERFORMANCE

DESIGN FEATURES

The RV-12iS is designed and built to comply with the American Society for Testing and Materials International (ASTM) standards for Light Sport Aircraft and it meets the limitation and Special Certificate of Airworthiness requirements for a Light Sport category aircraft as defined by the FAA in CFR Part 1.1 and CFR Part 21.190.

The Purchaser is responsible for obtaining aircraft operating approval from the relevant civil aviation authority, prior to aircraft delivery.

FUSELAGE: The fuselage will be constructed primarily of aluminum alloy materials. The semi-monocoque structure will consist of frames and stringers covered by sheet aluminum skin. A forward opening canopy used to allow access for the pilot and passenger. A removable fuel tank is installed aft of the seats.

WING: The wing will be constructed primarily of aluminum alloy materials and incorporates a NACA 23000 airfoil. The wing structure uses a two spar design. Flaperons are used to further lower the stall speed.

EMPENNAGE: The empennage will be constructed primarily of aluminum alloy materials The horizontal tail will be a stabilator with moveable anti-servo tab. Pitch trim will be provided by the anti-servo tab. The vertical tail will be a conventional fixed stabilizer and rudder.

LANDING GEAR: The main landing gear will use heat treated aluminum leaf gear. Each main wheel will be equipped with toe actuated disc brakes. The rudder and differential braking will be used for nose wheel steering. Toe brakes will be provided at both cockpit seats Wheel fairings are standard.

POWERPLANT: The Rotax 912iS Sport is an air/liquid cooled, horizontally opposed, four cylinder, naturally aspirated, spark ignited, four stroke, geared drive engine incorporating a dry sump, electronic fuel injection and exhaust system w/ EGT sensors and muffler. The engine is designed to operate on 100LL aviation fuel or Premium Auto gas and has a maximum continuous rating of 98hp at 5500 RPM. The time between overhaul is 2000 hours.

SYSTEMS: The flight controls consist of dual control sticks, which provide movement to the stabilator and flaperons. Rudder pedals, with differential toe brakes, provide control to the rudder and brakes. A switch, located between the two occupants, provides actuation of the electric flaperon motor. Electric pitch trim is used. A single bus 14 Volt electrical system is used, with power generated by the engine driven alternator. LED Position, anti-collision and landing lights are standard.

AVIONICS AND INSTRUMENTATION: A single 10" Dynon Skyview HDX or Garmin G3X display provides primary flight and engine information in a split screen format. A Garmin GTR 200 Com radio with internal Intercom, Mode S transponder, an ACK 406Mhz ELT and ADS-B IN/ OUT with weather/ traffic complete the avionics suite.

INTERIOR: The cabin interior consists of two seats with vinyl upholstery and booster cushions, overhead panel lighting, floor carpet panels, cabin armrests and gray painted interior. All interior aluminum and steel parts are primed for corrosion protection.

EXTERIOR: Exterior paint will be multi-color design using 2 stage polyurethane/ clearcoat.

FLIGHT TRAINING: Two hours of professional flight training in the purchased airplane are included in the purchase price. This training is available in Aurora, Oregon and requires prior arrangement. It can be arranged as part of aircraft delivery. Transfer of aircraft ownership must be complete before flight training is available. Customers must provide aircraft insurance. No credit is available for those who choose not to take training.