

National Ultralight is delighted to announce the new Challenger Light Sport XL-65 and XS-50 models. Numerous great new features kick the Canadian Challenger up yet another notch to further secure its position as by far the most popular airplane in its class - Canada's favourite Advanced Ultralight.

CHALLENGER LIGHT SPORT



XL-65 AND XS-50

The new Challenger Light Sport XL-65 is a high power, high lift aircraft for amphibious floats, heavy loads and high density altitudes. A new design 29.5 ft wing with Hoerner tips, new heavy load saddles, new heavy duty landing gear and new 20 USgal wing tanks along with a power package with 30% more thrust combine to allow a gross weight increase from 960 lbs to 1060 lbs. As an additional benefit the wing tanks also allow for the creation of a baggage compartment in the fuselage behind the passenger seat. The new XL-65 is powered by the proven ASTM certified 65 hp Rotax 582.

The new Challenger Light Sport XS-50 is optimized as an economical go-fast airplane for wheels and skis. Cruise speed is increased to 90 mph thanks to a 26 ft clip wing and new streamlining features. The XS-50 is powered by the proven ASTM certified 50 hp Rotax 503. The XS-50 has a 960 lb gross weight. Standard fuel is a 10 USgal fuselage tank. Also available are a 17 USgal fuselage tank or 20 USgal wing tanks. The wing tanks allow for a baggage compartment in the fuselage behind the passenger seat.

The new Challenger Light Sport models were designed expressly for our diverse Canadian requirements. They build on the very worthy foundation of the US Challenger II LSS with key enhancements to dial them perfectly into our Canadian missions and climate. The XL-65 and XS-50 honour the tradition of the classic Challenger II 582 Premium and Challenger II 503 Deluxe by bringing together components from multiple third party suppliers to form complete quick-build packages needing only paint and pilot.

The new Challenger Light Sport XL-65 and XS-50 represent the most dramatic step forward ever taken. These models incorporate numerous design enhancements driven by customer inputs. The goals were to

make them easier to build and easier to fly, more ergonomic and more rugged. They carry more payload farther and faster. All while keeping the price at very affordable levels even with engine and instruments.

The most visible of the new features are the new tail and rudder which are much larger than on earlier models. The Canadian Challenger Light Sports also have differential ailerons. The result is easier, more conventional handling which will appeal to pilots who prefer more directional stability and less footwork.

Notice however that the new Canadian LS tapered tail is not quite so large as on the US Challenger LSS. We have taken a more balanced approach to stability and handling which retains the earlier Challenger's legendary elevator-like sideslipping and ability to operate in high crosswinds on water and ice.

Less visible but highly useful nevertheless is the availability of wing tanks in both the XL-65 (standard) and the XS-50 (optional). This makes room for a very handy baggage compartment in the fuselage behind the passenger seat. In the XL-65 wing tanks contribute to increasing the gross weight to 1060 lbs.

The handling characteristics of the new Challenger Light Sport models are light and responsive. The combination of the new design light weight leading edge channel wrap and bottom ribs plus the proven fibreglass Hoerner wingtips now included as standard provides hitherto unheard of roll responsiveness. This brand new wing configuration provides for a great ride in turbulence and increased controllability.

Cruise speed has increased for both the XL-65 and XS-50. The new wing design reduces drag while providing increased lift and stability. It is readily identified by its smooth leading edge and bottom ribs plus flush gussets attaching the ribs to the leading and trailing edge spars. Beyond the main lift struts further drag reductions were effected by adding streamline fairings to the jury struts and stab struts.

The new solid aluminum main landing gear reduces drag by enabling use of improved gear leg fairings and eliminating all external cables. The internal carry through structures in the fuselage have been beefed up substantially. This new landing gear readily absorbs the bumps of rough farm fields and less elegant landings. The new hydraulic disc brakes make for very short stops. Customers asked for this!

Entry and exit is made easier by the redesigned cockpit side rails, doors and windscreen. The new pre fab instrument panel accommodates the new extended suite of instruments while still providing good leg clearance for taller pilots. On the XL-65 a new GPL heavy duty electric start system provides 30% more torque for faster starts. On the XS-50 the new Quad City electric start system operates through the PTO end of the engine allowing a backup manual starter to be simultaneously installed at the MAG end.

The Challenger Light Sport quick-build kits are even easier and more fun to assemble than the classics. As with all Challengers they include factory-built tail, wings and fuselage with controls pre-installed. New for the Light Sports is a precut predrilled instrument panel and wiring harnesses for panel and engine. No special tools or skills are required. Realistic assembly times are in the vicinity of 300 hours.

A vastly better new manual has clear drawings, color pictures and punchy text. Support is readily available across Canada via phone and email as well as face-to-face through an extensive network of dealers and professional Challenger techs. For owners who assemble their kits at odd hours there is unmatched 7x24 support via web sites and online forums.

The new Challenger Light Sports can be registered in Canada in the Advanced Ultralight category or in the Amateur-Built category. The new Light Sport series has a number of new features to facilitate the Amateur-Built route, for example control stops and pilot accessible fuel shutoff system.

CANADIAN CHALLENGER LIGHT SPORT XL-65 AND XS-50

In addition to the satisfaction of assembling your own airplane and knowing it inside and out, a big advantage to registering as Advanced Ultralight or Amateur-Built is that you can do all maintenance and inspections yourself or with the assistance of whomever you choose. If you are not a do it yourself type then in Canada both categories allow up to 100% of the assembly to be done by pros if you wish.

In Canada the Challenger Light Sport XL-65 and XS-50 may be flown with the economical Ultralight Pilot Permit or with a traditional pilot certificate such as the Recreational Permit or Private Licence.

In today's challenging economy the financial aspects of aircraft ownership are more critical than ever. The new Challenger Light Sports are less than a quarter of the cost of typical AULA and LSA aircraft. The low acquisition cost and very low operating and maintenance costs mean owners can afford to fly as often as they wish. Challenger owners never pause to think how much it will cost to go for a flight.

The new Challenger Light Sport airframe packages come standard as quick-build kits including instruments and all described features. The available power packages include engine, mounts, redrive, prop and everything else needed to get the air moving backward and the plane moving forward. The XL-65 and XS-50 quick-build kits are configured on wheels and include everything necessary to go flying except paint and pilot. Skis and tundras may be installed on both models and floats on the XL-65.

The Challenger line of aircraft includes six choices - three new Light Sport models (XL-65, XS-65, XS-50) and three Classic Challenger II models (Premium 582, Deluxe 503, Legacy 503). The range of features, performance and prices is wide enough to suit just about every need and just about every budget.

582 powered packages including airframe, instruments, engine, prop, etc start around CAN\$33,000. To spread out cash flow the airframe may be further split into tail, wings and fuselage sub-kits.

The new two seat Challenger Light Sport models position themselves beside the most advanced AULA's in Canada and the S-LSA's and E-LSA's of the US Light Sport Aircraft category. Challengers emphasize the fun of building and flying your own airplane whereas virtually all of the new AULA's and LSA's follow the Cessna tradition of hermetically sealing the occupants away from the flying experience. Would you rather drive a mini-van on the freeway or a two-seat roadster on a winding country road? And why be restricted to the interstate when you can go direct on land, sea or snow!

Challengers also emphasize the philosophy that recreational aircraft should be both affordable to acquire and affordable to operate and maintain. The price tags of the latest AULA's and LSA's are near \$150,000 on wheels and over \$175,000 on floats which is completely out of reach for most recreational aviators!

The new Challenger Light Sport models deliver wide ranging major improvements while retaining the docile nature of classic Challengers including low stall speeds with no wing drops. Also retained are the outstanding STOL operations with takeoff and landing rolls in the 200-400 ft range as well as unmatched crosswind capabilities. Payload is very impressive and is actually higher than in most two seat aircraft with much larger, more expensive engines.

The versatility to go high and fast or to go low and slow, the capability to operate from short unimproved strips, the ability to fly with the doors off like a roadster with the top down, and the unmatched visibility from both seats combine to put the fun back into flying. There is nothing like a Challenger Light Sport!

National Ultralight Inc. is the exclusive distributor for the Challenger line of aircraft in Canada. For more information visit www.challenger.ca. Contact us at 705-721-9811 or challenger@challenger.ca.