



AVIA TECH

A V I A T E C H

SEAPLANE COMPANY

AVIATECH Company



Aviatech LLC was established at the beginning of 2008. The main activity of the Company is the development, production, repair, and maintenance of aviation equipment (normal category aircraft AP23).

In particular, we produced the L-42M amphibious aircraft, later its improved version L-142 was manufactured, and in 2019, new L-145 amphibious aircraft with a more powerful ROTAX 915si 140 h/p engine (Austria) with advanced aircraft performance data was created.

A talented team of highly skilled specialists is engaged in the Company's activities. The company's personnel is more than 40 people. The founders of the company have been working in the aviation and aircraft manufacturing market for more than 25 years.

The production site is located in Samara, Russia.



Company historical background



The Aviatech team started the development and production of L-6, L-6M, L-6SV, and L-42 aircraft in the late 1990s.

It all started with amateur flights on a makeshift plane "Vera", which was designed by military pilot Alexei Georgievich Annenkov.



Company's resources



Many unique amphibious aircraft L-6, L-42m, L-6SV, etc. were developed and put into production by the specialists of SPA Aviatech LLC. – the specified models have no analogs in the world in terms of their flight performance and consumer appeal. This fact is supported by numerous articles and feedback at specialized international and Russian exhibitions.

Currently, more than 50 aircraft have been produced. Our aircraft are successfully operated in the following cities of Russia: Salekhard, Tyumen, Vologda, Kemerovo, Khabarovsk, Magadan, Kursk, Kaliningrad, Penza, Veliky Novgorod, as well as in Moscow and St. Petersburg.

The following long-distance expeditions were carried out on our Aircraft:

- 2013, three airplanes, Samara - St. Petersburg - Rybachy settlement (Kola Peninsula)
- 2015, Samara -Magadan, Samara - Khabarovsk. Vologda - Yuzhno-Sakhalinsk 2016 Vologda - Salekhard - Putorano Plateau - Altai (Teletskoye Lake)
- (Sakhalin Island).

The Airlines to operate our L-142 and L-145 amphibious aircraft have been established in the cities of Salekhard, Kemerovo, Magadan, Veliky Novgorod, and Khabarovsk.



Company's resources



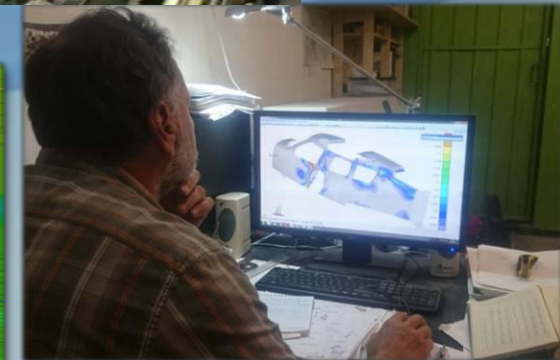
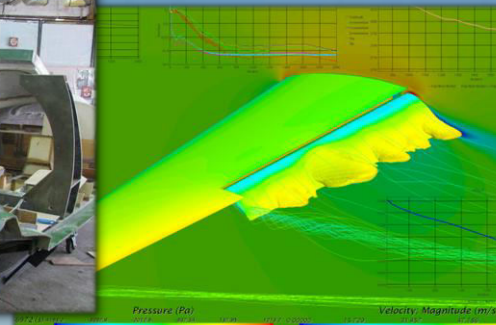
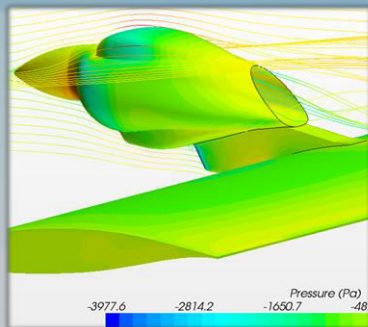
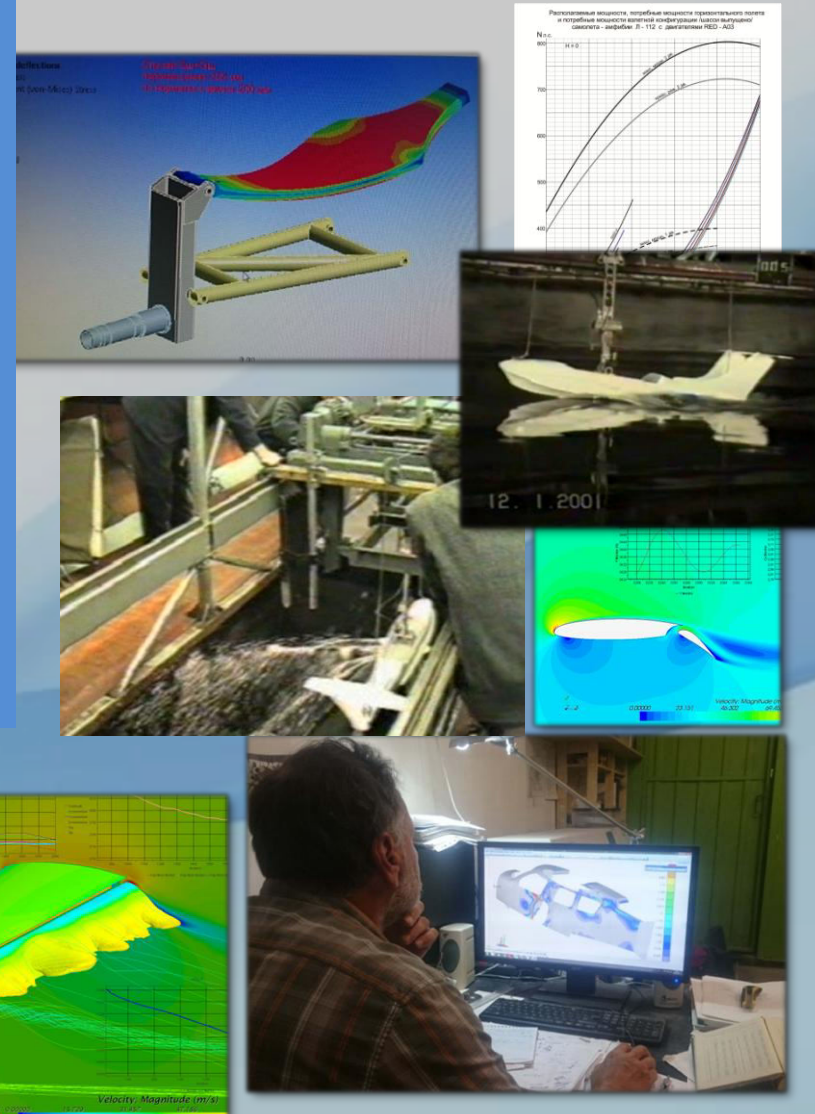
The AVIATECH company has extensive experience in the development of new models of aviation equipment.

We've gained a vast practical experience in aerodynamics: the airfoil sections of the wing, flap/slat system, and flaps of our aircraft have been optimized and improved.

We've gained practical experience in the calculation, design, and manufacture of structures made of composite materials. New technologies for the production of composite three-layer load-bearing structures have been mastered and implemented into production.

We've gained experience in the installation and operation of various power units.

For instance, there are rich traditions and unique experiences in the construction of light seaplanes in Samara, The Academician S.P. Korolev National Research University located in Samara offers training courses for aerospace specialists.



Aviation enterprise in Samara

The project is located on a specific site, 20 km away from Samara.
At the moment, electrification works are completed, gasification works are underway



The main products of the company



The main products of Aviatech are the L-142 and L-145 aircraft. The activities in preparation for certification of the L-145 model are just underway.

The aircraft is manufactured of composite materials using proven cold molding technology. The airframe scheme is a standard cantilever monoplane (high-wing monoplane) with a trapezoidal wing, V-tail, and stabilizer located at the top of the keels. The power unit includes two piston engines mounted on the wing and equipped with variable-pitch propellers.

The wing has a flap system in the form of slotted flaps and is equipped with wing floats. The aircraft landing gear is a tricycle structure with a tail wheel. The main landing gear rises to the fuselage. The fuselage of the aircraft is made according to the boat-monocoque scheme, the cabin combines the crew workplace and the passenger compartment, with a total number of seats - 4 (2 rows with 2 seats in each). Aircraft control type - double hand control.

Dry weight - 950 kg
Maximum takeoff weight - 1700 kg
Landing speed - 80..90 km/h
Cruise speed - 240 km/h
Takeoff run, max - 300 m
Flight range - 2000..2400 km
Aerodynamic efficiency index - min 15
CG range - 18..36%
Used fuel - AI95..AI98
Crew - 1 pilot + 3 passengers



Amphibious seaplane L-162



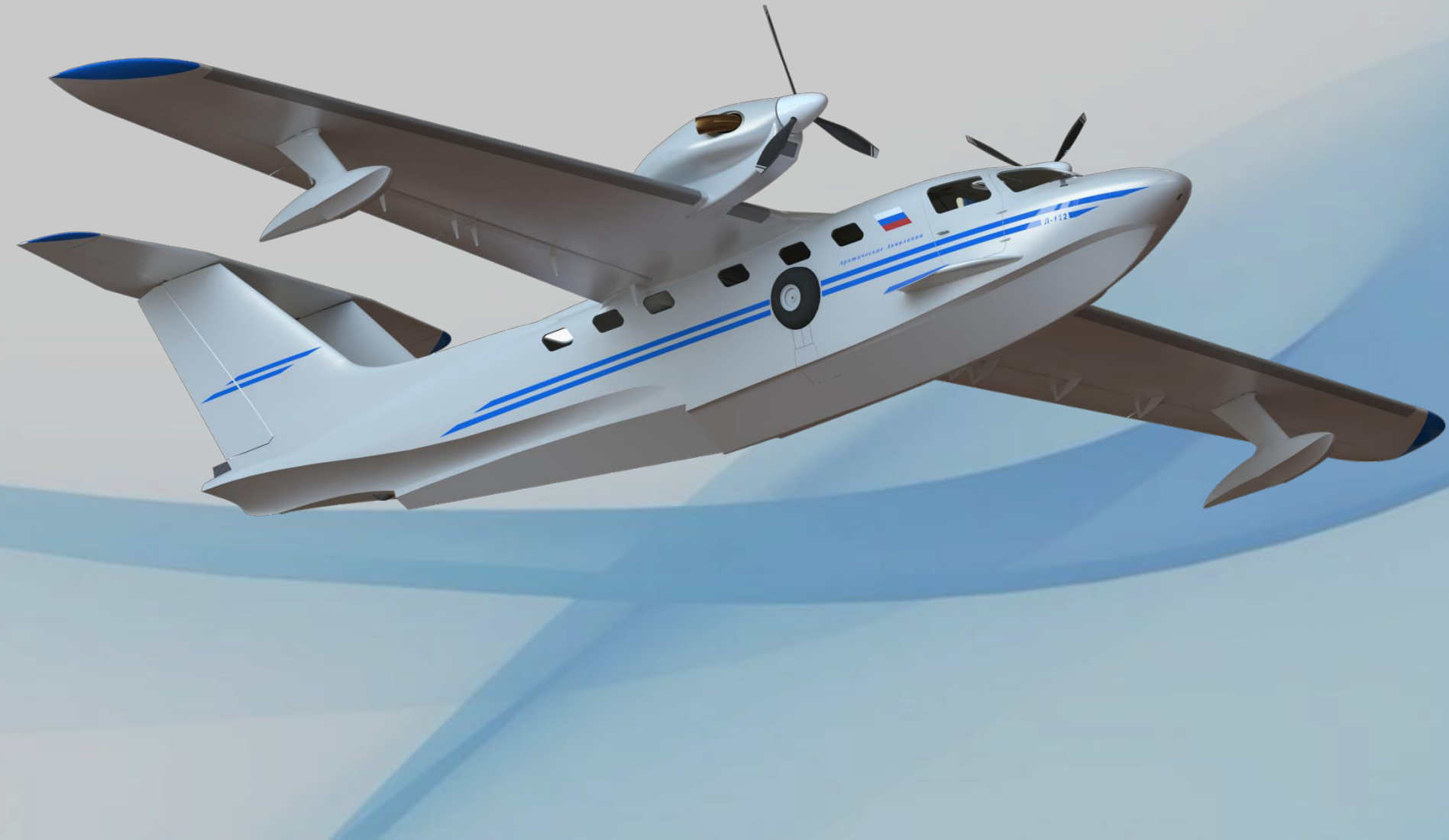
The aircraft is designed according to the aft-tail aircraft scheme - a monoplane (high-wing monoplane) with a trapezoidal wing and two engines mounted on the wing. The wing has a flap system in the form of slotted flaps and is equipped with wing floats. The tail unit of the aircraft is two-keeled, with a stabilizer on the top of the keels for ease of loading and unloading on the water surface. The fuselage of the aircraft is designed according to the scheme boat - semi-monocoque, it includes a crew workplace, a passenger compartment, and a cargo compartment. The cabin and passenger compartment are equipped with ventilation and heating systems. Aircraft control type - double hand control. The equipment of the aircraft is designed for complete autonomy during operation. The power unit includes piston engines and variable-pitch propellers. The retractable landing gear reduces the overall aerodynamic drag, it leads to cruise and maximum flight speeds increase.

Wingspan - 15 m Length - 10.5 m
Height - 3.5 m
Estimated cruising speed - 300 km / h
Maximum speed - 330 km / h
Flight range - 2000 km
Max Altitude - 4000 km
Deadweight - 1400 kg
Takeoff weight up to - 2400 kg
CG range 20..40%
Capacity - 1 pilot + 5..7 passengers
Payload - 500 kg for a range of 2000 km
100 kg for a range of 1000 km
Recommended types of power units:
- Franklin 360, 210 hp, Gasoline AI-95..98
- Continental 360, 215 hp, Gasoline 100LL
- Continental CD-265, kerosene-type jet fuel

Flight tests May-June 2020.



Amphibious seaplane L-112 "ARCTIC"



L-112 "ARCTIC" Model description



The aircraft is designed according to the aft-tail aircraft scheme - a semi-cantilever monoplane (high-wing monoplane) with a trapezoidal wing and two engines mounted on the wing. The wing has a flap system in the form of slotted flaps and is equipped with wing floats. The tail unit of the aircraft is two-keeled, with a stabilizer on the top of the keels for ease of loading and unloading on the water surface. The fuselage of the aircraft is designed according to the scheme boat - semi-monocoque, it includes a crew workplace, a front technical compartment, a passenger compartment, and a cargo compartment. The cabin and passenger compartment are equipped with ventilation and heating systems. Aircraft control type - double hand control. An auxiliary power unit is used during taxiing operations on the water surface. The equipment of the aircraft is designed for complete autonomy during operation.



The scope of application of L-112.

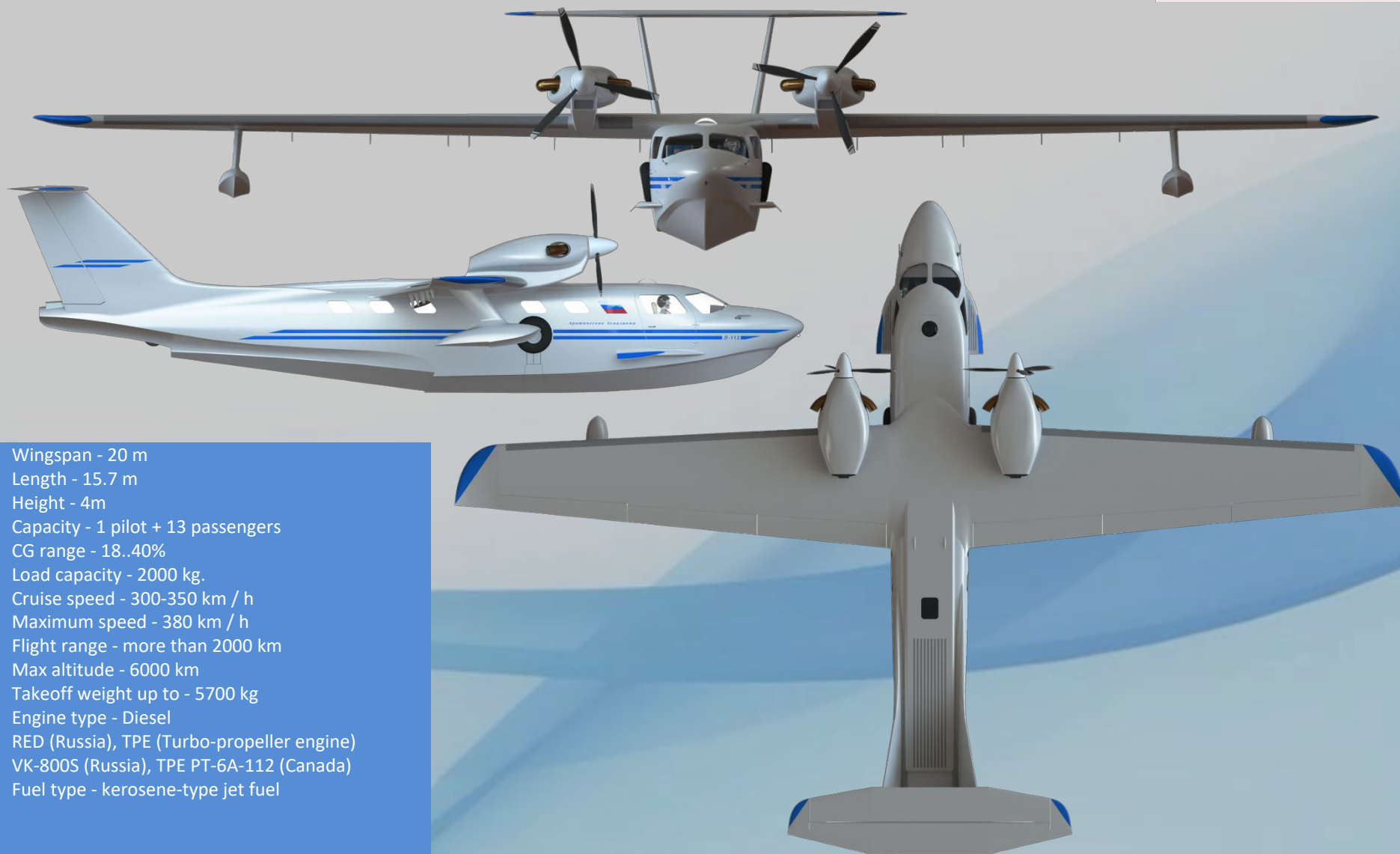
ARCTIC seaplanes are wider than those land aircraft since they can land both on land and the water surface. The main uses for seaplanes are:

- transportation using inland and coastal waters;
- protection of national zones for breeding and commercial production of marine animals and plants;
- medical assistance in remote areas;
- sea search and rescue operations with the ability to take the affected person on board and deliver him to land;
- exploration of fish resources;
- interaction with ships at sea;
- ice patrol;
- tourism, expeditions;
- special assignments.



L-112 "ARCTIC"

Estimated flight performance data



Wingspan - 20 m
Length - 15.7 m
Height - 4m
Capacity - 1 pilot + 13 passengers
CG range - 18.40%
Load capacity - 2000 kg.
Cruise speed - 300-350 km / h
Maximum speed - 380 km / h
Flight range - more than 2000 km
Max altitude - 6000 km
Takeoff weight up to - 5700 kg
Engine type - Diesel
RED (Russia), TPE (Turbo-propeller engine)
VK-800S (Russia), TPE PT-6A-112 (Canada)
Fuel type - kerosene-type jet fuel

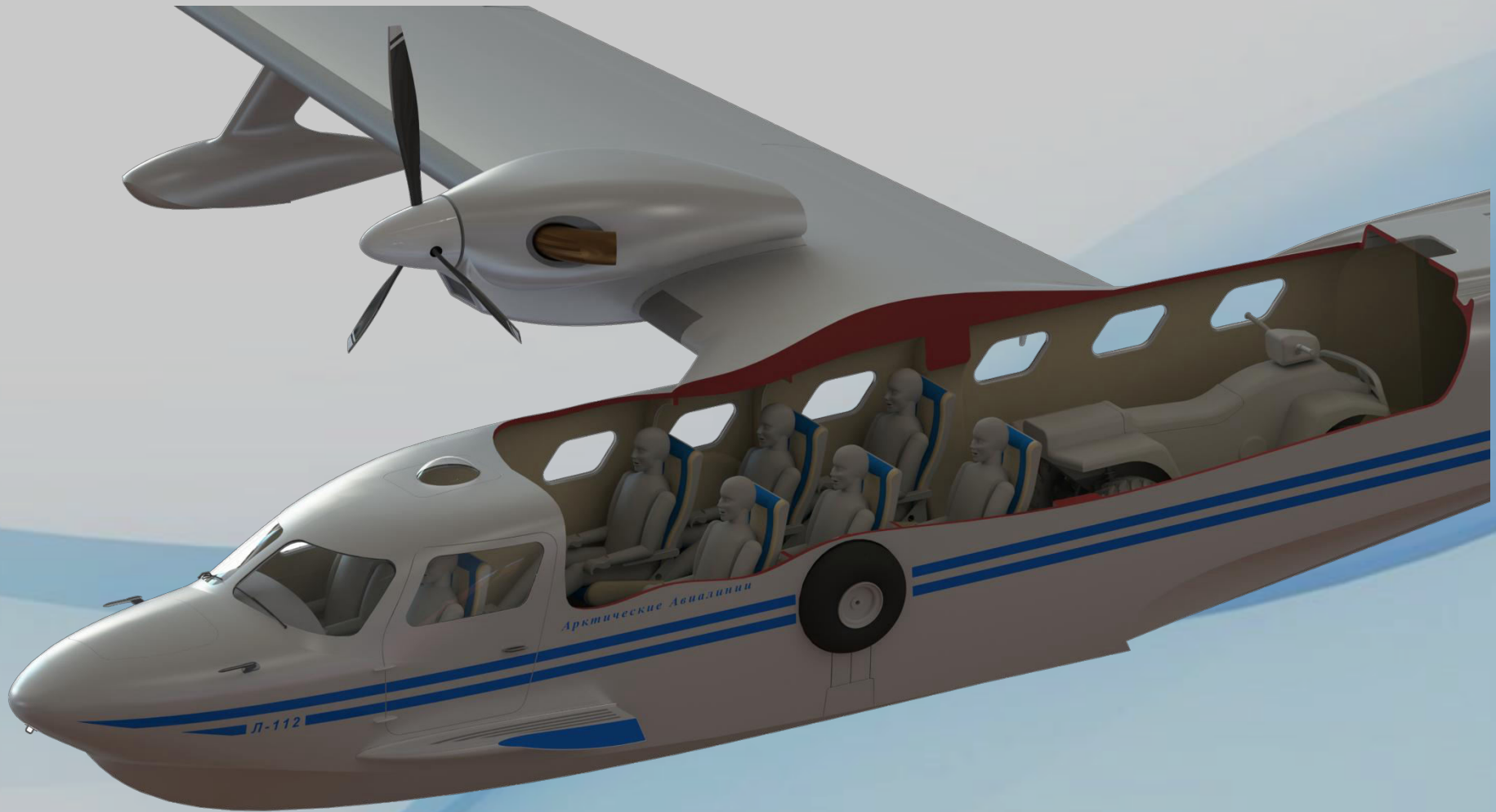
L-112 ARCTIC Scope of application

Passenger version, capacity up to 13 persons



L-112 ARCTIC Scope of application

Passenger and cargo version,
capacity - up to 6 persons + cargo



L-112 ARCTIC Scope of application

Cargo version - up to 2000 kg of cargo.



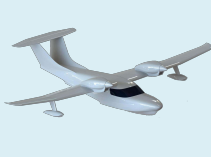
L-112 ARCTIC Scope of application

Version for medical purposes



Comparative analysis



	L-145	L-162 .	L-112	Be-103	Lake Regenade	Dornier Seastar	Poseidon-46
							
Cruise speed, km/h	240	300	300..350	240	230	330	335
Maximum range, km	2 400	2 000	>2 000	1 072	1 660	1 700	2 200
Maximum take-off weight, kg	1700	2 400	5 700	2270	1400	4600	1750
Live weight, kg	750	1 000	2 000	450	650	1250	750
Lift-off speed, km/h	95	100	110	144	135	150	100
PU Power, h.p	2x140	2x210..265	2x500..550	2x210	1x250	2x641	2x200
Land/water takeoff run, m	250/300	250/350	300/400	350/650	350/650	690/1050	200/300
Number of seats	1 + 3	1 + 5..7	1 + 13	4	6	12	6
Country	Russia	Russia	Russia	Russia	USA	Germany	Russia