LZ-73: small luxury airship concept

Peter Lobner, 5 August 2019

This is an exotic design by Denislav Videnovia circa 2013 for an all-electric, battery-powered airship capable of carrying a pilot and perhaps 4 to 6 passengers in rather luxurious accommodations.

Basic design features:

- All lift is aerostatic; 100% from helium lift gas in flight
- Lifting gas volume: 15,000 cubic meters (530,000 cu ft)
- Heavier-than-air on the ground: variable buoyancy is achieved by compressing some helium lifting gas after landing and storing it in an on-board pressurized tank.
- Capable of vertical takeoff & landing (VTOL) and hovering
- Automatic flight controls in hover: digital controls manage hovering and position-keeping, even under windy conditions
- All-electric propulsion with vectoring thrusters for propulsion and maneuvering flight
- Zero carbon emissions
- Range: 400 km (249 miles) on battery power
- Speed: about 90 kph (56 mph)
You'll find more details on the LZ-73 airship on the Tuvie website at the following link. This was the source of the graphics in this section.


*Front quarter view with the passenger cabin extended for access.*

Source. Tuvie.com
Interior layout of the LZ-73. Note the scale with the figure of a person, bottom right. Source. Tuvie.com

Upon landing the lifting gas (Helium) is sucked out back in the bottle (the pressure in the bottles is balanced trough a compressor).

Rear quarter view showing the main propulsors. Source. Tuvie.com

Top view. Source. Tuvie.com
LZ-73 passenger compartment showing pilot station and passenger accommodations. Source. Tuvie.com