



The Operator Performance Laboratory (OPL)
1801 South Riverside Drive, Hangar H
Iowa City Municipal Airport (KIOW, CTAF 122.8, Rwy 7/25)
Iowa City, Iowa 52242
Flight Ops: 319 248 1100, Cell: 319 631 4445
Research Aircraft Specification Sheet

Make: Aero Vodochody L-29
Registration: N429GC, State of Iowa, University of Iowa, liability insured
Crew: 2, front seat safety pilot, rear seat evaluation pilot

Dimensions: Length: 10.81 m (35 ft 6 in), Wingspan: 10.29 m (33 ft 9 in), Height: 3.13 m (10 ft 3 in), Wing area: 19.8 m² (213 ft²), empty weight: 2,280 kg (5,030 lb), Loaded weight: 3,286 kg (7,244 lb), Max takeoff weight: 3,540 kg (7,800 lb)

Power plant: 1× Motorlet M-701C , 8.7 kN (1,960 lbf)

Crew support: O2 system, g-suit, pressurization

Hard-points: 2 each with rails equipped for ARDS or similar electronic pods, 120VAC, 28VDC, RS422, Ethernet, hard point also usable for aux fuel tank.

Performance: Maximum speed: 820 km/h (443 knots, 510 mph), Range: 900 km (486 nm, 560 mi), Service ceiling 11,500 m (37,700 ft), Rate of climb: 14 m/s (2,800 ft/min), Wing loading: 166 kg/m² (34.3 lb/ft²), Thrust/weight: 0.25, loading +8/-4gz

Instrumentation: Total of 5 each high performance PC computers (Linux or Windows), 2 each 15" high brightness touch screens in back cockpit, safety pilot phase tagger display in front, Cognitive Avionics Tool Set (CATS): eye tracking (Smarteye), EEG, ECG, GSR, respiration amplitude, quick disconnect umbilical, flight technical analysis, flight control inputs, Polhemus Scout head tracker, JHMCS training helmet with VGA display, 900 Mhz Long range data link, 1.2 Mbps, high speed L-band data link 2Mbps, 2.4Ghz 10W video link, 4 channel video, Hemisphere Crescent heading source, Rockwell Collins GuS GADHRS, Novatel ProPak V3 GNSS, 1kW 120VAC true sine wave inverter, 600 W 120VAC true sine wave inverter, dual VHF Navcom, GPS, bore sighted FLIR camera, SVS/EVS software, OPL proprietary remote process management.

