

IOWA



Operator Performance Lab

Instrumented L-39ZA Aircraft

Low-cost tactical in-flight simulation and flight test services



IOWA

Technology
Institute

LET OPL SERVE YOUR FLIGHT TEST NEEDS

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FULL SERVICE FLIGHT TESTING

INSTRUMENTED AERO L-39ZA LIGHT ATTACK AIRCRAFT

INSTRUMENTED EXTERNAL HARD POINTS

Pod rail adaptor and umbilical capable of carrying pods on centerline and 4 wing stations using BRU-77

- Agile 16W
- MALD
- 5" ACMI

Experimental power system, 7 kW total capacity

- Vertical Power VP-X and PPS Solid State power for 28VDC, 10 switched outputs at 10A/15A, 1 switched output at 300A
- KGS SEA-150 Inverter, 3 Phase 1500 VA (500 VA per Phase) at 400 Hz
- KGS SPS-1307 Inverter, Single Phase 100VA (1300 VA intermittent) at 60 Hz

Avionics

- 1 x Garmin GNS 530 VHF NAV/COM
- 1 x Garmin GNS 430VHF NAV/COM
- 1 x Garmin SL-30 NAV/COM
- 1 x Garmin GMA-340 Intercom
- Dynon Skyview SVS
- Chelton EFIS
- Shadin Fuel Totalizer
- 1 x ARC-210 UHF
- 1 x TTNT Datalink, L-Band

Endurance

- Up to 3.5 hrs depending on fuel loadout
- Internal: 856 kg (290.4 gal)
- Wing tip tanks: 156 kg (52.8 gal)
- Small underwing tanks: 232 kg (78.8 gal)
- Large underwing: 545kg (184.8 gal)

Payload carriage: 1 x Center Line and 4 x Pylons wing hardpoints, captive carry

- Centerline up to 200 kg (440 lbs)
- Inboard up to 500 kg (1102 lbs)
- Outboard up to 250 kg (551 lbs)

Applications

- Captive carry MALD, Agile 16W, 5" pods and similar payloads using BRU-71
- Pilot performance assessment (using CATS)
- Red air
- Airborne C2-ISR

External video recording

- Integrated camera on the wingtip to provide post flight video and imagery

L-39ZA SPECS

CREW

- 1 front seat, 1 back seat

WEIGHTS

- Empty: 3,584 kg (7,902 lbs)
- Max takeoff: 5,600 kg (12,345 lbs)

PERFORMANCE

- Powerplant: 1 x Ivchenko AI – 25TL turbofan engine (16.87 kN | 3790 lbf)
- Maximum speed: 490 KIAS without external stores
- Range: 1,828 km (1136mi, 987 NM) Fuel at 5500 kg sea level (large fuel tanks)
- Service ceiling 11,500 m (37,700 ft)
- G-loading: +8 and -4 at 4,200 kg (9259 lbs), +5 and -2.5 at 5500 kg (1212lbs)

