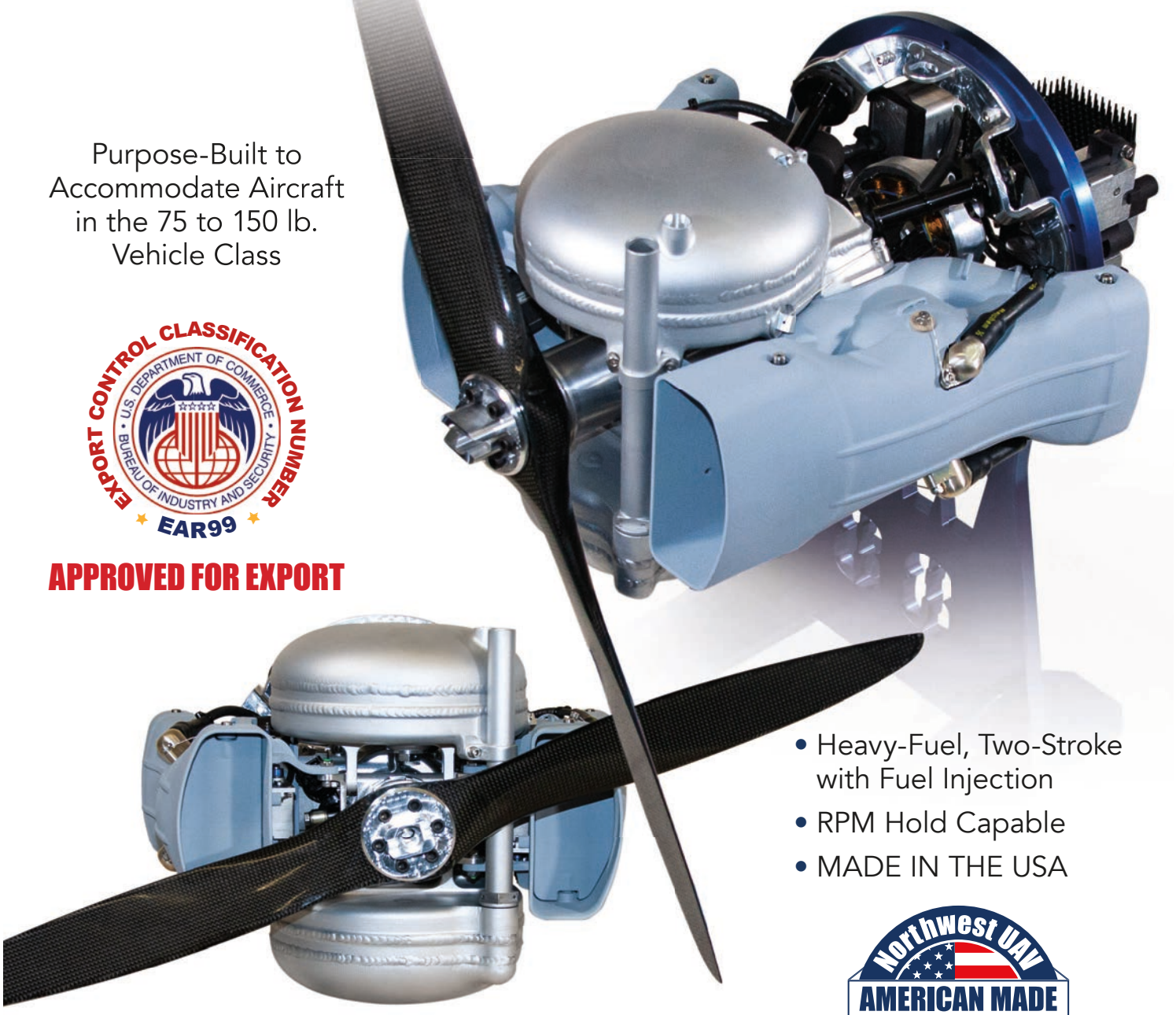
Northwest UAV
A GLOBAL COMPANY

PROPULSION & PAYLOAD
INTEGRATION SPECIALISTS

NW-88 HEAVY-FUEL ENGINE



Purpose-Built to Accommodate Aircraft in the 75 to 150 lb. Vehicle Class

EXPORT CONTROL CLASSIFICATION NUMBER
U.S. DEPARTMENT OF COMMERCE
BUREAU OF INDUSTRY AND SECURITY
EAR99

APPROVED FOR EXPORT

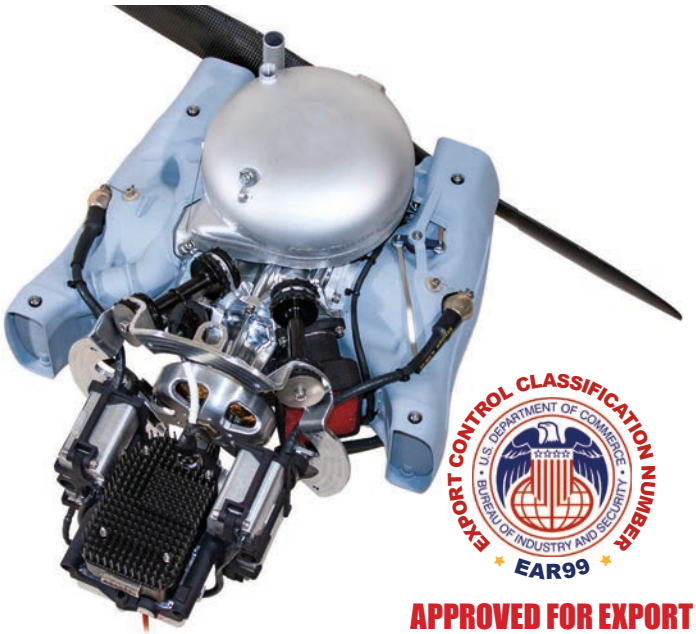
- Heavy-Fuel, Two-Stroke with Fuel Injection
- RPM Hold Capable
- MADE IN THE USA

Northwest UAV
AMERICAN MADE
AVIATION GRADE

Where Precision and Reliability Soar!

From single components to entire propulsion systems – Our main focus is in propulsion solutions, modular components and support solutions for any UAV or unmanned system.

NWUAV purpose-built NW-88 multi-fuel engine is designed, developed and built for unmanned aircraft systems with larger payload requirements, and long endurance aircraft.



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The NW-88 is the most efficient and configurable UAV engine on the commercial market.

Purpose-built to handle aircraft from 34 to 68 kg (75 to 150 lbs)[1].

- Built for Reliability
- Based on the Combat-proven NW-44
- Built Specifically for Unmanned Applications
- Scalable for Use in a Broad Range of Aircraft
- Logistic Fuels Compatible
- Best Power-To-Weight Ratio
  - ➤ Larger Payloads
  - ➤ Higher Climb Rates
  - ➤ Faster Cruise Speeds
- Easy Maintenance
- Approved for Export EAR99
- Technical Support Included
- Telemetry Trend Monitoring
- Designed for STANAG 4703/AEP-83

[1]depending on mission requirements and aircraft configuration

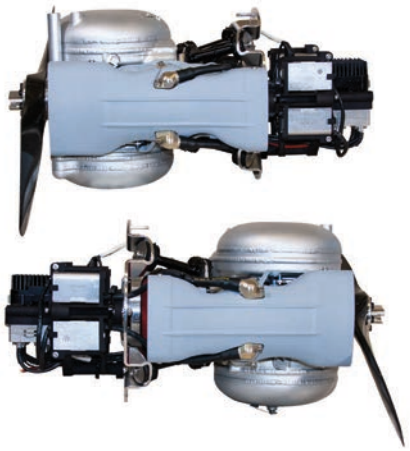
SPECIFICATIONS

	NW-88 EFI
Total Weight* (see below)	7800 ± 200 grams
Displacement	88 cc
Maximum Continuous Speed	7500 rpm
Power Rating at 7250 RPM	7.3 hp
BSFC at Cruise 5000 RPM at Sea Level	395-456 g/kWh 0.65-0.75 lb/hp-hr
Ignition	Twin 25kv Capacitor Discharge Ignition (CDI) per cylinder
Cooling	Air with Active Cylinder Head Temperature (ACHT) Control
Generator Regulator	6/12/21 or 28 VDC, 280-Watts
Generator	On-Shaft Permanent Magnet Alternator
Fuel System	Full Authority Digital Engine Controller with Electronic Fuel Injection
Fuel Type	Non-ethanol 93-100 octane gasoline (R+M)/2, Jet-A, JP-5, JP-8, TS-1
ECU Data Storage	1,000 hours at 1Hz Recording Rate
TBO (Estimate)	400-500 hours

NOTES: *Actual performance will vary depending on PMU configuration, application, propeller, fuel, oil, environmental conditions and type of operation.*
** Total weight with propeller and interface harness.*

Additional Features

- Twin-cylinder engine
- RPM hold capable
- Dual ignition (per cylinder)
- Dual piston rings
- Automatic altitude compensation
- Custom 280-Watt direct drive generator with a 6/12/21 or 28 volt Generator Control Unit (GCU); ~280-Watts available, 30-Watts for engine, 250-Watt for payload and aircraft.
- Telemetry:
  - ➤ Speed
  - ➤ Fuel consumption
  - ➤ Throttle position
  - ➤ Cylinder temperature
  - ➤ Intake air temperature
- Easy cold start
- CAN communication
- Lightweight quiet acoustic muffler
- Interfaces with popular autopilots
- Fuel injection
- ***Conformal design mitigates unwanted parasitic drag, which increases net efficiency***
- MANUFACTURED IN THE USA



REV D AS9100 Quality Management Certified
ISO9001 CERTIFIED

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