## Purchase Description: Raider 65 HP Multi-Fuel Outboard Motor

### 1.0 Scope
This purchase description defines the requirements for twenty (20) Raider 65 HP Multi-Fuel Outboard Motors (or functional equivalent). These submersible, tactical propulsion systems will be utilized on Wing P4.7 (or equivalent) inflatable craft to support amphibious, littoral, and riverine operations.

### 2.0 Salient Characteristics
Any proposed motor must meet or exceed the following physical, functional, and performance specifications:

| Feature | Minimum Requirement |
|---|---|
| **Propulsion Power** | 65 Horsepower (HP) rated at the propeller shaft. |
| **Fuel Compatibility** | **True Multi-Fuel Capability:** Must operate reliably on JP-5, JP-8, Jet-A, F-24, Diesel, and Standard Unleaded Gasoline without requiring manual internal engine modifications or timing changes. |
| **Starting System** | Heavy-duty manual recoil start (electric start optional but manual backup is mandatory). |
| **Submersibility** | **Fully Submersible:** Must feature a post-submersion de-watering system allowing the motor to be purged and restarted within five (5) minutes of being fully submerged. |
| **Engine Type** | 2-Stroke, inline 3-cylinder configuration optimized for tactical operations. |
| **Weight** | Maximum dry weight of 178 lbs (113 kg) to ensure manual mounting/demounting capability by a two-man crew. |
| **Shaft Length** | 20-inch (Long Shaft) configuration, compatible with standard military CRRC transoms. |
| **Tiller Control** | Ergonomic tactical tiller handle containing throttle, shift, kill switch, and trim controls. |
| **Trim/Tilt** | Manual tilt with shallow-water drive positions and assist shock absorbers. |
| **Propeller** | Heavy-duty stainless steel or composite 3-blade tactical propeller with hub exhaust. |
| **Ingress Method** | Must be air deployable from fixed and rotary wing aircraft |

### 3.0 Required Deliverables & Accessories
Each outboard motor must be delivered with the following accessories:

- One (1) 6-Gallon (22.7L) heavy-duty, tactical fuel bladder or rigid tank with quick-disconnect fuel line.
- One (1) Submersion/De-watering tool kit (spark plug wrench, cylinder purge kit).
- One (1) Operator and Maintenance manual (digital and hard copy).

## 4.0 Testing & Certifications

- **EPA Exemption:** Must qualify for national security/military EPA exemptions due to multi-fuel operating requirements.
- **Factory Testing:** Each unit must be factory-run and tested prior to shipping.