



**SEABIRD AVIATION
AUSTRALIA PTY LTD**

**SEABIRD SEEKER SB7L-360A
SERIES 2**



INFORMATION PACK



Australian Made – World Leader

Designed & developed in Australia, and now operating in Australia, the USA, Middle-East and Africa, the *SEEKER* is a purpose built, rugged utility aircraft for private, commercial and security operations.

At a third of the operating cost of rotary - wing equivalents, the *SEEKER* provides an efficient alternative for powerline and pipeline inspection, coast watch, environmental and stock monitoring, aerial photography and security - where VTOL (vertical take-off and landing) is not mission essential. Crew visibility is unrivalled by any other fixed-wing aircraft and is superior to many helicopters.



The SEEKER Advantage

Seabird Aviation Australia has designed and developed the SEEKER multi-role utility aircraft for optimum effectiveness and performance in low level observation tasks. Delivering a combination of attributes not available with conventional helicopters or commercially available fixed wing aircraft, the SEEKER represents a sound business decision and offers an impressive and unique flying experience.

SEABIRD SEEKER – A proven performer

- ◆ A history of thousands of hours of safe operation
- ◆ A unique **proven**, cost-effective airborne surveillance platform
- ◆ **Proven** integrated infrared and video downlinked sensor options
- ◆ A commercially **proven** powerline/pipeline patrol aircraft
- ◆ **Proven** in harsh desert conditions of the Middle East
- ◆ A unique and **proven** aircraft for the private owner
- ◆ Certified to FAR 23 in Australia and USA
- ◆ Type Acceptance in India , South Africa, Jordan
- ◆ Designed and manufactured under Production Certificate 417197 in Hervey Bay, Queensland Australia
- ◆ Manufactured under license by Seabird Aviation Jordan LLC in Amman, Jordan
- ◆ Manufactured under license by Seabird Aviation America Inc. in Albuquerque New Mexico, USA





Unique features -

- ◆ **Helicopter – like visibility**
 - Crew seated forward of the wing highlights the deficiencies of conventional fixed-wing designs and permits unrivalled 270 degree visibility.
- ◆ **Primary Safety**
 - Responsive push - rod operated controls and vice free stall handling – Will roll level when stalled in a turn
 - Minimal pitch change with power and flap changes
 - Visibility from cabin and inherent stability reduces pilot load and enhances situational awareness
 - Low stall speed and ample power-to-weight ratio enhance low level flight safety
 - High fatigue life – metal primary structure
 - Simple structure and systems ensure complete and regular maintenance
- ◆ **Secondary Safety**
 - Occupants protected in tubular steel “Safety Cell”
 - Fire hazards are minimised with fuel in wings and no fuel lines in cabin area
 - Four point inertia reel harness standard
- ◆ **Comfortable ride**
 - Forward cabin provides the crew with a smooth ride and reduced fatigue on extended missions
 - Well ventilated and spacious cabin with top door-off operation approval
- ◆ **Low vibration levels**
 - With a high mounted engine and pusher prop aft of the cabin, no propeller slipstream buffet over cabin
- ◆ **De-rated Lycoming 0-360 engine**
 - Widely acknowledged as one of the world’s most reliable piston aircraft engines. De-rated for even greater reliability
- ◆ **Low octane fuels**
 - Min. 80/87 Avgas with Mogas approval

- ◆ **Soft-field operation**
 - Rugged spring steel main undercarriage legs. Tail wheel oleo, low pressure tyres for rough field operations
- ◆ **Airframe spare parts**
 - Readily available direct from Australian manufacturer, with off-the-shelf rotables commonly available
- ◆ **Warranty**
 - 12 months/500 hours airframe warranty
- ◆ **Range of sensors accommodated**
 - Aperture in floor, and under-wing and fuselage hard-points. 24 volt 70 amp electrical system

Unique Design – Proven Technology & Structure

Wings

Strut braced high-wing monoplane, with NACA 632-215 (modified) aerofoil section with constant chord. Dihedral 2° from root. Incidence 4° at root, 1° at tip. No sweepback. Vortex Generators and Leading-edge Cuffs. All-metal skinned. Corrosion resistant 6061T6 aluminium alloy structure, with top-hinged ailerons and mechanical slotted flaps. Single bracing strut, with jury strut, each side.

Fuselage

Pod and boom structure, of 4130 chrome molybdenum steel tube forward fuselage affording maximum crew protection. FRP forward fuselage non-load-bearing skin. Aluminium alloy semi-monocoque tail boom. Removable doors and windows horizontally hinged.

Tail Unit

Swept fin (with dorsal fin) and balanced rudder; non-swept fixed incidence tail plane with one-piece horn balanced elevator. Construction similar to that of wings. Elevator trim.

Landing Gear

Fixed, with Cleveland wheels and brakes. 8.00-6 low pressure main tyres and cantilever spring steel legs. Scott 8 inch tailwheel with Oleo strut.

Power Plant

125kW (168hp) Lycoming O-360-B2C, driving a wood-composite 2-blade fixed pitch propeller. Fuel in two integral wing tanks, combined usable capacity 180 litres (48 US gallons, 40 Imp gallons). MoGas approved. Over wing flush fuel caps each tank.

SEEKER Applications



In applications requiring safe, low speed flight at low levels, Seeker provides the operator with a platform to augment his existing fleet or tap into new markets.

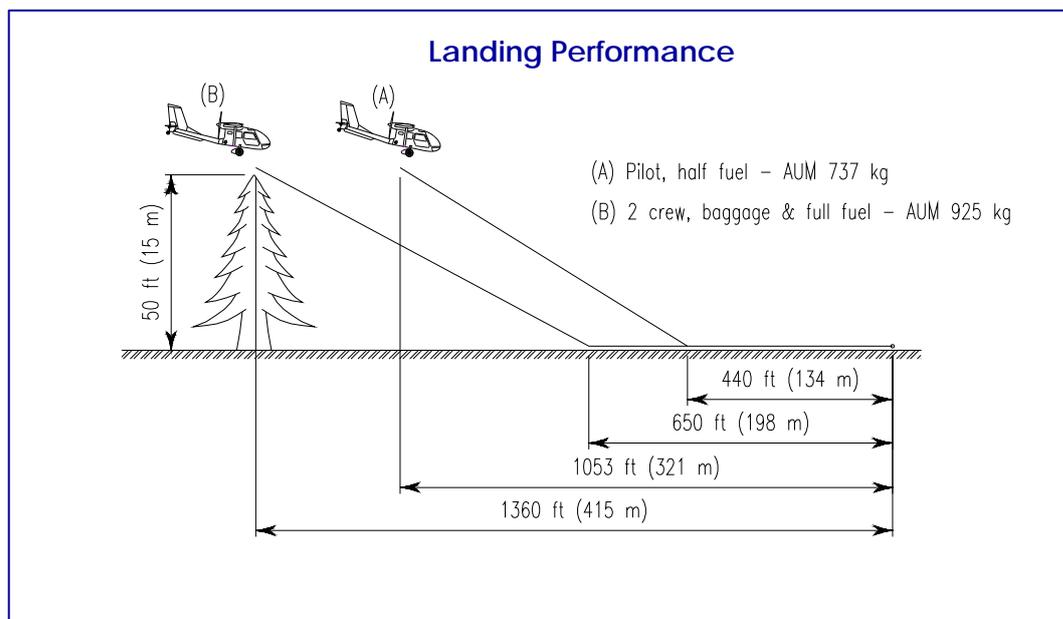
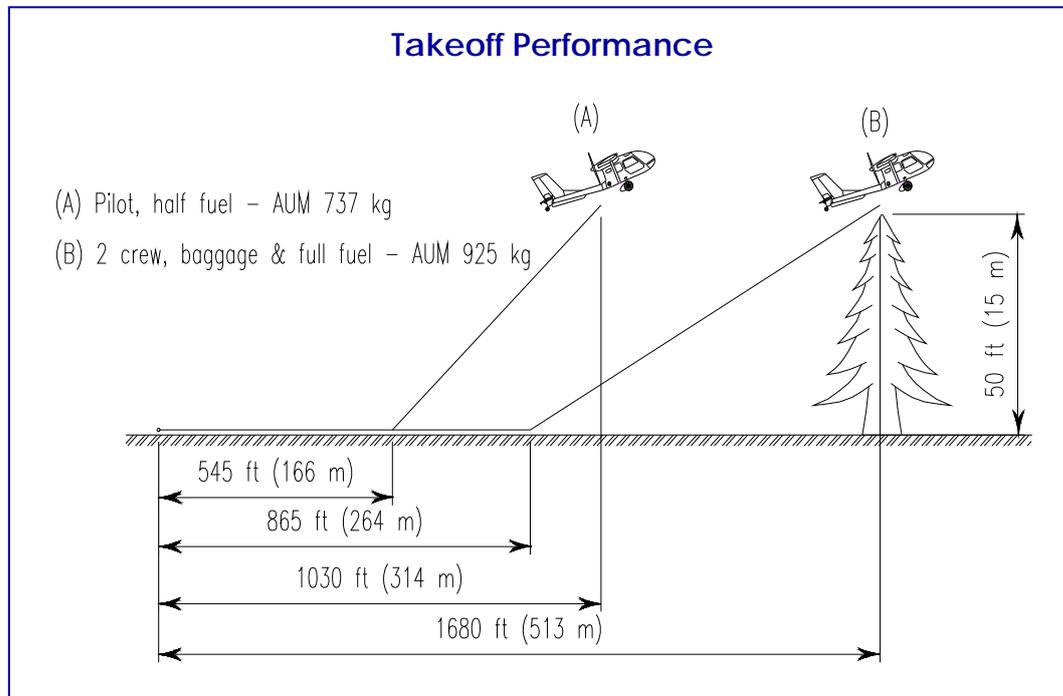
Applications:

- Agriculture, Stock and Crop Monitoring
- Border patrol, Crime Prevention, Detection and Pursuit
- Customs Surveillance
- Environmental Survey
- Fisheries
- Forest Fire Detection and Control
- Game Spotting
- Illicit Crop Detection
- News Gathering and Traffic Reporting
- Photographic Platform
- Pipe and Power Line Patrol
- Search and Rescue
- Survey and Mapping
- Private Flying and Flight Training

Indicative Overhaul Hours

Airframe life	75,000 hours
Propeller life	unlimited – on condition (suggest 5,000 hours)
Engine life	2,000 hours TBO (extendable on condition for private use)

Performance



Standard Equipment

ENGINE	Lycoming O-360-B2C
PROPELLER	Bishton 177 – wood composite
GENERAL	Airflow kit (Vortex Generators / Wing Cuffs) Cleveland 6" main wheels and brakes) 8.00 x 6 tyres 8" Scott tail wheel Dual Controls 4-point inertia-reel seat harnesses
ELECTRICAL	Alternator: 70 amp/24 volt Annunciator Panel Nav/Strobe Lights Landing / Taxi Lights Cabin fan heater-demister Concorde sealed battery RG24-20
INSTRUMENTS	Airspeed Indicator Altimeter Vertical Speed Indicator Turn-coordinator (Electric) Outside air-temp gauge Tachometer / Hour Meter Engine cluster (Oil p., Oil t., Fuel p., CHT, EGT, V/A) Fuel Gauges (L/R) Stall Warning Compass Clock Hobbs hour meter – air switch Attitude Indicator: SIGMA-TEK IO-01071 Directional Indicator: SIGMA-TEK IO-00588 Post light instrument lighting
AVIONICS	GPS / Comm.: GARMIN GNC 420 Comm2 GARMIN SL40 Transponder: GARMIN GTX 327 Audio Panel Garmin GMA 347 Encoder: AK-350
VACUUM SYSTEM	Vacuum Pump..... SIGMA-TEK ("Aeon" – piston type) Regulator.....RAPCO 2H3-12Gauge.....UMA(1") 10-01100 Filter.....RAPCO RA-IJ7-1
MISCELLANEOUS	Single base-colour polyurethane paint / 2 colour stripe Underwing Hardpoint Mounts Pilot's Operating Handbook Maintenance Manual Parts Manual

Optional Equipment

Electrical	Heated Pitot / Annunciator light
Propeller	HOFFMAN – HO44HM-177138LD wood-composite
Miscellaneous	External Power Socket
	Cargo Net
	Screen cover
	Jacking Blocks
	Aircraft Tool Kit (Basic)
	Intake Covers
	Custom Paint

Experience the SEEKER



A SEEKER Flight is a unique and memorable experience

The SEEKER can provide a cost- effective alternative to many conventional fixed and rotary – wing aircraft.

Indicative Hourly Operating Costs based on 500 hours flying / annum

Fuel (32 lts/hour @ (say) \$1.50/lt)	48.00
Oil	2.00
Propeller allowance	1.00
Engine allowance	12.50
Insurance (say \$7,500/annum)	15.00
100 hourly maintenance	20.00
TOTAL	AUD 98.50

