
Company Profile

Bellinger Systems Pty Ltd provides a comprehensive range of Design, Engineering, manufacturing and support services to Defence and relevant industries. Bellinger's experienced staff have over 100 years of combined experience in the electrical and electronic fields having transitioned from Bellinger Instruments Pty Ltd after 52 years of service.

We can design, modify, upgrade or re-manufacture items/equipment to suit your requirements.

Bellinger Systems Pty Ltd has extensive experience in installation, including racking and cabling in both on-shore and ship-based environments. We design custom interface and remote-control systems and equipment to allow interoperability of systems at the data and RF interface. Bellinger Systems Pty Ltd also designed several products to facilitate training and laboratory testing of TDL systems, to aid ship installation.

Our experience in installing trial systems in various environments has given us the ability to quickly react to unexpected circumstances and rapidly changing environments in the field.

We deliver repair services down to component level replacement which enables us to deliver a complete support solution either at our facility or onsite. We customise each job to provide the best and most comprehensive support, while optimising processes to meet client operational targets. We believe that our client's requirements are the focus of everything we do. We combine a "can-do" attitude with diligence and technical experience. Bellinger's facility is also equipped with a large range of test equipment which enables our trained staff to exceed our client's expectations.

Services Provided

1. Bespoke electronic equipment level and system level design and manufacture;
2. In-country design or build-to-print of electrical and electronic assemblies and equipment;
3. Drafting services including 3D modelling and drawing;
4. PCB design and prototype manufacture;
5. System integration, installation and commissioning;
6. Full overhaul of electrical and electronic equipment and systems.
7. Test equipment calibration;
8. Cable manufacture: power, audio, data and RF;
9. Supply of equipment, materials and spare parts;
10. Physical/environmental testing to MIL standards in conjunction with a specialised testing Laboratory;
11. Preventive and corrective maintenance on systems and component level items.

All of our work is performed to meet and exceed Australian Standards, Military standards and manufacturers recommendations. Our active participation in business and regulatory bodies ensures a current view of industry requirements and expectations.

Bellinger's technicians are specialist trained, with extensive knowledge and experience in their selected fields. A large proportion of our management team, engineers and trades people have been working in the Defence industry for over 20 years.

Our expertise is often in demand when Original Equipment Manufacturer's support for products is withdrawn or simply non-existent. Our staff have a proven track record of "supporting the unsupportable", often for long periods after their projected use-by dates or until an often-delayed replacement platform arrives.

Quality Assurance and Accreditation

- Bellinger Systems Pty Ltd maintains an AS/NZS ISO 9001:2015 Quality Management System.
- Our premises is Defence Security Cleared and we continue to be a member of the Defence Security Industry Program (DISP).

Experience:

- Over 350 uniquely different items either repaired, overhauled or supplied to the ANZAC platform;
- Provide in-service support to Collins Class Submarines, Armidale Class Patrol Boats, HMAS Choules, Canberra Class LHD's, DDG's and SPO managed equipment.

Previous Projects

- HFIP and tactical data link system design, manufacture and test at multiple Defence sites around Australia.
- Design and manufacture of prototype power management, data, signal and interface converters as well as power distribution panels for current ANZAC platforms undergoing Project SEA1442 Phase 4 Communications System Upgrade.
- Design, develop and manufacture complete Link 22 evaluation and development suite. (Currently being utilised by ADFTA to evaluate the benefits if Link 22 for Fleet).
- Design, develop and manufacture bespoke test and evaluation equipment for Link 11/22 to aid in support, training and system testing. (Two units are currently in service in Australia).
- Design and manufacture of replacement 24VDC uninterruptable power supply (UPS) module for the 24V power supply fitted to all ANZAC Class vessels.
- Upgrades of numerous RF Products Inc, UHF Multicouplers used in ANZAC Class an LHD communications.
- Design and manufacture M3B radio sub system for interfacing with ANZAC SEA 1442 Phase 4.
- Design, test and implement MIL-STD-167A and MIL-STD-901D Grade-A data acquisition and logging for communications equipment.
- Link 16 design and installation in the ANZAC Class land-based test site in Adelaide and on HMAS ANZAC.
- Design, build and install a Link 11 base station for NZ Navy.

Equipment Experience:

- RF, Communications and Navigation Equipment
- IFF System Equipment
- Radar/Sonar Systems
- Link 11/16/22
- Power Supplies/Inverters/UPS's
- Switchboards and Power Distribution
- High Current Circuit Breakers
- Control/Monitoring Panels
- Engine Control and Monitoring Equipment
- Test Equipment Repair/Calibration
- Circuit Card Assembly Repair
- Electronic Equipment Design and Manufacture
- General Electrical and Electronic Equipment
- Weapons Control
- Voice and Data Communication Systems
- Navigation Systems
- Precision GPS Systems
- Surveillance Receivers
- HDRLOS

Repair, Overhaul and Calibration Examples

- AC circuit breakers: current supply and measurement to 10,000A, 45 – 500Hz;
- Antennas including: radar, communications, countermeasures, direction finding, HF, VHF, UHF and IFF;
- System computers and servers;
- Communication switches, Red and Black, in particular DRS Shincom 3100 switch. Telephony and PABX, Intercoms and Broadcast Alarms;
- DC circuit breakers and meters up to 1000A;
- Diver communication including: Diver to Diver and Diver to Ship;
- Electronic Countermeasure Systems.
- Engine control and monitoring systems;
- External communications, including Satcom, UHF, VHF and HF radios, antennas, direction finding equipment and surveillance systems;
- Fire control systems including gun and missile;
- Flight director systems;
- Ground support equipment;
- IFF systems
- Internal communication systems including: public address, intercom and emergency broadcast;
- Lighting including: floodlights, emergency lights, signalling lights and divers lights;
- Link 11, 16 and 22 Systems designs, integration and maintenance;
- Microwave surveillance receivers;
- Power supplies, voltage regulators and convertors including: radar power supplies to 40kV, battery chargers, DC to single and three phase convertors and solid-state power supplies;
- Radar systems and modules;
- Recording systems: wide band, flight, instrumentation, analogue, digital, MIL-1553, SIGINT, CEPT1 & 2 etc;
- RF communication systems including: HF, VHF, UHF and SATCOM.
- Spectrum, vector, power, frequency and phase noise measurement is available to 40GHz;
- UHF Multicouplers including RF Products Inc. 800525 Multicouplers and USOM;
- RF Distribution and control systems.
- Satellite navigation systems;
- Sonar systems and modules;
- Submarine fitted equipment, e.g. invertors, sonar, displays, actuators, servo's, EM logs and probes;
- Test equipment;
- TV cameras and monitors including: director aim and gun barrel cameras; and
- UPS systems including Clary Mil Spec units.

Company Details

ABN 89 633 874 656

ADDRESS 4-6 Muriel Avenue
Rydalmere, NSW 2116
Australia

POSTAL ADDRESS 4-6 Muriel Avenue
Rydalmere, NSW 2116
Australia

Tel: +61 (0) 2 9684 1424

Website: www.bellinger.com.au

Company Contact Details:

David Hartshorne
General Manager
dave@bellinger.com.au

Stephen Wood
Manager, WA Operations
steve@bellinger.com.au

Document Management and Control

Scheduled for review: **Management Review – 2021**

Please direct any query or suggestion regarding this document to the Quality Manager.

Action	Version	Description of Action Taken	Date	Approved
Drafted	0.10	Document drafted	18/06/2019	Steve Wood
Approved	1.00	Document approved	15/07/2019	David Hartshorne
Amended	1.10	Company logo and contact information updated	16/04/2020	David Hartshorne
Amended	1.20	Minor typographical error corrected. (CAR 22/2020)	25/05/2020	David Hartshorne
Reviewed	2.00	Document reviewed – Management Review (14/12/2020)	14/12/2020	David Hartshorne
Amended	2.10	Review and amendment of the Company Profile, Services Provided, Previous Staff Projects and Repair, Overhaul and Calibration Examples sections. (CAR 05/2021)	31/03/2021	David Hartshorne