

## **Senior Technical Specialist - George Brown**

B.Sc. (math physics engineering)

Diploma in Electrical Engineering Technology

STCW marine engineer

Military (naval) trained

Former Transport Canada Ship Safety Surveyor

Certified OCMIF / SIRE inspector

A+ Certified PC technician

### **Naval Architecture**

Appointed marine surveyor under Canada Shipping Act to survey vessels

- Knowledge of hull structures and fire protection
- Familiar with structural repair methods and evaluation
- Experience with propellers, thrusters and rudders for vessel control
- Knowledge of factors affecting vessel stability – stability points, free surface, CG, buoyancy
- Designed and deployed mooring systems for current meters and wave riders.
- Knowledge of vessel openings and control of, launch and recovery systems, mission equipment
- Experience background includes passive and active corrosion control systems
- Has several years of experience in vessel surveys and condition evaluation
- Background includes application of Classification Society rules and Canada shipping Act in evaluation and survey of vessels.
- Operational experience in operation, maintenance and repair of cargo lifting equipment
- Previously, block and tackle inspector with Transport Canada

### **Marine Engineering**

B.Sc. in engineering principals and certified STCW marine engineer

- Expert in marine electrical distribution systems – design, construction, test, evaluate, maintain. Participated in development of national standards for marine electrical systems
- Completed several FMEA studies of marine power plants and dynamic positioning systems.
- Generated test and trials programs for commissioning of marine systems.
- Conducted commissioning trials and system testing for oil rigs and ships
- Managed projects for the construction and maintenance of vessels
- Knowledgeable in the application of marine thrusters, propellers and rudders
- Experienced in the design and application of marine instrumentation and control systems, including PLC control of machinery systems
- Selected cable and documented interface requirements for marine systems
- Maintained ship's auxiliary systems – refrigeration, air handling, waste, potable water...
- Maintained and operated deck machinery and cargo handling equipment
- Administered a vibration analysis program across a fleet of vessels
- Performed analysis of gas turbine control system. Trained in GT operations.

## **Communication and Navigation Systems**

Previously employed by a marine electronics company; Atlantic Electronics.

- Installed and tested marine radio, radar, GPS, sonar, navtex and autopilot systems
- Familiar with DSC radio control
- Can tune antennas for HF/MF communication (adjust SWR)
- Background in networking includes digital signal processing
- Have consulted on the operation and application of UPS systems
- Installed and maintained instrumentation and monitoring systems for ships
- Involved in the design of control consoles for ships (CCG 500 class)
- Integrated vessel systems for navigation (radar, GPS, AIS, sonar) use of NMEA networks
- Installed and tested marine gyroscopes
- Aware of SOLAS requirements for EPIRBs, GMDSS, SART
- Installed and tested autopilot and dynamic positioning systems

## **Marine Informatics Technology**

Post-secondary education in networking technology and digital system design.

- Applied structured cabling to voice and data networks
- A+ certified PC technician
- Familiar with WAN and peer to peer networking topologies – star, mesh, ring
- Installed and aligned satellite communication antennae
- Installed and tested wireless networks
- Familiar with IT security methods
- Can deploy offsite mirroring for disaster recovery and business continuity
- Have used many windows and unix based applications
- Can test networks for loading and utilization

## **Aids to Navigation**

- Specified, installed, and maintained visual aids: nav lights, beacons, strobes
- Repaired, replaced and maintained fog horns
- Designed, deployed and recovered bouy and bouy mooring systems
- Familiar with requirements of collision regulations – markings, signs and signals

## **Integrated Logistics Support**

Performed duties of senior logistics support manager for machinery control systems for RCN.

- Managed assets for machinery control systems
- Followed DND standards for documentation control
- Identified configuration management elements of machinery control systems
- Analysed bid submissions for equipment to comply with requirements
- Determined sparing, transport, storage and maintenance requirements
- Developed training plans for personnel to manage of equipment
- Deployed predictive maintenance programs for health monitoring of equipment
- Educated in elements of contract law and mechanics lien act.
- Obtained extensive training in Integrated Logistics Support at Queen's University with DND

## **Infrastructure**

- Familiar with standards for helicopter landing facilities
- Certified for helicopter emergency duties
- Significant experience in evaluation of grounding systems for helicopter fueling
- Experienced in siting transportable accommodations, generating plants, and support buildings
- Experienced in supplying support services for remote installations – water, sewage, power

## **Health Safety Environment**

- Conduct HSE surveys of vessels
- Familiar with IMO emission standards
- Certified under WHMIS
- Knowledgeable in transport mechanisms in the environment
- Can use and maintain sensors to detect environmental contaminants (LEL, H<sub>2</sub>S)
- Trained in chemical, nuclear, and biological hazards
- Aware of hazards due to ionizing radiation – UV, laser, microwave, RF
- Participated in oil dispersion studies in marine environment – performed experiments and collected data
- Deployed and retrieved current meters, wave riders and other sensors for marine environment monitoring
- Previously, pollution control officer with Transport Canada
- Trained in marine emergency duties – fire, damage control, sea survival, rescue, first aid

## **Project List**

### **Vessels/ships**

Acergy Falcon  
Andrea Chouest  
Atlantic Condor  
Blue Marlin  
Bourbon Liberty 121  
Bourbon Liberty 201  
Burin Sea  
C Freedom  
C Fighter  
Campos Carrier  
Campos Challenger  
Campos Contender  
Chloe Candies  
Claire Candies  
Elizabeth C  
Global Hercules  
Global Orion  
Grand Slam  
Gulmar Falcon  
Helix Caesar  
HR Hughes  
Jascon 31  
Nanuq  
Nicki Candies  
Santo Supplier  
Seaforth Atlantic  
SeaJacks Kraken  
SeaJacks Zaratan  
StimStar II  
Technip Deep Blue  
Technip Pioneer  
Terrel Tide  
Trico Northern Canyon  
Trinity Sea

## **Rigs**

Delba III

Development Driller II

Development Driller III

Discoverer Enterprise

Herema Balder

Herema Thialf

Eirik Raude

Pelerin

Rowan Gorilla III

Vinland

West Aquarius

## **FMEA**

Adams Arrow

Atlantic Condor

Delba III

Global Orion

Kirt Chouest

Nicki Candies

Robert Adams

SeaJacks Kraken

SeaJacks Zaratan