

## **DRT Job Descriptions**

### ***Network Administration/Information Technology***

#### **Technician**

- Monitor and maintain DRT's network systems.
- Troubleshoot network and make improvements when necessary.
- Diagnosis and repair of workstations, servers, and computer network equipment.
- Installation of computer network equipment such as routers, firewall appliance and switches, workstations, Windows based servers, peripherals, and software.
- Other duties as assigned.

#### **Network Support Technician**

- Configure and setup client computers including re-installation of all Microsoft operating systems.
- Setup network access and email accounts on network servers for users.
- Install application software as required by user needs.
- Provide prompt, efficient and courteous help to resolve computer hardware / software problems.
- Provide training for new users on proper use of the corporate network.
- Provide basic network support of various network software systems, including email, internet access.
- Maintain virus protection software on all systems using management software.
- Provide basic computer repair / upgrade support (memory / disk upgrades, change power supply / fans, etc.
- Setup voicemail accounts within the phone system, setup and move phone terminals including patching phone lines.
- Willing and able to conduct general facility support functions including prepare offices for new employees, moving desks and tables, hanging white boards, etc.
- Other duties as assigned.

### ***Field Services***

#### **Field Service Technician 90/90**

- Tier 1/2 maintenance support for in-house and OCONUS deployed DRT products in a harsh environment.
- Ability to lift DRT equipment in containers weighing 70 pounds for deployment onto Helicopters, Fixed Wing Aircraft, and various military ground vehicles.
- Upgrade, Repair and Maintain DRT equipment in a harsh environment.
- Ability to deploy with US forces on Helicopters, fixed wing aircraft, and various ground vehicles, such as Humvee's, and Bradley Fighting vehicles over rough terrain.
- Individual will also conduct Training in both formal and informal (mostly OJT) environments.
- Conduct briefings to military personnel.
- Maintain equipment inventories.
- Maintain required documentation.
- Other duties as assigned.

Individual must have a background in electronics and computers. This position requires deployment to overseas War Zone locations for extended periods (90 to 100 days at a time on a rotating basis.

**TS/SCI Security Clearance with Polygraph required**

#### **Field Service Trainer**

- Provide training classes locally and on travel in both formal and informal manners.
- Travel to customer sites for various periods of time (usually 1 week, but can be more).
- Provide hardware and software demonstrations tailored to the customers' operational needs.
- Assist with software acceptance testing and documenting any found issues.
- Develop and maintain training course material to include presentations, exercises, tests, etc.
- Provide technical support via the phone, email or other as necessary while supporting the Customer Service Desk.

- Provide direct field support to customers and end-users on short notice.
- Continue to expand knowledge base as hardware and software products increase.
- Quickly learn new products, then turnaround and teach at various levels from a beginning operator to a technician, to an engineer level.

**TS/SCI Security Clearance with Polygraph or ability to obtain same**

## ***Manufacturing***

### **Manufacturing Engineer**

- Monitor, analyze and report on DRT product assembly, module and system flows and issues.
- Interface the test environment processes with supporting departments. (ie QA, Test Engineering, Purchasing).
- Maintain control documents to track and manage existing work projects.
- Interface with contract manufacturing partners for analysis and corrective actions.
- Assist in the early development of DRT products from design reviews through production feedback at all phases.
- Monitor incoming product performance and defects.
- Perform special projects as assigned by the Manager of Manufacturing Engineering.
- Provide analysis for proper production load balancing and throughput.

### **Test Engineer**

- Job will entail design, development, programming, debug, and modification of test fixtures including planning to insure timely delivery and commissioning to production.
- Review all aspects of test platforms appropriate for the company's applications, including selection decisions.
- Provide cost and schedule estimates for subsequent approval.
- Follow test requirements from the product designer.
- Document design quickly and with high accuracy.
- Provide test liaison support with subcontractors as necessary.
- May involve occasional travel.

### **Electronics Assembler**

- Read and understand Bill of Materials.
- Solder components on boards with the use of documentation.
- Interpret drawings and PC layouts.
- Implement "Special Assemble Instruction".
- Some mechanical required.

### **RF Technician**

- Support RF Hardware (HW) projects in various capacities.
- Proficiency in using RF test equipment to characterize receiver and transmitter HW is required.
- Primary responsibility includes taking RF performance measurements to validate designs and characterize new components.
- Circuit level troubleshooting and soldering skills required.
- May assist with assembly, test, and repair of systems used by Engineering.
- Other responsibilities include general lab upkeep and support.

## ***Engineering***

### **Digital Hardware Engineering**

- Develop advanced high speed digital hardware boards used in high performance communications equipment.
- Ability to design advanced signal processing platforms from concept to production.
- Develops test strategies, devices, and systems.

- Performs stress and performance tests on a variety of computer hardware including circuit boards, processors and wiring.
- Other duties as assigned.

#### **Firmware Engineering**

- Develop firmware software for microprocessors and DSPs operating on radio communications equipment performing control data processing.
- Participate in the testing process through test review and analysis, test witnessing and certification of software.
- Estimate size and effort while taking quality and performance into consideration.
- Participate in the review of specifications for feasibility and completeness.
- Develop software component/subsystem specifications and standards, contribute to discussions and make presentations.
- Other duties as assigned.

#### **DSP Engineering**

- Performs technical research and digital signal process (DSP), some task management and ILS functions.
- Develop algorithms and software for implementation of the physical layer of wireless protocols.
- Develop software to support product enhancements.
- Estimate size and effort while taking quality and performance into consideration.
- Participate in the review of specifications for feasibility and completeness.
- Develop specifications and standards, contribute to discussions and make presentations.
- Other duties as assigned.

#### **DSP Software Engineering**

- Develop advanced algorithms and software for implementation and analysis of the physical layer of wireless protocols.
- Participate in the testing process through test review and analysis, test witnessing and certification of software.
- Estimate size and effort while taking quality and performance into consideration.
- Participates in the review of specifications for feasibility and completeness.
- Develop software component/subsystem specifications and standards, contribute to discussions and make presentations.
- Other duties as assigned.

#### **DSP-FPGA Engineer**

- Develop advanced algorithms for implementation and analysis of the physical layer of wireless protocols.
- Develop advanced FPGA designs used in advanced communications and signal processing platforms. Ability to design, code, simulate using Model Sim and integrate large FPGA designs from both Xilinx and Altera.
- Participate in the testing process through test review and analysis, test witnessing and certification of software.
- Estimate size and effort while taking quality and performance into consideration.
- Participate in the review of specifications for feasibility and completeness.
- Develop software component/subsystem specifications and standards, contribute to discussions and make presentations.
- Other duties as assigned.

#### **RF Hardware Engineering**

- Design and implement board-level reference design products and IC verification platforms.
- Design analog and digital circuits and subsystems including amplifiers, filters, power supplies, etc.
- Participate in all aspects of product design, from concept to system circuit, and PC board-level design, through successful volume production.
- Estimate size and effort while taking quality and performance into consideration.

- Develop advanced high speed RF hardware boards used in high performance communications equipment.
- Other duties as assigned.

### **Software Engineering**

- Design, modifies, develops, writes and implements software programming applications.
- Support and/or installs software applications/operating systems.
- Participate in the testing process through test review and analysis, test witnessing and certification of software.
- Design, plans, and coordinates work teams. Provides technical support to project team members.
- Other duties as assigned.

### **Protocol Software Engineering**

- Design and implement call processing applications for wireless networks in C++ for a Windows NT/2000/XP platform.
- Participate in the testing process through test review and analysis, test witnessing and certification of software.
- Estimate size and effort while taking quality and performance into consideration.
- Participate in the review of specifications for feasibility and completeness.
- Develop software component/subsystem specifications and standards, contribute to discussions and make presentations.
- Other duties as assigned.

### **Software Test Engineering**

- Perform software testing for DRT Software releases, triage software defects and maintain the Software lab.
- Assist in the development, maintenance, and upgrades to automated test scripts and architectures for application products.
- Other duties as assigned.

### **Antenna Engineer**

- Design and develop advanced HF/VHF/UHF antennas, with emphasis on steered beam and/or electronically scanned designs.
- Participate in all aspects of product design, from concept to system-, circuit-, and PC board-level design, through successful volume production.
- Other duties as assigned.

### **DF/GEO/ANT Engineering**

- Performs systems level technical design and development tasks.
- Conducts technical research, identifies hardware and software solutions for subsystems level requirements.
- Researches and resolves conflicts in system level hardware/software functionality.
- Design and develop antennas and related RF Radio Frequency products.
- Responsible for the design, development, implementation, and analysis of technical products and systems.
- Perform equipment engineering design evaluations.
- May develop a range of products.
- Recommend alterations to development and design to improve quality of products and/or procedures.
- Other duties as assigned.