

**REYNOLDS ELECTRICAL & ENGINEERING CO., INC.
POSITION DESCRIPTION**

POSITION TITLE: Radiation Instrument Technician I

JOB CODE : 051140

DATE PREPARED : July 31, 1983

Revised: October 27, 1993

SUMMARY STATEMENT

Under close supervision, the incumbent performs routine assignments to service, maintain, and calibrate radiological health instrumentation and portable radiological survey and gas measurement instruments in a timely manner.

DIMENSIONS

The incumbent reports to the Radiation Instrument Technician Supervisor or higher level supervisor, may receive guidance from lead persons or higher level technicians, and has no supervisory responsibility.

NATURE AND SCOPE

1. Assists in maintenance, repair, and calibration of various types of nuclear radiation detection, counting, and analysis equipment, analog and digital recording devices, and on-line computerized data gathering/display systems;
2. Maintains, services, repairs, calibrates, installs, and field verifies Remote Area Monitoring Systems; operates and maintains display systems for three independent laboratories to support the DOE's nuclear testing program at the Nevada Test Site (NTS);
3. May use various types of standard and specialized equipment such as oscilloscopes, pulsars, multivoltmeter (MVM), counters, and component testers, and traceable radioactive calibration standards, manufacturers'/customers' instructions, and applicable prescribed procedures;
4. With guidance, operates and uses several radiation standards during calibration of detection and monitoring devices;
5. Aids in installation and performance of equipment operational checkouts in various areas, buildings, and compounds at NTS;
6. Adheres to all Company EEO, affirmative action, environmental, health, safety, quality assurance, and security programs;
7. Performs related work as required.

ESSENTIAL JOB FUNCTIONS

Physical

<i>Constantly = Over 2/3 of time</i>
<i>Frequently = 1/3 - 2/3 of time</i>
<i>Occasionally = Less than 1/3 of time</i>

1. Frequent standing/walking in shop or outdoor areas including underground in tunnels up to one mile per shift;
2. Occasional sitting on stool in work shop or in vehicle while traveling to work sites;
3. Frequent lifting/carrying tools, equipment, or supplies up to 50 pounds;
4. Occasional push/pull exerting force up to 25 to 35 pounds while moving equipment or pounding stakes into ground

Radiation Instrument Technician I

5. Occasional climbing stairs/ladders to reach some areas;
6. Frequent bending/twisting at waist/knees/neck while installing/repairing equipment;
7. Occasional kneeling/crouching while installing/repairing equipment; occasionally works in cramped/confined spaces;
8. Constant use of both hands/arms in reaching/handling/grasping/fingering while working on equipment, driving motor vehicle, completing paperwork, etc.; overhead reaching required; fine motor skills required;
9. Constant use of sight abilities in inspecting, testing, installing and repairing equipment, driving, and maintaining a safe work environment; visual requirements include color vision, depth perception, peripheral vision, hand/eye/foot coordination, and visual acuity in near- and mid-range vision;
10. Constant use of speech/hearing abilities in communicating with coworkers, equipment users, and supervisors and giving and receiving instructions.

Mental

1. Constant mental alertness, attention to detail, and high degree of accuracy required in testing, inspecting, installing, and maintaining radiological equipment to exacting specifications and ensuring a safe work environment;
2. Must be able to follow oral and written instructions and established procedures and accomplish assignments within required time frame;
3. Must possess mechanical aptitude, logic, problem-solving, and planning/organizational skills to ensure that duties are completed in the most efficient and timely manner;
4. Must possess good mathematical skills including algebra and trigonometry and ability to read and understand work orders, technical manuals, parts catalogs, procedures, diagrams and illustrations, schematics, and other information necessary to complete installation, maintenance, and repairs;
5. Must possess good oral/written communication and interpersonal skills in order to deal with all types of craftspeople, scientists, engineers, supervisors, and outside agencies in a professional, effective, and clear manner;
6. Must be able to record data accurately and complete logs, reports, and other written information;
7. Must be able to deal with constant pressure from frequent interruptions, multiple priorities, and working around hazards/radioactive conditions.

WORKING CONDITIONS AND EQUIPMENT USED

Work is performed indoors in instrument repair shop and outdoors under all types of above and below ground conditions, in tunnels, mines, and on drill rigs, sometimes for extended periods of time.

Tools & Equipment Used: Standard and specialized radiological testing and counting equipment including, but not limited to, oscilloscopes, pulsars, MVM, counters, and component testers, traceable radioactive calibration standards, hand tools, power tools, sledge hammer, post driver, and motor vehicle. Safety equipment including, but not limited to, safety shoes, hearing protection, safety glasses, safety harness, back support belts, and respirators.

Radiation Instrument Technician I

REQUIRED TRAINING AND WORK EXPERIENCE

High school diploma or equivalent required. Completion of resident-type basic electronics school and one year of applicable work experience required.

OTHER SPECIAL QUALIFICATIONS

Valid driver's license required. Must be able to obtain "Q" clearance.

REYNOLDS ELECTRICAL & ENGINEERING CO., INC.
POSITION DESCRIPTION

POSITION TITLE: Radiation Instrument Technician II

JOB CODE : 051240

DATE PREPARED : July 31, 1983

Revised: October 27, 1993

SUMMARY STATEMENT

Under supervision, the incumbent performs routine assignments to service, maintain, and calibrate radiological health instrumentation and portable radiological survey and gas measurement instruments in a timely manner.

DIMENSIONS

The incumbent reports to the Radiation Instrument Technician Supervisor or higher level supervisor, may receive guidance from lead persons or higher level technicians, and has no supervisory responsibility.

NATURE AND SCOPE

1. Assists in maintenance, repair, and calibration of various types of nuclear radiation detection, counting, and analysis equipment, analog and digital recording devices, and on-line computerized data gathering/display systems;
2. Maintains, services, repairs, calibrates, installs, and field verifies Remote Area Monitoring Systems; operates and maintains display systems for three independent laboratories to support the DOE's nuclear testing program at the Nevada Test Site (NTS);
3. May use various types of standard and specialized equipment such as oscilloscopes, pulsars, multivoltmeter, counters, and component testers, traceable radioactive calibration standards, manufacturers'/customers' instructions, and applicable prescribed procedures;
4. Generally operates and uses several radiation standards during calibration of detection and monitoring devices;
5. Installs and performs equipment operational checkouts in various areas, buildings, and compounds at NTS;
6. Fabricates circuits and devices as required for special applications;
7. Performs periodic maintenance, calibration, and performance checks of mini-scalers and single channel analyzers;
8. Adheres to all Company EEO, affirmative action, environmental, health, safety, quality assurance, and security programs;
9. Performs related work as required.

ESSENTIAL JOB FUNCTIONS

Physical

<i>Constantly = Over 2/3 of time</i>
<i>Frequently = 1/3 - 2/3 of time</i>
<i>Occasionally = Less than 1/3 of time</i>

1. Frequent standing/walking in shop or outdoor areas including underground in tunnels up to one mile per shift;
2. Occasional sitting on stool in work shop or in vehicle while traveling to work sites;

Radiation Instrument Technician II

3. Frequent lifting/carrying tools, equipment, or supplies up to 50 pounds;
4. Occasional push/pull exerting force up to 25 to 35 pounds while moving equipment or pounding stakes into ground;
5. Occasional climbing stairs/ladders to reach some areas;
6. Frequent bending/twisting at waist/knees/neck while installing/repairing equipment;
7. Occasional kneeling/crouching while installing/repairing equipment; occasionally works in cramped/confined spaces;
8. Constant use of both hands/arms in reaching/handling/grasping/fingering while working on equipment, driving motor vehicle, completing paperwork, etc.; overhead reaching required; fine motor skills required;
9. Constant use of sight abilities in inspecting, testing, installing and repairing equipment, driving, and maintaining a safe work environment; visual requirements include color vision, depth perception, peripheral vision, hand/eye/foot coordination, and visual acuity in near- and mid-range vision;
10. Constant use of speech/hearing abilities in communicating with coworkers, equipment users, and supervisors and giving and receiving instructions.

Mental

1. Constant mental alertness, attention to detail, and high degree of accuracy required in testing, inspecting, installing, and maintaining radiological equipment to exacting specifications and ensuring a safe work environment;
2. Must be able to follow oral and written instructions and established procedures and accomplish assignments within required time frame;
3. Must possess mechanical aptitude, logic, problem-solving, and planning/organizational skills to ensure that duties are completed in the most efficient and timely manner;
4. Must possess good mathematical skills including algebra and trigonometry and ability to read and understand work orders, technical manuals, parts catalogs, procedures, diagrams and illustrations, schematics, and other information necessary to complete installation, maintenance, and repairs;
5. Must possess good oral/written communication and interpersonal skills in order to deal with all types of craftspeople, scientists, engineers, supervisors, and outside agencies in a professional, effective, and clear manner;
6. Must be able to record data accurately and complete logs, reports, and other written information;
7. Must be able to deal with constant pressure from frequent interruptions, multiple priorities, and working around hazards/radioactive conditions.

WORKING CONDITIONS AND EQUIPMENT USED

Work is performed indoors in instrument repair shop and outdoors under all types of above and below ground conditions in tunnels, mines, and on drill rigs, sometimes for extended periods of time.

Radiation Instrument Technician II

Tools & Equipment Used: Standard and specialized radiological testing and counting equipment including, but not limited to, oscilloscopes, pulsars, MVM, counters, and component testers, traceable radioactive calibration standards, hand tools, power tools, sledge hammer, post driver, and motor vehicle. Safety equipment including, but not limited to, safety shoes, hearing protection, safety glasses, safety harness, back support belts, and respirators.

REQUIRED TRAINING AND WORK EXPERIENCE

High school diploma or equivalent required. Completion of resident-type basic electronics school and two years of applicable work experience required.

OTHER SPECIAL QUALIFICATIONS

Valid driver's license required. Must be able to obtain "Q" clearance.

**REYNOLDS ELECTRICAL & ENGINEERING CO., INC.
POSITION DESCRIPTION**

POSITION TITLE: Radiation Instrument Technician III

JOB CODE : 051320

DATE PREPARED : July 31, 1983

Revised: October 27, 1993

SUMMARY STATEMENT

Under general supervision, the incumbent performs detailed assignments to service, maintain, and calibrate radiological health instrumentation and portable radiological survey and gas measurement instruments in a timely manner.

DIMENSIONS

The incumbent reports to the Radiation Instrument Technician Supervisor or higher level supervisor and may provide guidance to subordinate technicians and act as a lead person.

NATURE AND SCOPE

1. Performs detailed assignments in the maintenance, repair, and calibration of various types of nuclear radiation detection, counting, and analysis equipment, analog and digital recording devices, and on-line computerized data gathering/display systems;
2. Maintains, services, repairs, calibrates, installs, and field verifies Remote Area Monitoring Systems (RAMS); operates and maintains display systems for three independent laboratories to support the DOE's nuclear testing program at the Nevada Test Site (NTS);
3. Operates, services, and maintains Geostationary Operational Environment Satellite antenna; services and repairs Uninterruptable Power Supply System associated with computer and display systems;
4. May use various types of standard and specialized equipment such as oscilloscopes, pulsars, multivoltmeter, counters, and component testers, traceable radioactive calibration standards, manufacturers'/customers' instructions, and applicable prescribed procedures;
5. Generally operates and uses several radiation standards during calibration of detection and monitoring devices; under general supervision, maintains, repairs, and calibrates radioactive calibration standards in accordance with applicable American National Standards Institute standards and standard operating procedures;
6. Installs and performs equipment operational checkouts in various areas, buildings, and compounds at NTS;
7. Fabricates circuits and devices as required for special applications;
8. Performs periodic maintenance, calibration, and performance checks of mini-scalers and single channel analyzers;
9. May guide and train other junior technicians;
10. Adheres to all Company EEO, affirmative action, environmental, health, safety, quality assurance, and security programs;
11. Performs related work as required.

Radiation Instrument Technician III

ESSENTIAL JOB FUNCTIONS

<i>Constantly = Over 2/3 of time</i>
<i>Frequently = 1/3 - 2/3 of time</i>
<i>Occasionally = Less than 1/3 of time</i>

Physical

1. Frequent standing/walking in shop or outdoor areas including underground in tunnels up to one mile per shift;
2. Occasional sitting on stool in workshop or in vehicle while traveling to work sites;
3. Frequent lifting/carrying tools, equipment, or supplies up to 50 pounds;
4. Occasional push/pull exerting force up to 25 to 35 pounds while moving equipment and pounding stakes into ground;
5. Occasional climbing stairs/ladders to reach some areas;
6. Frequent bending/twisting at waist/knees/neck while installing/repairing equipment;
7. Occasional kneeling/crouching while installing/repairing equipment; occasionally works in cramped/confined spaces;
8. Constant use of both hands/arms in reaching/handling/grasping/fingering while working on equipment, driving motor vehicle, completing paperwork, etc.; overhead reaching required; fine motor skills required;
9. Constant use of sight abilities in inspecting, testing, installing and repairing equipment, driving, and maintaining a safe work environment; visual requirements include color vision, depth perception, peripheral vision, hand/eye/foot coordination, and visual acuity in near- and mid-range vision;
10. Constant use of speech/hearing abilities in communicating with coworkers, equipment users, and supervisors and giving and receiving instructions.

Mental

1. Constant mental alertness, attention to detail, and high degree of accuracy required in testing, inspecting, installing, and maintaining radiological equipment to exacting specifications and ensuring a safe work environment;
2. Must be able to follow oral and written instructions and established procedures and accomplish assignments within required time frame;
3. Must possess mechanical aptitude, logic, problem-solving, and planning/organizational skills to ensure that duties are completed in the most efficient and timely manner;
4. Must possess good mathematical skills including algebra and trigonometry and ability to read and understand work orders, technical manuals, parts catalogs, procedures, diagrams and illustrations, schematics, and other information necessary to complete installation, maintenance, and repairs;
5. Must possess good oral/written communication and interpersonal skills in order to deal with all types of craftspeople, scientists, engineers, supervisors, and outside agencies in a professional, effective, and clear manner;
6. Must be able to record data accurately and complete logs, reports, and other written information;
7. Must be able to deal with constant pressure from frequent interruptions, multiple priorities, and working around hazards/radioactive conditions;

Radiation Instrument Technician III

8. Must possess good leadership/training skills in order to provide training and guidance to subordinate technicians in a positive and effective manner.

WORKING CONDITIONS AND EQUIPMENT USED

Work is performed indoors in instrument repair shop and outdoors under all types of above and below ground conditions in tunnels, mines, or on drill rigs, sometimes for extended periods of time.

Tools & Equipment Used: Standard and specialized radiological testing and counting equipment including, but not limited to, oscilloscopes, pulsars, MVM, counters, and component testers, traceable radioactive calibration standards, hand tools, power tools, sledge hammer, post driver, and motor vehicle. Safety equipment including, but not limited to, safety shoes, hearing protection, safety glasses, safety harness, back support belts, and respirators.

REQUIRED TRAINING AND WORK EXPERIENCE

High school diploma or equivalent required. Completion of a resident-type basic electronics school and six years of applicable work experience required or an Associates of Art degree in Electronics with two years of applicable work experience.

OTHER SPECIAL QUALIFICATIONS

Valid driver's license required. Must be able to obtain "Q" clearance. Must be actively pursuing certification with the National Institute for Certification in Engineering Technologies or the International Society of Certified Electronic Technicians or a Federal Communications Commission General Radio-Telephone License.

REYNOLDS ELECTRICAL & ENGINEERING CO., INC.
POSITION DESCRIPTION

POSITION TITLE: Radiation Instrument Technician IV

JOB CODE : 051525

DATE PREPARED : July 31, 1983

Revised: October 27, 1993

SUMMARY STATEMENT

Under very little or no supervision, the incumbent performs the most complex assignments to service, maintain, and calibrate radiological health instrumentation and portable radiological survey and gas measurement instruments in a timely manner.

DIMENSIONS

The incumbent reports to the Radiation Instrument Technician Supervisor or higher level supervisor, provides guidance to subordinate technicians, and acts as a lead person over specific functions through the extended authority of supervision with some planning and coordination required.

NATURE AND SCOPE

1. Performs detailed assignments in the maintenance, repair, and calibration of various types of nuclear radiation detection, counting, and analysis equipment, analog and digital recording devices, and on-line computerized data gathering/display systems;
2. Acts as lead technician; assists in training and direction of assigned personnel; reviews and assigns work of subordinate technicians;
3. Maintains, services, repairs, calibrates, installs, and field verifies Remote Area Monitoring Systems; operates and maintains display systems for three independent laboratories to support the DOE's nuclear testing program at the Nevada Test Site (NTS);
4. Operates, services, and maintains Geostationary Operational Environment Satellite antenna and Uninterruptable Power Supply System associated with computer and display systems;
5. May use various types of standard and specialized equipment such as oscilloscopes, pulsars, multivoltmeter (MVM), counters, and component testers, traceable radioactive calibration standards, manufacturers'/customers' instructions, and applicable prescribed procedures;
6. Generally operates and uses several radiation standards during calibration of detection and monitoring devices; maintains, repairs, and calibrates radioactive calibration standards in accordance with applicable American National Standards Institute standards and standard operating procedures;
7. Installs and performs equipment operational checkouts in various areas, buildings, and compounds at NTS;
8. Fabricates circuits and devices as required for special applications;
9. Performs periodic maintenance, calibration, and performance checks of mini-scalers and single channel analyzers; services, repairs, and calibrates signal conditioners and buffers; programs data collection on semi-portable and portable platforms;
10. Adheres to all Company EEO, affirmative action, environmental, health, safety, quality assurance, and security programs;
11. Performs related work as required.

Radiation Instrument Technician IV

ESSENTIAL JOB FUNCTIONS

<i>Constantly = Over 2/3 of time</i>
<i>Frequently = 1/3 - 2/3 of time</i>
<i>Occasionally = Less than 1/3 of time</i>

Physical

1. Frequent standing/walking in shop or outdoor areas including underground in tunnels up to one mile per shift;
2. Occasional sitting on stool in work shop or in vehicle while traveling to work sites;
3. Frequent lifting/carrying tools, equipment, or supplies up to 50 pounds;
4. Occasional push/pull exerting force up to 25 to 35 pounds while moving equipment or pounding stakes into ground;
5. Occasional climbing stairs/ladders to reach some areas;
6. Frequent bending/twisting at waist/knees/neck while installing/repairing equipment;
7. Occasional kneeling/crouching while installing/repairing equipment; occasionally works in cramped/confined spaces;
8. Constant use of both hands/arms in reaching/handling/grasping/fingering while working on equipment, driving a motor vehicle, completing paperwork, etc.; overhead reaching required; fine motor skills required;
9. Constant use of sight abilities in inspecting, testing, installing and repairing equipment, driving, and maintaining a safe work environment; visual requirements include color vision, depth perception, peripheral vision, hand/eye/foot coordination, and visual acuity in near- and mid-range vision;
10. Constant use of speech/hearing abilities in communicating with coworkers, equipment users, and supervisors and giving and receiving instructions.

Mental

1. Constant mental alertness, attention to detail, and high degree of accuracy required in testing, inspecting, installing, and maintaining radiological equipment to exacting specifications and ensuring a safe work environment;
2. Must be able to follow oral and written instructions and established procedures and accomplish assignments within required time frame;
3. Must possess mechanical aptitude, logic, problem-solving, and planning/organizational skills to ensure that duties are completed in the most efficient and timely manner;
4. Must possess good mathematical skills including algebra and trigonometry and ability to read and understand work orders, technical manuals, parts catalogs, procedures, diagrams and illustrations, schematics, and other information necessary to complete installation, maintenance, and repairs;
5. Must possess excellent oral/written communication and interpersonal skills in order to deal with all types of craftspeople, scientists, engineers, supervisors, and outside agencies in a professional, effective, and clear manner;
6. Must be able to record data accurately and complete logs, reports, and other written information;
7. Must be able to deal with constant pressure from frequent interruptions, multiple priorities, and working around hazards/radioactive conditions;

Radiation Instrument Technician IV

8. Must possess excellent leadership/training skills in order to provide training and guidance to subordinate technicians in a positive and effective manner.

WORKING CONDITIONS AND EQUIPMENT USED

Work is performed indoors in instrument repair shop and outdoors under all types of above and below ground conditions, at high elevation (up to 8,000 feet), in tunnels, mines, or on drill rigs, sometimes for extended periods of time.

Tools & Equipment Used: Standard and specialized radiological testing and counting equipment including, but not limited to, oscilloscopes, pulsars, MVM, counters, and component testers, traceable radioactive calibration standards, hand tools, power tools, sledge hammer, post driver, and motor vehicle. Safety equipment including, but not limited to, safety shoes, hearing protection, safety glasses, safety harness, back support belts, and respirators.

REQUIRED TRAINING AND WORK EXPERIENCE

High school diploma or equivalent and completion of a resident-type basic electronics school with eight years of applicable work experience are required; or Associates of Art degree in Electronics and four years of applicable work experience required.

OTHER SPECIAL QUALIFICATIONS

Valid driver's license required. Must be able to obtain "O" clearance. Must be certified with the National Institute for Certification in Engineering Technologies or the International Society of Certified Electronic Technicians or a Federal Communications Commission General Radio-Telephone License.