

Report ID: NIHR148
Report Date: 03/21/2012
Database:

Page No : 1
Run Time: 08:38:07

WORK ROLE: 29AA

WORKROLE TITLE: GEOINT Analyst (Geodetic Orbit Sciences)

WORKROLE DESCRIPTION:

GEOINT Analyst (Geodetic Orbit Sciences) apply orbital mechanics and network systems analysis to acquire, process, and analyze satellite data. They develop, evaluate, and use algorithms and tools to provide integrity monitoring and determine precise ephemerides and other information. They analyze satellite ranging and timing information in order to identify anomalies in both real-time and post-fit scenarios. These analysts handle technical and logistical details pertinent to remote command and control of a worldwide network of satellite tracking stations. They provide in-depth technical expertise on satellite issues to internal and external customers, and represent NGA in external community forums establishing DoD and Intelligence Community doctrine and policy.

ODNI CORE COMPETENCIES FOR ALL EMPLOYEES OF THE INTELLIGENCE COMMUNITY:

Adaptability	Build Professional/Tech Netwks	Continual Learning
Creative Thinking	Enterprise Perspective	Exploring Alternatives
Influencing/Negotiating	Information Sharing	Interpersonal Skills
Multi-media Communication	Oral Communication	Policy & Directives
Resource Management	Situational Awareness	Synthesis
Written Communication		

WORKROLE FUNCTIONAL COMPETENCIES:

Skills

Advising/Consulting	Algorithm Development	Building Managerial Networks
Customer Rqmts & Service	Data Analysis	Data Management
Data Preparation	Information Dissemination	Information Gathering & Resch
Monitor Station Operations	Quality Assurance	Signal Processing
Statistical Analysis		

Knowledges

Analytical Prcss & Tchnqs	Calculus	Collection & Tasking Prncpls
Data Evaluation Principles	Error Propagation Theory	GEOINT Doctrine
GIS Principles	GPS Data Reduction Techniques	GPS Functionality
GPS Satellite Data Types	GPS Selective Availability	GPS Signal Antispoofing
GPS Theory	Geod/Geophy Prod Sy (GGEPS)	Grids, Proj, Datum, Coords
ISO Processes & Procedures	Intelligence Issues	Linear Algebra
Multipath & Electromag Interf	NGA Org, Mission, & Vision	Network Adjustment Software
Orbital Analysis	Orbital Mechanics	Satellite Geodesy
Satellite Tool Kit	Software Programming Languages	Std Internet Protocol Commands
World Geodetic System (WGS)		

EDUCATION/LICENSES/CERTIFICATIONS:

A. Education: Bachelor's degree in Geodesy, Mathematics, Physical Science, or a related discipline that includes at least 30 semester (45 quarter) hours of coursework in any combination of Astronomy, Cartography, Computer Science, Engineering Science, Geodesy, Geology, Geomatics, Geophysics, Mathematics, Meteorology, Orbital Mechanics, Photogrammetry, Physical Science, Physics, Remote Sensing, or Surveying. Coursework must include differential equations and integral calculus. -OR- B. Combination of Education and Experience: A minimum of 30 semester (45 quarter) hours of coursework in any area listed in option A plus experience that demonstrates the ability to successfully perform the duties associated with this work. As a rule, every 30 semester (45 quarter) hours of college work is equivalent to one year of experience. Candidates should show that their combination of education and experience totals 4 years. -OR- C. Experience: Six years of experience in conducting work related to satellite operations, GPS surveying, Geodesy, Geophysics, or Wide Area Network analysis.

ENVIRONMENTAL/PHYSICAL REQUIREMENTS:

Distinguish principal colors and shades/hues of principal colors
Far visual acuity of 20/60 or better binocular with or without corrective
Near visual acuity of 20/20 or better with or without corrective lenses