June 2008

Position Description – Northern Region
Deputy Communications Duty Officer
THSP – Exception Position 5 - AD-K

The incumbent, acting under the direction of the Communications Duty Officer:

- Has the responsibility for the technical functions and duties in the area of incident radio communications including the related radio frequency spectrum resource.
- Provides operational guidance in the areas of incident radio frequency spectrum management for the entire nation during strength of force.
- Has responsibility for determining technical compatibility between proposed incident radio systems and radio frequency assignments for the interagency fire and aviation community on a national basis.
- Has responsibility for the resolution of incident radio frequency interference problems to incident radio systems, within the United States and including international interference problems with Mexico and Canada.
- Coordinates with the Geographic Area Coordination Centers (GACC) in assigning tactical, command, and air frequencies. Tracks all frequencies assigned to the GACC's. May work with the USDA-FS, Department of Interior and Federal Aviation Administration Spectrum Managers for temporary frequency assignments.
- Maintains and updates a database of all air, tactical, command and logistics frequencies, communications equipment and personnel (Communications Technicians, Communications Unit Leaders, and Communications Coordinators).
- Helps solve both communications equipment and frequency problems, for the field, during incident support.

The following knowledge and abilities are required:

- Expert knowledge at the professional level if incident radio communication system design, management and operation, with extensive experience in the management and utilization of the related radio frequency spectrum at all levels.
- Ability to make necessary technical evaluation of incident radio interference problems and by analysis (including applications of computer programs where appropriate) determines the cause and appropriate remedy.
- Ability to apply standard electronic and electrical engineering practices in the evaluation of a wide variety of incident radio facilities including a comprehensive and expert knowledge of special symbols and terminology related to frequency management activities, e.g. high frequency (HF), very high frequency (VHF), frequency bands, propagation methods modulation, class of station, types of emission, high and low-band, wide and narrow band, power output, bandwidth, etc.
- A comprehensive technical knowledge of the various types of emergency communications equipment available to support all-risk incidents. In addition, the incumbent has the experience and ability to respond to all types of situations and to decide the proper course of action and then to rapidly develop viable concepts

for communications support that meets the needs of the assigned incident. The incumbent must organize, manage, and meld this equipment into a functioning emergency communications system or systems during all-risk incident assignments. Also included is adjustment of communications traffic flow in relation to system use and the expansion or contraction of the system to meet user requirements.

- A comprehensive knowledge of state of the art communications technologies and how to apply them either in an effective manner when designing emergency communications system or with the processes associated with designing communications systems for agency use. These designs take into account the need for digital encryption, cellular radio, satellite communications techniques and the current digital requirements.
- A complete and comprehensive technical and field operational knowledge of the radio propagation characteristics of low power. Portable communications equipment operating in the VHF Lo-band, VHF Hi-band, and UHF frequency bands utilizing analog and/or digital signaling, frequency modulation (FM), as well as, equipment operating in the VHF frequency band of 118-135 MHz utilizing amplitude modulation (AM). In addition, a comprehensive knowledge of L and KU band microwave propagation characteristic is needed for the installation and operation of emergency satellite and terrestrial microwave systems used in conjunction with the low power systems. This includes a complete comprehension of the path/power limitation and the effect of various terrain/foliage types for both FM and AM modulation schemes for all frequency bands from HF to KU band microwave.
- Knowledge of, and experience as, Communications Technician, and Communications Unit leader in Type I, II and All-Risk Incidents, and Communications Coordinator. Knowledge will include duties, theory, and practice, and must be at sufficient level to design and explain complex linking systems to field units.

Required courses are as follows:

- Incident Communications Technician S-258
- Communications Unit Leader S-358
- Communications Coordinator is suggested

/s/ Jane M. Haker
Incident Business Coordinator
Region One - USFS