1 5 AUG 1986

MEMORANDUM FOR: Deputy Director for Administration

VIA : Chief, Safety Division, OMS

Chief, Real Estate and Construction

Division, Office of Logistics

Director of Logistics

FROM : Arvel D. Tharp, M.D.

Director of Medical Services

SUBJECT : Memorandum of Understanding for Support in

the Field of Fire Protection and Life Safety

Matters

Attached for your approval is a Memorandum of Understanding concerning the newly established Fire Protection Engineer position for the Real Estate and Construction Division, Office of Logistics. This position is to be filled by a fire protection engineer from the Safety Division on a rotational basis.

SIGNED ARVEL D. THARP, M.D.

Arvel D. Tharp, M.D.

Attachment

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MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding addresses support required from the Safety Division, Office of Medical Services, Directorate of Administration in the field of fire protection engineering.

1. Background/Justification: The Real Estate and Construction Division, Office of Logistics has a need for a Fire Protection Engineer to be assigned in RECD to provide engineering support and guidance to ensure the integration of fire protection and life safety requirements in CIA facilities. The intent is to ensure that the CIA fire protection and life safety criteria is addressed at each project concept stage and throughout the design of each project. Reference Headquarters Regulation 12-1 par. e.

2. Assignment Information:

- a. Incumbent must have a Bachelor's degree in Fire Protection Engineering from an accredited College or University and must be knowledgeable in Life Safety codes:
 - b. Proposed Grade of Position: GSE-13
 - c. Proposed Position Title: Fire Protection Engineer.
 - d. Proposed Date of Assignment: 1 September 1986
- e. Duration of this Assignment: Rotational for two years with possible extension of six months to a year. Prior to expiration of assignment, incumbent will indicate, in writing, his desire regarding extension of the assignment.
- f. Day-to-day administration and handling will be the responsibility of RECD/OL. Career training can be recommended and approved by Chief, SD/OMS with the concurrence of RECD/OL. Specific job related training can be approved by RECD/OL with certification of completion forwarded to SD/OMS. Training and travel incidental to this position will be paid by RECD/OL.

3. Responsibilities:

- a. The incumbent's primary responsibility will be to provide engineering support and guidance to ensure the integration of fire protection and life safety requirements in CIA facilities, addressing this criteria at the concept stage and throughout the design of each project.
- b. Detailed responsibilities and duties are provided in the attached job description for the position.

4. Administration and Career Management:

- a. The OMS/DDA appropriate Career Panel will be responsible for ranking and evaluating the incumbent for promotion in the position.
- b. Performance Appraisal Report will be prepared by Chief, FEB/RECD/OL, who will provide a copy to Chief, Safety Division.
- c. Direct supervision will be provided by Chief, FEB/RECD/OL and guidance will be provided by Chief, FPB/SD/DDA. Incumbent will provide weekly activity reports to Chief, SD/OMS/DDA.

CONCUR:	
Chief, Safety Division, OMS	Date
SIGNED ARVEL D. THARP, M.D.	1 5 AUG 1986
Director, Office of Medical Services	Date
(signed) Chief, Real Estate and Construction Division	2 1 AUG 1986 Date
Director, Office of Logistics	Date
APPROVAL:	
Deputy Director for Administration	Date

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Position Description: Fire Protection Engineer Grade: GSE-13

Organization: Field Engineering Branch, Position No.

Real Estate & Construction
Division, Office of Logistics

I. JOB SUMMARY

In coordination with the Fire Protection Branch/Safety Division, assists in the implementation of the Agency's fire protection engineering program by ensuring that designs for new and renovated facilities are in compliance with fire protection engineering criteria and established engineering fundamentals. Serves as Project Engineer responsible for project management, development, and administration of facilities engineering for domestic and foreign facilities in support of the Agency's mission. Define facilities engineering requirement, cost requirements and methods for meeting the facility needs of the Agency's mission. Acting through the appropriate entities (GSA, DOD, FBO, or the private sector.), provide domestic and foreign engineering support for Agency facilities.

II. DUTIES

This position provides professional fire protection engineering expertise to complement other engineering disciplines within the Field Engineering Branch. Specific duties and responsibilities are outlined below.

1. Fire Protection Engineering (50%)

- a. Reviews architectural and engineering plans and specifications for new construction and major renovations to insure compliance with applicable fire protection and life safety criteria.
- b. Provides technical advice and guidance to Agency officials, project engineers, and management in the interpretation of fire protection and fire prevention regulations, standards and directives.
- c. Reviews shop drawings, relative to fire protection equipment being installed under contract for compliance with design plans and specifications.

- d. Designs fire protection, fire detection and fire extinguishing systems for new construction and renovations and acts as the contracting officers technical representative on fire protection enhancement projects.
- e. Inspects and tests for acceptance all fire alarm, fire detection, and fire suppression systems to ensure that they operate in accordance with contract requirements.
- g. Keeps knowledgeable of state-of-the-art advances in fire protection technology by attendance at special courses and conferences such as National Fire Protection Association and Society of Fire Protection Engineers.

2. Project Management (30%)

- a. Planning Review with the customer his request, checking for completeness as to present and future needs. Organize pertinent data, prepare time schedules, scopes of work, schedule for design and construction of project. Incorporate data that should be considered into the project, prepare preliminary drawings and cost estimates. Brief the requestor on the results of planning to insure that the problem is being answered.
- b. Administration Provide project administration by preparing complete contracts, serving as contracting officer's technical representative, reviewing and approving shop drawing submittals, and testing and inspecting items or equipment at Agency facilities or at vendors' warehouses.
- c. Provide supervision of project during construction. This includes revision of drawings due to changed conditions when required, and ensure that the construction quality and time schedule are met and that changes that arise during construction are resolved satisfactorily. Review and endorse contractor's payment request. Provide partial and final inspection of construction work. Make as-built drawings revisions to insure that all changes are properly recorded so as to provide the best information to maintenance or operating personnel. Track progress and make reports on daily basis for onsite activity and biweekly reports on projects progress.

2. Engineering Consulation (10%)

- a. To provide all necessary general engineering design work assigned by the Chief, Field Engineering Branch. This includes preliminary studies, site visits to determine existing conditions at facilities, communication with the requesting component of the Agency in order to establish needs, and the evaluation of all compiled data and the exercising of sound engineering judgment to reach the best and most economical solution and design. The preparation of final design, working drawings, technical specifications, and cost estimates for construction is required.
- b. This work is based upon the knowledge acquired during years of experience on design, estimating and actual construction work; the proper use of existing guidelines; the knowledge of the equipment and materials currently available in the market and the latest techniques on design and construction.
- c. The work is performed to fulfill the needs and requirements of the Agency either in the continental U.S. or in a foreign country.

3. Design and Estimating (10%)

- a. Design is accomplished either in-house, through an A-E contract or through another Government agency such as GSA, DOD, or State Department. The incumbent is required to ensure that the best design possible is achieved based on functional requirements, site location, Government furnished equipment, energy conservation, lighting, heating, air conditioning and ventilation requirements, safety and security requirements, and budget and time restrictions. The incumbent is responsible for the review of the work accomplished at various stages to insure that the completed design meets the objective.
- c. Providing cost estimates for projects from either preliminary or final stages which can serve as a basis for planning, preparing for budgets, or for negotiating design or construction contracts.

III. EVALUATION FACTORS

1. Knowledge Required by the Position

The position requires a Bachelor's degree in Fire Protection Engineering from an accredited college or university Professional knowledge of the concepts and principles in the science of fire protection engineering and related engineering fields to enable the incumbent to plan and carry out complex design projects encompassing a broad range of fire protection matters with minimal supervision. Five years of experience in design, supervision, estimating and construction of complex projects and a working knowledge of contract administration is necessary. Knowledge of foreign design and construction procedures is desirable.

2. Supervisory Control

Supervision is provided by the Chief, Field Engineering Branch. Work assignments are received from the Chief of the Branch, who determines the relative priorities and deadlines. The assignment is given in terms of the desired final product. The mode of accomplishment is left to the incumbent. In the case of more complex projects, the merits of various possible solutions may be thouroughly discussed between supervisor and incumbent.

3. Guidelines

The work is performed based on experience and sound engineering practice requiring the incumbent to exercise professional judgment. Data is available from National Fire Codes, Regional Building Codes, technical publications of professional associations, engineering handbooks, commercial catalogs, data sheets, Agency regulations and the Defense Acquisition Regulations. These guidelines provide general information which requires the incumbent to deviate from standard practices and research new developments in order to solve various engineering problems.

4. Complexity

The incumbent is responsible for providing professional advice and direction on a broad range of fire protection engineering issues. The incumbent is not solely dedicated to the science of fire protection engineering. The position requires that training and experience in the other engineering fields. The incumbent must use his own discretion based on his past experience and knowledge of engineering fields to consider differences in courses of action and refine methods or develop new techniques, concepts, or programs in solving problems.

5. Scope and Effect

Fire protection engineering minimizes the impact a fire would have upon the Agency by preserving the integrity of its operational activities and vital programs. General engineering work and its effect is to process an engineering problem from its inception through design and construction to an acceptable solution. Errors in judgment would directly impact upon Agency operations and activities. The facilities program requires operational support to sensitive programs requiring the incumbent to work within security constraints. The individual is often required to make "on-the-spot" decisions regarding engineering problems to ensure continuance of an operation and timely success.

6. Personal Contacts

Contacts are made constantly with members of other Agency components both at Headquarters and in the field. Contact is occasionally made with representatives of city and county governments and other Government agencies (military services, Foreign Buildings Office of State Department, General Services Administration), with private architectural engineering firms and contractors, and with vendors. During TDY or PCS assignments, contacts are made with foreign nationals.

7. Purpose of Contacts

The planning, design, construction and supervision of an engineering project are the usual purposes of personal contact. This includes coordination efforts with Agency personnel to ensure that their needs are met and monitoring the effort of personnel outside of the Agency to ensure that the product of their effort meets the Agency's needs.

8. Physical Demands

The physical demands vary from the demand for hands-on agility to bend, lift, manipulate tools and apply pressure, to simply negotiating construction sites, climbing or descending ladders, etc. The majority of the time there are no special physical demands.

9. Work Environment

Normally work is accomplished in an office environment. TDY's may include field work at remote locations, or locations considered hardship posts, where personnel may be subjected to extreme cold or heat, and other environmental differences found in a foreign country.

10. Supervision Exercised

Direct supervision is not normally a part of this position. The day-to-day direction of workers occurs but only in the technical field.