

POSITION DESCRIPTION

1. Agency PDCN 80448000

2. Reason for Submission <input checked="" type="checkbox"/> Redescription <input type="checkbox"/> New <input type="checkbox"/> Reestablishment <input type="checkbox"/> Other Explanation (Show Positions Replaced) Replaces F9571000, Civil Engineer, GS-810-11; F9572000, Architect, GS-808-11.	3. Service <input type="checkbox"/> HQ <input checked="" type="checkbox"/> Field	4. Empl Office Location	5. Duty Station	6. OPM Cert #	
	7. Fair Labor Standards Act Not Applicable		8. Financial Statements Required <input type="checkbox"/> Exec Pers Financial Disclosure <input type="checkbox"/> Employment & Financial Interests		9. Subject to IA Action <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	10. Position Status <input type="checkbox"/> Competitive <input checked="" type="checkbox"/> Excepted (32 USC 709) <input type="checkbox"/> SES (Gen) <input type="checkbox"/> SES (CR)	11. Position is <input type="checkbox"/> Supervisory <input type="checkbox"/> Managerial <input checked="" type="checkbox"/> Neither	12. Sensitivity <input type="checkbox"/> Non-Sensitive <input type="checkbox"/> Noncritical Sens <input type="checkbox"/> Critical Sens <input type="checkbox"/> Special Sens	13. Competitive Level 14. Agency Use OFF	

15. Classified/Graded by
 a. US Office of Pers Mgt b. Dept, Agency or Establishment c. Second Level Review d. First Level Review

Official Title of Position	Pay Plan	Occupational Code	Grade	Initials	Date
Architect/Engineer*	GS	800*	12	ajl	04 Mar 02

16. Organizational Title (If different from official title)
ANG Base Engineer

17. Name of Employee (optional)

18. Dept/Agency/Establishment - National Guard Bureau

a. First Subdivision - State Adjutant General
b. Second Subdivision - ANG Wing/Group Flying Base

c. Third Subdivision - Mission Support Directorate
d. Fourth Subdivision - Engineering Division
e. Fifth Subdivision -

19. Employee Review. This is an accurate description of the major duties and responsibilities of my position.

Employee Signature /Date (optional)

20. Supervisory Certification. I certify that this is an accurate statement of the major duties and responsibilities of this position and its organizational relationships, and that the position is necessary to carry out Government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes related to appointment and payment of public funds. False or misleading statements may constitute violations of such statutes or their implementing regulations.

a. Typed Name and Title of Immediate Supervisor

Signature _____ Date _____

b. Typed Name and Title of Higher-Level Supervisor/Manager (optional)

Signature _____ Date _____

21. Classification/Job Grading Certification: I certify this position has been classified/graded as required by Title 5 USC, in conformance with USOPM published standards or, if no published standards apply directly, consistently with the most applicable standards.

Typed Name and Title of Official Taking Action

ANDY J. LIEPNIEKS
Personnel Management Specialist

Signature _____ Date _____

//signed// 04 Mar 02

22. Standards Used in Classifying/Grading Position
 USOPM Handbook of Occupational Groups & Families, Jan. 1999, Definition for GS-801, General Engineering Series; Intro. to the Position Classification Standards; General Grade Evaluation Guide for Nonsupervisory Professional Engineering Positions GS-800, Jun. 1971; USOPM PCS for: Architecture, GS-808, Oct 1986; Civil Engineering, GS-810, Jun. 1966; Environmental Engineering, GS-819, May 1979; Mechanical Engineering, GS-830, Jun. 1977; Electrical Engineering, GS-850, Feb. 1971.

Information For Employees. The standards and information on their application are available in the personnel office. The classification of the position may be reviewed and corrected by the agency or OPM. Information on classification/job grading appeals is available from the personnel office.

23. Position Review

Initials	Date	Initials	Date	Initials	Date	Initials	Date
a. Employee (Opt)							
b. Supervisor							
c. Classifier							

24. Remarks:

Released from NGB-HR-Classification Activity, CRA 02-1002, dated 04 Mar 02.

* NOTE: This is an Interdisciplinary Architect or Engineer position. The occupational title and series classification may be General Engineer (this includes Architectural and Construction Engineer), GS-801; Architect, GS-808; Civil Engineer, GS-810; Environmental Engineer, GS-819; Mechanical Engineer, GS-830; or Electrical Engineer, GS-850, depending upon the qualifications of the incumbent appointed to the position.

25. Description of Major Duties and Responsibilities (SEE ATTACHED)

25.

a. INTRODUCTION:

This is an interdisciplinary architect or engineer position. The nature of the work is common to the architecture or several engineering disciplines. The duties assigned to this position can be classified in either of the following architecture or engineering occupational series: General Engineering, GS-801 (this includes Architectural and Construction Engineering); Architecture, GS-808; Civil Engineering, GS-810; Environmental Engineering, GS-819; Mechanical Engineering, GS-830; Electrical Engineering, GS-850. The position may be filled with an incumbent qualified in any of the above occupational series. The position will be classified to the occupational series of the incumbent selected at the time that the position is filled.

This position is located in the ANG Base Engineering Division. May assume the duties of the Base Architect/ Engineer in his/her absence. Provides supervisory and technical assistance to the Base Architect/Engineer in overseeing and managing the engineering shops and production control function. Provides technical support to all assigned sections. Provides guidance to these sections on standard and code requirements. Develops engineered solutions to technical problems, which are incapable of being resolved by subordinates. Typical problems require the need to perform extensive mathematical and technical calculations in engineering to include civil, mechanical, electrical, or general engineering as well as architecture.

This position requires military membership. It is designated for National Guard officer incumbency only. The incumbent provides subordinate guidance and team leadership to Non-Dual Status and Dual Status employees. Incumbent performs planning development necessary to accomplish architecture and engineering functions for programs essential to state Air National Guard daily operations, training, and readiness missions. Fosters an environment conducive to teaming among service providers and customers to meet state Air National Guard requirements

b. DUTIES AND RESPONSIBILITIES:

1. Responsible for the acquisition, construction, maintenance, repair, and operating of real property facilities, and provides related management, engineering, and other support work. Specifically, this includes (a) acquisition, accountability, and disposal of real estate; (b) planning and programming of total requirements for the maintenance, repair, and construction of facilities including financial management of facility programs. (c) provision of basic utility services; (d) maintenance and repair of structures and associated equipment; (e) furnishing snow removal, pest control, fire prevention, and engineering services activities.

2. Exercises authority in planning, directing, controlling and coordinating architectural or engineering activities. Directs total operations through subordinate civilian supervisory and non-supervisory personnel. Plans, schedules and assigns work; establishes and

monitors internal controls; and ensures uniform application of regulations, policies, directives, and professional engineering practices. Considers a variety of elements in determining funds available, contour of land, soil condition, weather and its effect upon building material, new engineering concepts, USAF Guides, etc.

3. Utilizes program and planning documents in determining real property facility requirements for programmed units and activities within the installation. Accomplishes long and short range planning for replacement of facilities or equipment including contingency operations for potential war or domestic emergency conditions. Oversees development and time phasing of operations and maintenance of real property facility and construction programs to ensure assimilation into the overall installation program. Responsible for implementation of the "total programming" concept for maintenance, repair, and construction of facilities. Advises on and reprograms activities to meet changes in mission and/or objectives requiring Commanders decision on phasing of specific activities and/or coordination with other activities.

4. Represents the Base Architect/Engineer at meetings and conferences with HQ ANG and intermediate command staff, Commanders and staff representatives of tenant organizations, Division and District Engineer representatives of the Corps of Engineers and Naval Facilities Engineering Command, metropolitan airports commission staff; FAA, Veterans Administration, highway department representatives; Federal, states, and city Environmental Protection Agency representatives. Coordinates on plans, exchanges information, recommends policy or procedures and keeps apprised of new architecture and engineering developments. Makes decisions in line with prior ANG Base policy and planning, such as priority of new construction, acceptance of completed work, facility disposal, real estate acquisition, utilization, or disposal actions.

5. Determines operational trends and forecasts requirements. Determines and coordinates acquisition and use of money, manpower, equipment and material. Plans required organizational structures to establish the essential functional elements necessary to carry out architectural/engineering responsibilities most effectively and economically. Delegates authority, ensures coordination, and develops new managerial methods and techniques to increase program effectiveness and decrease costs. Coordinates with ANG Civil Engineer Directorate and Engineering Divisions, selected civilian engineer and/or the Navy Facilities Engineering/Corps of Engineers (COE) offices on higher echelon-approved projects under the Military Construction Program and Real Property Maintenance Programs and requirements pertinent thereto.

6. Provides technical instructions and information on architectural, engineering and other technical requirements and assigns phases of projects to subordinate architects, engineers, engineering technicians, and draftsmen. Reviews work accomplishment during progress and, upon completion directs changes to achieve technically accurate and adequate layout and design computations, specifications, and estimates. Directs and reviews establishment and maintenance of record drawings, related files, compilation of data for annual budgets and revisions thereto and project capitalization.

7. Establishes technical engineering and architectural processes, criteria, and functions. Prepares or directs the preparation of engineering and architectural drawings, specifications and independent cost estimates for the construction, modification and maintenance of a wide variety of military buildings, structures, pavements, grounds, and utilities systems. Reviews architectural drawings, sketches, and specifications for technical adequacy, constructability, maintainability, operability, and interpretation in terms of requirements for manpower, supplies, and equipment. Participates as technical consultant and government engineering/architectural representative in conferences with Architectural-Engineering firms to insure that completed designs meet Air Force requirements in terms of technical sufficiency and economical use of funds and materials. Indicates and takes follow-up action on such changes in plans and specifications as may be required in order to meet technical, functional and utilization requirements. Prepares for record and higher authority, studies, briefs, reports, summaries, etc., pertaining to the base engineering functions and responsibilities.

8. Through subordinate supervisors, directs approximately twenty-five or more civilian and military employees engaged in readiness, Crash-Fire-Rescue engineering design, explosive ordnance disposal engineering, and operational facility maintenance duties. Is responsible for providing training and facilities for the OJT and proficiency training of approximately 100 drill status officers and airmen. Exercises personnel management responsibilities normally found in positions at this level including identification of training needs for supervisors and technical staff members.

9. Develops and maintains effective engineering staff relationships with base and tenant organizations. In staff meetings and in daily activities, presents briefings on acquisitions, construction, operation, maintenance, and financial management concerning real property facilities. Identifies and discusses problems as well as corrective actions being taken, program status, including fiscal aspects of the engineering portion of the annual budget, and related matters of interest to the Commander and his staff.

- Performs other related duties as assigned.

c. CONTROLS OVER WORK:

Serves under the general supervision of the Base Architect/Engineer. Supervision is more consultative than directive and authority to act is the maximum consistent with Air Force regulations, policies, and directives. Guidance is received from current Air Force regulations, policies and directives, professional engineering handbooks and periodicals. Additional guidelines consist of a wide variety of agency engineering and regulatory manuals and publications, local, state, and federal codes and standards, manufacturer's catalogs and manuals, etc. Actions taken and decisions made by the incumbent are accepted as professionally sound and valid and determines the course of action to be taken within the organization. Carries out work independently, interpreting policy and regulations in consonance with established

objectives, resolving most conflicts that arise and coordinating work with others as required. Assumes the duties of the Base Architect/Engineer in his/her absence.

EVALUATION STATEMENT

A. Title, Occupational Series & Grade: This is an Interdisciplinary Architect or Engineer position in the GS-800 family. It may be filled as an Architect, GS-808-12 or as a General Engineer (this includes Architectural and Construction Engineers), GS-801-12, Civil Engineer, GS-810-12; Environmental Engineer, GS-819-12; Mechanical Engineer, GS-830-12; or Electrical Engineer, GS-850-12.

B. References:

1. Handbook of Occupational Groups & Families, January 1999, Definition for GS-0801, General Engineering Series.
2. General Grade Evaluation Guide for Nonsupervisory Professional Engineering Positions GS-0800 June 1971, TS-6.
3. Introduction to the Position Classification Standards, Section III. Principles and Policies of Position Classification, H.2. Titling Positions and L. Interdisciplinary Professional Positions.
4. OPM PCS for Architecture, GS-808, October 1986.
5. OPM PCS for Civil Engineering, GS-810, June 1966.
6. OPM PCS for Environmental Engineering, GS-819, May 1979.
7. OPM PCS for Mechanical Engineering, GS-830, June 1977.
8. OPM PCS for Electrical Engineering, GS-850, February 1971.

C. Background Information: This position has been written to update duties and responsibilities that have resulted from changes in the architectural and engineering disciplines and architectural and engineering design and construction activities on Air National Guard Bases.

D. Title, Series and Grade:

1. Series:

This is an interdisciplinary architectural or engineering position in which the work is common to architecture or several engineering disciplines. It may be classified in any one of the following architectural or engineering occupational series: General Engineering (this occupational code includes Architectural as well as Construction Engineering since these occupational series do not have their own occupational codes), GS-801; Architecture, GS-808; Civil Engineering, GS-810; Environmental Engineering, GS-819; Mechanical Engineering, GS-830; Electrical Engineering, GS-850. The nature of the work of this position is such that it will be classified to the occupational series of the incumbent selected at the time that the position is filled.

The interdisciplinary concept and the above occupational codes are also supported by Air Force regulations governing military qualifications and training requirements, as an officer, for this position. These regulations state that a common core of knowledge and education derived from gaining an undergraduate

degree from Architecture or General, Architectural, Civil, Construction, Environmental, Electrical or Mechanical Engineering, serve as sources of recruitment for this position.

The work of this position requires professional architectural or engineering knowledge in the areas of civil, mechanical, electrical, facility, environmental, fire protection, architectural, military contingency, plant facility and construction engineering disciplines and architecture. The work is of project management nature in that the incumbent is assigned responsibility for projects beginning with site proposals and plans through final construction and occupation by users. The work involves the application of engineering fundamentals such as the strength and strain analysis of engineering materials and structures, the physical and chemical characteristics of engineering materials such as elastic limits, maximum unit stresses, coefficients of expansion, workability, hardness, tendency to fatigue, resistance to corrosion, engineering adaptability, engineering methods of construction and processing, etc.; or positions involving professional work in several branches of engineering. In addition, the incumbent may perform work that is concerned with facilities, systems, equipment, and instruments for production, transmission, measurement, control, and use of heat and mechanical power. The work also deals with electrical circuits, circuit elements, equipment, systems, and associated phenomena concerned with electrical energy for purposes such as motive power, heating, illumination, chemical processes, or the production of localized electric or magnetic fields. This position also typically requires: (a) knowledge of architectural principles, theories, concepts, methods, and techniques; (b) a creative and artistic sense; and (c) an understanding and skill to use pertinent aspects of the construction industry, engineering and the physical sciences related to the design and construction of new or the improvement of existing buildings.

Therefore, per references above, the occupational series of this position then is assigned as GS-801 or GS-808, GS-810, GS-819, GS-830 or GS-850, depending on the qualifications of the incumbent selected.

2. Title: The title of Architect, General Engineer, Civil Engineer, Mechanical Engineer or Electrical Engineer is assigned in accordance with references B.3. and the qualifications of the incumbent selected to fill the position.

3. Grade: The General Grade Evaluation Guide for Nonsupervisory Professional Engineering Positions GS-0800 is used to classify positions in series for which there are no specific grade-level standards, e.g., the General Engineering Series, GS-801, provided that the function and type of work performed is not adequately covered by grade-evaluation guides or standards for other engineering series. The engineering work of this position meets that requirement.

The grade-level criteria in this guide is presented in terms of three broad types of nonsupervisory work performed by engineers. Type III describes the work that is most analogous to this position in that this type of work involves staff assignments as technical consultants and advisers and/or program coordinator-reviewers in engineering organizations engaged in Type I and/or Type II work. These positions typically occur at GS-12 and above, although they may occasionally occur at the GS-11 level. These engineers exercise judgment, based on extensive experience, in providing guidance to engineers in the same specialty fields. Type III work is described in terms of “nature of assignment” and “level of responsibility.”

Nature of assignment: Type III, GS-12, engineers, as specialists in a technical field, a category of facility or equipment, or a program function, perform staff advisory, consulting, and reviewing services for an engineering organization. The line or operational portion of the organization serviced is engaged in a variety of Type I and/or Type II assignments of the difficulty described at the GS-11 grade level. GS-12 engineers provide advisory, planning, and reviewing services on specific problems, projects, programs, and functions. This describes the nature of work of the base engineer as a manager over Architectural-Engineering plans and projects and as a consultant for A/E contracting work.

Level of responsibility: Type III, GS-12, engineers, in positions of this type, are relied upon as the source of information and advice within the organization concerning their specialties. The supervisor provides little or no technical guidance to the engineer except on critical or controversial issues. Matters affecting budget, public relations, or other administrative features are referred to the supervisor in the form of recommendations. This matches the work of this position in that the incumbent serves as an expert source of information on the location, availability, applicability and adequacy of guides. As at the GS-12 level for a Type III engineer, the incumbent works as a technical expert in resolving a large variety of problems in multiple engineering disciplines that are of the kind described at GS-11 level of this guide. The incumbent also maintains frequent contacts with coworkers in the organization, with A/E designers, contractors as well as with engineers and architects at other government offices to render advice, consultation, and assistance. Similarly, the architectural work is graded using the same principles and concepts found in reference B.4., except they are applied to an architect working as a project manager and serving as an expert source of information on architectural/engineering problems. Based on the above, the architectural or engineering duties and responsibilities of this position are graded at the GS-12 level.

- E. Conclusion: This is an interdisciplinary Architect/Engineer position. Based upon the above duties, this position is classified as an Architect, GS-808-12; General Engineer, GS-801-12; Civil Engineer, GS-810-12; Mechanical Engineer, GS-830-12; Environmental Engineer, GS-819-12; or an Electrical Engineer, GS-850-12.

CLASSIFIER: Andy Liepnieks NGB Personnel Mgmt. Spec.

DATE: 04 Mar 02