

AIR NATIONAL GUARD
Joint Force Headquarters
187th FIGHTER WING, MONTGOMERY, ALABAMA
117th AIR REFUELING WING, BIRMINGHAM, ALABAMA

ACTIVE GUARD RESERVE (AGR) – MILITARY VACANCY ANNOUNCEMENT # 25 - 17

OPEN DATE: 17 JUNE 2025

EXPIRATION DATE: 17 JULY 2025

OPEN TO: STATEWIDE
NUMBER OF POSITIONS: 1
POSITION TITLE: WATER AND FUEL SYSTEM MAINTENANCE
FUNC CODE: 44M000
PEC#: 59297G
UMDA Position #: 3401104350
AFSC: 3E4X1 REQ'D
ASVAB REQUIRE: M47 AND E28
GRADE: SSGT-MSGT
SECURITY CLEARANCE: SECRET
UNIT/DUTY LOCATION: 117TH CIVIL ENGINEER SQUADRON
SELECTING OFFICIAL: LT COL JEFFERY FARMER
HRO REMOTE: MSGT SAMANTHA CROTZER

APPLICATION REQUIREMENTS

Signed NGB Form 34-1, [NGB Forms](#)

Current Report of Individual Personnel (RIP): Obtain from Virtual Military Personnel Flight (vMPF)

AF Form 422: Must be signed and verified within 6 months from your Medical Group

Air Force Fitness Management System II (AFFMS II) Fitness Report: Must be Current and passing

All applications must be submitted with a completed AGR Eligibility Checklist, found in ANGI 36-101. Your unit's HRO Remote Designee or the appropriate FSS representative must complete this checklist.

Email completed application packages to:

117ARW.FSSHRO.Org@us.af.mil

117th HRO
ATTN: 117TH HRO Remote Office
5401 East Lake BLVD
BIRMINGHAM, AL 35217

All emailed packages must be in a single PDF

JOB INTRO/TITLE:
WATER AND FUEL SYSTEMS MAINTENANCE

SPECIALTY SUMMARY:

Installs, inspects, maintains, troubleshoots, modifies, repairs, and manages plumbing, water distribution, wastewater collection systems, water and wastewater treatment systems, fire suppression, backflow prevention systems, natural gas distribution systems; **(3E4X1A Fuel Systems Maintenance)** liquid fuel storage, distribution, and dispensing systems. Complies with environmental and safety regulations. Related DoD Occupational Subgroups: 172000.

DUTIES AND RESPONSIBILITIES:

- 2.1. Installs, and operates natural gas, plumbing, water and wastewater treatment systems, fire suppression, backflow prevention systems, aircraft hydrant refueling, bulk storage, and ground product dispensing systems. Monitors systems operation to ensure efficiency and compliance with local state, federal and DoD regulations for safety and environmental regulations for hazardous materials. Installs and operates field potable water treatment equipment.
- 2.2. Maintains, inspects, and repairs natural gas, swimming pools, plumbing, water and wastewater treatment systems, fire suppression, and backflow prevention assembly and program. Performs inspection, recurring maintenance, winterize, and overhaul systems. Operationally inspects and diagnoses malfunctions in mechanical and electrical system controls and components using technical orders, manufacturers' handbooks, local procedures, code, and directives. Inspects condition and operation of electrical components such as motors, disconnect switches, contacts, solenoids, relays, alarms, cathodic protection systems and programmable logic controls. Conducts fuel system components and performs pressure testing and maintenance on fuel system piping. Performs confined space entries to accomplish system maintenance. Solves complex maintenance problems by studying layout drawings, wiring diagrams, and schematics to analyze, isolate and troubleshoot system malfunctions. Removes, repairs, and replaces defective components. Installs, modifies, repairs, and maintains a variety of new and existing utility, supply, and disposal systems and equipment such as sewage, water, oil, and gas distribution systems, and water closets, tubs, backflow prevention devices/assemblies, fire sprinkler systems, and showers. Locates and taps main lines, sets up system routes, places and cuts route openings, places hangers for proper level and slope, and determines and installs valves, traps, and unions as needed for proper operation of a variety of systems and equipment. Develops and establishes operation and maintenance procedures to ensure maximum efficiency.
- 2.3. Locates and determines quality and quantity of water sources. Coordinates locations of field latrines and pits with engineering and medical staff. Analyzes water for chemical and physical characteristics to determine water purification treatment methods. Installs and operates field potable water treatment equipment. Assists with installation, maintenance, and repair of Fuels Mobility Support Equipment (FMSE), Fuels Operational Readiness Capability Equipment (FORCE), and other contingency fueling assets.
- 2.4. Performs planning activities, quality assurance to include service contracts, and facility surveys. Surveys proposed work to determine resource requirements. Initiates fuel facility Sustainment, Restoration, and Modernization and Military Construction Projects to include project review, monitoring, and acceptance through Defense Energy Support Center (DESC). Prepares cost estimates and supply procurement for in-service work. Applies engineered performance standards to plan and estimate jobs. Ensures all planning activities comply with environmental and safety regulations to include hazardous materials.
- 2.5. **3E4X1A Fuel Systems Maintenance**, Installs, maintains, and repairs aircraft hydrant refueling, bulk storage, and ground product dispensing systems. Operationally inspects fuel system components such as pumps, automatic/manual valves, electrical motors, switches, filtration equipment, and like items for proper operation. Performs pressure testing and maintenance on fuel system piping. Troubleshoots system malfunctions and performs appropriate repairs. Performs internal and external maintenance on above and below ground fuel tanks, to include, cleaning of tank interior. Performs confined space entries to accomplish system maintenance. Uses drawings and schematics to analyze and isolate malfunctions. Initiates Fuel Facility Sustainment, Restoration, and Modernization and Military Construction Projects to include project review, monitoring, and acceptance through DESC. Assists with installation, maintenance, and repair of Fuels Mobility Support Equipment (FMSE), Fuels Operational Readiness Capability Equipment (FORCE), and other contingency fueling assets.

SPECIALTY QUALIFICATIONS:

- 3.1. Knowledge: Must have mandatory knowledge of contingency/peacetime operations in hydraulic, electrical, mechanical theories, and principles that apply to all utility and liquid fuel systems. Has knowledge in, characteristics, physiological effects, and hazards of liquid fuel products. To include types, sizes, and uses of

plumbing materials and components; mathematics; reading and interpreting drawings and specifications, military and commercial publications, and environmental regulations; maintenance of water distribution, wastewater collection, and natural gas distribution systems and corrosion prevention. Additionally, has knowledge of Prime BEEF program and its role in supporting worldwide contingency operations.

3.2. Education. For entry into this specialty, completion of high school with courses in mathematics, chemistry, biology, physics, earth sciences, drawing and specification use, and shop mechanics is desirable.

3.3. □ Training. The following training is mandatory for award of the AFSC indicated:

3.3.1. □ 3E431. Completion of Water and Fuels Systems Maintenance Apprentice course J8AQR3E431 01AB & J8AQR3E431 02ABJ3ABR3E431 03AC.

3.3.2. □ 3E451A Completion of Fuel Systems Maintenance Technician Courses J6ANW3E451 04AA and J3AZR3E451 04AC

3.3.3. □ 3E471 and 3E471A. Completion of Advanced Control Systems Cybersecurity Course (AFIT WENG 270)

Note: Highly recommended for ANG and AFRES

3.4. Experience. The following experience is mandatory for award of the AFSC indicated: 3.4.1. 3E451. Qualification in and possession of AFSC 3E431, completion of Core Tasks and Career Development Courses is mandatory. Also, experience in functions such as installation, operation, maintenance, and repair of liquid fuel systems, natural gas distribution systems, plumbing, water distribution and wastewater collection systems.

3.4.2. 3E471. Qualification in and possession of AFSC 3E451, completion of core tasks, and 7 level web-based course. Also, experience performing or supervision functions such as operation, maintenance, and repair of liquid fuel systems, natural gas distribution systems, plumbing, water distribution and wastewater collection systems.

3.5. Other. The following are mandatory as indicated: 3.5.1. For entry into this specialty: 3.5.1.1. Must possess a valid state driver's license to operate government motor vehicles (GMV) in accordance with AFI 24-301, *Vehicle Operations*.

3.5.1.2. Freedom from fear of confined spaces (Claustrophobia).

3.5.1.3. Freedom from fear of heights (Acrophobia).

3.5.1.4. See Attachment 4 for additional entry requirements.

3.5.2. For entry, award, and retention, normal color vision as defined in AFI 48-123, *Medical Examinations and Standards*.

3.5.3. For award and retention of these AFSCs, must maintain local network access IAW AFI 17-130, *Cybersecurity Program Management* and AFMAN 17-1301, *Computer Security*.

ELIGIBILITY REQUIREMENTS FOR ENTRY INTO THE AGR PROGRAM:

Must be a member or eligible to become a member of the Alabama Air National Guard.

Member will be required to hold a compatible military assignment in the unit they are hired to support.

Member's military grade will not exceed the maximum military duty grade authorized on the Unit Manning Document (UMD) for the position.

Member must meet the physical qualifications outlined in, Medical Examination and Standards (DAFMAN 48-123), Attachment 2 before being placed on an AGR tour.

Member must have retain-ability to complete the tour of military duty.

Member must not be eligible for or receiving a federal retirement annuity.

Member must comply with standards outlined in DAFMAN 36-2905, Fitness Program to be eligible for entry into the AGR program. Member must meet all eligibility criteria in ANGI 36-101, The Air National Guard Active Guard and Reserve (AGR) Program.

Member must hold required AFSC or be eligible for retraining (if applicable) **and meet all eligibility criteria in AFECD/AFOCD**

ADDITIONAL DUTIES

AGR members will participate with their unit of assignment during Regular Scheduled Drill (RSD). AGR tour lengths in the State of Alabama are at the discretion of the Squadron Commander.

Initial tours will not exceed 6 years. Follow-on tours will be from 1 to 6 years, per ANGI 36-101

To be considered for this position you must meet all minimum AFSC requirements to include the minimum ASVAB qualifying score. Scores are reflected on your personnel RIP.

If your ASVAB score does not meet the minimum required IAW AFECD contact your servicing MPF.

You have the option to retake the test.

You must schedule your test date and receive your new scores prior to the announcement closing date. Selectee will be required to participate in the Direct Deposit Electronics Funds Transfer program.

A law enforcement background check may be required prior to appointment to this position.

By submitting a resume or application for this position, you authorize this agency to accomplish the check

APPLICATION INSTRUCTIONS

APPLICATIONS MUST BE SUBMITTED FOLLOWING THE INSTRUCTIONS ON THIS ANNOUNCEMENT.

******** INCOMPLETE APPLICATIONS WILL NOT BE PROCESSED ********

WRITTEN EXPLANATION IS REQUIRED FOR ANY MISSING DOCUMENTS

Current AGR members and those who wish to become an AGR must submit the following:

AGR Eligibility Checklist found in ANGI 36-101 ([see below](#)).

NGB Form 34-1, Application for Active Guard/Reserve (AGR) Position, Form Version Dated 11 November 2013 Announcement number and position title must be annotated on the form

Download the current form version from;

<http://www.ngbpdn.ngb.army.mil/forms/Adobe%20PDF-F/ngb34-1.pdf>

Current Report of Individual Personnel (RIP). Documents must show your ASVAB scores. RIP can be obtained from the servicing Force Support Squadron (FSS)

In lieu of a RIP, applicant may provide a printout from the virtual MPF (vMPF) Select 'Record Review', and then 'Print/View All Pages'

Copy of current passing physical fitness assessment. (From AF Portal, <https://www.my.af.mil/>)

AF Form 422, Physical Profile Serial Report <https://asims.afms.mil/imr/MyIMR.aspx> (CURRENT within 5 years, validated within 12 months, working copy is acceptable)

ALANG - Air Technicians interested in converting to AGR status:

Selection for the advertised position does not constitute acceptance into the AGR program.

Once notification of a selection is made, the individual is required to submit a request for AGR medical clearance through the Medical Group, to the State Air Surgeon.

The State Air Surgeon will evaluate the request and notify MDG of the member's medical clearance approval or denial.

The information below was taken from ANGI 36-101, 21 April 2022.

5.3 Grade. To accept an AGR position, an applicant's military grade cannot exceed the maximum military authorized grade on the UMD for the AGR position. Reference paragraph 6.6 for proper assignment to position/unit. Enlisted Airmen who are voluntarily assigned to a position which would cause an overgrade must indicate in writing a willingness to be administratively reduced in grade in accordance with AFI 36-2502, Enlisted Airman Promotion/Demotion Programs, when assigned to the position. Acceptance of demotion must be in writing and included in the assignment application package.

5.4 Commissioning of Enlisted Member. Enlisted personnel applying for officer positions must be eligible for commissioning upon application for AGR duty. Assignment to the AGR tour will not become effective until the individual receives a commission in the ANG and as a Reserve of the Air Force and has completed formal training for which an AFSC has been awarded

5.5. Air Force Fitness Standards. AGR Airmen are subject to the provisions of AFMAN 36-2905, *Air Force Fitness Program*. Airmen must meet the minimum requirements for each fitness component in addition to scoring an overall composite of 75 or higher for entry into the AGR program. For members with a documented DLC which prohibits them from performing one or more components of the Physical Fitness Assessment (PFA), an overall "Pass" rating is required and any DLC must be resolved prior to accession.

5.6 Security Clearance. AGRs must have a current favorable adjudicated personnel security investigation that is commensurate with their currently assigned AFSC. Local security representatives can provide verification of security clearance information using the Defense Information System for Security (DISS)

5.7. Separated for Cause. To be accessed in the AGR program, an individual must not have been previously separated for cause from a previous Reserve Component AGR tour or from any Active Component. Requests for waiver to this policy will be annotated on the AF Form 679 and routed to NGB/A1PP.

5.8. Retainability for an AGR Assignment. Enlisted personnel must obtain sufficient retainability to fulfill an AGR assignment.

5.9. Sanctuary. It is not the intent of the AGR program to bring non-career applicants into the sanctuary zone (18 to 20 years of TAFMS). Anyone whose order, whether active duty (AD) or full-time National Guard duty (FTNGD) other than for training, places them at 18 years or more of TAFMS will require a signed, approved sanctuary waiver in accordance with DAFI 36-2110, *Total Force Assignments*.

5.10. Inability to attain 20 years TAFMS. AGR applicants should be able to attain 20 years of TAFMS in the AGR career program. Waiver authority of this requirement is The Adjutant General, Commanding General, or designee. Individuals selected for AGR tours that cannot attain 20 years of TAFMS prior to reaching mandatory separation must complete the Statement of Understanding contained in Attachment 3. The HRO will maintain the completed, signed Statement of Understanding.

5.11. Medical Requirements. Applicants for permanent, occasional or AGR deployment backfill tours must meet the requirements outlined in [Chapter 12](#).