

Attachment J5

Florida Air National Guard (FANG), Jacksonville Potable Water System

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J5 Florida Air National Guard (FANG), Jacksonville Water System

J5.1 Florida Air National Guard, Jacksonville Overview

The Florida Air National Guard (FANG), Jacksonville facility is located at the Jacksonville International Airport in Jacksonville Florida. The base covers about 332 acres of land. The FANG houses the 125th Fighter Wing, which includes the 202nd Red Horse Civil Engineering Squadron located at Camp Blanding, near Starke, Florida. The 202nd Red Horse unit is not included in this study.

The 125th Fighter Wing, Florida Air National Guard, is located at Jacksonville International Airport (IAP), Florida, with a NORAD Alert Detachment at Homestead AFB, Florida. Since its inception, the 125th has developed strong competencies in the Strategic Air Defense arena.

The roots of the 125th Fighter Wing date back to the period following World War II when the unit was first organized as the 159th Fighter Squadron on 9 February 1947 with an initial strength of 18 personnel and was equipped with the P-51 Mustang. In 1948, the 159th became one of the first Air National Guard units to be equipped with jets when it converted to the F-80C Shooting Star.

The unit was called to active duty on 10 October 1950 as a result of the outbreak of the Korean Conflict. After a nine-month conversion from the F-80 to the F-84E Thunderjet, the unit deployed to Japan where it flew air defense missions over the Korean theater. The unit was released from active duty on 9 July 1952, returning home to be re-equipped with the F-51H Mustang.

During the remainder of the early 1950s, the 159th was equipped with a multitude of different aircraft, including the T-6, B-26, C-45, F51H, T-33, F-80, and F86A. By the end of 1954, the unit was equipped with an entire squadron of F-80s. On 1 July 1956, the primary unit designation was changed to the 125th Fighter Interceptor Group (FIG), and the unit converted to the F-86D Super Sabre with the primary mission of air defense.

In July 1960, the 125th converted from the F-86D to the all-weather, supersonic F-102A/B Delta Dagger, followed in July 1974 by a conversion to the F-106A/B Delta Dart.

On October 1, 1979 the 125th FIG was officially assigned to the Air Defense Division of the Tactical Air Command, and subsequently was honored as an Air Force Outstanding Unit on March 2, 1980. The 125th reinforced its role as Air Defender on October 1, 1983 when it expanded its around-the-clock alert mission by adding a detachment at Homestead Air Force Base.

In 1985 the FANG added a non-flying unit with the formation of the 202nd Red Horse Civil Engineering Squadron (RHS). The 202nd was formed to provide a rapidly deployable, highly trained force to accomplish heavy damage repairs to runways, facilities, and utilities of the Air Force worldwide. That unit is located at Camp Blanding, near Starke, Florida. The 202nd RHS is actively involved in Hurricane Relief, Construction Projects for United States Air Force and Army National Guard Units, training for other Air National Guard and Air Force units, and Community Service.

In April 1987, the 125th converted to the F-16A/B, a multi-role fighter that was subsequently modified as the ADF-16 specifically designed for the Air Defense role.

On December 15, 1992 the 159th Weather Readiness Training Center and Weather Flight were added to the Florida Air National Guard. Located at Camp Blanding, the school billets and trains Air National Guard members as well as active duty airmen in their career field of weather predictions.

The 125th Fighter Wing has a dual mission - one state and one federal. The state mission is to provide trained and equipped personnel to protect life and property and to preserve peace, order, and public safety. The federal mission is to provide fully trained and qualified personnel to CINCNOAD in time of war or national emergency for the defense of the North American Continent. On a daily basis, the 125th is responsible for the maintenance of a NORAD Air Defense Alert site at Homestead ARB. In this capacity, the unit provides armed F-15 aircraft capable of intercepting, identifying, and, if necessary, destroying unknown aircraft which penetrate sovereign U.S. airspace. In the past, this threat has included Soviet Bear bombers, Cuban fighters, and narcotics traffickers. The installation is comprised of 41 buildings, and approximately 325,000 gross square feet.

J5.2 Water System Description

The FANG, Jacksonville potable water system consists of all appurtenances physically connected to the system from the point in which the Government ownership currently, starts to the point of demarcation defined by the real estate instruments. Generally, the point of demarcation will be the building footprint. The system may include, but is not limited to the water wells, the water treatment plant, the storage tanks and the distribution lines including service laterals. The following description and inventory is included to provide the Offeror with a general understanding of the size and configuration of the distribution system. The inventory is assumed to be approximately 90 percent complete. The Offeror shall base the proposal on site inspections, information in the bidder's library, other pertinent information, and to a lesser degree the following description. Under no circumstances shall the successful Contractor be entitled to any rate adjustments based on the accuracy of the following description and inventory.

J5.2.1 Water System Fixed Equipment Inventory

The FANG, Jacksonville purchases potable water from JEA. JEA (formerly Jacksonville Electric Authority) is affiliated with the City of Jacksonville and operates an extensive water system that includes 98 wells tapping the Floridian Aquifer and 28 water plants. The FANG has one water connection to the JEA system; an 8-inch metered line enters the

northeast corner of the base. The average water use is about 18,700 gallons per day (gpd). The operating pressure of the system is approximately 45-50 psig.

Water is distributed throughout the FANG through underground pipelines. Pipe materials of construction include glass-lined ductile iron and PVC pipe. The original system was installed in 1969 and some newer pipe has been installed as the base has expanded over the years. The majority of pipe is glass-lined ductile iron pipe. Overall, there are an estimated 15,475 linear feet of potable distribution pipe ranging from $\frac{3}{4}$ inch to 8 inches in diameter, with about 16 hydrants and 51 isolation valves and one 15,000-gallon water storage tank. The water storage tank is part of an abandoned noise suppression area that is no longer in use. The tank itself has been isolated and is not presently storing potable water.

There are three water meters in the base distribution system. The City maintains the primary water meter at the northeast corner of the base; the meter and vault were recently replaced. This is the only source of water for the distribution system and provides the billing quantities for the FANG. The other two meters are used for internal records. The JEA meter vault was half-filled with standing water at the time of the site visit, the vault needs to be pumped out and properly maintained.

There are no water supply treatment facilities at the base. JEA supplies treated water in compliance with Primary and Secondary Drinking Water Standards under the Safe Water Drinking Act. The State of Florida, Department of Health, regularly runs drinking water bacteriological analyses. Bacterial results have been consistently satisfactory, although a zero chlorine residual has been noted in some samples. Compliance with the Lead and Copper rule has not been a problem.

The State of Florida, Department of Health, has performed monthly drinking water bacteriologic tests on multiple sample points across the base. All 1998 samples were found to be satisfactory pertaining to the presence of coliform. Free chlorine residuals are normally about 1 mg/L, although a low chlorine residual at some of the sample points is reported. No problems with color, taste, or odor have been reported on base.

The FANG, Jacksonville has an additional dedicated fire protection system. The system consists of a 120,000-gallon ground storage water tank and a pump rated at 2,000 gpm @ 140 psig. A 12-inch PVC line runs under ground to specified yard hydrants. The fire protection system is metered off of the base water distribution system. The system is dedicated to fire flow, including distribution pipes, storage tank, and pump station, and is not considered part of the potable water distribution system for purposes of potential utility privatization.

Irrigation wells at the base are not connected to the system; and on-site well #1 is capped off from the system and not permitted for use. These well system facilities are not considered part of the potable water distribution system for purposes of potential utility privatization.

Historically, main breaks have not been a problem. The only main breaks have been as a result of construction. The main breaks are caused by human error, not material failure. Base personnel report that inspections of broken mains from the original system indicated like new conditions. Glass lining was still intact and no corrosion on the outside of pipe was reported. Replacement materials have been purchased to match the quality of the original pipe and fittings.

Sources of information on base water system facilities and conditions include the following:

J5.2.1.2 Inventory

Table 1 provides a general listing of the major water system fixed assets for the FANG, Jacksonville water system included in the purchase. The system will be sold in a “as is, where is” condition without any warranty, representation, or obligation on the part of Government to make any alterations, repairs, or improvements. Ancillary equipment attached to, and necessary for, operating the system, though not specifically mentioned herein, is considered part of the purchased utility.

TABLE - 1
FIXED INVENTORY
Water Distribution System Inventory - FANG Jacksonville

Item	Size	Quantity	Unit	Approximate Year of Construction
Water Distribution Pipe				
Polyethylene, 160 PSI, SDR 7	3/4"	90	LF	1995
Polyethylene, 160 PSI, SDR 7	3/4"	115	LF	1975
Polyethylene, 160 PSI, SDR 7	1"	910	LF	1969
Polyethylene, 160 PSI, SDR 7	1"	165	LF	1975
Polyethylene, 160 PSI, SDR 7	1"	825	LF	1995
PVC, Class 160, SDR 26	1-1/2"	320	LF	1969
PVC, Class 160, SDR 26	1-1/2"	85	LF	1975
PVC, Class 160	2"	1,140	LF	1969
PVC, Class 160	2"	120	LF	1975
PVC, Class 160	2"	990	LF	1995
PVC, Class 160	2-1/2"	115	LF	1969
PVC, Class 160	2-1/2"	195	LF	1985
PVC, Class 160	3"	150	LF	1969
PVC, Class 160	3"	50	LF	1975
PVC, Class 160	3"	260	LF	1985
HDPE butt fusion joints, SDR 21	4"	1,390	LF	1969
HDPE butt fusion joints, SDR 21	4"	860	LF	1985
HDPE butt fusion joints, SDR 21	4"	425	LF	1995
HDPE butt fusion joints, SDR 21	6"	1,855	LF	1969
HDPE butt fusion joints, SDR 21	6"	750	LF	1985
HDPE butt fusion joints, SDR 21	8"	4,635	LF	1969
HDPE butt fusion joints, SDR 21	8"	30	LF	1975
Valves				
PVC, plastic ball., socket or threaded	1"	1	EA	1975
PVC, plastic ball., socket or threaded	1"	1	EA	1985
PVC, plastic ball., socket or threaded	2"	2	EA	1969
PVC, plastic ball., socket or threaded	2"	3	EA	1975
PVC, plastic ball., socket or threaded	2"	3	EA	1995
PVC, plastic ball., socket or threaded	2-1/2"	2	EA	1985
PVC, plastic ball., socket or threaded	3"	1	EA	1975
PVC, plastic ball., socket or threaded	3"	1	EA	1985
Butterfly with box, cast iron	4"	6	EA	1969
Butterfly with box, cast iron	4"	2	EA	1985
Butterfly with box, cast iron	4"	1	EA	1995
Butterfly with box, cast iron	6"	9	EA	1969
Butterfly with box, cast iron	6"	3	EA	1985

Butterfly with box, cast iron	8"	15	EA	1969
Butterfly with box, cast iron	8"	1	EA	1995
Backflow preventer, gate valve	3"	1	EA	1985
Backflow preventer, gate valve	4"	1	EA	1985
Fire hydrants	4-1/2"	16	EA	1968
Aboveground Storage tank	15,000	1	Gal	1969

Notes:

EA = each
 LF = linear feet
 SDR = Standard Diameter Ratio
 Gal = Gallons

J5.2.2 Water Distribution System Non-Fixed Equipment and Specialized Tools Inventory

Table 2 lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment and tools. The successful Contractor shall provide any and all equipment, vehicles, and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

TABLE - 2
SPARE PARTS
 Water Distribution System Inventory - FANG Jacksonville

Qty	Item	Make/Model	Description	Remarks
	None			

TABLE - 3
SPECIALIZED EQUIPMENT AND VEHICLES
 Water Distribution System Inventory - FANG Jacksonville

Description	Quantity	Location	Maker
None			

J5.2.3 Water System Manuals, Drawings, and Records Inventory

Table 4 lists the manuals, drawings, and records that will be transferred with the system.

TABLE - 4
MANUALS, DRAWINGS, AND RECORDS
 Water Distribution System Inventory - FANG Jacksonville

Qty	Item	Description	Remarks
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J5.3 Current Service Arrangement

Florida Air Nation Guard (FANG) purchases potable water from JEA. JEA (formerly Jacksonville Electric Authority) is affiliated with the City of Jacksonville and operates an extensive water system that includes 98 wells tapping the Floridian Aquifer and 28 water plants. The FANG has one water connection to the JEA system; an 8-inch metered line enters the northeast corner of the base. The average water use is about 18,700 gallons per day (gpd). The operating pressure of the system is approximately 45-50 psig.

J5.4 Secondary Metering

The Base may require secondary meters for internal billings of their reimbursable customers, utility usage management, and energy conservation monitoring. The Contractor shall assume full ownership and responsibility for existing and future secondary meters IAW Clause C.3.

J5.4.1 Existing Secondary Meters

TABLE - 5
 EXISTING SECONDARY METERS
 Water Distribution System Inventory - FANG Jacksonville

Meter Location	Meter Description
None	

J5.5 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:
 Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to the Contracting Officer's designee.
 (This information will be provided upon award)

Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall include the following information for Scheduled and unscheduled outages:

Scheduled: Requestor, date, time, duration, facilities affected, feedback provided during outage, outage notification form number, and digging clearance number.

Unscheduled: Include date, time and duration, facilities affected, response time after notification, completion times, feedback provided at time of outage, specific item failure, probability of future failure, long term fix, and emergency digging clearance number.

Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to the Contracting Officer's designee. (This information will be provided upon award)

Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to the Contracting Officer's designee. (This information will be provided upon award)

System Efficiency Report. If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25th of each month for the previous month. System efficiency reports shall be submitted to the Contracting Officer's designee. (This information will be provided upon award)

J5.6 Energy Savings and Conservation Projects

IAW C.3, Utility Service Requirement, the Government has not implemented any projects for energy conservation purposes:

J5.7 Service Area

IAW Clause C.4, Service Area, the service area is defined as all areas within the FANG, Jacksonville boundaries.

J5.8 Off-Installation Sites

There are no off-installation sites associated with this scope.

J5.9 Specific Transition Requirements

IAW Clause C.17, Transition Plan, **Table 6** lists service connections and disconnections required upon transfer, and **Table 7** lists the improvement projects required upon transfer of the FANG, Jacksonville water system.

TABLE - 6
SERVICE CONNECTIONS AND DISCONNECTIONS
Water Distribution System Inventory - FANG Jacksonville

Location	Description
None Required	

TABLE - 7
SYSTEM IMPROVEMENT PROJECTS
Water Distribution System Inventory - FANG Jacksonville

Project Location	Project Description
None Required	
