

ATTACHMENT J5

RICHMOND IAP (ANG) Natural Gas Distribution System

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J5 RICHMOND IAP (ANG) Natural Gas Distribution System

J5.1 RICHMOND IAP (ANG) Overview

The 192nd Fighter Wing is located at Richmond IAP (ANG) at Richmond International Airport in Sandston Virginia. The base consists of 143 acres and 64 buildings (295,646 SF). It is surrounded by residential areas to the north and northeast. To the west and south lies the airport operating surfaces and airport owned wetlands are to the east. It is home to 294 officer and enlisted personnel and surges to 1000 personnel one weekend a month.

The history of the 192nd FW stretches back to World War II. In May 1946, the Pentagon reactivated and redesignated the 328th Fighter Squadron, a heroic WWII unit. The 328th had been organized at Mitchell Field, New York, on Oct. 10, 1942, and saw action in the European theater. Battle honors included a Presidential Unit Citation and the French Croix de Guerre with Palm. Newly designated as the 149th Fighter Squadron, the unit was assigned to the Virginia Air National Guard, which earned official recognition from the National Guard Bureau in June 1947. The 149th Fighter Squadron was entitled to the history, honors, and colors of the 328th.

The unit's first aircraft was the F-47 Thunderbolt. The unit was called to active federal service on March 1, 1951. This activation temporarily resulted in the dissolution of the Virginia Air National Guard, as members were sent to various places, including for many, duty in the Korean War.

The Virginia Air National Guard was reorganized in November 1953 as a B-26 bomber outfit. In 1957, the unit was redesignated the 149th Fighter Interceptor Squadron and was scheduled to get F-86E Saberjets. However, later that year, the unit became the 149th Tactical Fighter Squadron, and F-84F Thunderstreaks began replacing the B-26.

At the height of the Cold War in 1961, the squadron was federalized as a result of tensions concerning the Berlin Wall. The squadron remained at Richmond in an active-duty status for about a year before being released. Twenty-two Virginia ANG members were sent to Chaumont RICHMOND IAP (ANG), France, in December 1961 to support the 7180th Tactical Fighter Wing, a deployed unit of the 108th Tactical Fighter Wing. They spent eight months in Europe.

In October 1962, the unit was redesignated as the 192nd Tactical Fighter Group, with the 149th TFS becoming the group's flying squadron. Other squadrons in the group were the 192nd Group Headquarters, 192nd Materiel Squadron (Maintenance), 192nd Combat Support Squadron, and the 192nd USAF Dispensary.

During 1971, the 192nd was assigned the F-105D Thunderchief, a battle-hardened supersonic fighter-bomber that was the backbone of America's fighter element during the Vietnam War. The group's special tasking during the next 10 years included several deployments to Red Flag live-fire exercises in Nevada and a deployment to RAF Lakenheath, England, in 1976.

In 1981, the unit began converting to the Vought A-7D Corsair II, a subsonic jet designed primarily for close-air support. The 10-year A-7 era included several deployments to Panama in support of the defense of the Panama Canal and two trips to Norway – in 1985 and 1989.

The year 1985 was a particularly busy one internationally for the 192nd. Shortly after finishing a deployment to Ecuador, the 192nd deployed in September to Evenes Air Station, Norway, 150 miles above the Arctic Circle. A few weeks later, a Virginia contingent competed in Gunsmoke '85, the Air Force's tactical fighter competition, and the 192nd was named the world's "Best A-7 Unit."

The 192nd also earned the General Spruance Safety Award and was recognized as having had the best Operational Readiness Inspection in the Ninth Air Force during 1985. That string of accomplishments helped the 192nd earn its first-ever USAF Outstanding Unit Award, which was presented in 1987.

The unit soared into a new era of aviation technology in 1991, when it became the first Air National Guard unit to receive the Air Force's upgraded Fighting Falcon -- The F-16C/D. The unit was initially assigned 24 single-seat F-16C models and two F-16D models. By early 1994, defense cutbacks had reduced the unit's assigned inventory to 18 F-16s, and eventually to 15. Conversion to the F-16 airframe required the 192nd to build a \$2 million "hush house," a special noise-suppression hangar in which the jets' engines could be tested without bothering neighbors.

The 192nd's designation shortened during 1992 -- from 192nd Tactical Fighter Group to 192nd Fighter Group. This change reflected the retirement of the former Tactical Air Command and creation of the multi-role mission of the new Air Combat Command. After the 192nd FG became fully operational with the F-16, it was chosen as the lead unit in a four-state Air National Guard F-16 "rainbow" detachment deployed to Incirlik Air Base, Turkey, to support Operation Provide Comfort II. During that operation between Dec. 1, 1993, and Jan. 15, 1994, ANG pilots patrolled the no-fly zone over northern Iraq to prevent Iraqi forces from inflicting damage on the villages of Kurdish minorities. This was the first time Air National Guard units had been called to active duty to serve in a peacekeeping role in the Mideast, following Iraq's defeat in 1991. The unit returned to Incirlik in February 1996 for another round of patrols over Iraq.

During October 1995, the 192nd's designation was again slightly modified to reflect unit restructuring within the Air Force and Air National Guard. This time the unit designation was changed from 192nd Fighter Group to 192nd Fighter Wing.

In addition to its customary mission of training for war, the 192nd performed as a test base for higher headquarters by taking on two new, diverse projects in 1995.

At the direction of the commander of Air Combat Command, in January the 192nd became a test regional repair center for F-16 engines. The 18-month assignment called for the 192nd propulsion section to strip and rebuild General Electric F110-GE-100 engines for its own F-16s as well as for F-16s assigned to Pope RICHMOND IAP (ANG), NC. With Pope designated to become a composite wing with several types of aircraft, ACC officials sought more efficient and economical ways of providing maintenance for its F-16 engines. By setting up a regional repair center at the 192nd, the Air Force aimed to reduce the number of F-16 maintenance people needed in this region, consolidate their training, reduce duplication of resources and equipment, and lower maintenance costs per flying hour.

While that project was underway, the 192nd was selected to evaluate and bring on line a new, portable reconnaissance pod designed for F-16s to take on the added mission of aerial reconnaissance.

The RF-4C, which had been the Air Force's manned reconnaissance aircraft, was retired in October 1995. The Air Force initially decided to discontinue its manned reconnaissance program but reversed itself. To provide maximum flexibility, it decided to see whether reconnaissance pods could be added to fighter aircraft, giving operational units the additional function of reconnaissance. The 192nd Fighter Wing was selected to test the capability of electro-optical "recce" pods. After becoming mission capable with the pods in April 1996, the fighter wing deployed to Aviano AB, Italy, in May 1996 for the first real-world contingency use of the new pods and computerized imaging equipment. For 45 days, the 192nd FW flew "recce" missions over Bosnia, in support of international peacekeeping efforts there.

- Due to the unit's many unique and high profile accomplishments and high-caliber results during an Air Force Quality Assessment during 1996, the wing was awarded its second Air Force Outstanding Unit Award in December '96. 1997 marked the 50th anniversary of the Virginia Air National Guard.

J5.2 Natural Gas Distribution System Description

J5.2.1 Natural Gas Distribution System Fixed Equipment Inventory

The RICHMOND IAP (ANG) natural gas distribution system consists of all appurtenances physically connected to the distribution system from the point in which the distribution system enters the Installation and Government ownership currently starts to the point of demarcation, defined by the Right of Way. The system may include, but is not limited to, pipelines, valves, regulators, and meters. The actual inventory of items sold will be in the bill of sale at the time the system is transferred. The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The Government makes no representation that the inventory is accurate. The Contractor shall base its proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any service charge adjustments based on the accuracy of the following description and inventory.

J5.2.1.1 Description

The natural gas distribution system at Richmond-ANG is comprised of approximately 10,000 linear feet of polyethylene piping ranging from 1 to 4 inches in diameter, 44 PE plug valves, 16 regulators, 7 large and 9 small meters. Piping is buried approximately 3 feet underground with isolation valves at each junction. Piping and valves are considered to be in excellent condition as the entire system was installed new in 1995. The delivered PSIG of the system is 25 PSIG. The system has 13 sacrificial anodes for cathodic protection and is metered from one location on base. There are 4 planned facilities that may require gas service once completed.

J5.2.1.2 Inventory

Table 1 provides a general listing of the major natural gas distribution system fixed assets for the RICHMOND IAP (ANG) natural gas distribution system included in the sale.

TABLE 1
Fixed Inventory
Natural Gas Distribution System RICHMOND IAP (ANG)

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
PE Gas Pipe	1.00	220	LF	1995
	1.25	470	LF	1995
	2.00	1208	LF	1995
	4.00	8140	LF	1995
PE Ball Valves	1.00	4	EA	1995
	1.25	3	EA	1995
	2.00	16	EA	1995
	4.00	21	EA	1995
Large Regulators		7	EA	1995
Small Regulators		9	EA	1995
Large Meters		7	EA	1995
Small Meters		9	EA	1995
Sacrificial Anodes		13	EA	1995

Notes:
PE = Polyethylene
LF = Linear Feet
EA = Each
IN = Inches

J5.2.2 Natural Gas Distribution System Non-Fixed Equipment and Specialized Tools

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, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

TABLE 2
Spare Parts
Natural Gas Distribution System RICHMOND IAP (ANG)

Qty	Item	Make/Model	Description	Remarks
None				

TABLE 3
Specialized Vehicles and Tools
Natural Gas Distribution System RICHMOND IAP (ANG)

Description	Quantity	Location	Maker
None			

J5.2.3 Natural Gas Distribution System Manuals, Drawings, and Records

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

TABLE 4
Manuals, Drawings, and Records
Natural Gas Distribution System RICHMOND IAP (ANG)

Qty	Item	Description	Remarks
1	Manuals	Operations and Maintenance Manuals	
1	Map	AUTOCAD Release 14	Some recent installations are not noted on current map

J5.3 Specific Service Requirements

The service requirements for the RICHMOND IAP (ANG) natural gas distribution system are as defined in the Section C, *Description/Specifications/Work Statement*.

J5.4 Current Service Arrangement

Natural gas is delivered to a looped system at 25 PSIG by the City of Richmond.

J5.5 Secondary Metering

J5.5.1 Existing Secondary Meters

Table 5 provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings for all secondary meters IAW Paragraph C.3 and J5.6 below.

TABLE 5
Existing Secondary Meters
Natural Gas Distribution System RICHMOND IAP (ANG)

Meter Location	Meter Description
None	

J5.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 6**. New secondary meters shall be installed IAW Paragraph C.13, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3 and J5.6 below.

TABLE 6
New Secondary Meters
Natural Gas Distribution System RICHMOND IAP (ANG)

Meter Location	Meter Description
None	

J5.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. 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 address to be provided at the time of award.
2. 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 be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to the address to be provided at the time of award.
3. Meter Reading Report. The monthly meter reading report shall show the current and previous month’s 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 address to be provided at the time of award.
4. 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 address to be provided at the time of award.:

J5.7 Energy Saving Projects

IAW Paragraph C.3, Requirement, the following projects have been implemented by the Government for conservation purposes:

Meters have been installed at each building.

J5.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the RICHMOND IAP (ANG) boundaries.

J5.9 Off-Installation Sites

No off-installation sites are included in the sale of the RICHMOND IAP (ANG) natural gas distribution system.

J5.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 7** provides a listing of service connections and disconnections required upon transfer.

TABLE 7
Service Connections and Disconnections
Natural Gas Distribution System RICHMOND IAP (ANG)

Location	Description
None	

J5.11 Government Recognized System Deficiencies

Table 8 provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the RICHMOND IAP (ANG) natural gas distribution system. If the utility system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewal and Replacement Plan process and will be through Schedule L-3. Renewal and Replacement projects will be recovered through Sub-CLIN AB.

TABLE 8
System Deficiencies
Natural Gas Distribution System RICHMOND IAP (ANG)

Project Location	Project Description
No System Deficiencies	MCP Projects are in planning for a Motor Pool, a Vehicle Maintenance Complex, a Munitions Maintenance Complex, and a Base Supply/Support Complex. Natural gas requirements for these facilities are unknown at this time.