

**JUSTIFICATION REVIEW DOCUMENT  
FAR PART 6 JUSTIFICATION AND APPROVAL FOR OTHER THAN  
FULL AND OPEN COMPETITION**

**Program/Equipment:** Mission Training Center/Trane Chiller System

**Authority:** 41 U.S.C. 3304(a)(1); FAR 6.302-1(c)

**Prepared by:** Mark Green  
Contracting Specialist  
149 Mission Support Contracting Office  
Email: [mark.green.23@us.af.mil](mailto:mark.green.23@us.af.mil)

**Contracting Officer:** Kirk M. Swiantek  
Contracting Officer, NGB-AQ-R  
Construction & A-E Division  
Email: [kirk.m.swiantek.civ@army.mil](mailto:kirk.m.swiantek.civ@army.mil)

**Technical:** Trevor P. Ellis  
Deputy Base Civil Engineer  
149 Civil Engineering Squadron  
Email: [trevor.ellis.4@us.af.mil](mailto:trevor.ellis.4@us.af.mil)

**Requirements Representative:** Trevor P. Ellis  
Deputy Base Civil Engineer  
149 Civil Engineering Squadron  
Email: [trevor.ellis.4@us.af.mil](mailto:trevor.ellis.4@us.af.mil)

**Reviews:** I have reviewed this justification and find it adequate to support other than full and open competition.

I have reviewed this justification and find it adequate to support other than full and open competition.

**Program Manager:** William N. T. Smith,  
Senior Project Manager AZ, MN, NM, OR, TX  
Air National Guard Readiness Center Western Cell  
Email: [william.smith.314@us.af.mil](mailto:william.smith.314@us.af.mil)

**Office of Legal Counsel:**

Typed Name: CPT Alicia Westerhoff

Signature: WESTERHOFF.ALICIA.MICHELLE  
HELLE.1010304764

Digitally signed by  
WESTERHOFF.ALICIA.MICHELLE  
Date: 2024.06.14 10:17:42 -04'00'

**FAR Part 6 Justification and Approval for Other than Full and Open Competition**

**1. Contracting Activity:** USPFO for Texas; Air National Guard

**2. Description of Action:** This contract action is to award a firm-fixed price contract for construction of the Mission Training Center Facility located on Joint Base San Antonio (JBSA), Lackland Air Force Base (AFB), Kelly Field, 149 Fighter Wing (149 FW). The Brand Name requirements in support of this project are:

Heating, Ventilation, and Air Conditioning (HVAC) Chiller System: Trane North America

**3. Description of Supplies/Services:** The Mission Training Center Construction project includes the above brand specific required items to support the installation's current Heating/Ventilation and Air Conditioning (HVAC) System.

The current Heating, Ventilation, and Air Conditioning (HVAC) Chiller Systems on JBSA Lackland AFB are Trane products. USAF and JBSA have both issued blanket Brand Name justifications for Trane Chiller systems to reduce costs to train and equipment personnel to operate, maintain, and repair these Chillers. Additionally, this brand name increases the 149FW capabilities to keep repair parts on the shelf. Utilization of a different brand will impact funding, operate, maintenance, and repair capabilities within the 149 FW over the next 10 years.

Trane Chiller System.

**4. Authority Cited:**

10 U.S.C. 2304(c)(1), as implemented by FAR 6.302-1, Only one responsible source and no other supplies or services will satisfy agency requirements.

**5. Reason for Authority Cited:**

- a. The use of 10 U.S.C. 2304(c)(1) and FAR 6.302-1 - Only One Responsible Source and No Other Supplies or Services Will Satisfy Agency Requirements is being applied because existing AFCEC HVAC Chiller System Standardization requires a single manufacturer at the installation level. 502d Civil Engineer Group and the 149<sup>th</sup> Civil Engineer Squadron conducted a series of analysis to justify the

(Source Selection Information - See FAR 2.101 and 3.104-4)

use of a single manufacturers for Heating, Ventilation, and Air Conditioning (HVAC) chiller units.

- i. As described at FAR 6.302-1(a)(2), when the supplies or services required by the agency are available only from one responsible source, or for DoD, NASA and the Coast Guard, from only one or a limited number of responsible sources, and no other types of supplies or services will satisfy agency requirements, full and open competition need not be provided for.
  - ii. As further described in FAR 6.302-1(c), an acquisition or portion of an acquisition that uses a brand-name description or other purchase description to specify a particular brand-name, product, or feature of a product, peculiar to one manufacturer does not provide for full and open competition, regardless of the number of sources solicited; and shall be justified and approved in accordance with FAR 6.303 and 6.304.
- b. Heating, Ventilation, and Air Conditioning (HVAC) Chiller System: Trane North America: USAF and JBSA have both issued blanket Brand Name justifications for Trane Chiller systems to reduce costs to train and equipment personnel to operate, maintain, and repair these Chillers. Please see validating language below, particularly paragraphs III, V, VIII, and X, of the Assistant Secretary of the Air Force approved justification that is currently in affect.

**6. Efforts to Obtain Competition:** The Contracting Officer shall publish the notices required by FAR 5.201 and any proposals received shall be considered.

- a. Effective Competition: Multiple distributors and certified persons are approved to provide and install the equipment in the 149th FW facility. The project will be synopsisized on SAM.gov and the requirement for the brand name requirements will be included. The Government will post a solicitation for bids on SAM.gov for 30 days, allowing all small businesses with the appropriate reps and certs to submit bids.
- b. Only the manufacturer is being specified as brand name requirements. The suppliers, distributors, and installers have many sources to obtain competitive pricing from for the total cost.

Trane has a local supply distribution center located in San Antonio Texas. Also, our Prime Vendor has nationwide access to Trane authorized dealers and supply distribution centers. Trane North America is listed on the General Services Administration (GSA), GSA Contract numbers GS-07F-0248K and GS-06F-0079R. Additionally, there are well over 3 suppliers of Trane Chiller systems within the local area and who have appropriate base access on JBSA Lackland AFB.

**7. Actions to Increase Competition:** The installation of this system is based on a previously completed 100% design. A general construction NAICS will be used to

maximize the ability for a qualified small business to submit proposals increasing competition.

**8. Market Research:** Market research was conducted for potential sources that may have the capability to fulfill these requirements. Only the brand names noted by the various entities controlling base infrastructure can be provided to meet the Government's requirements as stated above.

**9. Interested Sources:** In accordance with Defense Federal Acquisition Regulation Supplement (DFARS) 205.205-71, DFARS 206.302-1(d), and DFARS Procedures, Guidance and Information (PGI) 206.302-1(d), a request for sources sought was posted to SAM.gov on 7 March 2023 for 23 days and the results were 10 small business responses claiming they could support the requirements according to the completed design.

**10. Other Facts:**

Procurement History:

- a. As a new ground-up construction requirement for the 149 FW, the Mission Training Center is required to integrate to JBSA with a responding emergency service station utilizing the above branded equipment.
- b. The Mission Training Center new construction requirement is required to conform to ANG standards of using brand systems in all new and retrofit systems for compatibility and sustainment as detailed in ANG ETL 15-01-03.

**11. Technical Certification:** I certify that the supporting data under my cognizance, which are included in the justification, are accurate and complete to the best of my knowledge and belief.

Typed Name: Jose A Acosta Andujar  
Title: Engineer Specialist III

Signature: ACOSTA ANDUJAR,JOSE.AN  
TONIO.1465015523  
Digitally signed by ACOSTA ANDUJAR,JOSE.ANTONIO

**12. Requirements Certification:** I certify that the supporting data under my cognizance, which are included in the justification, are accurate and complete to the best of my knowledge and belief.

Typed Name: Major Trevor P. Ellis  
Title: Deputy Base Civil Engineer

Signature: ELLIS.TREVOR.PA  
TRICK.1403828196  
Digitally signed by ELLIS.TREVOR.PATRICK  
Date: 2024.08.18 12:10:55 -05'00'

**13. Fair and Reasonable Cost Determination:** I hereby determine that the anticipated cost or price to the Government for this contract action will be fair and reasonable. All companies are active in the civilian marketplace with accessible price data readily available for comparison to received bids. The manufacturer has no restrictions from purchasing equipment and allow for any vendor to install their products. No additional licensing is required specific to acquiring these specific brands of equipment.

that will be agreed upon are based on adequate price competition.

Typed Name: Kirk M. Swiantek  
Title: Contracting Officer

Signature: SWIANTEK.KIRK.M  
ATTHEW.10986597  
02  
Digitally signed by  
SWIANTEK.KIRK.MATTHEW.10  
Date: 2024.06.18 13:22:17 -04'00'

**14. Contracting Officer Certification:** I certify that this justification is accurate and complete to the best of my knowledge and belief.

Typed Name: Kirk M. Swiantek  
Title: Contracting Officer

Signature: SWIANTEK.KIRK.M  
ATTHEW.10986597  
02  
Digitally signed by  
SWIANTEK.KIRK.MATTHEW.10  
Date: 2024.06.18 13:22:40 -04'00'

### Approval

Based on the foregoing justification, I hereby approve the procurement of the Heating, Ventilation, and Air Conditioning (HVAC) Chiller System for Trane North America for the [REDACTED] on an other than full and open competition basis pursuant to the authority of 41 U.S.C. 3304(a)(1), subject to availability of funds, and provided that the services or property herein described have otherwise been authorized for acquisition.

MCKAY.CARRIE.  
ANN.1504100770  
Digitally signed by  
MCKAY.CARRIE.ANN  
70  
Date: 2024.06.20 08:31:43 -04'00'

**Chief of Contracting Office:**

Carrie A. McKay  
Division Chief  
A-E, Construction & Environmental (NGB-AQ-R)  
Email: Carrie.A.McKay2.civ@army.mil



Justification and Approval (J&A) for Other Than Full and Open Competition

NOTE: If a Justification and Approval was approved for the preceding acquisition, a copy of the approved J&A for the predecessor action must be included in the staff package for approval of the instant J&A. This applies to J&A staff packages that are submitted for review and approval at a level above the contracting officer. The predecessor J&A will be used as a reference document by the approving official.

Is this a new or amended J&A Document? [X] New [ ] Amended (Prior to Award Only!)

Is this a Bridge Action as defined in the AF Bridge Action Reduction Plan? [ ] Yes [X] No

Funding level for this acquisition: [REDACTED]

Contracting Activity: Air Force Installation Contracting Center (AFICC)

Purchase Request / Local ID Number: TBD

Program / Project (and PE, if applicable): HVAC Chiller Replacement Standardization

Program Type (PEO or Other Contracting): Other Contracting – Air Force Category Management of Cat 4#, Facilities and Construction

Authority: 6.302-1 – 10 USC 2304(c)(1), Only One Responsible Source and No Other Supplies or Services Will Satisfy Agency Requirements

[REDACTED] J&A Type: [X] Class [ ] Individual

COORDINATION (AFFARS 5306.304(a))

Table with 3 columns: Date, Project Lead/Program Mgr/Requiring Activity, Signature. Contains 7 rows of coordination signatures from various officials including Elizabeth M. Harwood, Julian S. Kaelin, Michaelisa Tomasic-Lander, Robert A. Hixenbaugh, and Renee M. Richardson.

[Handwritten signature]



**Justification and Approval (J&A) for Other Than Full and Open Competition**

Date 19 Jul 19	SCOTT A. KISER, SES, DAF Associate Deputy Secretary (Contracting) Assistant Secretary of the Air Force (Acquisition, Technology, & Logistics)	Signature KISER.SCOTT.A LAN.1103048857 <small>Digitally signed by KISER.SCOTT.ALAN Date: 2019.07.19 16:29:51 -04'00'</small>
-------------------	--	---

**APPROVAL** ([AFFARS 5306.304\(a\)](#))

Date	William B. Roper, Jr. Assistant Secretary of the Air Force (Acquisition, Technology & Logistics)	Signature  7 Aug 2019
------	--	---



## Justification and Approval (J&A) for Other Than Full and Open Competition

---

### I. Contracting Activity.

Department of the Air Force, Air Force Installation Contracting Center, 771 Enterprise Sourcing Squadron, 1940 Allbrook Dr., Fairborn, OH 45433

### II. Nature and/or description of the action being processed.

The United States Air Force (USAF) has a brand name requirement to procure Heating, Ventilation, & Air Conditioning (HVAC) chillers from a limited selection of manufacturers (see attached addendum titled: Addendum\_Base-MFG'R Selection List) to support new chiller purchases for the remainder of this Fiscal Year (FY) through 30 Sep 2024. This Class J&A will support multiple contracts (new) throughout USAF both CONUS and OCONUS locations.

### III. Description of supplies/services required to meet agency needs.

This Class J&A covers all USAF HVAC chiller purchases from the effective date of this Class J&A through 30 Sep 2024. Chiller purchases during the next 5 years are expected to number 1,976 units (the number of units expected to reach the end of life cycle). The total spend necessary for replacement of these units has been estimated at \$370M. Approval of this Class J&A will reduce the total cost of ownership to the Air Force by eliminating inefficiencies and duplication in cost by reducing the need to train USAF HVAC maintainers on multiple manufacturers' systems, eventually reducing the cost of training by an estimated \$6.2M per 5 year training cycle. Standardization under this class J&A also allows, over time, HVAC Chiller repair to be done in-house as the primary option versus contracting out these services, resulting in further savings to the Air Force of approximately [REDACTED] training cycle. Approval will also increase mission performance efficiencies by streamlining and specializing Civil Engineering (CE) maintainer's schoolhouse training, increasing expertise of organic maintainers thereby reducing downtime of chillers for repair and replacement due to increasing expertise of organic maintainers. The increased availability of trained maintainers also improves the sustainment of the Air Force's equipment, machinery, and communications systems. Approval will also increase process efficiencies by allowing CE pre-planning for building design, will improve lifecycle maintenance and replacement of expensive and critical equipment, and will leverage spending on spare parts inventory.

### IV. Statutory authority permitting other than full and open competition.

The Competition in Contracting Act (CICA) at 10 U.S.C. 2304(c)(1), as implemented by FAR 6.302-1(a)(2) and required by FAR 6.303-2(b)(4), states when supplies or services required by the agency are available from a limited number of responsible sources and no other type of supplies or services will satisfy agency requirements, full and open competition need not be provided for.

### V. Demonstration that the contractor's unique qualifications or nature of the acquisition requires the use of the authority cited above (applicability of authority).

The Air Force is required to use the "brand name exception" to CICA because the nature of the acquisition as a strategic vehicle for Category Management (CM) requires a pre-planned brand name approach to acquiring HVAC chillers. This brand name acquisition is integral to generate significant estimated cost savings in training expenses and efficiency improvements in mission performance not otherwise available under full and open competition.

The training costs of Air Force maintenance personnel would be greatly reduced under the standardization of HVAC Chillers mentioned in paragraph II. There are two aspects of training for Air Force maintenance personnel. Similar to other Air Force assets, additional training beyond initial skills training is required to maintain proficiency in the system's maintenance. Initial training for Air Force personnel maintaining HVAC systems is conducted at Sheppard AFB (the "school house") and includes basic instruction on Chillers for common maintenance and operations across the inventory of Air Force chillers. However, there is no detailed instruction on fault diagnosis and repair because the Air Force inventory of chillers has 142 different manufacturers, the unique difference in the manufacturers' processes cannot be trained to



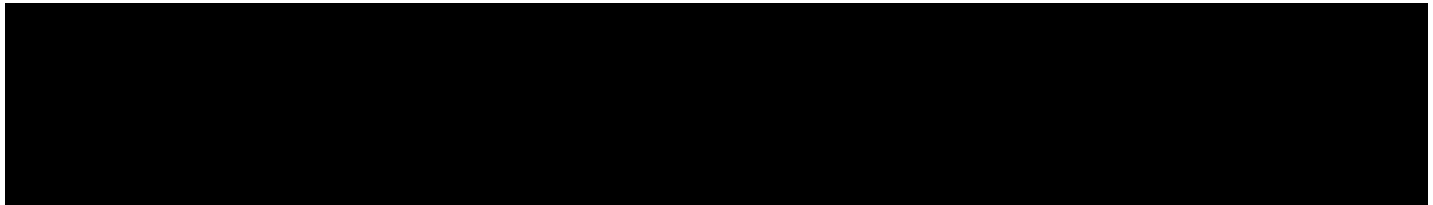


## Justification and Approval (J&A) for Other Than Full and Open Competition

ensure trainees master all manufacturers. Therefore Air Force personnel require additional training at the maintainer's duty location on base-specific manufactures' chillers. At every Air Force base, there are between 1 and 19 number of unique manufactures' chillers, requiring the local training to stretch across all different types of chillers. The Air Force Civil Engineering Center (AFCEC) Force Development Manager for HVAC reviewed the Career Field Education and Training Plan (CFETP) to capture the costs for minimal training to operate and maintain multiple systems. Of the 20 HVAC chiller-related tasks on the CFETP, 13 tasks would have to be re-learned or accomplished with each new manufacturer bought and installed. Thus, 65% of the baseline training costs is repeated at the duty station for each new manufacturer installed at a base. This level of effort is not practical, and cannot occur while still meeting the basic mission needs. The result is an under-trained workforce burdened to train-as-you go, which ends in failed attempts to maintain and repair critical equipment.

Additional training must also be provided above the CFETP to ensure advanced troubleshooting and repair of specific systems. Advanced training requires the manufacturer to be involved in order to certify that the maintainer can use proprietary systems for fault diagnosis, or have access to proprietary code for digital faults. The cost of this training is high and is specific to each manufacturer. Currently, the Air Force funds this training for only the top manufacturer used at the base, and any repairs required on other complex systems are contracted out.

The training is currently conducted by the manufacturers at their location resulting in Temporary Duty (TDY) costs for all maintainers requiring training. Each manufacturer has five courses that must all be completed to be fully trained. The majority of installations, 96%, have more than one chiller manufacturer represented, with a mean value of seven, and a maximum of 19. This represents a significant duplication of training costs and time in having maintainers obtain required training from each manufacturer.



The most savings would result by the Air Force establishing local specialized training, once the installation's standardized Chiller manufacturer is designated. Through standardization and on-site organic advanced training, the cost is estimated to reduce to approximately [REDACTED] to train all 3006 maintainers on a single manufacturer's system in-house. Alternatively, even if the Air Force paid full vendor prices and were trained at the bases instead of sending maintainers TDY that cost drops down to [REDACTED]. Any mix of training reform aided by standardization results in [REDACTED] in cost reductions.

The Category Management process identified the Air Force did not have an established TCO model for Chillers. The CIR team sponsored a master's student at the Air Force Institute of Technology (AFIT) to develop a Total Cost of Ownership (TCO) model template for HVAC systems that includes sustainment costs. A major finding of this thesis is the enterprise lacks data to properly complete a TCO model. Therefore, the model was used for this effort was derived from existing operations and maintenance and contract spending data associated with HVAC. The TCO model provides USAF acquisition, contracting, and civil engineering professionals a tool with which to project life-cycle costs, negotiate prices, and justify spending decisions. Furthermore, the model provides a proof of concept to the CE enterprise that will allow for the expansion of TCO modeling to other categories of spending. Based on the AFIT thesis, the CIR team is investigating TCO data improvement initiatives and also investigating simulation as a means to generate enough TCO modeling to support purchasing decision scenarios. For example, decisions that incorporate controls cyber security, energy consumption, and mean time between failure considerations.

Implementation of this Class J&A will (1) facilitate to standardize the USAF on a very limited number of chiller manufacturers which reduces training costs by an estimated [REDACTED] training cycle and increases mission performance efficiencies, (2) will ensure training will be more defined, (3) will increase the responsiveness and effectiveness of in-house maintainers resulting in fewer and shorter downtimes for building HVAC systems, and (4) will lead to a more cost effective delivery of mission capability by ensuring Air Force maintainers are fully trained. Therefore, award to any other sources than those specified brand names for specified Air Force bases would result in continued substantial duplication of cost and lowered mission performance to the Government that is not expected to be recovered through competition. Finally, approval will generate demand efficiencies by reducing the equipment and parts inventories



## Justification and Approval (J&A) for Other Than Full and Open Competition

---

for CE and the personnel required to sustain them.

### **VI. Description of efforts made to ensure that offers are solicited from as many potential sources as practicable.**

IAW FAR 5.201 a Notice of Proposed Contract Action/Special Notice, 238220, HVAC Chillers, was posted on FedBizOpps (FBO) 15 March 2019; the posting remained open for 15 days.

A brief description of the requirement was included in the FBO notice. The notice advised that any interested responsible party that believed it was equally or otherwise uniquely capable of meeting the requirements should submit a capability statement. The notice also stated that supporting evidence must be furnished in sufficient detail to not only demonstrate the ability to fulfill the requirement but also demonstrate that competition would be advantageous to the government and would not create a break in service or degradation of performance quality. Two sources expressed interest in the published Special Notice/Synopsis that was posted on FBO, neither of the sources were chiller manufacturers.

In addition, a survey was conducted in March 2018 in preparation of the creation of the CIR. The Air Force's current main Original Equipment Manufacturer (OEM) companies were contacted, including Trane, Carrier, the York brand of Johnson Controls, and McQuay Chillers of Daikin Applied. These manufacturers account for 88% of the chillers installed on USAF Bases. The manufacturers, with the exception of Trane who did not respond, provided summary descriptions of their product lines supporting the general idea that all of them have capability to meet the USAF requirements and support standardization efforts. The responses also supported the idea of competition among the manufacturers being maintained at the distributor level, where possible small business awards can be made. The cost and efficiency benefits to the Air Force through standardization and interoperability, with sunk costs of existing and highly reliable infrastructure, greatly outweighs the expected benefits of competition of differing OEM brands.

Ultimately, full and open competition is what led the Air Force to the current state of costly training but still less than fully trained maintainers, multiple systems per base requiring contracting out advanced repairs, and preventing the efficiencies of less system down-time. The Air Force owns and operates large infrastructure systems, however installing disparate systems has led to a lack of operations and maintenance proficiency. The market research and the subject matter expert analysis captured in the CIR documents that training effectiveness and system knowledge diminish as manufacturer diversity increased, with both chillers and control systems. Inversely, costs to train go up to pay for diverse training programs over all the systems. Lack of expertise with complexity across multiple chiller systems coming from a multitude of vendors all lead to gaps in training, and inability to operate and maintain systems effectively. Finally, the CE schoolhouse training dollars as well as local base O&M funds for training are not being effectively applied when the result is less than a fully qualified organic maintenance function. AFCEC has documented that the limited funds for training do not now meet the standards to have at least two fully qualified maintainers per HVAC chiller system at each location. The efficiencies gained by standardization on selected brand name systems per base will allow the saved O&M funds to be applied to unmet training needs.

### **VII. Determination by the Contracting Officer that the anticipated cost to the Government will be fair and reasonable.**

Contracting Activities will be required to make an individual determination of price fair and reasonableness IAW FAR 13.106-3(a) (simplified acquisitions) or FAR 15.403-3(c)(1) (commercial acquisitions) prior to award. AFCEC and local bases have a large data base of historical prices based on competitive acquisitions, which should be used for comparisons and the government's estimate. While there would not be competition among manufacturers for a local base buy of the assigned name brand HVAC chiller under this J&A, most decentralized purchases will include installation and minimal training when needed. These costs will be competed, most likely among small business installers.

The future of the Category Management direction for HVAC chillers may include AFICC-level negotiations directly with the manufacturers for best customer pricing. This will be an opportunity for a strategic agreement between the government and the manufacturers identified on the attached addendum list. At this time the Air Force CE community needs the



## Justification and Approval (J&A) for Other Than Full and Open Competition

immediate J&A authority to limit acquisitions to assigned brand name chillers because it is estimated that approximately

life this fiscal year. Procuring under this class J&A will replace the anticipated repeated requests from local contracting units for brand name J&As to ensure equipment interoperability which were not consistently processed and approved and often stalled procurements by roughly 12 weeks on average. Under this class J&A, contracting units will not process separate J&As, creating more agile acquisition cycles, as well as cost savings in demand and process.

### **VIII. Description of the market research conducted and the results, or a statement of the reasons market research was not conducted.**

A joint CIR between Air Force Installation and Mission Support (AFIMSC), AFCEC, and AFICC was accomplished to gain practical knowledge and experience in how the Air Force manages HVAC systems as well as current market and industry trends and practices. Supporting facts in this Class J&A were drawn from this CIR, which documents historical and future HVAC Chiller long-term and in-depth spend and trend analysis. Input was gathered from AFCEC subject-matter experts, market analysis, and gap analysis.

### **IX. Any other facts supporting the use of Other Than Full and Open Competition.**

In order to increase mission performance, costs savings, and innovation in business methods, HVAC chiller standardization supports the National Defense Strategy objective to innovate business decisions for saving taxpayer dollars. In order to implement this acquisition strategy, the Air Force must pre-plan the brand name HVAC chillers per installation.

### **X. List of any sources that expressed, in writing, an interest in the acquisition.**

This class J&A does not have a specific acquisition attached to this request. Sources that expressed interest in this effort are as follows: Carrier, the York Brand of Johnson Controls, McQuay Chillers of Daikin Applied, Matthis Construction Company, and US Comfort Building Services Inc. The underlying analysis of the need for standardization accounted for as many different manufacturer's brands as would be practical to achieve the maximum amount of savings and efficiencies. An "or equal" manufacturer to those who are represented in the attached addendum is an oxymoron in that other brands may be able to heat and cool equally. However, those "or equals" could not produce the savings and efficiencies determined by the extensive business analysis found in the CIR because they could not provide the standardized training on proprietary information and designs, and could change the fact that multiple manufacturers would still be procured using the status quo procedures. The efficiencies of maintaining a limited number of HVAC chiller brands over time could not be achieved.

### **XI. A statement of the actions, if any, the agency may take to remove or overcome any barriers to competition before making subsequent acquisitions for the supplies or services required.**

The only barriers to competition under this class J&A have been generated by historical purchases. This class J&A action only recognizes that past competitive awards have established the number and mix of HVAC chillers on each base. The Category Management analysis and action only recognizes these facts and maximizes savings and efficiencies based on what the Air Force has in its current inventory across the enterprise and at local levels. The Air Force will continue to perform data driven analysis over time to look for market changes that may increase competition amongst HVAC chiller manufacturers. Additionally, as standard industry practice involves manufacturers, selling through vendors, competition will be maintained at the Dealer/ Distributor level. As noted earlier, the Air Force may pursue negotiations for best customer pricing directly with selected brand name manufacturers to pre-price the chillers.

### **XII. Certification by the Contracting Officer.**

The Contracting Officer's signature on the Justification and Approval Document provides evidence that he has determined



## **Justification and Approval (J&A) for Other Than Full and Open Competition**

---

this document to be both accurate and complete to the best of his knowledge and belief (FAR 6.303-2(b)(12)).

### **XIII. Certification by the technical/requirements personnel.**

As evidenced by their signatures on the Justification and Approval Document, the technical and/or requirements personnel have certified that any supporting data contained herein, which is their responsibility, is both accurate and complete (FAR 6.303-2(c)).



**DEPARTMENT OF THE AIR FORCE  
502D CIVIL ENGINEER GROUP  
JOINT BASE SAN ANTONIO**

MEMORANDUM FOR AFCEC/COO

FROM: 502 CEG/CL

SUBJECT: Chiller System Manufacturer Standardization Request

1. The 502d Civil Engineer Group has conducted a series of analysis to justify the use of a single manufacturers for Heating, Ventilation, and Air Conditioning (HVAC) chiller units. As a result of the analysis, Trane Incorporated has been identified as the requested manufacturers of chiller systems to be used at Joint Base San Antonio.

2. A comprehensive inventory control analysis was completed by a team comprised of the CEO Infrastructure Superintendent and the HVAC Systems Sub-Activity Manager. The following data was derived from BUILDER:

<b>Manufacturer</b>	<b># of Units</b>	<b>Percent of Total Units</b>	<b>Component Replacement Value</b>	<b>Average Remaining Service Life</b>
TRANE				
CARRIER				
MCQUAY				
YORK				

3. A supply chain analysis was completed by the Chief of Material Control. Three local authorized Trane Supply and repair companies have been identified that can meet future demand requirements, and there is adequate competition to mitigate fluctuations of component and servicing pricing.

4. Given the high percentage of Trane systems currently on the installation, technicians have significantly more experience and familiarization working with their equipment than other manufacturers on the installation. Additionally, Trane has a local supply distribution center located in San Antonio Texas. Also our Prime Vendor has nationwide access to Trane authorized dealers and supply distribution centers. Trane North America is listed on the General Services Administration (GSA), GSA Contract numbers GS-07F-0248K and GS-06F-0079R.

5. An approval of this initiative will allow the installation to significantly reduce the total cost of ownership to include the initial procurement, subsequent maintenance, and associated training costs with these systems. An approval memorandum from AFCEC/CO is requested to concur with the above findings.

6. Please refer any questions to my POC: Mr. Frank Carbonell, at 210-671-0153, or [francisco.carbonell@us.af.mil](mailto:francisco.carbonell@us.af.mil).

RICHARD TRVINO, P.E., GS-15, DAF  
Director, 502d Civil Engineer Group

cc:  
502 CES/CL

Addendum Base-MFG'R Selection List				
Installation No.	MAJCOM	Installation	Unit	Manufacturer
1				TRANE
2				TRANE
3				TRANE
4				TRANE
5				TRANE
6				TRANE
7				TRANE
8				CARRIER
9				DAIKIN (MCQUAY)
10				TRANE
11				TRANE
12				TRANE
13				TRANE
14				DAIKIN (MCQUAY)
15				TRANE
16				CARRIER
17				TRANE
18				CARRIER
19				TRANE
20				TRANE
21				TRANE
22				TRANE
23				TRANE
24				CARRIER
25				CARRIER
26				TRANE
27				JOHNSON CONTROLS INC. (YORK, QUANTECH)
28				TRANE
29				JOHNSON CONTROLS INC. (YORK)
30				TRANE
31				CARRIER
32				TRANE
33				TRANE
34				TRANE
35				TRANE
36				CARRIER
37				TRANE
38				CARRIER
39				TRANE
40				CARRIER
41				TRANE
42				TRANE
43				INGERSOLL (TRANE)
44				TRANE
45				CARRIER
46				TRANE
47				TRANE
48				TRANE
49				CARRIER
50				TRANE

51					TRANE
52					CARRIER
53					EXHAUSTO/NOVENCO
54					TRANE
55					TRANE
56					TRANE
57					TRANE
58					TRANE
59					TRANE
60					CARRIER
61					DAIKIN (MCQUAY)
62					TRANE
63					CARRIER
64					CARRIER
65					TRANE
66					TRANE
67					CARRIER
68					LG
69					MITSUBISHI
70					CARRIER
71					CARRIER (TOSHIBA-CARRIER)
72					TRANE
73					SWEGON GROUP (BLUE BOX INC.)
74					CARRIER
75					UNIFLAIR LIMITED
76					CARRIER
77					CARRIER
78					CARRIER
79					TRANE
80					UNITED TECHNOLOGIES CORP - UTC (CIAT)
81					CARRIER/CLIVET (FORM, MIDEA GROUP)
82					CARRIER
83					DUNHAM BUSH
84					LG
85					LG
86					LG
87					LG
88					AERMEC INTERNATIONAL
89					CARRIER
90					CARRIER
91	AETC	JBSA	502 CES		TRANE