

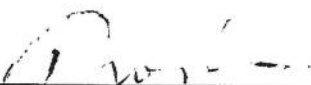
**INTERGOVERNMENTAL  
SUPPORT AGREEMENT**

**BETWEEN**

**NASA AMES RESEARCH CENTER**

**AND**

**ARNOLD ENGINEERING DEVELOPMENT  
CENTER**

  
\_\_\_\_\_  
Tom Moyles  
Chief Financial Officer,  
Ames Research Center

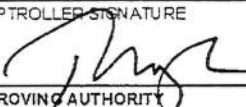
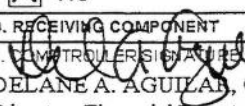
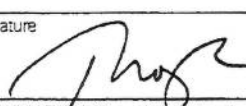
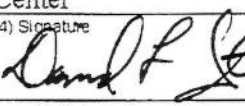
Date December 20, 2005

  
\_\_\_\_\_  
DAVID L. STRINGER, Brig Gen, USAF  
Commander

Date 23 Feb 06

13. ADDITIONAL PROVISIONS(Use this space to continue general and/or specific provisions as needed.)

# SUPPORT AGREEMENT

1. AGREEMENT NUMBER (Provided by Supplier) SAA2 - 401821		2. SUPERSEDED AGREEMENT NO.		3. EFFECTIVE DATE		4. EXPIRATION DATE (May be "Indefinite") September 30, 2006	
5. SUPPLYING ACTIVITY				6. RECEIVING ACTIVITY			
a. NAME AND ADDRESS National Aeronautics and Space Administration Ames Research Center Moffett Field, CA 94035-1000				a. NAME AND ADDRESS Arnold Engineering Development Center 100 Kindel Dr. Suite A303 Arnold AFB, TN 37389-1303			
b. MAJOR COMMAND NASA HQ, Aerospace Tech Enterprise, Wash. D.C.				b. MAJOR COMMAND Air Force Material Command, Wright Patterson AFB, OH			
7. SUPPORT PROVIDED BY SUPPLIER							
a. SUPPORT (Specify what, when, where, and how much) 1) INSTITUTIONAL SHARED SERVICES at Moffett Field, CA  DEMAND SERVICES: 2, 3, 5) Bundled IT Services 4) Audio Visual services 6) Additional Communications services 7) Custodial Services 8) Duplication Services 9) Engineering Support 10) Entomology inside buildings 11) Additional Environmental 12) Health Services 13) Explosive Ordnance Support 14) Facility Maintenance and Repair 14a) Building 246 Maintenance and Repair 15) Additional Fire Protection Services 16) Postal Services 17) Trash Collection and Disposal 18) Additional Security Services 19) Utilities Consumption (including tunnel power) SEND PAYMENTS TO: NASA Ames Research Center Financial Management Division M/S 203-18; Attn: Collections Agent Moffett Field, CA 94035				b. BASIS FOR REIMBURSEMENT 1) \$4.60/SF/YR * x 179,921 *  2, 3, 5) \$9,623/seat/yr x 10 4) Actual Cost 6) Actual Cost 7) \$1.61 * custodial sq ft 8) Actual Cost 9) \$142.83/hour x 2080 hours 10) Actual Cost 11) Actual Cost (none planned) 12) \$90/hour x 55 hours 13) \$65/hour 14) Actual Cost 14a) 31% of bldg 246 maint cost 15) Actual Cost 16) Actual Cost 17) Actual Cost 18) \$35/hour x 320 hours 19) Actual Cost  FY06 Total  * SEE BACK UP FOR DETAILS.		c. ESTIMATED REIMBURSEMENT 1) \$ 827,640  2, 3, 5) \$ 96,230 4) \$ 14,800 6) \$ 140,000 7) \$ 35,000 8) \$ 5,000 9) \$ 300,000 10) \$ 5,000 11) 0 12) \$ 5,000 13) \$ 1,950 14) \$ 50,000 14a) \$ 0 15) \$ 15,000 16) \$ 2,000 17) \$ 3,000 18) \$ 11,200 19) \$ 475,000 Total \$ 1,986,820 QUARTERLY PAYMENTS DUE ON 10/1/05, 12/31/05, 3/31/06 AND 6/30/06 ESTIMATE ONLY; ADVANCE PAYMENT REQUIRED	
ADDITIONAL SUPPORT REQUIREMENTS ATTACHED: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
8. SUPPLYING COMPONENT				9. RECEIVING COMPONENT			
a. COMPTROLLER SIGNATURE 		b. DATE SIGNED 12/20/06		a. COMPTROLLER SIGNATURE  DELANE A. AGUILAR, COL USAF Director, Financial Mgmt and Comptroller		b. DATE SIGNED 23 Feb 06	
c. APPROVING AUTHORITY				c. APPROVING AUTHORITY			
(1) Typed Name Thomas J. Moyles		(1) Typed Name DAVID L. STRINGER, Brig Gen, USAF Commander		(1) Typed Name		(1) Typed Name	
(2) Organization Chief Financial Officer		(3) Telephone Number (650) 604-5073		(2) Organization Arnold Engineering Development Center		(3) Telephone Number (931) 454-5201	
(4) Signature 		(5) Date Signed 12/20/05		(4) Signature 		(5) Date Signed 23 Feb 06	
10. TERMINATION (Complete only when agreement is terminated prior to scheduled expiration date.)							
a. APPROVING AUTHORITY SIGNATURE		b. DATE SIGNED		a. APPROVING AUTHORITY SIGNATURE		b. DATE SIGNED	

**11. GENERAL PROVISIONS** (Complete blank spaces and add additional general provisions as appropriate: e.g., exceptions to printed provisions, additional parties to this agreement, billing and reimbursement instructions.)

- a. The receiving components will provide the supplying component projections of requested support. (Significant changes in the receiving component's support requirements should be submitted to the supplying component in a manner that will permit timely modification of resources requirements.)
- b. It is the responsibility of the supplying component to bring any required or requested change in support to the attention of \_\_\_\_\_ prior to changing or cancelling support.
- c. The component providing reimbursable support in this agreement will submit statements of costs to: \_\_\_\_\_
- d. All rates expressing the unit cost of services provided in this agreement are based on current rates which may be subject to change for uncontrollable reasons, such as legislation, DoD directives, and commercial utility rate increases. The receiver will be notified immediately of such rate changes that must be passed through to the support receivers.
- e. This agreement may be cancelled at any time by mutual consent of the parties concerned. This agreement may also be cancelled by either party upon giving at least 180 days written notice to the other party.
- f. In case of mobilization or other emergency, this agreement will remain in force only within supplier's capabilities.

ADDITIONAL SUPPORT REQUIREMENTS ATTACHED: ☐ Yes ☒ No

**12. SPECIFIC PROVISIONS** (As appropriate: e.g., location and size of occupied facilities, unique supplier and receiver responsibilities, conditions, requirements, quality standards, and criteria for measurement/reimbursement of unique requirements.)

ADDITIONAL SUPPORT REQUIREMENTS ATTACHED: ☐ Yes ☒ No

## 1. Institutional Shared Pool Service

Institutional Shared Pool services ("ISP Services") are comprised of: (i) common grounds and road maintenance; (ii) security; (iii) structural fire response and periodic Fire Marshal inspections; (iv) first responder operations (Hazardous Material (as defined in section 4.3)); (v) utility infrastructure systems maintenance and repair; and (vi) routine administrative support and management oversight (i.e. environmental oversight) related to the Lease. Currently, ISP Services and Landlord's method to calculate the costs thereof are more particularly described in that certain document entitled Services and Cost Sharing for Resident Agencies, NASA Ames Research Center, Moffett Field, for Fiscal Year 2006, effective as of August 18, 2005.

## 2. Bundled IT Services

Many IT services are combined and included in a package or "bundled services". Item 5 of this agreement outlines the services provided in the "bundle". The cost to each resident agency is based on the number of personnel using the "bundled" service.

## 3. Administrative Services (Bundled IT Service):

Includes records management, personnel locator, document control and handling, forms and publications, and maintenance of official publications reference libraries.

Supplier Will:	Receiver Will:
1. Provide administrative services as described above.	1. Reimburse the Supplier for services provided. (Bundled IT Services)

## 4. Audio Visual (Demand):

Includes still photography, graphics, micrographics, and presentation services. Also, includes film, video and audio media services.

Supplier Will:	Receiver Will:
1. Within the capability, and as requested by the Receiver, provide audio visual services as described above.	1. Reimburse the Supplier for services provided.

## 5. Communications (Bundled IT Service):

These services are not offered as individual line items but rather included in the IT Allocated Service Pool. The basis of estimate for the bundled services price is the FY05 IT ASP rate of \$16,103 per DOSWF (direct on site workforce). Since AEDC did not request (nor do they need) NFAC EUL Execution Final 122005

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all of the services provided by the service pool, I removed the cost of services that were not applicable. Specifically, I removed the cost for IFM/Business Systems, IT Management (we will not complete OMB exhibits or other regulatory functions for them), half of the cost of Central Services (since they will need PC infrastructure services but are not interested in our email, calendar, web, etc) and SERV-I overhead. The proposed rate for bundled services computes to \$9,623 per person.

The bundled rate entitles them to use of the LAN infrastructure, Internet (wide area network) access, video infrastructure (NASA TV and select commercial and cable TV stations), telephone services (local and long distance), windows infrastructure services (domain, active directory, file sharing), inclusion in center-wide email and use of our "Intranet" services like X.500 white pages and Inside Ames. Also included are IT security services including regular vulnerability scanning, incident investigation, protection via our firewalls and monitoring and patch management. Note that the cable plant infrastructure is covered to the main demarcation point in each building. Installation of any wiring required **inside** a building that does not currently exist is a demand service that requires a separate cost estimate. Once the network is established, the maintenance of it is covered in the bundled cost.

Note that the centrally provided storage is for common office file sharing. This is not a massive data store for science or experiment data.

The following of the requested services are specifically included in the "bundled" price.

- a. Provide phones with DSN, Long Distance (FTS 2001), and local access.
- b. Provide COMSEC support
- c. NASA ARC (distribution all) email.
- d. Network support for Office LAN environment.
- e. Provide Centralized Help Desk support.
- f. Provide data storage.
- g. Provide access to DREN network for VPN connection (this is AEDC's largest bandwidth WAN).

Supplier Will:	Receiver Will:
1. Provide Bundled IT Services as described above.	1. Reimburse the Supplier for services provided.

## 6. Communications (Demand):

Includes dedicated communications services and telephone equipment, add/move/change Cat 5 and voice lines, and access to the Engineering Documentation Center. May also include leasing of communications equipment, lines, and special communications-electronics equipment services (i.e. Cell Phone, Pagers, etc).

The following requested services are offered on a demand basis at price (or price range) indicated:

- a. Provide STU/STE telephone capability: We have a variety of secure communications devices available ranging from reuse of old STUs (included in Bundled cost), STEs which can be purchased for \$3400-\$3700, and a lower bandwidth device that supports FNBDT quality over PSTN for \$1700. If ISDN is desired, it can be provide for a monthly cost of \$35/line (plus usage fees) and a one time installation cost of \$300.
- b. Provide support for Blackberry, Cell Phones, Pagers, Land Mobile Radios (LMR).
  1. Blackberry: Model 7550, includes 18 month refresh and unlimited data plan. \$840/yr. Optional services include voice plan (550 any time minutes for \$660/year), enhanced support, additional documentation, etc. (prices for each optional service vary)
  2. Cell Phones: Includes 24 month refresh and 500 anytime minutes per month for \$720/year. Option to upgrade to additional minutes includes 850 anytime minutes/month for \$300/year additional, 1200 anytime minutes/month for \$576/year additional or 1900 anytime minutes/month for \$1,140/year additional
  3. Pagers: One-way alphanumeric pager for \$96/year, one-way text messaging pager for \$204/year or 2-Way text messaging pager for \$528/year.
  4. Land Mobile Radios: Service cost for LMR service is \$460/radio/year. We have some older radios available for use (included in the "Bundled" price) which will work for approximately another 2 years. If newer radios are desired the average cost is \$2500 (which includes 2 batteries, a charger and a carrying case).
- c. Provide Seat Management for personal computers. Air Force PCs will require support for the following:
  1. AF AFMC Windows & Office standards of Windows XP and Office 2003 Professional.
  2. Air Force email through Outlook Web Access (through Virtual Private Networking).
  3. Cisco VPN client for Windows
- d. Our seat management contract offers the following basic hardware and service options:

Base Seat Management Costs		
	Monthly/seat	Annual/seat
Desktop PC	210.48	2234.28
Laptop PC	259.53	2755.00
Desktop Mac	271.23	2879.19
Laptop Mac	296.62	3148.78

- e. Desktops and laptops are in the 85<sup>th</sup> percentile of performance measurement. Newest platforms are measured every 90 days.
- f. PC seats are HPs, Mac seats are Apple Towers and Titaniums. All include 1Gb of memory, 17" LCD monitor, 128Mb USB flash memory device and a copy of MS Office for home use.
- g. The twelve standard services included in the base pricing are:
1. Standard application software suite including MS Office Professional, Adobe reader, Citrix, JVM, Stuffit Expander, Quicktime, RealOne, etc
  2. Hardware break-fix and replacement (if necessary) within 8 business hours
  3. System software repair or reimaging (if corrupted) within 8 business hours
  4. Application software repair (standard software suite) within 8 business hours
  5. Hardware refresh every 3 years
  6. Software refresh: new versions of standard software suite components installed within one year of release or as agreed to with the COTR
  7. One Move/Add/Change action per year is included for each seat (tokens are pooled; Ames has never exceeded its allotment)
  8. Helpdesk support during normal business hours; provides remote troubleshooting by helpdesk personnel
  9. Customer training is provided for major system upgrades (e.g., MAC OS X)
  10. System maintenance: apply security patches, bug fixes, make necessary configuration changes
  11. Provides basic b/w printing capability located within 150 feet of customer
  12. Daily centralized data backup services (user data; not OS)
- h. Many accessories and options are available through the seat management "catalog", including smart card readers.

### **Communication Demand Services Requiring Estimates**

The following demand services are of sufficient complexity that they require a requirements discussion with the customer and potentially a site survey after which a detailed cost estimate will be provided for discussion. All work is done on a cost reimbursable basis.



- a. Provide support for cable installations (copper and fiber optics) to support NFAC
  1. Individual Cat-5 moves/adds/changes for the data network are \$180 each
  2. Individual telephone moves/adds/changes are \$35 each.
  3. Moves in bulk can be priced on a cost reimbursable basis.
  4. New cable installations and renovations of existing cable plant will be estimated on a cost reimbursable basis.
- b. Provide System Administrative, Network Administration, and PC/Workstation support on and for the NFAC Test Network.
- c. For supporting non-seat managed systems and any other IT needs including programming, analysis, user support, etc., AEDC can open a task on the A-CITS (Ames Consolidated IT Support) contract. A-CITS is a cost reimbursable contract, and task cost will be based directly on their specific requirements.
- d. Provide the ability to schedule and use the NASA VTC capabilities
  1. Most video conferencing facilities at ARC are paid for directly by specific projects. Recommendation is to identify a conference room in NFAC space and purchase a polycom videoconferencing unit specifically for AEDC use (either via TCP/IP or ISDN). Cost of implementing video conferencing in a conference room requires an estimate as there are many options a customer might choose which will impact the total cost. Implementation can range from a simple installation to a comprehensive high-end collaboration room with sophisticated tools.
  2. Basic table-top voice conferencing Polycom units can also be obtained for group voice conferencing. Optional accessories are also available.

Supplier Will:	Receiver Will:
1. Within the capability, and as requested by the Receiver, provide custodial services in accordance with the description above and all applicable regulations.	1. Comply and ensure that all operations are conducted in accordance with all applicable regulations, and reimburse the Supplier for services provided.
2. Within the capability and as requested by the Receiver, provide dial tone and connectivity to Pacific Bell, FTS 2000, and DSN. Provide instruments, modems, and facsimile equipment. Maintain and	2. Reimburse the Supplier for services provided.

repair all provided equipment. Provide accounting and bill verification.	
3. Within the capability and as requested by the Receiver, provide AF NFAC personnel and their contractors access to the VTC facilities located on the NASA Ames Complex.	3. Schedule the use of the VTC rooms in accordance with the NASA Ames policies and procedures, and reimburse the Supplier for services provided.
4. Within capability and as requested by the Receiver, register and coordinate frequencies used at ARC. Acquire trunking radios and manage trunking system.	4. Adhere to NTIA and NASA Ames frequency regulations. Reimburse the Supplier for services provided.
5. Within capability and as requested by the Receiver, provide additional demand services not specified.	5. Reimburse the Supplier for services provided.

#### 7. Custodial Services (Demand):

Includes labor and material/supplies for janitorial and cleaning services for Receiver-occupied and resident agency-used facilities and areas. This service includes the following tasks and frequencies:

- a. Daily
  1. Trouble Calls
  2. Supply distribution
- b. Daily Services (Restrooms and showers)
  1. Wet mop and disinfect floors
  2. Refill all dispensers (soap, towels, toilet paper, etc., excluding tampons)
  3. Clean and disinfect all fixtures (toilets, urinals, sinks, etc) all exposed and hidden surfaces shall be clean and free of stains, encrustation and water rings.
  4. Clean mirrors and mirror framing as needed
  5. Clean and disinfect walls, partitions, doors and showers including trim, framing, kick plates, etc., as needed
  6. Empty waste containers and pick up debris in area
- c. Three times weekly
  1. Empty waste baskets including wet trash in break rooms
  2. Replace liners with new when necessary
  3. Keep area around waste receptacles clean of all debris
  4. Wash waste container with disinfectant and dry, when necessary
  5. Break down cardboard cartons and place in receptacles
- d. Weekly Services
  1. Vacuum or sweep all entrance mats to buildings
  2. Wet mop hallways and stairs
  3. Sweep and damp mop elevator floors and door tracks

4. Sweep and remove debris at all entryways and landings inside and out
5. Empty cigarette urns
6. Clean and disinfect all drinking fountains

Supplier Will:	Receiver Will:
1. Within the capability, and as requested by the Receiver, provide custodial services in accordance with the description above.	1. Reimburse the Supplier for services provided.
2. Within capability and as requested by the Receiver, provide additional demand services not specified.	2. Reimburse the Supplier for services provided.

#### 8. Duplication Services (Demand):

Includes the operation of centralized copying equipment and related services.

Supplier Will:	Receiver Will:
1. Within the capability, and as requested by the Receiver, provide duplication services.	1. Reimburse the Supplier for services provided.
2. Within capability and as requested by the Receiver, provide additional demand services not specified.	2. Reimburse the Supplier for services provided.

#### 9. Engineering Support (Demand):

Includes professional engineering services from NASA Ames personnel who have specialized engineering/technical skills that may be required to reactive and operate the complex. The skills and hours needed have not been defined at this time, and will be determined on a case-by-case basis.

Supplier Will:	Receiver Will:
1 Within the capability, and as requested by the Receiver, provide professional engineering services as described above.	1. Reimburse the Supplier for services provided.
2. Within capability and as requested by the Receiver, provide additional demand services not specified.	2. Reimburse the Supplier for services provided.

#### 10. Entomology (Demand):

Includes abatement and control measures directed against insects, rodents, weeds, fungi, and other animals or plants that are determined to be undesirable in buildings, equipment, supplies, and on grounds.

Supplier Will:	Receiver Will:
1. Provide entomology services as described above.	1. Reimburse the Supplier for services provided. Entomology services within buildings is not included in ISP Services.

#### 11. Environmental (Demand):

Includes hazardous waste pickup, packaging, transportation and disposal, sampling for waste stream characterization, as well as spill response and clean-up activities.

Supplier Will:	Receiver Will:
1. Within the capability, and as requested by the Receiver, provide environmental services as described above.	1. Reimburse the Supplier for services provided.
2. Within capability and as requested by the Receiver, provide additional demand services not specified.	2. Reimburse the Supplier for services provided.

#### 12. Health Services (Demand):

Includes routine health care and use of Supplier's health unit. Emergency services in response to injuries occurring on the Property are included in ISP Services.

Supplier Will:	Receiver Will:
1. Within the capability, and as requested by the Receiver, provide health care services as described above.	1. Reimburse the Supplier for services provided.

### 13. Explosive Ordnance Support (Demand):

Includes services and facilities for explosive ordnance storage, disposal and training.

Supplier Will:	Receiver Will:
1. Provide explosive ordnance support services as described above.	1. Reimburse the Supplier for services provided.
	2. Comply with Supplier's safety regulations.
	3. Coordinate with Supplier's Safety Office when bringing explosives onto or transporting around site.

### 14. Facility Maintenance and Repair (Demand):

Includes routine and cyclical preventive maintenance and minor repairs required to preserve or restore real property so it may be used for its designated purpose. This item applies to "building systems" preventive maintenance and trouble calls. It does not include preventive maintenance or trouble calls done on tunnel/test or test bed equipment.

Supplier Will:	Receiver Will:
1. Within the capability, and as requested by the Receiver, provide facility maintenance and repair requested by the Receiver.	1. Reimburse the Supplier for services provided.
2. Within capability and as requested by the Receiver, provide additional demand services not specified.	2. Reimburse the Supplier for services provided.

### 15. Fire Protection (Demand):

Includes medical transportation and fire extinguishers and maintenance.

Supplier Will:	Receiver Will:
1. Within the capability, and as requested by the Receiver, provide fire protection services as described above.	1. Reimburse the Supplier for services provided. (Demand)
2. Within capability and as requested by the Receiver, provide additional demand	2. Reimburse the Supplier for services provided.

services not specified.	
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#### 16. Postal (Demand):

This service includes pick up and delivery of mail to and from the NFAC on a daily basis.

Supplier Will:	Receiver Will:
1. Within the capability, and as requested by the Receiver, provide daily pick up and delivery of mail.	1. Reimburse the Supplier for metered mail. Pick up and delivery of mail is not reimbursable.
2. Within capability and as requested by the Receiver, provide additional demand services not specified.	2. Reimburse the Supplier for services provided.

#### 17. Refuse Collection and Disposal (Demand):

Includes collection and disposal of trash and waste materials.

Supplier Will:	Receiver Will:
1. Within the capability, and as requested by the Receiver, provide refuse collection and disposal of trash and waste materials.	1. Reimburse the Supplier for services provided.
2. Within capability and as requested by the Receiver, provide additional demand services not specified.	2. Reimburse the Supplier for services provided.

#### 18. Security Services (Demand):

Include developing and implementing programs and activities for crime prevention and deterrence, preservation of life, protection of property, traffic enforcement, defense of personal rights, and enforcement of all applicable Federal, State, and local laws and regulations. Personnel providing these services are armed and have Federal Arrest authority granted under Section 304 (e) of the Space Act of 1958, as amended.

Basic services will be provided 24 hours per day. A Communications Center (including Emergency 911 service) is in operation 24 hours per day. Investigative services are provided during normal business hours and on an on-call basis during non-business hours. Records and documentation of activities and incidents will be maintained as part of the service. Services are provided by NASA support contractors.

This element also includes physical security services to control perimeter gates and other access points and to provide surveillance, inspection, security guidance and services, and law enforcement. Receiver will be responsible for coordinating employee badging and access requirements with the Protective Services Office. Visitor processing/badging will be provided by the Visitor Reception/Badging Office. Other physical/technical security services include periodic assessment of the security posture of NASA Ames Research Center, evaluating vulnerabilities, establishing physical barriers/clear zones, coordinating/managing security alarm and electronic access control system requirements, and providing information and coordination to assure that all NASA Ames Research Center activities and special events are planned and performed in compliance with established procedures and requirements. Statistical data will be maintained and recommendations may be made to improve security. Costs for providing additional security services for special events or special requirements will be borne by the sponsoring agency on a cost reimbursable basis. Services will be provided by NASA support contractors.

Supplier Will:	Receiver Will:
1. Provide security services as described above.	1. Reimburse the Supplier for services provided to the extent not included in ISP Services.

#### 19. Utilities (Demand):

The Utility Plan attached to the Lease outlines the methodology (meter or engineering estimate) to determine utility usage. This item includes water, sewage, electricity, natural gas. If Receiver requires high pressure air, it may request the same from Supplier as a Demand Service.

Supplier Will:	Receiver Will:
1. Provide the utilities described above in accordance with the terms and conditions of the Lease.	1. Reimburse the Supplier based on meter readings or engineering estimates as set forth in the Utility Plan attached to the Lease.
2. Within capability and as requested by the Receiver, provide additional demand services not specified.	2. Reimburse the Supplier for services provided.

