

# ACITS-3 FORM

## PART 1 - TASK ORDER INFORMATION

<b>Contract No:</b> NNA13AB88C		<b>Contract Title:</b> ACITS 3 NASA AMES		
<b>Date:</b> 5/3/2016		<b>Task Title:</b> Radio Frequency (RF) and Video Services		
<b>Task Order No.:</b> I63	<b>Task Mod No.:</b> Original	<b>Service Request No.:</b>	<b>Customer Code:</b> NASA/Ames Research Center	<b>SOW Reference:</b>
<b>Order Type:</b> Cost Plus Fixed Fee		<b>Funding Level:</b> Task Level Funding		
<b>Task Requester Email:</b> (b) (6)		<b>Name:</b> Justin Hopkins		<b>Phone:</b> (b) (6)
<b>Financial Manager Email:</b> (b) (6)		<b>Name:</b> Rafael Medina		<b>Phone:</b> (b) (6)
<b>Computer Security Officer Email:</b> (b) (6)		<b>Name:</b> Ernest Lopez		<b>Phone:</b> (b) (6)
<b>Task previously covered by another contract other than predecessor to incumbent? (If YES, provide in SOW)</b>				<b>NO</b>
<b>Does the task require access to government databases? (If YES, indicate in SOW)</b>				<b>NO</b>
<b>SECTION 508, ELECTRONIC AND INFORMATION TECHNOLOGY ACCESSIBILITY COMPLIANCE (EITAC)</b>				
<b>Does the task include EIT items? (Please review the EITAC documentation)</b>				<b>NO</b>
<p>Upon receipt of this task order request, the contractor shall review the task requirement(s) and inform the Government, as part of its task order/modification response, any discrepancies between standards initially cited and those the contractor proposes to deliver to the Government. Examples of discrepancies include ODCs for which some other standard might be or become applicable and, as a result, require citation in the task order, as well as any cited standards that the contractor believes is not applicable (provide rationale). Note: If, by mistake, the task, including and ODC of the task, should not meet an applicable standard not cited by the requester, it is the requester, not the contractor who is a fault; and the requester must find a way (e.g., by modifying the task request) to bring the task into compliance. In such cases the requester shall complete the required agency forms (or equivalent) before the task order/modification is approved.</p>				
<b>GOVERNMENT FURNISHED EQUIPMENT (GFE)</b>				
<p>Government will provide all appropriate equipment and software necessary for the performance of this task unless otherwise noted in this task order. The contractor, in accordance with the contract can acquire equipment not presently available as GFE. Equipment identified as task unique will be expensed to the task in accordance with ASRC Federal Accounting policy, and will be defined as GFE in the Government inventory. All other equipment purchases will be depreciated and become contractor property. The contractor shall follow agency rules regarding assignment of government owned equipment and other government supplied equipment. The contractor shall provide information, such as, Property Assignments, Property Location and Unused Equipment, upon request.</p>				
<b>AFFIRMATIVE PROCUREMENT (See <a href="http://www.epa.gov/cpg/products.htm">http://www.epa.gov/cpg/products.htm</a>)</b>				
<p>The item(s) being purchased are NOT on any of the EPA's Comprehensive Procurement Guideline lists. - AND -</p> <p>They meet the minimum recycled/recovered content.</p>				
<b>COTR SIGNATURE:</b> Kirsten Nagel (5/26/2016)			<b>CO SIGNATURE:</b> Anjennette Contreras-Rodriguez (5/31/2016)	

## ACITS-3 FORM (Continued)

PART 2 - TASK ORDER PLAN PROPOSAL				
<b>Contract No:</b> NNA13AB88C		<b>Contract Title:</b> ACITS 3 NASA AMES		
<b>Date:</b> 5/3/2016		<b>Task Title:</b> Radio Frequency (RF) and Video Services		
<b>Task Order No.:</b> I63	<b>Task Mod No.:</b> Original	<b>Service Request No.:</b>	<b>Customer Code:</b> NASA/Ames Research Center	<b>SOW Reference:</b>
<b>Order Type:</b> Cost Plus Fixed Fee		<b>Funding Level:</b> Task Level Funding		
Categories	Current Request	Prior Cumulative Estimate Without Current Request	Total Cumulative Task Estimate	
Onsite Hours	(b) (4)			
Offsite Hours				
Total Hours				
Onsite Labor				
Offsite Labor				
Subtotal ARTS Labor				
Teammate/Subcontractor Labor				
Subtotal Teammate/Sub Labor				
Total Labor				
Materials				
Equipment				
Travel				
Training				
Miscellaneous				
Other Direct Costs Subtotal				
Total Cost				
PMO				
Fee				
Total Price				

## ACITS-3 FORM (Continued)

### PART 3 - APPROVAL SUMMARY

<b>Contract No:</b> NNA13AB88C		<b>Contract Title:</b> ACITS 3 NASA AMES		
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<b>Order Type:</b> Cost Plus Fixed Fee		<b>Funding Level:</b> Task Level Funding		
<b>Approved By</b>	<b>Name</b>	<b>Date</b>	<b>Email</b>	<b>Phone</b>
1. COTR Hopkins	Kirsten Nagel	5/26/2016	(b) (6)	(b) (6)
2. CO Hopkins	Anjennette Contreras-Rodriguez	5/31/2016		

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**Task Background:**

This task will support Center Radio Frequency (RF) and Video Services. These services are broken down into the following five specific sub-functions: 1) Land Mobile Radio (LMR) System Maintenance, Operation and Customer Service, 2) Video Systems Maintenance, Operation and Customer Support, 3) Multimedia Support, 4) Emergency Communications Support and 5) Spectrum Management Support. Services supported under each function entail support of 1) the maintenance and operation of the Center LMR system, also known as the Trunking Radio (T-Radio) system, and all associated user equipment; 2) the maintenance and operation of the Center provisioned Internet Protocol Television (IPTV) system; 3) Multimedia support for Center Senior Executive meetings in (b) (7)(E); 4) maintenance, setup, operation and maintenance of over \$1 million of specialized IT systems reserved exclusively for Center Emergency Communications preparedness, but made available for loan/use to Center projects while not in use; and 4) support the Center Spectrum Management Office when required to conduct Radio Frequency Interference (RFI) Direction Finding missions and support Center customers with technical analyses for their RF systems utilizing Spectrum Management Office provisioned GFE.

**Statement of Work - Requirements, part 1:**

Land Mobile Radio (LMR) System Maintenance, Operation and Customer Service. (Charge Point 001)

Hours of operation are to be from 7:30 AM to 4:00 PM Monday through Friday. The Center LMR system is managed by the Center LMR Manager and their duly appointed Alternate. The system consists of eight (b) (7)(E) radio repeater transceivers (seven operational and one always serving as backup), primary and backup transmit and receive antenna systems, redundant transmitter combiner and receiver multi-coupler systems, and other directly associated radio repeater station equipment. Maintenance, operations and other customer services defined below is conducted by the contractor. The Center LMR Manager authorizes limited access to the T-Radio system and system configuration tools due to the system supports Center law enforcement, fire operations, other functions where the radios are depended upon for safety-of-life and national security objectives, and because those who have access to the system will also have the ability to program in radio frequencies to equipment, where specific federal regulatory restrictions apply that only the Center LMR Manager and Alternate are authorized to support. Because of these access restrictions, the contractor is not allowed to sub-grant access to the system or system configuration tools to unauthorized personnel.

The T-radio system is a real-time communications system, thus it must be continuously monitored and serviced, end user equipment modified and repaired when needed, and sound administrative practices adhered to in maintenance, operation, daily monitoring, necessary reconfigurations, repairs, and after hours on call support for the backbone system. Additionally the support staff are assigned with managing the system's drawings, Standard Operating

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Procedures (SOPs), supporting the annual customer chargeback billing, and upkeep of administrative project tools such as the Talk Net Manager list and Alpha Radio Matrix spreadsheet. After hours support is limited to only supporting issues normally reported by customers, and requiring verification by the Center LMR Manager, that can adversely impact safety of life, protection of government property, or impact national security objectives. Examples of such incidents is a complete system outage, availability of less than four T-Radio repeaters, high volume of system generated dropped calls, high volume of system generated call denials, etc. End user specific after hours support is to-be-defined (TBD) when customers request and fund the support (e.g., Center 24x7x365 security-fire radio and 911 dispatch consoles, Center fire station ring down and Public Address (PA) system). Maintenance, operation, daily monitoring, necessary reconfigurations, repairs, and backbone system only after hours on call support requirements are for the Harris Corporation Project 25 (P25) digital trunking T-Radio repeater system i (b) (7)(E) up to 600 associated portable, mobile and base station end user radios, and Personal Data Assistant (PDA) devices operating on the system via the Harris proprietary BeOn capability.

#### Video Systems Maintenance, Operation and Customer Support. (Charge Point 002)

Support distribution of internal and external video feeds throughout the Center via existing IT cable plant infrastructure from the Center Video Control Center and Ames Data Center.

#### Statement of Work - Requirements, part 2:

Video feeds include, but are not limited to internal NASA network distributed TV feeds received via landline or by satellite, internal Center produced video feeds by the Center Video Production Services Office (Code VC), and the IT Operations managed IPTV system. Support the operation and maintenance of the Center IPTV system. Also support operation of the Center Video Conferencing Room located in (b) (7)(E) other video conferencing/distribution/display systems managed by the IT Operations Division, and non-IT Operations Division systems for customers via reimbursement to the division (Ames Service Request). Additionally support the Center Electronic Sign project, a funded initiative being vetted through the Directorate's ITPMB to replace and re-position the legacy Center Electronic Sign with a newer, more capable, state-of-the-art display. Lastly, commence development of proposals to present to the IT Operations Division to remove the decommissioned VIDNET infrastructure from the base IT cable plant.

#### Multimedia Support. (Charge Point 003)

Provide multimedia support scheduled for Center Senior Executives in Ames (b) (7)(E) Support includes operation of audio-video display systems located in the (b) (7)(E) Committee Room and Center Director's Meeting Room.

### ACITS-3 FORM (Continued)

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<b>Task Order No.:</b> 163	<b>Task Mod No.:</b> Original	<b>Service Request No.:</b>	<b>Customer Code:</b> NASA/Ames Research Center	<b>SOW Reference:</b>
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#### Emergency Communications (Charge Point 004)

Support continuous preparedness requirements for the setup, operation and maintenance of the Center's specialized IT systems supporting Center Emergency Communications services, and operator support of the federal NASA HF radio net control, and NCS SHARES Region IX net control. Included but not limited in this support service is the upkeep of the (b) (7)(E) Emergency Communications Center and all systems and supporting resources inside facility; all Center Emergency Communications antenna systems located throughout the Center; various satellite, HF, VHF and UHF RF systems, other IT and supporting logistics systems; and coordination with the Ames Motor Pool to support when necessary maintenance for the two Emergency Communications vehicles, mobile twin 10 kw electrical generators, and one logistics support trailer.

#### Spectrum Management Support (Charge Point 005)

Support Direction Finding (DF) missions when radio frequency interference impacts on-site license and special center spectrum manager approved non-licensed systems.

#### Network Engineer (Charge 006)

Network engineering support as needed to manage, operate and re-configure the core system operational components of the Harris LMR repeater and IPTV systems. Secondary support to data center activities.

#### Personnel Skill Sets:

RF, Emergency Communications and Spectrum Support.

- Certified Electronics Technicians or U.S. Military equivalent training.
- 5 years experience trouble shooting and repairing industrial rated Land Mobile Radios (LMRs).
- 5 years experience operating and maintaining LMR repeater station equipment.
- Certified Zetron radio dispatch console system trained.
- Certified Harris P25 trunking system trained.
- Certified California State 911 system trained.
- Certified Anacom satellite transceiver maintenance and operation training.
- Certified ComTech satellite modem operator training.
- Certified TechCom Direction Finder operator training.
- Certified Optimbase EZ TV system training.
- Experienced with the setup, operation and maintenance of fixed and field depoyable setup of uplink/downlink satellite communications ground station systems, including but not limited to C and Ku-band transceivers, satellite modems and parabolic dishes from 1 - 3.8

### ACITS-3 FORM (Continued)

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meters.

Video.

- 2 plus years Multimedia support experience supporting senior executive level customers.
- 5 years experience operating and maintaining a campus-wide size video distribution plant.
- Experience with IPTV system setup, operation and re-configuration.

Excellent communications and interpersonal skills.

**Government Furnished Property:**

Harris P25 Trunking Land Mobile Radio (LMR) station equipment and antenna system  
 M/A-Com Trunking LMR station equipment and antenna system  
 Agilent Spectrum Analyzer  
 Bird Spectrum Analyzer  
 General Dynamics Communications Test Set  
 TechCom Direction Finding system  
 ComTech satellite modems  
 Anacom C and Ku-band transceivers  
 Travelers Information System (TIS)  
 Vertex 2.4 meter Ku-band Dish  
 Ford 2006 Box Van communications vehicle  
 Chevrolet 1989 truck with Communications Cab  
 Twin 10 kw mobile electrical generators  
 Wells Cargo trailer  
 Various HF, VHF and UHF transmitters and receivers  
 Various HF transmitter amplifiers  
 Various teleconferencing systems  
 Various antenna systems

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<b>Specific Deliverables and Deliverable Dates</b>				
<b>No.</b>	<b>Type of Deliverable</b>	<b>Description of Deliverable</b>		<b>Date Required</b>
1.	Schedule	Implement radio dispatch console system, review candidate systems, select, implement, Initial Operation Capable (IOC), Full		9/15/2016
2.	Schedule	Implement Land Mobile Radio (LMR) Cross-Patching system, review systems, select, implement, integrate com systems, operate, maintain under Charge Point 1 requirements thereafter		9/15/2016
3.	Schedule	Implement IPTV system capabilities upgrades (channel blades, card cage, etc.)		9/15/2016
4.	Schedule	Perform Harris P25 Land Mobile Radio (LMR) Trunking System VSWR checks		Weekly
5.	Schedule	Perform Harris P25 LMR trunking and antenna systems semi-annual pre-maintenance		7/31/16
6.	Schedule	Perform Video Control Center NASA distribution circuits quarterly pre-maintenance review		FY Quarterly
7.	Schedule	Perform IPTV satellite TV antennas VSWR performance		CY Semi-Annual
8.	Schedule	Perform Center emergency satellite phones airtime reloads		7/1/2016
9.	Schedule	Implement 3.8m Ku-band antenna system to be Fully Operation Capable (FOC) per the Center Emergency Coms Manager's requirements		9/31/2016
10.	Performance	Manage HF radio operator net control support for the NASA and NCS Region IX HF radio nets		Weekly
11.	Schedule	Video display implementation w/IPTV and electronic sign capabilities (b) (7)(E) st floor south wing		6/30/2016
12.	Performance	60-minutes-upon-receipt turnaround of all in-shop delivered customer LMR P25 radios authorized for reprogramming (0800 - 3:00 pm normal working days)		9/31/2016
13.	Performance	LMR repairs not-to-exceed 10 normal working days commencing upon receipt of radios in-shop.		9/31/2016
14.	Performance	Not-to-exceed 2-hours on-site/on-scene reporting for troubleshooting Harris P25 LMR system outages or degradation of performance that adversely impacts on-base safety-of-life or protection of government assets		9/31/2016
15.	Performance	Maintain the Ames AM Travelers Information System (TIS) Fully Operational Capable (FOC) 24x7x365		9/31/2016
16.	Performance	Implement two HF radio and supporting antenna systems in Ames Emergency Communications Center (ECC) Fully Operational Capable (FOC) 24x7x365		9/31/2016
17.	Performance	Ku-band system, including transceiver, modem and integrated spectrum analyzer Fully Operational Capable (FOC) 24x7x365		9/31/2016

No.	Type of Deliverable	Description of Deliverable	Date Required
18.	Performance	Direction Finding (DF) system's electronics integrated and Fully Operational Capable 24x7x365 in the Emergency Communications vehicle (excluding store-away antenna)	9/31/2016
19.	Performance	Optibase EZ TV system maintenance and operation	Daily
20.	Schedule	Identify, acquire and implement Exterior Electronic Sign for Ames front gate	8/15/2016

### ACITS-3 FORM (Continued)

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<b>Travel, Training, and Materials Requirements</b>				
<b>No.</b>	<b>Type of Requirement</b>	<b>Description</b>		<b>Date Required</b>
1.	Travel	Test ARC-LaRC SATCOM Systems Linkup w/DMD50 Modems		8/22/2016
2.	Material	LMR Customer Radio Repair Parts		7/15/2016
3.	Material	Iridium Phones Airtime Cards Re-Charge		7/15/2016
4.	Material	Communications Cross Patching System		7/31/2016
5.	Material	Radio Dispatch Console System		6/30/2016
6.	Material	MGES-6000 Encoder Blade - 4HD License, 4-CH HD/SD-SDI		7/31/2016
7.	Material	Mobile SATCOM auto-linkup system		7/31/2016
8.	Material	Mobile telescoping antenna tower		7/31/2016
9.	Material	IPTV Silver Maintenance Service Contract		9/15/2016
10.	Material	IPTV Analog-to-1080p Converter		7/31/2016
11.	Material	BeOn Licenses		9/15/2016
12.	Material	MGW-5111 Front Switch ES Internal Giga Ethernet Enhanced Switch		7/31/2016
13.	Material	MGW-5100/1100 Enhanced Controller Front Board		7/31/2016
14.	Material	MGW-5100/1100 Enhanced-Controller Rear Board RoHS Compliant		7/31/2016
15.	Material	MGW-5100 Switch Rear Board RoHS Compliant		7/31/2016
16.	Material	External Electronic Video Display		8/15/2016
17.	Material	RF systems and supporting components for Harris LMR repeater operations/maintenance, Emergency Communications preparedness and Spectrum Analysis services		9/15/2016

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<b>Order Type:</b> Cost Plus Fixed Fee		<b>Funding Level:</b> Task Level Funding		
<b>Charge Points</b>				
<b>Charge Number</b>	<b>Description</b>			
1	Land Mobile Radio (LMR) System Maintenance, Operation and Customer Service			
2	Video Systems Maintenance, Operation and Customer Support			
3	Multimedia Support			
4	Emergency Communications Support			
5	Spectrum Management - Direction Finding (DF) Support			
6	Network Engineer			

## ACITS-3 FORM (Continued)

<b>Contract No:</b> NNA13AB88C	<b>Contract Title:</b> ACITS 3 NASA AMES			
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**IT Security Requirements:**

a. Are this task's activities covered under an organizational IT Security Plan?: YES

b. Does this task support applications that have been designated as a "Special Management Attention" application?: NO

If yes, please describe:

c. Is specialized security training required?: YES

If yes, specialized training requirements are described as follows:

Communications Security (COMSEC) and National Security Systems Briefings, prescribed by Ames COMSEC Manager, are required for all support personnel.

d. Is a security clearance needed for any personnel on this task? YES

If yes, what level of clearance is required?:

SECRET

e. IT Security Deliverables associated with this task:

- IT Risk Assessment: NO
- IT Security Plan: NO
- IT Contingency Plan: NO
- IT Security Vulnerability Test Results: NO
- Results of Periodic IT Security Reviews: NO
- Other Documentation as Follows: Report of Status of IT Security Plan, Contingency Plan, and Risk Assessment of Critical Services: NO
- Other Documentation:

## ACITS-3 FORM (Continued)

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**IT Security Requirements (Continued):**

f. Periodic reviews of IT Security measures are necessary. What is the role of the contractor under this task in areas such as review of user accounts, account management, data backup and restoration, use of warning banner, use of encryption, vulnerability scanning, and security tools?

g. In the event of an IT Security incident associated with systems and data under this Task, the Chief Information Security Official, the Security Operations Center (SOC), and the Task Requester are to be notified immediately by the contractor. In order to ensure full coordination, the following individuals also are to be notified:

Title	Name	Phone
System Owner (Responsible for the applicable IT Security Plan)	NASA Integrated Coms Services Contract	
Organization's Computer Security Official	Ernest Lopez	(b) (6)
Alternate System Owner		