**Specifications: Avionic Equipment**

**to be installed on Bell 407 GXi Helicopters**

**for the Department of Public Safety,**

**Louisiana State Police, Air Support Unit**

**\*\* ITEMS 1-3 HAVE BEEN APPROVED AS A PROPRIETARY SPECIFCATION AND ONLY BIDDERS MEETING THE EXACT SPECIFICATIONS/BRAND WILL BE CONSIDERED FOR AN AWARD. \*\***

**1. Trakka TC-375 Camera System**

> 375mm (14.75") gyro-stabilized gimbal (TCU)

1) High-Definition MWIR thermal imager with continuous zoom optics

2) High-Definition color TV camera with continuous zoom optics

3) H.264 or H.265 Video over Ethernet with KLV Metadata

4) Serial Interface for Searchlight Slaving

5) IMU/INS/GPS: Requires terrain elevation data from a moving map or the LRF to provide:

- Geo-location; provides target’s geographical position.

- Geo-hold; capability to hold geographical locations.

> Operators Manual (in English language)

> Reusable shipping container

> Hand Control Unit and Mount Bracket

 Confirm Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**TC-375 Options**

Includes:

- Cable Kit with GPS Antenna

- Laser Range Finder - 20 Km

- NVG Compatible Laser Pointer

- Video Auto Tracking

- (MTI) Moving Target Indicator

- Drying Kit

 Confirm Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2. Trakka TM-100 Moving Map and Video System**

 >Includes Mil-Spec PC and Airborne Backlit Keyboard

 Confirm Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3. TLX Searchlight with CIU**

MKIII Power Conditioning Interface Unit (PCIU)

MKIII Control Interface Unit (CIU) - Flight Control Interface

TLX Grip Hand Controller - Back Lit

TLX Standard Cables MKII/MKIII

Spectral Filters for Filter Wheel

> IR 825 nm Filter

> Visible Near Red Filter

> Amber Filter

> Blue/Green Filter

PCIU and Grip Controller Mounting

 Confirm Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**ADDITIONAL REQUIRED ACCESSORIES**

LTE /Wi-Fi Router – 5 ports, 4G/3G, or equivalent

 Specify Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Three Antcom 3G/4G Aviation External Antenna, or equivalent

 Specify Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**VIDEO RECORDERS**

**Avalex 8414 DVR or equivalent to include media**

>Avalex 8414 DVR Connector Kit

 Specify Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**ADDITIONAL ACCESSORIES NEEDED**

**RTX ARINC 429 Serial Port Adapter or equivalent**

> Configured with 2 Transmit Channels and 2 Receive Channels.

 PN: RTX429/SPA5-2T2R

 Specify Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Axnes Polycon Next Generation (PNG) - Aircraft Kit or equivalent**

Wireless Intercommunications System (WICS) Kit

Qty. 1: BST50 Base Station, SW Package, Control Panel, Connector Kit and two Antennas

Qty. 2: MP50 Transceivers including SW Package, Antenna, Storage Pouch, Adapter Cable, Desktop Charger

 Specify Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**16x16 Rugged 3-G SDI Video Switch or equivalent**

>To Include Switch Installation Kit: SK03

 Specify Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Programmable User Preset Switch to Include Installation Kit**

**MOXA 4-Port Serial to Ethernet Adapter, or equivalent**

> 4-Port RS-232/422/485 device server with DB9 connectors

> 12 - 48 VDC power input

> -40 - 75 Celsius operating temp

 Specify Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**AIS Receiver Kit to Include AIS FM Extended Band Antenna- External, or equivalent**

 Specify Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**MONITORS**

**Macro-Blue 15.6" Q-Series Display or equivalent**

> Forward TFO

- P/N: MB15W - N33040B00> Q-Series Display, 15.6" Widescreen, 16:9 Aspect Ratio, Landscape Orientation, NVIS, Dual Mode Lighting

- (NVIS/Day), Meets MIL-STD 3009

> PCAP Touch Screen, Works with gloves or bare fingers

> Built In Dual Knob Controls with NVIS Backlighting

> Four 3G HD-SDI Video Inputs

> 1920 x 1080 Full HD Native Resolution, 1200 NITS Brightness

> Meets MIL-L-85762A for Sunlight Readability and Contrast Ratio

> DO160-G Qualified

- 2.0 Software Installed Instant Switching between Sources, Multiple Views, Dual Source Touchscreen

- USB Programming and Service Port

 Specify Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Macro-Blue 17.0" Q-Series Display or equivalent**

> Aft TFO

- P/N: MB17W - N33040B00

> Q-Series Display, 17.0" Widescreen, 16:10 Aspect Ratio, Landscape Orientation

> NVIS, Dual Mode Lighting (NVIS/Day), Meets MIL-STD 3009

> PCAP Touch Screen, Works with gloves or bare fingers

> Built In Dual Knob Controls with NVIS Backlighting

> Four 3G HD-SDI Video Inputs

> 1920 x 1200 WUXGA Native Resolution, 1200 NITS Brightness

> Meets MIL-L-85762A for Sunlight Readability and Contrast Ratio

> DO160-G Qualified

- 2.0 Software Installed Instant Switching between Sources, Multiple Views, Dual Source Touchscreen

- USB Programming and Service Port

 Specify Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Two Q-Series Display Install Kit or equivalent**

J1 (POWER AND COMM) Q-SERIES

One 528-001-16M11-19SA CIRCULAR CONNECTOR

One 528-809S060-3 BOOT SHRINK

 Specify Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**AIRBORNE MINI2 6.5GHZ DL SYSTEM**

**SkyLink LinkBox2 Transmitter or equivalent**

One 6.4/6.5 GHz Transmitter System with Antenna Control

> Band: C

> Frequency: 6400 - 6500 MHz

> Power: 8W linear

> Video Inputs: - (SD/HD) SDI - Ethernet

> Power Outputs: - Two 28 VDC Switches- Three 12 VDC Switches - 100 Watt max power

> Five external Ethernet ports

> Includes Mounting Tray SL-LB-MT-02 (SL-LB-MT-01RD for Dual Radio Systems)

 Specify Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SkyLink Mini 2 w/ Downlook or equivalent**

SkyLink MINI II, high performance directional antenna with Internal INS

> Stand-alone Antenna with built-in servo drive

- May be controlled from C90/100 or customer supplied control system

> Small and lightweight

> Internal INS

> Frequency: 6.5 GHz

> AZ/El control

> Includes slip rings

> SkyLink MINI Coupler Assembly, with Downlook Antennas

> In-line 6 dB Coupler

> Integrated Downlook Antenna for 6.5 GHz

> 75/25 split (HG/DL)

> One circulator

 Specify Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**LinkBox2 and Mini2 or S Installation Connector Kit or equivalent**

> Connectors for

- Power and Comms from LinkBox to Mini

- Power to LinkBox

- Auxiliary and Ethernet

- Audio and HDMI

> Cable termination instructions

 Specify Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**TS LinkBox and SkyLink Antenna Control Software or equivalent**

**Remote Interface Protocol Driver and Software or equivalent**

**At least 20 ft. of GPS Antenna and Cable for C100 or Antenna Pod**

 Specify Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**POV Cameras**

**Two Marshall High Definition POV Cameras or equivalent**

> One HD POV camera shall be installed along the bottom of the tail boom, aft of the searchlight, facing rearward

> One HD POV camera shall be installed in the vertical stabilizer facing forward

 Specify Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**MOUNTS**

Meeker AFG1-V2 Bell 407 Forward Nose Camera Mount Kit or equivalent

Meeker AFG3 Bell 407 Nose Mount Light Kit or equivalent

> Cross Tube Location

Two Meeker DT-1-1 / DT-1-11 Dovetail Set or equivalent

Meeker AP407UM01 Universal Aft Searchlight Mount Kit or equivalent

Meeker AP407UM01-28 Wedge or equivalent

Meeker Dovetail Upper Female or equivalent

 Specify Brand/Model Bid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**AMS INTEGRATION AND CUSTOMIZATION**

**Integration Item**

> Open and Close Aircraft

> Installation of all listed AMS equipment

> Provisions and installation of Aero Brigham Aft TFO station to include:

- 17 in. Macro-Blue Monitor

- Shotover ARS-750 Keyboard

- AEM G13116 Audio Panel

- USB A + USB C Power

- Wescam Hand controller disconnects

- Miscellaneous support materials and systems

> TDFM9000, RC9000 Installation

- Technisonic Project Number (# 90512)

- UHF/VHF, 3x 800 MHz

> NVG cert update

> Call button

> PA system

**PROJECT ENGINEERING MANAGEMENT, TRAINING & SUPPORT**

**Must Include:**

> Project Management of all systems

> Complete System Design

> Full AMS and GRS Drawing Package

> Engineering Support

> Installation Support

> AMS and GRS System Training

> Final System Commission

> System Support

**SERVICE, SUPPORT & TRAINING**

**24/7 Service, Support and Training**

**Must Include:**

> Oversight and coordination of Aircraft Mission Suite Equipment

> 24/7/365 live technical support

> Unlimited service calls with a tech on-site within 3 business days of repair request.

> On-site system and operational training for agency personnel.

> Comprehensive and ongoing training to operate mission suite solution with maximum ease and efficiency.

> Training courses performed at Louisiana State Police facility with Louisiana State Police equipment and offer a hands-on learning experience that includes an in-depth review of all equipment, system functionality, user interface, and routine maintenance procedures

> Valid transfers of OEM factory warranties from new equipment

> All parts and labor to repair or replace defective components covered by factory warranty and factory service from OEMs

> Technical and operational consultation services for Local, State and Federal agencies

**Method of Award:**

It is the intent of the State to award this contract on an all-or-none basis to the overall lowest responsive, responsible bidder meeting the specifications. The State reserves the right to reject individual line items from the award.