STATEMENT OF WORK
418th FLIGHT TEST SQUADRON (418FLTS)
WIRELESS COMMUNICATIONS
27 MARCH 2026

1.0 SCOPE: This Statement of Work documents the requirements for a wireless communications innovation project titled Helpful Airborne Wireless Communication Ecosystem Yielding Enhanced Sharing (HAWCEYES). The overall objective is to improve communications by creating a wireless communications network that is carried on/off the aircraft and can connect all members of the test team.

1.1 BACKGROUND: The 418th Flight Test Squadron (418FLTS) at Edwards Air Force Base, CA, requests a proposal for work to be accomplished for the development of a wireless communications network that is carried on/off the aircraft and can connect all members of the test team. The communication systems on existing aircraft like the C-17, KC-135, and KC-46 aircraft is designed for an operational crew of 3-6 individuals split between the flight deck and the back of the plane (boomers or loadmasters). This presents a communication challenge for test missions with airborne control rooms where upwards of 20 individuals are on the plane. The existing solution involves comm splitter cables and extension cords which can connect some extra crew members but are clumsy, don't reach all parts of the aircraft, and present a tripping hazard. As a result, some members of the test team are not on comms during parts of the flight test. They're missing out on critical communications and the opportunity to add their knowledge to the team.

2.0 REQUIREMENTS: The contractor shall accomplish the following:

1. Design and build a carry-on/off wireless communications network that is self-contained and portable. Two copies shall be built in the first phase with the design retained for future options to build more copies.

2. Utilize existing 802.11xx (wifi) and/or Bluetooth protocols with a minimum range of 30 meters.

3. Be self powered via batteries for a minimum period of 30 minutes (60 minutes desired) and have the capability to be plugged into to 115VAC “wall power” for the duration of the flight test.

4. Utilize commercial VOIP software such as TeamSpeak or Mumble (or another commercially available software as determined jointly by the government and contractor) which supports device connectivity for both iOS and Android devices. Software shall have the ability to receive version updates.

5. Support a minimum of 32 connected devices.

6. Plug in to receive audio from the aircraft’s existing intercom system (ICS) via U-174 (single prong) connector and retransmit the audio to wirelessly connected

devices. The ability to transmit audio on the aircraft ICS is desired (not required) for a future phase.

7. Provide all hardware and software design and specifications to support any required airworthiness and cybersecurity approvals. Approvals will be handled by the government using existing processes.

8. Ship or deliver two copies of the system to the 418FLTS at Edwards Air Force Base for ground checkouts. Retain the ability to build future copies if requested by the government.

9. Travel to the 418FLTS to support troubleshooting or tuning of the system on the aircraft.

10. Contractor personnel may be required to troubleshoot the system during flight tests on Air Force aircraft such as (but not limited to) C-17, KC-135, and KC-46 aircraft. Personnel for flight tests shall meet the 418FLTS requirements to fly as Mission Essential Personnel (MEP) with no inflight duties. If required, those requirements will be sent to the contractor by the 418FLTS and coordinated through existing MEP approval processes.

3.0 ADMINISTRATIVE: Contractor shall coordinate initial design with the government within 90 days of contract award to ensure it is expected to meet all requirements prior to build. As a new capability, some iteration is expected prior to finalizing the design and build for the final product. Once the final design is agreed upon, the contractor will build and deliver two copies within 90 days. Timelines for any on site troubleshooting, ground tests, and flight tests (if required) will be coordinated between the contractor and the 418FLTS based on aircraft availability. Future copies of the system may be requested by the government.

3.1 PROCEDURAL

3.1.1 All works for this project shall be cleared by the customers' security and given a daily temporary worker's badge before entering the customers'-controlled area.

3.1.2 Any waste or excess material resulting from any contract requirement shall be removed and disposed of at a proper disposal site off Edwards Air Force Base by the Contractor in strict accordance with applicable Federal, State, Country and local laws.

3.1.3 The contractor is permitted to work holidays and weekends to prevent delays due to conflicting schedules from the organizations listed above.

3.1.4 **Safety and Health Requirements**: It is the contractor's responsibility to ensure its employees and managers have a comprehensive understanding of OSHA requirements. Detailed information is available on the OSHA website at http://www.osha.gov. Contractors are responsible for complying with federal and state occupational safety and health standards for their employees, except where the Air Force contractually agreed to assume responsibility.

3.1.5 **Mishap Reporting.** The Contractor shall promptly report pertinent facts to the Government Program Office (GPO) regarding mishaps involving government personnel or property, on or off the Air Force Installation, incidental to work performed IAW DAFI 91-204, *Safety Investigation and Hazard Reporting*. Direct costs related to the mishap shall be separated from other cost and provided to the GPO and Safety Investigators.

3.2 TEMPORARY FACILITIES AND TEMPORARY CONTROLS

Not applicable

3.3 SECURITY REQUIREMENTS

3.3.1 All Contractor employees will be subject to a criminal history background check IAW DoDM 5200.08V3_AFMAN 31-101V3, Installation Perimeter Access Control, and 412th Test Wing Integrated Defense Plan (IDP) 31, Volume I (the AFMAN and IDP are both limited access documents but more details on the requirements/process in terms of background checks can be provided by the Contracting Office upon request). Vehicle registration, proof of insurance, and a valid driver's license must be presented for vehicles. Installation Commanders may deny access and credentials based on information obtained during identity vetting that indicates the individual may present a threat to the good order, discipline, and morale of the installation.

3.3.2 Base Access. For Contractor personnel requiring frequent base access to perform work at Edwards AFB will be granted access via an Air Force Materiel Command (AFMC) Form 496, Application for AFMC Identification Card. Air Force Federal Acquisition Regulation Supplement (AFFARS) Clause 5352.242-9000, Contractor Access to Air Force Installations, the Prime Contractor shall submit a written request on company letterhead to the CO with the following information (prior to submitting a request for Base access via an AFMC Form 496): 1) contract number, 2) location of work, 3) contract start and stop date (must be on or before contract's expiration date), and 4) names of employees/ subcontractor employees needing access to the base, to include each employee's company name.

3.3.3 It is recommended that the Prime Contractor provide a copy of the request letter to each employee for verification purposes when the employee comes to the Contracting Office at Building 2800 to get their AFMC Form 496 signed. Employees for which no request letter can be found or provided will result in the employee being asked to return on another date/time so verification can be made.

3.3.4 Base passes will be limited to the length of the contract not to exceed 3 years from the date the AFMC Form 496 is submitted to the Contracting Office for signature. The AFMC Form 496 will be reviewed/approved by the CO, then taken by the Contractor employee to the Edwards AFB Pass Registration Office in Building 3000, or the Visitor Control Center in Building 1004, for the security portion and issuance of the Base pass.

3.3.5 The contractor shall comply with all base security regulations. Additionally, the contractor shall comply with actions dictated by force protection condition (FPCON) changes/measures and/or health protection condition (HPCON) changes/measures. For real-world situations/exercises, changes to force/health protection conditions could impact contractor performance of work and can include denial of access to the installation to perform work.

3.3.6 Only employees who will be working on the contract consistently/frequently should be submitted for a long-term Base pass.

3.3.7 The Contractor shall comply with all security requirements imposed by the Installation. Specific security considerations will be handled on an individual Task Order/contract basis as required.

3.3.8 The contractor shall report suspicious activity (refer to Edwards AFB Contractor Antiterrorism Awareness pamphlet) to Security Forces at 661-277-3340 in a timely manner.

3.3.9 The Contractor and its employees shall comply with all base traffic regulations.

3.3.10 No States are subject to Real ID Act enforcement currently. The Department of Defense will accept standard State-issued driver's licenses and identification cards from all U.S. States and territories as proof of identity. Please visit the Department of Homeland Security's (DHS) website to get the latest information, https://www.dhs.gov/current-status-states-territories. Once Real ID Act is enforced, the Contractor shall comply fully.

3.3.11 Contractor personnel who require routine physical access to the installation shall comply with Level I - Antiterrorism Awareness training requirements. Routine physical access applies to contractor personnel whose contract, performance work statement/statement of work has a 45 day or more period of performance. AT Level I training provides contractor employees with the requisite knowledge necessary to remain vigilant for possible terrorist threats. AT Level I training can be taken at https://jkodirect.jten.mil/Atlas2/page/login/Login.jsf for non-Common Access Card (CAC) holders. CAC holders may complete AT Level I training (Force Protection course) via my Learning at https://lms-jets.cce.af.mil/moodle/. AT Level I training will be completed by all contractor personnel within 30 days of requiring access and annually thereafter. Tracking for each contractor or subcontractor employee is the responsibility of the COR or unit Antiterrorism Representative.

3.3.12 The Contractor shall comply with DoD (DoDM 5205.02), DAF (AFI 10-701), OPERATIONS SECURITY (OPSEC) and locally established Operations Security (OPSEC) policies and procedures to protect classified, sensitive, and unclassified information and/or equipment, which is furnished to and operated by the Contractor.

3.3.13 Security Awareness Training will be offered by the Government to all Contractor employees prior to initiating work. This training provides Contractor employees with the requisite knowledge necessary to remain vigilant for possible threats, understand basic security procedures, understand the obligation to report

security violations and the continued obligation to safeguard information. The requiring unit Security Manager will coordinate, and track completed training with the Contractor.
3.3.14 Contact the unit Security Manager or Wing OPSEC Signature Manager at (661) 277-2066 for questions or reporting.

3.3.15 The Contractor shall be responsible for safeguarding all government property, equipment and materials provided for Contractor use. At the end of each work period, all government facilities, equipment, and materials shall be secured.

3.3.16 During performance of the contract, the Contractor shall be responsible for obtaining required identification for newly assigned personnel.

3.3.17 The Contractor shall be responsible for prompt return of credentials and vehicle passes for: 1) any employee who no longer requires access to the work site; 2) upon request by a CO; and 3) upon completion or termination of the contract. The Prime Contractor shall ensure that all Base identification passes issued to employees and subcontractor employees are returned to the issuing office. Failure to comply with these requirements may result in withholding of payment.

3.3.18 Contractor employees are prohibited from possessing weapons, firearms or ammunition, on themselves or within Contractor-owned or privately owned vehicle while on Edwards AFB.