

STATE OF ALASKA INVITATION TO BID (ITB)



VEHICLE MOVEMENT AREA TRANSPONDER (VMAT) – FEDERALLY FUNDED

ITB 2527H163

ISSUED 10/29/2026

The Department of Transportation and Public Facilities, Division of Program Management and Administration, is soliciting bids for Vehicle Movement Area Transponders (VMAT)

IMPORTANT NOTICE: If you received this solicitation from the State of Alaska's "Online Public Notice" web site, you must register with the procurement officer listed below if you desire to receive notification of subsequent amendments to the solicitation.

BIDDER'S NOTICE: By signature on this form, the bidder certifies that they comply with the following:

- (1) the bidder has a valid Alaska business license or will obtain one prior to award of any contract resulting from this ITB. If the bidder possesses a valid Alaska business license, the license number must be written below or one the following forms of evidence must be submitted with the bid:
 - a canceled check for the business license fee;
 - a copy of the business license application with a receipt date stamp from the State's business license office;
 - a receipt from the State's business license office for the license fee;
 - a copy of the bidder's valid business license;
 - a sworn notarized affidavit that the bidder has applied and paid for a business license;
- (2) the price(s) submitted was arrived at independently and without collusion, under penalty of perjury, and that the bidder is complying with:
 - the laws of the State of Alaska;
 - the applicable portion of the Federal Civil Rights Act of 1964;
 - the Equal Employment Opportunity Act and the regulations issued thereunder by the state and federal government;
 - the Americans with Disabilities Act of 1990 and the regulations issued thereunder by the state and federal government;
 - the bid will remain open and valid for at least 90 days;
 - all terms and conditions set out in this Invitation to Bid (ITB).

If a bidder does not hold an Alaska Business License (1) at the time designated in the ITB for opening the state will disallow the Alaska Bidder Preference. Bids must also be submitted under the name as appearing on the bidder's current Alaska business license in order to receive the Alaska Bidder Preference. If a bidder fails to comply with (2) of this paragraph, the state may reject the bid, terminate the contract, or consider the contractor in default.

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DIVISION OF PROGRAM MANAGEMENT AND
ADMINISTRATION

Signed by:


0F38D8049495442...

PROCUREMENT OFFICER:

SARAH CONLON

PHONE: (907) 451-2222

EMAIL: SARAH.CONLON@ALASKA.GOV

COMPANY SUBMITTING BID

AUTHORIZED SIGNATURE

PRINTED NAME

DATE

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SECTION 1. INTRODUCTION & INSTRUCTIONS

SEC. 1.01 PURPOSE OF THE ITB

The Department of Transportation and Public Facilities, Division of Program Management and Administration, is soliciting bids to purchase, install, integrate, test, and commission Vehicle Movement Area Transponder (VMAT) units on designated airport airside vehicles to support airport surface awareness, vehicle identification, and operational safety within the airport movement area.

SEC. 1.02 BUDGET

Payment for the contract is subject to funds already appropriated and identified.

SEC. 1.03 DEADLINE FOR RECEIPT OF BIDS

Bids must be received no later than 10:00 AM AK Alaska Time on November 10, 2026, at which time they will be publicly opened. Late bids or amendments will be considered non-responsive and will not be opened or accepted for evaluation.

SEC. 1.04 REQUIRED REVIEW

Bidders shall carefully review this ITB for defects and questionable or objectionable material. Comments concerning defects and questionable or objectionable material in the ITB should be made in writing and received by the procurement officer at least ten days before the deadline for receipt of bids. This will allow time for an amendment to be issued if one is required. It will also help prevent the opening of a defective bid, upon which award cannot be made, and the resultant exposure of bidders' prices.

SEC. 1.05 QUESTIONS PRIOR TO DEADLINE FOR RECEIPT OF BIDS

All questions must be in writing and directed to the procurement officer. The interested party must confirm telephone conversations in writing. Two types of questions generally arise. One may be answered by directing the questioner to a specific section of the ITB. These questions may be answered over the telephone. Other questions may be more complex and may require a written amendment to the ITB. The procurement officer will make that decision.

SEC. 1.06 RETURN INSTRUCTIONS

Bidders may submit one hard copy of their entire bid, in writing, to the procurement officer in a sealed package. The sealed bid package must be addressed as follows:

If using U.S. mail, or a delivery service or courier, please use the following address:

Department of Transportation and Public Facilities
Division of Program Management and Administration
Attention: Sarah Conlon
Invitation to Bid (ITB) Number: 2527H163
ITB Title: Vehicle Movement Area Transponder (VMAT) – Federally Funded
2301 PEGER ROAD
FAIRBANKS, AK 99709

If submitting your bid via email, the entire bid may be emailed to dotnrprocurement@alaska.gov and must contain the ITB number in the subject line of the email. The **maximum** size of a single email (including all text and attachments) that can be received by the state is **20mb (megabytes)**. If the email containing the bid exceeds this size, the bid must be sent in multiple emails that are each less than 20 megabytes and each email must comply with the requirements described above. Please note that email transmission is not instantaneous. Like sending a hard copy bid, if you are emailing your bid, the state recommends sending it enough ahead of time to ensure the email is delivered by the deadline for receipt of bids.

If submitting in person, the bid must be hand-delivered to Procurement at 2301 Peger Road, Building #4. Building #4 is located behind the main DOT office building and can be accessed via the south parking lot.

It is the bidder's responsibility to contact the issuing agency at 907-451-1625 to confirm that the entire bid has been received. The state is not responsible for unreadable, corrupt, or missing attachments.

SEC. 1.07 ASSISTANCE TO BIDDERS WITH A DISABILITY

The State of Alaska complies with Title II of the Americans with Disabilities Act of 1990. Individuals with disabilities who may need auxiliary aids, services, and/or special modifications to submit a bid should contact the Procurement Officer no later than ten days prior to the closing of the bid to make any necessary arrangements.

SEC. 1.08 AMENDMENTS TO BIDS

Amendments to or withdrawals of bids will only be allowed if acceptable requests are received prior to the deadline that is set for receipt of bids, in accordance with 2 AAC 12.140. No amendments or withdrawals will be accepted after the deadline unless the delay is due to an error of the contracting agency, in accordance with 2 AAC 12.160.

SEC. 1.09 AMENDMENTS TO THE ITB

If an amendment is issued before the deadline for receipt of bids, the amendment will be posted on the State of Alaska Online Public Notice (OPN) website. The link to the posting of the amendment will be provided to all who were notified of the ITB and to those who have registered with the procurement officer after receiving the ITB from the OPN.

SEC. 1.10 ITB SCHEDULE

The ITB schedule below represents the State of Alaska's best estimate of the schedule that will be followed. If a component of this schedule, such as the deadline for receipt of bids, is delayed, the rest of the schedule may be shifted accordingly. All times are Alaska Standard Time (AST).

ACTIVITY	TIME	DATE
Issue Date / ITB Released		10/29/2026
Deadline for Receipt of Bids / Bid Due Date	10:00AM	11/10/2026
Bid Evaluations Complete		11/11/2026
Notice of Intent to Award		11/11/2026
Contract Issued		11/23/2026

This ITB does not, by itself, obligate the state. The state's obligation will commence when the contract is approved by the Commissioner of the Department of Transportation and Public Facilities, or the Commissioner's designee. Upon written notice to the contractor, the state may set a different starting date for the contract. The state will not be responsible for any work done by the contractor, even work done in good faith, if it occurs prior to the contract start date set by the state.

SEC. 1.11 ALTERNATE BIDS

Bidders may only submit one bid for evaluation. In accordance with 2 AAC 12.830 alternate bids (bids that offer something different than what is asked for) will be rejected.

SEC. 1.12 SUPPORTING INFORMATION

Provided a bid meets the requirements for a definite, firm, unqualified, and unconditional offer, the state reserves the right to request supplemental information from the bidder, after the bids have been opened, to ensure that the products or services offered completely meet the ITB requirements. The requirement for such supplemental information will be at the reasonable discretion of the state and may include the requirement that a bidder will provide a sample product(s) so that the state can make a first-hand examination and determination.

A bidder's failure to provide this supplemental information or the product sample(s), within the time set by the state, may cause the state to consider the offer non-responsive and reject the bid.

SEC. 1.13 FIRM, UNQUALIFIED, AND UNCONDITIONAL OFFER

To be responsive a bid must constitute a definite, firm, unqualified and unconditional offer to meet all the material terms of the ITB. Material terms are those that could affect the price, quantity, quality, or delivery. Also included as material terms are those which are clearly identified in the ITB, and which must be complied with at risk of bid rejection for non-responsiveness.

SEC. 1.14 FEDERAL CONTRACT PROVISIONS

Required Contract Provisions for Federal-Aid Contracts, Federal Aviation Administration (FAA), pages 1 through 18 are attached to this document. This contract incorporates the provisions by reference, with the same force and effect as if they were given in full text. The Contractor must identify all known federal requirements that apply to the proposal, the evaluation, or the contract.

CONTRACT FUNDING:

The funding of the resultant contract will be provided by the U.S. Federal Aviation Administration (FAA). Federal funds are identified and appropriated for the first term of the contract. Payment and performance obligations for additional terms of the contract are subject to the availability and appropriation of funds.

SEC. 1.15 STATEMENT OF FINANCIAL ASSISTANCE

Statement of Financial Assistance: This Procurement is subject in part to financial assistance grants agreement between the State of Alaska and the Federal Aviation Administration (FAA).

Sec. 36.30.890. Federal Assistance

If a procurement involves the expenditure of federal funds or federal assistance and there is a conflict between a provision of this chapter or a regulation adopted under a provision of this chapter and a federal statute, regulation, policy, or requirement, the federal statute, regulation, policy, or requirement shall prevail.

2 AAC 12.730. Federal Assistance

If a procurement involves the expenditure of federal funds or requires federal assistance and there is a conflict between a provision of this chapter and federal statute, regulation, policy, or requirement, the Procurement Officer shall comply with the federal statute, regulation, policy, or requirement. Authority: AS 36.30.040; AS 36.30.890.

SECTION 2. SCOPE OF WORK AND CONTRACT INFORMATION

SEC. 2.01 SCOPE OF WORK

The Department of Transportation and Public Facilities, Division of Program Management and Administration, is soliciting bids to purchase, install, integrate, test, and commission Vehicle Movement Area Transponder (VMAT) units on fifty (50) each designated airport airside vehicles to support airport surface awareness, vehicle identification, and operational safety within the airport movement area. These vehicles include Heavy Duty Field Maintenance Equipment (brooms, blowers, loaders, graders), Aircraft Rescue and Firefighting (ARFF) equipment, and Light Duty Vehicles (AP&F Command and patrol, Airport Operations, Field Maintenance Crew vehicles, Airfield Lighting Maintenance vehicles). All vehicles operate within the movement area, and locations will be tracked using the VMATs units.

The project will utilize the uAvionix VTU-20 airside movement vehicle transponder, subject to verification of applicable FAA qualification requirements, equipment compatibility, and project-specific technical requirements. The VTU-20 is commercially available and qualified under FAA Advisory Circular (AC) 150/5220-26. The FAA Advisory Circular is located within the attachments section of this ITB for additional information and guidance.

The installation shall include integration of the vehicle transponders with the existing FAA Surface Awareness Initiative (SAI) deployment at FAI, regardless of the original SAI installation contractor, provided that the necessary technical compatibility, configuration, and authorization requirements are satisfied. All coordination regarding integration with the existing SAI deployment, including technical requirements, access, and authorizations, shall be conducted through the State's designated Project Manager.

The State's existing airport field sensor infrastructure was installed by the FAA. The VMAT equipment provided under this solicitation must be compatible with and capable of interfacing with the existing field sensors and associated infrastructure. The specified uAvionix VTU-20 model, or a State-approved equivalent is required based on the State's documented technical and operational requirements for integration with the existing infrastructure.

BRAND SPECIFIC OR EQUIVALENT: The specified product is the uAvionix VTU-20 airside movement vehicle transponder, or a State-approved equivalent that meets all applicable FAA specifications, technical, operational, and integration requirements established in this ITB. Any equivalent must be identified and supported by documentation demonstrating compliance with these requirements.

Location: Fairbanks International Airport (FAI) is located at 6450 Airport Way Fairbanks, Alaska 99709

Project Manager: Daniel Schacher, 907-474-2506, Daniel.Schacher@alaska.gov

SEC. 2.02 CONTRACT TERM

The period of performance for this contract will be from date of award through project completion.

SEC. 2.03 CONTRACT TYPE

This contract is a Firm Fixed Price Contract.

SEC. 2.04 PAYMENT FOR STATE PURCHASES

No payment will be made until the contract is approved by the Commissioner of the Department of Transportation & Public Facilities or the Commissioner's designee. Under no conditions will the state be liable for the payment of any interest charges associated with the cost of the contract. The state is not responsible for and will not pay local, state, or federal taxes. All costs associated with the contract must be stated in U.S. currency.

Payment for agreements under \$500,000 for the undisputed purchase of goods or services provided to a state agency, will be made within 30 days of the receipt of a proper billing or the delivery of the goods or services to the location(s) specified in the agreement, whichever is later. A late payment is subject to 1.5% interest per month on the unpaid balance. Interest will not be paid if there is a dispute or if there is an agreement that establishes a lower interest rate or precludes the charging of interest.

SEC. 2.05 ELECTRONIC PAYMENTS

The State of Alaska prefers vendors receive payment via Electronic Funds Transfer (EFT). Bidders may review information concerning the EFT process and access the [Electronic Payment Agreement Form for Vendors](https://doa.alaska.gov/dof/vendor.html) at the following link: <https://doa.alaska.gov/dof/vendor.html>. Method of payment is not a factor in the State's determination for award.

Any single contract payments of \$1 million or higher must be accepted by the contractor via Electronic Funds Transfer (EFT).

SEC. 2.06 CONTRACT ADMINISTRATION

The administration of this contract is the responsibility of the procurement officer or person appointed by the Department of Transportation & Public Facilities, Division of Program Management and Administration.

SEC. 2.07 CONTRACT PERFORMANCE LOCATION

The location(s) the work is to be performed, completed, and managed is at the Fairbanks International Airport; 6450 Airport Way Fairbanks, Alaska 99709.

The contractor should include in their bid price: transportation, lodging, and per diem costs sufficient to pay for travel cost. Travel to other locations will not be required.

By signature on their bid, the bidder certifies that all services provided under this contract by the contractor and all subcontractors shall be performed in the United States.

If the bidder cannot certify that all work will be performed in the United States, the bidder must contact the procurement officer in writing to request a waiver at least 10 days prior to the deadline for receipt of bids.

The request must include a detailed description of the portion of work that will be performed outside the United States, where, by whom, and the reason the waiver is necessary.

Failure to comply with these requirements may cause the state to reject the bid as non-responsive or cancel the contract.

SEC. 2.08 THIRD-PARTY FINANCING AGREEMENTS NOT ALLOWED

Because of the additional administrative and accounting time required of the state when third party financing agreements are permitted, they will not be allowed under this contract.

SEC. 2.09 JOINT VENTURES

Joint ventures will not be allowed.

SEC. 2.10 RIGHT TO INSPECT PLACE OF BUSINESS

At reasonable times, the state may inspect those areas of the contractor's place of business that are related to the performance of a contract. If the state makes such an inspection, the contractor must provide reasonable assistance.

SEC. 2.11 INSPECTION & MODIFICATION - REIMBURSEMENT FOR UNACCEPTABLE DELIVERABLES

The contractor is responsible for providing all products or the completion of all work set out in the contract. All products or work is subject to inspection, evaluation, and approval by the state. The state may employ all reasonable means to ensure that the work is progressing and being performed in compliance with the contract. The state may instruct the contractor to make corrections or modifications if needed in order to accomplish the contract's intent. The contractor will not unreasonably withhold such changes.

Substantial failure of the contractor to perform the contract may cause the state to terminate the contract. In this event, the state may require the contractor to reimburse monies paid (based on the identified portion of unacceptable products or work received) and may seek associated damages.

SEC. 2.12 SHIPPING DAMAGE

The state will not accept or pay for damaged goods. The contractor must file all claims against the carrier(s) for damages incurred to items in transit from the point of origin to the ultimate destination. The state will provide the contractor with written notice when damaged goods are received. The state will deduct the cost of the damaged goods from the invoice prior to payment. The contractor must file all claims against the carrier(s) for reimbursement of the loss.

SEC. 2.13 CONTRACT CHANGES – UNANTICIPATED AMENDMENTS

During the course of this contract, the contractor may be required to perform additional work. That work will be within the general scope of the initial contract. When additional work is required, the state will provide the contractor a written description of the additional work and request the contractor to submit a firm time schedule for accomplishing the additional work and a firm price for the additional work. Cost and pricing data must be provided to justify the cost of such amendments per AS 36.30.400.

The contractor will not commence additional work until the procurement officer has secured required state approvals necessary and issued a written contract amendment.

SEC. 2.14 F.O.B. POINT

The F.O.B. point for all items purchased under this contract is the final destination anywhere within the State of Alaska. Ownership of and title to the ordered items remains with the contractor until the items have been delivered to their final destination and are accepted by the state.

The cost of shipping and delivery is to be included in the bid price. There will be no additional charge for shipping and delivery.

SEC. 2.15 CONTINUING OBLIGATION OF CONTRACTOR

Notwithstanding the expiration date of a contract resulting from this ITB, the contractor is obligated to fulfill its responsibilities until warranty, guarantee, maintenance, and parts availability requirements have completely expired.

SEC. 2.16 BILLING INSTRUCTIONS

Invoices must be billed to the ordering agency's address shown on the individual Purchase Order, Contract Award or Delivery Order. The state will make payment after it receives the goods or services and the invoice. Questions concerning payment must be addressed to the ordering agency.

SEC. 2.17 NONDISCLOSURE AND CONFIDENTIALITY

Contractor agrees that all confidential information shall be used only for purposes of providing the deliverables and performing the services specified herein and shall not disseminate or allow dissemination of confidential information except as provided for in this section. The contractor shall hold as confidential and will use reasonable care (including both facility physical security and electronic security) to prevent unauthorized access by, storage, disclosure, publication, dissemination to and/or use by third parties of, the confidential information. "Reasonable care" means compliance by the contractor with all applicable federal and state law, including the Social Security Act and HIPAA. The contractor must promptly notify the state in writing if it becomes aware of any storage, disclosure, loss, unauthorized access to or use of the confidential information.

Confidential information, as used herein, means any data, files, software, information or materials (whether prepared by the state or its agents or advisors) in oral, electronic, tangible or intangible form and however stored, compiled or memorialized that is classified confidential as defined by State of Alaska classification and categorization guidelines provided by the state to the contractor or a contractor agent or otherwise made available to the contractor or a contractor agent in connection with this contract, or acquired, obtained or learned by the contractor or a contractor agent in the performance of this contract. Examples of confidential information include, but are not limited to technology infrastructure, architecture, financial data, trade secrets, equipment specifications, user lists, passwords, research data, and technology data (infrastructure, architecture, operating systems, security tools, IP addresses, etc.).

If confidential information is requested to be disclosed by the contractor pursuant to a request received by a third party and such disclosure of the confidential information is required under applicable state or federal law, regulation, governmental or regulatory authority, the contractor may disclose the confidential information after providing the state with written notice of the requested disclosure (to the extent such notice to the state is permitted by applicable law) and giving the state opportunity to review the request. If the contractor receives no objection from the state, it may release the confidential information within 30 days. Notice of the requested disclosure of confidential information by the contractor must be provided to the state within a reasonable time after the contractor's receipt of notice of the requested disclosure and, upon request of the state, shall seek to obtain legal protection from the release of the confidential information.

The following information shall not be considered confidential information: information previously known to be public information when received from the other party; information freely available to the general public; information which now is or hereafter becomes publicly known by other than a breach of confidentiality hereof; or information which is disclosed by a party pursuant to subpoena or other legal process and which as a result becomes lawfully obtainable by the general public.

SEC. 2.18 INDEMNIFICATION

The contractor shall indemnify, hold harmless, and defend the State of Alaska from and against any claim of, or liability for error, omission or negligent act of the contractor under this agreement. The contractor shall not be required to indemnify the State of Alaska for a claim for, or liability for, the independent negligence of the State of Alaska. If there is a claim of, or liability for, the joint negligent error or omission of the contractor and the independent negligence of the State of Alaska, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis. "Contractor" and "State of Alaska", as used within this and the following article, include the employees, agents, and other contractors who are directly responsible, respectively, to each. The term "independent negligence" is negligence other than in the State of Alaska's selection, administration, monitoring, or controlling of the contractor and in approving or accepting the contractor's work.

SEC. 2.19 INSURANCE

Without limiting the contractor's indemnification, it is agreed that the contractor shall purchase at its own expense and maintain in force at all times during the performance of services under this agreement the following policies of insurance. Where specific limits are shown, it is understood that they shall be the minimum acceptable limits. If the contractor's policy contains higher limits, the State of Alaska shall be entitled to coverage to the extent of such higher limits.

Certificates of Insurance must be furnished to the contracting officer prior to beginning work and must provide for a notice of cancellation, non-renewal, or material change of conditions in accordance with policy provisions. If the insurer does not notify the State of Alaska on policy cancellation it shall be the contractor's responsibility to notify the State of Alaska of such cancellation.

Failure to furnish satisfactory evidence of insurance or lapse of the policy is a material breach of this contract and shall be grounds for termination of the contractor's services. All insurance policies shall comply with and be issued by insurers licensed to transact the business of insurance under AS 21. All policies for general liability shall be primary and non-contributing with any insurance that may be carried by the State of Alaska.

The contractor shall require and verify that all subcontractors maintain insurance meeting all requirements stated herein, and contractor shall ensure that the State is an additional insured on insurance required from subcontractors.

Policies written on a “claims-made” basis must have a two (2) year tail of coverage, or an unbroken continuation of coverage for two (2) years from the completion of the contract requirements.

2.1 Workers’ Compensation Insurance: The contractor shall provide and maintain, for all employees engaged in work under this contract, coverage as required by AS 23.30.045, and Employers Liability with limits of at least \$1,000,000. Also, where applicable, the contractor shall provide and maintain any other statutory obligations including but not limited to Federal U.S.L. & H. and Jones Act requirements. The policy must waive subrogation against the State of Alaska.

2.2 Commercial General Liability Insurance including:

\$2,000,000 General Aggregate
\$2,000,000 Products/Completed Operations
\$1,000,000 Personal & Advertising Injury
\$1,000,000 Each Occurrence
\$5,000 Medical Payments

The policy must name the State of Alaska as an “additional insured” and the actual policy endorsement shall accompany each Certificate of Insurance. The policy shall be endorsed to waive all rights of subrogation against the State of Alaska by reason of any payment made for claims under this coverage. This policy endorsement shall accompany each Certificate of Insurance

2.3 Commercial Automobile Liability Insurance: covering all vehicles used by the contractor in the performance of services under this agreement with minimum coverage limits of \$1,000,000 combined single limit per claim, to include: owned, hired, and non-owned. The policy must name the State of Alaska as an “additional insured” and the actual policy endorsement shall accompany each Certificate of Insurance. The policy shall be endorsed to waive all rights of subrogation against the State of Alaska by reason of any payment made for claims under this coverage. This policy endorsement shall accompany each Certificate of Insurance.

SEC. 2.20 WARRANTY

The contractor warrants every unit purchased against faulty materials and workmanship for a minimum period of at least one year. If, during this period, faults develop with the unit or components of the unit, they will be repaired or replaced without any cost, including any transportation or freight cost, to the state. Bids, which include supplemental warranties, will be accepted, but supplemental warranties that conflict with or diminish the state's rights under this warranty clause will be considered null and void. The state is not responsible for identifying conflicting warranty conditions before issuing a contract award. After award of the contract:

1. if a conflict arises between the supplemental warranty and the warranty in this ITB, the warranty in the ITB will prevail; and
2. if the state's rights are diminished as a result of application of the supplemental warranty, the supplemental warranty will be considered null and void and the ITB warranty will prevail.

By signature on the face page of this ITB the bidder acknowledges this requirement and indicates unconditional acceptance of this warranty clause.

BID FORMAT AND CONTENT

SEC. 2.21 BID FORMS

Bidders shall use the front page of this ITB, the Bid Submission Cover Sheet, and any other forms identified in this ITB for submitting bids. All bids must be signed by an individual authorized to bind the bidder to the provisions of the ITB.

BIDDER'S CERTIFICATION

By signature on the bid, the bidder certifies that they comply with the following:

- A. the laws of the State of Alaska;
- B. the applicable portion of the Federal Civil Rights Act of 1964;
- C. the Equal Employment Opportunity Act and the regulations issued thereunder by the state and federal government;
- D. the Americans with Disabilities Act of 1990 and the regulations issued thereunder by the state and federal government and certifies that programs, services, and activities provided to the general public on behalf of the State under a contract resulting from this solicitation comply with the Americans with Disabilities Act of 1990, 28 CFR, Part 35, Subpart B 35.130;
- E. all terms and conditions set out in this ITB;
- F. the price(s) submitted was arrived at independently arrived and without collusion, under penalty of perjury; and
- G. that the bid will remain open and valid for at least 90 days.

If any bidder fails to comply with [a] through [g] of this paragraph, the state reserves the right to disregard the bid, terminate the contract, or consider the contractor in default.

CONFLICT OF INTEREST

Each bid shall include a statement indicating whether the company or any individuals working on the contract has a possible conflict of interest (e.g., currently employed by the State of Alaska or formerly employed by the State of Alaska within the past two years) and, if so, the nature of that conflict. The procurement officer reserves the right to **consider a bid non-responsive and reject it** or cancel the award if any interest disclosed from any source could either give the appearance of a conflict or cause speculation as to the objectivity of the contract to be performed by the bidder.

SEC. 2.22 PRICES

The bidder shall state prices in the units of issue on this ITB. Prices quoted in bids must be exclusive of federal, state, and local taxes. If the bidder believes that certain taxes are payable by the state, the bidder may list such taxes separately, directly below the bid price for the affected item.

SECTION 3. EVALUATION AND CONTRACTOR SELECTION

SEC. 3.01 EVALUATION OF BIDS

After bid opening, the procurement officer will evaluate the bids for responsiveness. Bids deemed non-responsive will be eliminated from further consideration. An evaluation may not be based on discrimination due the race, religion, color, national origin, sex, age, marital status, pregnancy, parenthood, disability, or political affiliation of the bidder.

SEC. 3.02 EXTENSION OF PRICES

In case of error in the extension of prices in the bid, the unit prices will govern; in a lot bid, the lot prices will govern.

SEC. 3.03 METHOD OF AWARD

Award will be made by single Lot to the lowest responsive and responsible bidder. To be considered responsive, bidders must bid on all items.

SEC. 3.04 NOTICE OF INTENT TO AWARD

After the responses to this ITB have been opened and evaluated, a tabulation of the bids will be prepared. This tabulation, called a Notice of Intent to Award, serves two purposes. It lists the name of each company or person that offered a bid and the price they bid. It also provides notice of the state's intent to award a contract(s) to the bidder(s) indicated. A copy of the Notice of Intent will be sent to each company or person who responded to the ITB. Bidders identified as the apparent low responsive bidders are instructed not to proceed until a Purchase Order, Contract Award, Lease, or some other form of written notice is given by the procurement officer. A company or person who proceeds prior to receiving a Purchase Order, Contract Award, Lease, or some other form of written notice from the procurement officer does so without a contract and at their own risk.

SECTION 4. GENERAL PROCESS AND LEGAL INFORMATION

SEC. 4.01 ALASKA BUSINESS LICENSE AND OTHER REQUIRED LICENSES

Prior to the award of a contract, a bidder must hold a valid Alaska business license. However, to receive the Alaska Bidder Preference and other related preferences, such as the Alaska Veteran Preference and Alaskans with Disabilities Preference, a bidder must hold a valid Alaska business license prior to the deadline for receipt of bids. Bidders should contact the **Department of Commerce, Community and Economic Development, Division of Corporations, Business, and Professional Licensing, PO Box 110806, Juneau, Alaska 99811-0806**, for information on these licenses. Acceptable evidence that the bidder possesses a valid Alaska business license may consist of any one of the following:

- copy of an Alaska business license,
- certification on the bid that the bidder has a valid Alaska business license and has included the license number in the bid,
- a canceled check for the Alaska business license fee,
- a copy of the Alaska business license application with a receipt stamp from the state's occupational licensing office, or
- a sworn and notarized statement that the bidder has applied and paid for the Alaska business license.

You are not required to hold a valid Alaska business license at the time bids are opened if you possess one of the following licenses and are offering services or supplies under that specific line of business:

- fisheries business licenses issued by Alaska Department of Revenue or Alaska Department of Fish and Game,
- liquor licenses issued by Alaska Department of Revenue for alcohol sales only,
- insurance licenses issued by Alaska Department of Commerce, Community and Economic Development, Division of Insurance, or
- Mining licenses issued by Alaska Department of Revenue.

Prior the deadline for receipt of bids, all bidders must hold any other necessary applicable professional licenses required by Alaska Statute.

SEC. 4.02 AUTHORITY

This ITB is written in accordance with AS 36.30 and 2 AAC 12.

SEC. 4.03 COMPLIANCE

In the performance of a contract that results from this ITB, the contractor must comply with all applicable federal, state, and borough regulations, codes, and laws; be liable for all required insurance, licenses, permits and bonds; and pay all applicable federal, state, and borough taxes.

SEC. 4.04 SUITABLE MATERIALS, ETC.

Unless otherwise specified in this ITB, all materials, supplies or equipment offered by a bidder shall be new, unused, and of the latest edition, version, model, or crop and of recent manufacture.

SEC. 4.05 SPECIFICATIONS

Unless otherwise specified in this ITB, product brand names or model numbers specified in this ITB are examples of the type and quality of product required and are not statements of preference. If the specifications describing an item conflict with a brand name or model number describing the item, the specifications govern. Reference to brand name or number does not preclude an offer of a comparable or better product, if full specifications and descriptive literature are provided for the product. Failure to provide such specifications and descriptive literature may be cause for rejection of the offer.

SEC. 4.06 ITEM UPGRADES

The state reserves the right to accept upgrades to models on the basic contract when the upgrades improve the way the equipment operates or improve the accuracy of the equipment. Such upgraded items must be at the same price as the items in the basic contract.

SEC. 4.07 WORKMANSHIP AND MATERIALS

All work must be performed in a thorough and workmanlike manner and in accordance with current industry practices. The contractor will be held responsible for the quality of the service, maintenance, and inspections. Service, maintenance, and inspections that are improperly done will be redone, by the contractor, at the contractor's risk and expense.

SEC. 4.08 CONTRACTOR SITE INSPECTION

The state may conduct on-site visits to evaluate the bidder's capacity to perform the contract. A bidder must agree, at risk of being found non-responsive and having its bid rejected, to provide the state reasonable access to relevant portions of its work sites. Individuals designated by the procurement officer at the state's expense will make site inspection.

SEC. 4.09 ORDER DOCUMENTS

Except as specifically allowed under this ITB, an ordering agency will not sign any vendor contract. The state is not bound by a vendor contract signed by a person who is not specifically authorized to sign for the state under this ITB. Unless otherwise specified in this ITB, the State of Alaska Purchase Order, Contract Award and Delivery Order are the only order documents that may be used to place orders against the contract(s) resulting from this ITB.

SEC. 4.10 HUMAN TRAFFICKING

By signature on their bid, the bidder certifies that the bidder is not established and headquartered or incorporated and headquartered in a country recognized as Tier 3 in the most recent United States Department of State's Trafficking in Persons Report.

The most recent United States Department of State's Trafficking in Persons Report can be found at the following website: <http://www.state.gov/j/tip/>

Failure to comply with this requirement will cause the state to reject the bid as non-responsive or cancel the contract.

SEC. 4.11 RIGHT OF REJECTION

Bidders must comply with all the terms of the ITB, the State Procurement Code (AS 36.30), and all applicable local, state, and federal laws, codes, and regulations. The procurement officer may reject any bid that does not comply with all the material and substantial terms, conditions, and performance requirements of the ITB.

Bidders may not qualify the bid nor restrict the rights of the state. If a bidder does so, the procurement officer may determine the bid to be a non-responsive counteroffer and the bid may be rejected.

Minor informalities that:

- do not affect responsiveness,
- are merely a matter of form or format,
- do not change the relative standing or otherwise prejudice other bidders,
- do not change the meaning or scope of the ITB,
- are trivial, negligible, or immaterial in nature,
- do not reflect a material change in the work, or
- do not constitute a substantial reservation against a requirement or provision,

may be waived by the procurement officer.

The state reserves the right to refrain from making an award if it is determined to be in the state's best interest.

A bid from a debarred or suspended bidder shall be rejected.

SEC. 4.12 STATE NOT RESPONSIBLE FOR PREPARATION COSTS

The state will not pay any cost associated with the preparation, submittal, presentation, or evaluation of any bid.

SEC. 4.13 DISCLOSURE OF BID CONTENTS

This section governs the ownership, return, and disclosure of any offer or other record a bidder submits in response to this invitation to bid. (Herein, any reference to "Record" includes all such records and the offer; any reference to "Law" includes any federal or State of Alaska (State) law, including any court or administrative order or rule.)

1. All Records belong to the State.
2. The State has sole discretion regarding whether to return any Record. In exercising this discretion, the State will comply with all Laws.

3. Unless a notice of intent to award is issued, the State will, to the extent permitted by Law, consider all Records confidential and not subject to the Alaska Public Records Act (APRA).
4. If, and when a notice of intent to award is issued, the State will consider nonconfidential any Record unless, at the time of submission, the bidder undertook the following protective measures:
 - a. marked information confidential;
 - b. for any information marked confidential, identified the authority that makes that specific information confidential; and
 - c. committed, in writing, to explain in detail, including with affidavits and briefs, why each authority applies in any court or administrative proceeding in which any nondisclosure is challenged.
5. If the bidder did not undertake each protective measure, the State will not consider any information in a Record confidential: the State will disclose the entire Record without any redaction in response to an APRA or other request or, if it chooses, in the absence of a request and the State will disclose the entire Record without notifying the bidder.
6. If the bidder undertook each protective measure, the State will withhold the information marked confidential to the following extent:
 - a. the State agrees that the Law protects the information; and
 - b. if the nondisclosure is challenged, the bidder fulfills its commitment to explain, including with affidavits and briefs, how each authority applies to the information marked confidential.
7. The State will only notify a bidder of a request for the Record and of a planned release if the bidder undertook each protective measure, but the State disagrees that the marked information is protected. If there is such a disagreement, then before releasing the Record, the State will, to the extent permitted by Law and practicable, notify the bidder that it will disclose the information unless the bidder convinces the State not to or obtains an order prohibiting disclosure.

SEC. 4.14 ASSIGNMENTS

Per 2 AAC 12.480, the contractor may not transfer or assign any portion of the contract without prior written approval from the procurement officer. Bids that are conditioned upon the state's approval of an assignment will be rejected as non-responsive.

SEC. 4.15 FORCE MAJEURE (IMPOSSIBILITY TO PERFORM)

The parties to a contract resulting from this ITB are not liable for the consequences of any failure to perform, or default in performing, any of its obligations under the contract, if that failure or default is caused by any unforeseeable Force Majeure, beyond the control of, and without the fault or negligence of, the respective party.

For the purposes of this ITB, Force Majeure will mean war (whether declared or not); revolution; invasion; insurrection; riot; civil commotion; sabotage; military or usurped power; lightning; explosion; fire; storm; drought; flood; earthquake; epidemic; quarantine; strikes; acts or restraints of governmental authorities affecting the project or directly or indirectly prohibiting or restricting the furnishing or use of materials or labor required;

inability to secure materials, machinery, equipment or labor because of priority, allocation or other regulations of any governmental authorities.

SEC. 4.16 DEFAULT

In case of default by the contractor, for any reason whatsoever, the state may procure the goods or services from another source and hold the contractor responsible for any resulting excess cost and may seek other remedies under law or equity.

SEC. 4.17 DISPUTES

If the contractor has a claim arising in connection with the contract that it cannot resolve with the state by mutual agreement, it shall pursue the claim, if at all, in accordance with the provisions of AS 36.30.620 – AS 36.30.632.

SEC. 4.18 SEVERABILITY

If any provision of the contract or agreement is found to be invalid or declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions will not be affected; and the rights and obligations of the parties will be construed and enforced as if the contract did not contain the particular provision held to be invalid.

SEC. 4.19 CONTRACT CANCELLATION

- 1) The state reserves the right to cancel the contract at its convenience upon 30 calendar days written notice to the contractor. The state is only liable for payment in accordance with the payment provisions of this contract for supplies or services provide before the effective date termination.
- 2) By signature on their bid, the bidder certifies that they will not support or participate in a boycott of the State of Israel. Failure to comply with this requirement may cause the state to reject the bid as non-responsive or cancel the contract.

SEC. 4.20 GOVERNING LAW; FORUM SELECTION

A contract resulting from this ITB is governed by the laws of the State of Alaska. To the extent not otherwise governed by Section 5.15 of this ITB, any claim concerning the contract shall be brought only in the Superior Court of the State of Alaska and not elsewhere.

SEC. 4.21 QUALIFIED BIDDERS

Per 2 AAC 12.875, unless provided for otherwise in the ITB, to qualify as a bidder for award of a contract issued under AS 36.30, the bidder must:

- 1) Add value in the contract by actually performing, controlling, managing, or supervising the services to be provided; or
- 2) Be in the business of selling and have actually sold on a regular basis the supplies that are the subject of the ITB.

If the bidder leases services or supplies or acts as a broker or agency in providing the services or supplies to meet these requirements, the procurement officer may not accept the bidder as a qualified bidder under AS 36.30.

SEC. 4.22 FEDERALLY IMPOSED TARIFFS

Changes in price (increase or decrease) resulting directly from a new or updated federal tariff, excise tax, or duty, imposed after contract award may be adjusted during the contract period or before delivery into the United States via contract amendment.

- **Notification of Changes:** The contractor must promptly notify the procurement officer in writing of any new, increased, or decreased federal excise tax or duty that may result in either an increase or decrease in the contract price and shall take appropriate action as directed by the procurement officer.
- **After-imposed or Increased Taxes and Duties:** Any federal excise tax or duty for goods or services covered by this contract that was exempted or excluded on the contract award date but later imposed on the contractor during the contract period, as the result of legislative, judicial, or administrative action may result in a price increase provided:
 - a) The tax or duty takes effect after the contract award date and isn't otherwise addressed by the contract.
 - b) The contractor warrants, in writing, that no amount of the newly imposed federal excise tax or duty or rate increase was included in the contract price, as a contingency or otherwise.
- **After-relieved or Decreased Taxes and Duties:** The contract price shall be decreased by the amount of any decrease in federal excise tax or duty for goods or services under the contract, except social security or other employment [taxes](#), that the contractor is required to pay or bear, or does not obtain a refund of, through the contractor's fault, negligence, or failure to follow instructions of the procurement officer.
- **State's Ability to Make Changes:** The state reserves the right to request verification of federal excise tax or duty amounts on goods or services covered by this contract and increase or decrease the contract price accordingly.
- **Price Change Threshold:** No adjustment shall be made in the contract price under this clause unless the amount of the adjustment exceeds \$250.

SEC. 4.23 PROTEST

AS 36.30.560 provides that an interested party may protest the content of the ITB.

An interested party is defined in 2 AAC 12.990(a) (7) as "an actual or prospective bidder or bidder whose economic interest might be affected substantially and directly by the issuance of a contract solicitation, the award of a contract, or the failure to award a contract."

If an interested party wishes to protest the content of a solicitation, the protest must be received, in writing, by the procurement officer at least ten days prior to the deadline for receipt of bids.

AS 36.30.560 also provides that an interested party may protest the award of a contract or the proposed award of a contract.

If a bidder wishes to protest the award of a contract or the proposed award of a contract, the protest must be received, in writing, by the procurement officer within ten days after the date the Notice of Intent to Award the contract is issued.

A protester must have submitted a bid to have sufficient standing to protest the proposed award of a contract. Protests must include the following information:

- the name, address, and telephone number of the protester,
- the signature of the protester or the protester's representative,
- identification of the contracting agency and the solicitation or contract at issue,
- a detailed statement of the legal and factual grounds of the protest including copies of relevant documents, and
- the form of relief requested.

Protests filed by telex or telegram are not acceptable because they do not contain a signature. Fax copies containing a signature are acceptable.

The procurement officer will issue a written response to the protest. The response will set out the procurement officer's decision and contain the basis of the decision within the statutory time limit in AS 36.30.580. A copy of the decision will be furnished to the protester by certified mail, fax or another method that provides evidence of receipt.

All bidders will be notified of any protest. The review of protests, decisions of the procurement officer, appeals, and hearings, will be conducted in accordance with the State Procurement Code (AS 36.30), Article 8 "Legal and Contractual Remedies."

SECTION 5. ATTACHMENTS

SEC. 5.01 ATTACHMENTS

ATTACHMENTS

1. Bid Schedule
2. ITB 2527H163 Bid Submission Cover Sheet
3. FAA Terms and Conditions
4. Material Submittal for Buy American Compliance FAA Form 25D-154
5. Advisory Circular and Advisory Circular change # 3
6. FAI Equipment List for Reference

DOCUMENTS REQUIRED AT TIME OF BID OPENING

1. ITB – Page 1 of this solicitation
2. Bid Schedule – Attachment 1 of this solicitation
3. Bid submission cover sheet – Attachment 2 of this solicitation
4. Material Submittal for Buy American Compliance FAA Form 25D-154

DOCUMENTS REQUIRED PRIOR TO CONTRACT AWARD

1. Current Certificate of Insurance (COI) per Section 2.19
2. Current Alaska Business License per Section 4.01

BID RESPONSE CHECKLIST

1. Completed Page One
2. Completed Bid Schedule (attachment 1)
3. Completed Bid Submission Cover Sheet (attachment 2)
4. Material Submittal for Buy American Compliance FAA Form 25D-154
5. All Mandatory Return Amendments.

Attachment 1

BID SCHEDULE

LOT 1: Vehicle Movement Area Transponders (VMAT)

Item	Quantity	Unit	Final Destination Fairbanks International Airport	Unit Price	Extended Price
1.	50	Ea.	uAvionix VTU-20	\$	\$
2.	1	Ea.	Coordination with FAA/FCC and On-Site Installation	\$	\$
Grand Total Bid Price				\$	

Submitted by:

Business Name: _____

Address: _____

Contact: _____

Phone: _____

Email: _____

ATTACHMENT 2
Bid Submission Cover Sheet
Revised March 7, 2024

PROJECT INFORMATION

ITB NUMBER: 2527H163
PROJECT NAME: Vehicle Movement Area Transponder (VMAT)

BIDDER INFORMATION

Company Name: _____
Address: _____
Tax ID: _____
Alaska Business _____
License #: _____

CONTACT INFORMATION

Provide contact information for the individual that can be contacted for clarification regarding this bid:

Name _____
Title _____
Address _____
Email _____
Telephone _____

ADDENDA ACKNOWLEDGEMENT

The bidder acknowledges receipt of the following amendments and has incorporated the requirements of such amendments into their bid. Failure to identify and sign for all amendments may subject the bidder to disqualification. The bidder must list all amendments (by number), then initial and date to confirm that you have received and incorporated them into your bid (add more rows as necessary).

Number	Initials & Date

Number	Initials & Date

Number	Initials & Date

CERTIFICATIONS

No	Criteria	Response*
1	The bidder is presently engaged in the business of providing the products and/or services required in this ITB.	☐ YES ☐ NO
2	The bidder confirms that it has the financial strength to provide and/or perform and maintain the services required under this ITB.	☐ YES ☐ NO
3	The bidder accepts the terms and conditions set out in the ITB and agrees not to restrict the rights of the state.	☐ YES ☐ NO
4	The bidder confirms that they can obtain and maintain all necessary insurance as required on this project.	☐ YES ☐ NO
5	The bidder certifies that all services provided under this contract by the contractor and all subcontractors shall be performed in the United States.	☐ YES ☐ NO
6	The bidder is not established and headquartered or incorporated and headquartered, in a country recognized as Tier 3 in the most recent United States Department of State's Trafficking in Persons Report.	☐ YES ☐ NO
7	The bidder complies with the American with Disabilities Act of 1990 and the regulations issued thereunder by the federal government.	☐ YES ☐ NO
8	The bidder complies with the Equal Employment Opportunity Act and the regulations issued thereunder by the federal government.	☐ YES ☐ NO
9	The bidder complies with the applicable portion of the Federal Civil Rights Act of 1964.	☐ YES ☐ NO
10	The bidder can provide (if requested) financial records for the organization for the past three years.	☐ YES ☐ NO
11	The bidder has not had any contracts terminated by the State of Alaska (within the past five years).	☐ YES ☐ NO
12	The bidder certifies that it is not currently debarred, suspended, proposed for debarment, or declared ineligible for award by any public or federal entity.	☐ YES ☐ NO
13	The offeror certifies that they will not support or participate in a boycott of Israel. Failure to comply with this requirement may cause the state to reject the proposal as non-responsive or cancel the contract.	☐ YES ☐ NO
14	The bidder certifies that they do not have any governmental or regulatory action against their organization that might have a bearing on their ability to provide products and/or services to the State.	☐ YES ☐ NO
15	The bidder certifies, within the last five years, they have not been convicted or had judgment rendered against them for: fraud, embezzlement, theft, forgery, bribery, falsification or destruction of records, false statements, or tax evasion.	☐ YES ☐ NO
16	The bidder does not have any judgments, claims, arbitrations or suits pending/outstanding against your company in which an adverse outcome would be material to the company.	☐ YES ☐ NO
17	The bidder is not (now or in the past) been involved in bankruptcy or reorganized proceeding.	☐ YES ☐ NO
18	The bidder certifies they comply with the laws of the State of Alaska.	☐ YES ☐ NO
19	The bidder confirms their bid will remain valid and open for at least 90 days.	☐ YES ☐ NO

* Failure to answer or answering "False" may be grounds for disqualification. For any "False" responses, provide clarification (up to 250 word maximum for each "False" clarification) below (add rows as necessary).

Number	Clarification

CONFLICT OF INTEREST STATEMENT

Indicate below whether or not the firm or any individuals that will work on the contract has a possible conflict of interest (e.g., currently employed by the State of Alaska or formerly employed by the State of Alaska within the past two years) and, if so, the nature of that conflict. The procurement officer reserves the right to consider a bid non-responsive and reject it or cancel the award if any interest disclosed from any source could either give the appearance of a conflict or cause speculation as to the objectivity services to be provided by the bidder.

Does the bidder, or any individuals that will work on this contract, have a possible conflict of interest?

☐ YES ☐ NO

** Failure to answer may be grounds for disqualification.*

If "Yes", please provide additional information regarding the nature of that conflict:

FEDERAL REQUIREMENTS

Indicate below all known federal requirements that apply to the bid, it's evaluation, or the resulting contract:

SIGNATURE

This bid must be signed by a company officer empowered to bind the company.

Printed Name _____

Title _____

Date _____

Signature _____



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

**REQUIRED CONTRACT PROVISIONS
for
FEDERAL-AID (FAA) CONSTRUCTION CONTRACTS**

A0	GENERAL	A15	DRUG FREE WORKPLACE REQUIREMENTS
A1	ACCESS TO RECORDS AND REPORTS	A16	EQUAL EMPLOYEMENT OPPORTUNITY (EEO)
A2	AFFIRMATIVE ACTION REQUIREMENT	A17	FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)
A3	BREACH OF CONTRACT TERMS	A18	LOBBYING AND INFLUENCING FEDERAL EMPLOYEES
A4	BUY AMERICAN PREFERENCE	A19	PROHIBITION of SEGREGATED FACILITIES
A5	CIVIL RIGHTS - GENERAL	A20	OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970
A6	CIVIL RIGHTS – TITLE VI ASSURANCE	A21	PROCUREMENT OF RECOVERED MATERIALS
A7	CLEAN AIR AND WATER POLLUTION CONTROL	A22	RIGHT TO INVENTIONS
A8	CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS	A23	SEISMIC SAFETY
A9	COPELAND “ANTI-KICKBACK” ACT	A24	TAX DELINQUENCY AND FELONY CONVICTIONS
A10	DAVIS-BACON REQUIREMENTS	A25	TERMINATION OF CONTRACT
A11	DEBARMENT AND SUSPENSION	A26	TRADE RESTRICTION CERTIFICATION
A12	DISADVANTAGED BUSINESS ENTERPRISE	A27	VETERAN’S PREFERENCE
A13	DISTRACTED DRIVING	A28	DOMESTIC PREFERENCES FOR PROCUREMENTS
A14	PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT		

Section A0 GENERAL

[Source: From previous Form 25D-55A]

Procurements made under the Airport Improvement Program, AIP, must adhere to the provisions outlined in Title 49 CFR Part 18.36. This regulation provides for policies and procedures to be applied to typical procurement actions under the AIP, such as construction development, equipment purchases, and selection for professional services (engineering consultants etc.).

The Federal Aviation Administration (FAA) is not a party to the contracts the State of Alaska Department of Transportation and Public Facilities (Department) executes in support of the AIP. The Department is the contractual authority for establishing and administering the contract agreements and is responsible for all contractual matters, including evaluation and award of contract, resolution of claims and disputes, and settlement of litigation issues.

A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the Department.

Language within brackets [example] is considered as reference or instructional for program administration.

Section A1 ACCESS TO RECORDS AND REPORTS

[Source: 2 CFR § 200.333, 2 CFR § 200.336, FAA Order 5100.38. Include this provision in all contracts and subcontracts.]

The Contractor must maintain an acceptable cost accounting system. The Contractor agrees to provide the Department, the Federal Aviation Administration, and the Comptroller General of the United States or any of their duly authorized representatives, access to any books, documents, papers, and records of the Contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

Section A2 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION to ENSURE EQUAL EMPLOYMENT OPPORTUNITY

[Mandatory Language. Source: 41 CFR part 60-4, Executive Order 11246. Incorporate in all bids, RFPs, contracts and subcontracts; that exceed \$10,000.]

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables

Goals for minority participation for each trade: Is listed on the Invitation to Bid, Form 25D-7; if not listed it is 0.0%

Goals for female participation in each trade: 6.9%

These goals are applicable to all of the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs (OFCCP) within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is the State of Alaska.

Section A3 BREACH OF CONTRACT TERMS

[Source: 2 CFR § 200 Appendix II(A). Include in all contracts and subcontracts that exceed \$250,000)]

Any violation or breach of terms of this contract on the part of the Contractor or its subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement.

The Department will provide Contractor written notice that describes the nature of the breach and corrective actions the Contractor must undertake in order to avoid termination of the contract. The Department reserves the right to withhold payments to Contractor until such time the Contractor corrects the breach or the Department elects to terminate the contract. The Department's notice will identify a specific date by which the Contractor must correct the breach. Department may proceed with termination of the contract if the Contractor fails to correct the breach by deadline indicated in the Department's notice.

The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

Section A4.3.1 BUY AMERICAN PREFERENCE

[Source: Title 49 USC § 50101, Executive Order 14005, Public Law No. 117-58. Also referenced in Department's GCP 60-09. Include in all contracts and subcontracts.]

Specification GCP 60-09 establishes standard language for compliance with the Buy American Preference required by A4.3.1.

Section A5.3.1 GENERAL CIVIL RIGHTS PROVISIONS

[Mandatory Language. Source: 49 USC § 47123. Include in all contracts and subcontracts.]

The Contractor agrees to comply with pertinent statutes, Executive Orders and such rules as identified in Title VI List of Pertinent Nondiscrimination Acts and Authorities to ensure that no person shall, on the grounds of race, creed, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

Section A6.3.1 TITLE VI SOLICITATION NOTICE

[Mandatory Language. Source: 49 USC § 47123, FAA Order 1400.11. Include in all contracts and subcontracts]

The Department, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all Bidders or Offerors that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in consideration for an award.

Section A6.4.1 TITLE VI LIST OF PERTINENT NONDISCRIMINATION ACTS AND AUTHORITIES

[Mandatory Language. Source: 49 USC § 47123, FAA Order 1400.11. Include in all contracts and subcontracts.]

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 USC § 2000d *et seq.*, 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination in Federally-assisted programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 USC § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973, (29 USC § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR part 27; and 49 CFR part 27 (Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance);
- The Age Discrimination Act of 1975, as amended, (42 USC § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and Contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990 (42 USC § 12101, *et seq.*) (prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities) as implemented by U.S. Department of Transportation regulations at 49

- CFR parts 37 and 38;
- The Federal Aviation Administration’s Nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations);
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs [70 Fed. Reg. at 74087 (2005)];
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC § 1681 et seq).

Section A6.4.2 COMPLIANCE WITH NONDISCRIMINATION REQUIREMENTS

[Mandatory Language. Source: 49 USC § 47123, FAA Order 1400.11. Include in all contracts and subcontracts.]

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”) agrees as follows:

1. **Compliance with Regulations:** The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
3. **Solicitations for Subcontracts, including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the Contractor’s obligations under this contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.
4. **Information and Reports:** The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Department or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts And Authorities and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the Department or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a Contractor’s noncompliance with the non-discrimination provisions of this contract, the Department will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
 - a. Withholding payments to the Contractor under the contract until the Contractor complies;
 - and/or
 - b. Cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the Department or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the Department to enter into any litigation to protect the interests of the Department.

In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

Section A7 CLEAN AIR AND WATER POLLUTION CONTROL

[Source: 2 CFR § 200, Appendix II(G), 42 USC § 7401, et seq., 33 USC § 1251, et seq. Include in all contracts and subcontracts that exceed \$150,000.]

The Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 USC §§ 740-7671q) and the Federal Water Pollution Control Act as amended (33 USC §§ 1251-1387). The Contractor agrees to report any violation to the Department immediately upon discovery. The Department assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration.

Section A8 CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

[Mandatory Language. Source: 2 CFR § 200, Appendix II(E), 2 CFR § 5.5(b), 40 USC § 3702, 40 USC § 3704. Include in all contracts and subcontracts in excess of \$100,000.]

- (1) *Overtime Requirements.* No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, including watchmen and guards, in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (2) *Violation; liability for unpaid wages; liquidated damages.* In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$31 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1).
- (3) *Withholding for unpaid wages and liquidated damages —*
 - (i) *Withholding process.* The Federal Aviation Administration or the Department may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this Section A8 on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.
 - (ii) *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph (2)(i) of Section A10 or (3)(i) of this section, or both, over claims to those funds by:
 - (A) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
 - (B) A contracting agency for its procurement costs;
 - (C) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
 - (D) A contractor's assignee(s);
 - (E) A contractor's successor(s); or
 - (F) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

- (4) *Subcontracts*. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs (1) through (5) of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (5). In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.
- (5) *Anti-retaliation*. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:
- (i) Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;
 - (ii) Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;
 - (iii) Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or
 - (iv) Informing any other person about their rights under CWHSSA or this part.

Section A9 COPELAND “ANTI-KICKBACK” ACT

[Mandatory Language. Source: 2 CFR § 200, Appendix II(D), 29 CFR Parts 3 & 5. Include in contracts and subcontracts exceeding \$2,000.]

Contractor must comply with the requirements of the Copeland “Anti-Kickback” Act (18 USC 874 and 40 USC 3145), as supplemented by Department of Labor regulation 29 CFR part 3. Contractor and subcontractors are prohibited from inducing, by any means, any person employed on the project to give up any part of the compensation to which the employee is entitled. The Contractor and each Subcontractor must submit to the Department, a weekly statement on the wages paid to each employee performing on covered work during the prior week. Department must report any violations of the Act to the Federal Aviation Administration.

Section A10 DAVIS-BACON REQUIREMENTS

[Mandatory Language. Source: 2 CFR § 200, Appendix II(D), 29 CFR Part 5, 49 USC § 47112(b), 40 USC §§ 3141-3144, 3146, and 3147. Include in contracts and subcontracts exceeding \$2,000.]

1. *Minimum Wages*—

- (i) *Wage rates and fringe benefits*. All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR § 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(v) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph (a)(4) of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in

each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (1)(iii) of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii) *Frequently recurring classifications.*

- (A) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph (1)(iii) of this section, provided that:
- (1) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;
 - (2) The classification is used in the area by the construction industry; and
 - (3) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.
- (B) The Administrator will establish wage rates for such classifications in accordance with paragraph (1)(iii)(A)(3) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

(iii) *Conformance.*

- (A) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:
- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (2) The classification is used in the area by the construction industry; and
 - (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (B) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.
- (C) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (D) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (E) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs (1)(iii)(C) and (D) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph (1)(iii)(C) or (D) of this section must be paid to all workers performing work in the classification under this contract from the first day on which

work is performed in the classification.

- (iv) *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (v) *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- (vi) *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

(2) *Withholding—*

- (i) *Withholding requirements.* The Federal Aviation Administration or the Department may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this Section A10 for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work (or otherwise working in construction or development of the project under a development statute) all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph (3)(iv) of this section, the Federal Aviation Administration may on its own initiative and after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.
- (ii) *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph (2)(i) of this section or (3)(i) of Section A8, or both, over claims to those funds by:
 - (A) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
 - (B) A contracting agency for its procurement costs;
 - (C) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
 - (D) A contractor's assignee(s);
 - (E) A contractor's successor(s); or
 - (F) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

(3) *Records and certified payrolls —*

(i) *Basic record requirements —*

- (A) *Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

- (B) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.
- (C) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph (1)(v) of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.
- (D) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

(ii) *Certified payroll requirements—*

- (A) *Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the certified payrolls to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to the Federal Aviation Administration. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.
- (B) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph (3)(i)(B) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the sponsoring government agency (or the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records).
- (C) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:
- (1) That the certified payroll for the payroll period contains the information required to be provided under paragraph (3)(ii) of this section, the appropriate information and basic records are being maintained under paragraph (3)(i) of this section, and such information and records are correct and complete;
 - (2) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and
 - (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(D) *Use of Optional Form WH-347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (3)(ii)(C) of this section.

(E) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(F) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.

(G) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

(iii) *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

(iv) *Required disclosures and access—*

(A) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs (3)(i) through (iii) of this section, and any other documents that the Federal Aviation Administration or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the Federal Aviation Administration or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(B) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(C) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the Federal Aviation Administration if the agency is a party to the contract, or to the Wage and Hour Division of the Department of Labor. If the Federal agency is not such a party to the contract, the contractor, subcontractor, or both, must, upon request, provide the full Social Security number and last known address, telephone number, and email address of each covered worker to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to the Federal Aviation Administration, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

(4) *Apprentices and equal employment opportunity —*

(i) *Apprentices —*

(A) *Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for

the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(B) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(C) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph (4)(i)(D) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph (4)(i)(A) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(D) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

(ii) *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) *Compliance with Copeland Act Requirements.* The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

(6) *Subcontracts.* The contractor or subcontractor must insert in any subcontracts the clauses contained in paragraphs (1) through (11) of this section, along with the applicable wage determination(s) and such other clauses or contract modifications as the Federal Aviation Administration may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate.

(7) *Contract Termination: Debarment.* A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a Contractor and a subcontractor as provided in 29 CFR 5.12.

(8) *Compliance with Davis-Bacon and Related Act Requirements.* All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) *Disputes Concerning Labor Standards.* Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6 and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(10) *Certification of eligibility.*

(i) By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

(iii) The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

(11) *Anti-retaliation.* It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

- (i) Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;
- (ii) Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;
- (iii) Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or
- (iv) Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

Section A11 DEBARMENT AND SUSPENSION

[Source: 2 CFR part 180 (Subpart C), 2 CFR Part 200, Appendix II(H), 2 CFR part 1200, DOT Order 4200.5, Executive Orders 12549 and 12689. Use for any contract, regardless of tier, that is awarded by a Contractor, subcontractor, supplier, consultant, or its agent or representative in any transaction, if the amount of the contract is expected to equal or exceed \$25,000.]

Section A11.3.1 CERTIFICATION OF OFFERER/BIDDER REGARDING DEBARMENT

By submitting a bid/proposal under this solicitation, the Bidder or Offeror certifies that neither it nor its principals are presently debarred or suspended by any Federal Department or agency from participation in this transaction.

Section A11.3.2 CERTIFICATION OF LOWER TIER CONTRACTORS REGARDING DEBARMENT

[Source: 2 CFR part 180 (Subpart C), 2 CFR part 1200, DOT Order 4200.5. Use for any contract, regardless of tier, that is awarded by a Contractor, subcontractor, supplier, consultant, or its agent or representative in any transaction, if the amount of the contract is expected to equal or exceed \$25,000.]

The successful Bidder, by administering each lower tier subcontract that exceeds \$25,000 as a “covered transaction”, must verify each lower tier participant of a “covered transaction” under the project is not presently debarred or otherwise disqualified from participation in this federally assisted project. The successful Bidder will accomplish this by:

1. Checking the System for Award Management at website: <http://www.sam.gov>
2. Collecting a certification statement similar to the Certificate of Offeror/Bidder Regarding Debarment, above.
3. Inserting a clause or condition in the covered transaction with the lower tier contract

If the Federal Aviation Administration later determines that a lower tier participant failed to disclose to a higher tier participant that it was excluded or disqualified at the time it entered the covered transaction, the FAA may pursue any available remedies, including suspension and debarment of the non-compliant participant.

Section A12.3.1 DISADVANTAGED BUSINESS ENTERPRISE - SOLICITATION LANGUAGE (RACE CONSCIOUS) and

Section A12.3.2 DISADVANTAGED BUSINESS ENTERPRISE - SOLICITATION LANGUAGE (RACE/GENDER NEUTRAL)

[Source: 49 CFR §26 and 49 CFR §26.53. Department specification G-120. This language is not required for projects where DBE participation is by race/gender neutral means.]

Specification G-120 establishes standard language for participation by Disadvantaged Business Enterprises, required by A12.3.1 and A12.3.2.

Section A12.3.3 DISADVANTAGED BUSINESS ENTERPRISES (Program Goals)

[Mandatory Language. Source: 49 CFR § 26, Department specifications GCP-80 and G-120. Include in all contracts and subcontracts.]

Contract Assurance (49 CFR § 26.13) - The Contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of U.S. Department of Transportation assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Department deems appropriate, which may include, but is not limited to:

- 1) Withholding monthly progress payments;
- 2) Assessing sanctions;
- 3) Liquidated damages; and/or
- 4) Disqualifying the Contractor from future bidding as non-responsible.

Prompt Payment (49 CFR §26.29 and Department GCP 80-01) – The prime Contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than eight (8) working days from the receipt of each payment the prime Contractor receives from the Department. The prime Contractor agrees further to return retainage payments to each subcontractor within eight (8) working days after the subcontractor’s work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the Department. This clause applies to both DBE and non-DBE subcontractors.

Termination of DBE Subcontracts (49 CFR §26.53(f) and Department G-120) – The prime contractor must not terminate a DBE subcontractor listed on form 25A-325C (or an approved substitute DBE firm) without prior written consent of the Department as described in G-120.

Section A13 DISTRACTED DRIVING - TEXTING WHEN DRIVING

[Source: Executive Order 13513, DOT Order 3902.10. Use for all AIP funded contracts that exceed the micro-purchase threshold of 2 CFR §200.67 (currently set at \$10,000).]

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving" (10/1/2009) and DOT Order 3902.10 "Text Messaging While Driving" (12/30/2009), the Federal Aviation Administration encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or subgrant.

In support of this initiative, the Department encourages the Contractor to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Contractor must include the substance of this clause in all sub-tier contracts exceeding \$10,000 that involve driving a motor vehicle in performance of work activities associated with the project.

Section A14 PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

[Source: 2 CFR § 200, Appendix II(K), 2 CFR § 200.216. Department specification GCP-60-01. Include in all contracts and subcontracts.]

Contractor and subcontractor agree to comply with mandatory standards and policies relating to use and procurement of certain telecommunications and video surveillance services or equipment in compliance with the National Defense Authorization Act [Public Law 115-232 § 889(f)(1)].

Section A15 DRUG FREE WORKPLACE REQUIREMENTS

[Source: 49 CFR Part 32, Drug-Free Workplace Act of 1988 (41 U.S.C. 701 *et seq.*, as amended)]

The Drug-Free Workplace Act of 1988 requires some Federal contractors and all Federal grantees to agree that they will provide drug-free workplaces as a condition of receiving a contract or grant from a Federal agency. The Act does *not* apply to contractors, subcontractors, or subgrantees, although the Federal grantees workplace may be where the contractors, subcontractors, or subgrantees are working.

Section A16.3.1 EQUAL OPPORTUNITY CLAUSE (EEO Contract Clause)

[Mandatory Language. Source: 2 CFR 200, Appendix II(C), 41 CFR § 60-1.4, 41 CFR § 60-4.3, Executive Order 11246. Department Form 25A-301 and 25A-304. Use for any contract or subcontract when the amount exceeds \$10,000.]

During the performance of this contract, the Contractor agrees as follows:

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provisions shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.

(4) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the Contractor's commitments under this section 202 of Executive Order 11246 of September 24, 1962, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The Contractor will include the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: *Provided*, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

Section A16.3.2 EQUAL EMPLOYMENT OPPORTUNITY SPECIFICATION

The language in Department Form 25A-301 contains the mandatory FAA language in A16.3.2 EEO Specification. The language in Department Form 25A-301 is hereby incorporated into these contract provisions for EEO.

Section A17 FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)

[Source: 29 USC § 201, et seq, 2 CFR § 200.430. All consultants, sub-consultants, Contractors and subcontractors employed under this federally assisted project must comply with the FLSA.]

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, et seq, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets

minimum wage, overtime pay, recordkeeping, and child labor standards for full and part time workers.

The Contractor has full responsibility to monitor compliance to the referenced statute or regulation. The Contractor must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.

Section A18 LOBBYING AND INFLUENCING FEDERAL EMPLOYEES

[Mandatory Language. Source: 31 USC § 1352 – Byrd Anti-Lobbying Amendment; 2 CFR part 200, Appendix II(J); 49 CFR part 20, Appendix A. Consultants and Contractors that apply or bid for an award of \$100,000 or more must certify to these paragraphs by signing the bid documents.]

The Bidder or Offeror certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Bidder or Offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Section A19 PROHIBITION OF SEGREGATED FACILITIES

[Source: 2 CFR Part 200, Appendix II(C), 41 CFR § 60. Include in all contracts and subcontracts subject to EEO.]

(a) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Employment Opportunity clause in this contract.

(b) “Segregated facilities,” as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Employment Opportunity clause of this contract.

Section A20 OCCUPATION SAFETY AND HEALTH ACT OF 1970

[Source: 29 CFR part 1910. Include in all contracts and subcontracts.]

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer retains full responsibility to monitor its compliance and their subcontractor’s compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (29 CFR Part 1910). The employer must address any claims or disputes that pertain to a referenced

requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

Section A 21 PROCUREMENT OF RECOVERED MATERIALS

[Source: 2 CFR § 200.322, 2 CFR Part 200, Appendix II(J), 40 CFR part 247, 42 USC § 6901, et seq (Resource Conservation and Recovery Act (RCR)).]

Contractor and subcontractor agree to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, and the regulatory provisions of 40 CFR Part 247. In the performance of this contract and to the extent practicable, the Contractor and subcontractors are to use of products containing the highest percentage of recovered materials for items designated by the Environmental Protection Agency (EPA) under 40 CFR Part 247 whenever:

- 1) The contract requires procurement of \$10,000 or more of a designated item during the fiscal year; or,
- 2) The Contractor has procured \$10,000 or more of a designated item using Federal funding during the previous fiscal year.

The list of EPA-designated items is available at www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products .

Section 6002(c) establishes exceptions to the preference for recovery of EPA-designated products if the Contractor can demonstrate the item is:

- a) Not reasonably available within a timeframe providing for compliance with the contract performance schedule;
- b) Fails to meet reasonable contract performance requirements; or
- c) Is only available at an unreasonable price.

Section A 22 RIGHTS TO INVENTIONS

[Source: 2 CFR Part 200, Appendix II(F), and 37 CFR Part 401.]

Contracts or agreements that include the performance of experimental, developmental, or research work must provide for the rights of the Federal Government and the Department in any resulting invention as established by 37 CFR Part 401, Rights to Inventions Made by Non-profit Organizations and Small Business Firms under Government Grants, Contracts, and Cooperative Agreements. This contract incorporates by reference the patent and inventions rights as specified within 37 CFR §401.14. Contractor must include this requirement in all sub-tier contracts involving experimental, developmental or research work.

Section A23 SEISMIC SAFETY

[Source: 49 CFR part 4. Clause used for construction of new buildings or structural addition to existing buildings.]

The Contractor agrees to ensure that all work performed under this contract, including work performed by subcontractors, conforms to a building code standard that provides a level of seismic safety substantially equivalent to standards established by the National Earthquake Hazards Reduction Program (NEHRP). Local building codes that model their code after the current version of the International Building Code (IBC) meet the NEHRP equivalency level for seismic safety.

Section A24 TAX DELINQUENCY AND FELONY CONVICTIONS

[Source: Section 8113 of the Consolidated Appropriations Act, 2022 (Pub. L. 117-103), and similar provisions in subsequent appropriations acts. DOT Order 4200.6 - Requirements for Procurement and Non-Procurement Regarding Tax Delinquency and Felony Convictions. Include in all contracts and subcontracts.]

The language in Department Form 25D-159 contains the language required by A24 Tax Delinquency and Felony Convictions. The Contractor shall submit a completed Form 25D-159 according to specification GCP 30-03, and require each subcontractor and each lower tier subcontractor to complete Form 25D-159 according to specification GCP 80-01.

Section A25.3.1 TERMINATION FOR CONVENIENCE (Construction & Equipment Contracts)

[Source: 2 CFR § 200 Appendix II(B). Department GCP 80-09. The Department must include a clause for termination for convenience on all contracts and subcontracts in excess of \$10,000.]

Specification GCP 80-09 establishes standard language for conditions, rights, and remedies associated with Department termination of this contract for convenience, required by A25.3.1. Under no circumstance will the Department pay Contractor

for loss of anticipated profits or revenue, or other economic loss, in connection with work that is not performed prior to the Department's termination action.

Section A 25.3.2 TERMINATION FOR DEFAULT (Construction)

[FAA Mandatory Language for Construction Contracts. Source: 2 CFR § 200 Appendix II(B), FAA Advisory Circular 150/5370-10, Section 80-09. Department Section GCP 80-08.]

Specification GCP 80-08 establishes standard language for conditions, rights, and remedies associated with Department termination of this contract for cause due to default of the Contractor, required by A25.3.2. Under no circumstance will the Department pay Contractor for loss of anticipated profits or revenue, or other economic loss, in connection with work that is not performed prior to the Department's termination action.

Section A26 TRADE RESTRICTION CERTIFICATION

[Mandatory Language. Source: 49 USC § 50104, 49 CFR part 30. Include in all contracts and subcontracts.]

By submission of an offer, the Offeror certifies that with respect to this solicitation and any resultant contract, the Offeror:

- 1) is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (USTR);
- 2) has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the USTR; and
- 3) has not entered into any subcontract for any product to be used on the Federal project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18 USC § 1001.

The Offeror/Contractor must provide immediate written notice to the Department if the Offeror/Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The Contractor must require subcontractors provide immediate written notice to the Contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to an Offeror or subcontractor:

- 1) who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR; or
- 2) whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such USTR list; or
- 3) who incorporates in the public works project any product of a foreign country on such USTR list.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a Contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

The Offeror agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in all lower tier subcontracts. The Contractor may rely on the certification of a prospective subcontractor that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by USTR, unless the Offeror has knowledge that the certification is erroneous.

This certification is a material representation of fact upon which reliance was placed when making an award. If it is later determined that the Contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration (FAA) may direct through the Department cancellation of the contract or subcontract for default at no cost to the Department or the FAA.

Section A 27 VETERAN'S PREFERENCE

[Source: 49 USC § 47112(c). Include in all contracts and subcontracts.]

In the employment of labor (excluding executive, administrative, and supervisory positions), the Contractor and all subcontractors must give preference to covered veterans as defined within Title 49 United States Code Section 47112. Covered veterans include Vietnam-era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 USC § 632) owned and controlled by disabled veterans. This preference only applies when there are covered veterans readily available and qualified to perform the work to which the employment relates.

Section A 28 DOMESTIC PREFERENCES FOR PROCUREMENTS

[Source: 2 CFR § 200.322, 2 CFR Part 200, Appendix II(L). Include in all contracts and subcontracts.]

The Bidder or Offeror certifies by signing and submitting this bid or proposal that, to the greatest extent practicable, the Bidder or Offer has provided a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including, but not limited to, iron, aluminum, steel, cement, and other manufactured products) in compliance with 2 CFR § 200.322.

END



Attachment Four

Material Submittal for Buy American Compliance

Federal-Aid Airport Contracts

PART 1:

Project Name and Number	
Supplier Company Name	
Supplied to: Contractor or Subcontractor Company Name	
Materials: Bid Item No. / Bid Item Description	Quantity 0
Description of steel, iron, manufactured product, or construction material (attach material documentation and mill certifications when requested):	
Steel, iron, manufactured product, or construction material is (check one box):	
Produced in the United States	☐
FAA has issued a Type 1, 2, or 3 Waiver (type) ____	☐
FAA lists it as a Nonavailable Article	☐
FAA has issued a Nationwide Waiver	☐

I certify under penalty of law that the steel, iron, manufactured products, and construction materials listed on this form (or attachment), comply with the requirements of 49 USC § 50101, BABA, other related Made in America Laws, U.S. statutes, guidance, and FAA policies, and Contract subsection GCP 60-09 Buy American Preference.

Steel, iron, manufactured products, and construction materials submittals may be approved when:

- (1) They are produced in the United States;
- (2) The FAA has issued a waiver for the product;
- (3) The product is listed as a Nonavailable Article in Federal Acquisition Regulation subpart 25.104; or
- (4) The product is included in the FAA Nationwide Buy American Waivers Issued list.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Corporate Signature

Date

Printed Name

Supplier's Company Name

Position Title



U.S. Department of
Transportation
**Federal Aviation
Administration**

Advisory Circular

Subject: Airport Ground Vehicle Automatic
Dependent Surveillance - Broadcast (ADS-B)
Out Squitter Equipment

Date: 11/14/2011
Initiated by: AAS-1

AC No: 150/5220-26
Change:

1. Purpose of the Advisory Circular.

This Advisory Circular (AC) provides guidance on the development, installation, testing, approval, and maintenance of Automatic Dependent Surveillance – Broadcast (ADS-B) Out squitter units for airport ground vehicles. Using this AC, airports will be able to acquire approved and authorized airport ground vehicle ADS-B squitter units that are compliant with Title 14 Code of Federal Regulations (CFR), Part 91, Automatic Dependent Surveillance-Broadcast (ADS-B) Out Performance Requirements to Support Air Traffic Control (ATC) Service, as well as the initial set of ADS-B applications. Please note that the technical specifications for manufacturing ADS-B squitter units for airport ground vehicles are published in the FAA's document, Vehicle Automatic Dependent Surveillance - Broadcast (ADS-B) Specification, Version 2.31, published November 22, 2010.

2. To Whom this AC Applies.

- a. All airport ground vehicle ADS-B squitter units must meet the requirements stated in the Airport Ground Vehicle ADS-B Specification, Version 2.31.
- b. Airport and vehicle operators should follow the operational guidance in this AC to ensure proper operation of airport ground vehicle ADS-B units. While such units are not currently required, the FAA strongly encourages airport operators to voluntarily equip appropriate vehicles with airport ground vehicle ADS-B squitter units.
- c. In general, use of this AC is not mandatory. However, use of this AC is mandatory for all Part 139 certificated airports using this equipment, as well as projects funded with federal grant monies through the Airport Improvement Program (AIP) and with revenue from the Passenger Facility Charge (PFC) Program. See Grant Assurance No. 34, Policies, Standards, and Specifications, and PFC Assurance No.9, Standards and Specifications.
- d. The AC is required for vendors developing, installing, testing, and seeking approval of ADS-B units in airport ground vehicles.
- e. It is also recommended for vendors, airport operators, and other personnel who will implement, monitor, and use the airport ground vehicle ADS-B squitter units on the

airport. ADS-B squitter units used must meet the technical specifications of this AC. The FAA will issue a separate AC on operational use of ground vehicles equipped with ADS-B squitter units in the future.

f. The primary locations for installation of ADS-B squitters on vehicles are the 35 airports equipped with ASDE-X and the nine airports scheduled to receive ASSC upgrades to their ASDE-3 systems. ASDE-X and ASSC systems are needed to receive the ADS-B squitter signals for use on ATC displays. Airport Operators at these 44 airports (as shown in Appendix A) are encouraged, but not required, to equip their vehicles with ADS-B squitters in order to enhance safety and situational awareness. In the future, FAA may deploy ASSC or ADS-B surface surveillance volumes to additional airports that could then be appropriate sites for equipping of vehicles with ADS-B squitters. Information on grant funding eligibility is addressed in FAA Order 5100-38, the Airport Improvement Program Handbook.

g. Airports without FAA deployed surface surveillance may choose to equip their vehicles with ADS-B squitters. Aircraft equipped with ADS-B in avionics and Cockpit Display of Traffic Information (CDTI) will enable pilots to see ADS-B equipped vehicles location on in cockpit moving maps. This equipping is expected to become more widespread in future years. Airports without FAA deployed surface surveillance should consider current and near-term equipping of the aircraft using their airport when deciding on investments in ADS-B vehicle squitters.

3. Background.

Every year, there are incidents and accidents involving aircraft and vehicles at airports that have potentially serious consequences. Many of these events occur in periods of reduced visibility, which can result in a loss of situational awareness for flight crews and air traffic controllers. The FAA is in the process of deploying several systems and technologies to help reduce the number and severity of these incidents. Automatic Dependent Surveillance – Broadcast (ADS-B) has been identified as a cornerstone technology in the FAA's Next Generation Air Transportation System (NextGen) initiative to modernize the safety, efficiency, and capacity of the National Airspace System.

ADS-B will provide improved surveillance in the terminal, en route, and on surface environments, and will provide equipped aircraft with shared situational awareness via a cockpit display of proximate traffic. In order to achieve the benefits of ADS-B on the airport surface, surface vehicles and aircraft should be equipped with the ability to transmit ADS-B messages.

At airports with no surface surveillance, ADS-B can serve as a means to improve situational awareness for both air traffic control and aircraft operators equipped with the ability to receive and display ADS-B messages. This capability provides for a high level of safety. The inclusion of airport vehicles into the surface surveillance picture gives air traffic controllers and operators one more way to identify traffic issues, understand the most efficient way to proceed on the airport surface, and avoid incursions.

At airports already equipped with surface surveillance, such as Airport Surface Detection Equipment – Model X (ASDE-X), ADS-B will provide pilots with improved communication with air traffic control and efficiency of operations. ASDE-X information is fed into the Traffic Information Service-Broadcast (TIS-B) service and could provide pilots with a complete surface picture. This situational awareness can be employed to provide supplemental benefits to existing surface surveillance and provide an additional resource for future applications of ADS-B in the surface environment.

a. ASDE-X and ASSC. The FAA has deployed the ASDE-X to 35 airports. The FAA is also upgrading existing Airport Surveillance Detection Equipment-Model 3 (ASDE-3) sites at 9 airports with multi-lateration (MLAT) capability to produce an Airport Surface Surveillance Capability (ASSC). This will give air traffic control the ability to maintain surveillance of ground targets. The ASDE-X and ASSC systems were designed to support safe ground operations at an airport by providing reliable and accurate information on the location of aircraft and ground vehicles. They do this through a combination of technologies, including airport surface movement radar (SMR), airport surveillance radar (ASR), MLAT, and ADS-B.

Due to the inherent problems associated with radio frequency and radar transmissions, a single sensor surveillance system may not provide a complete and accurate depiction of a target to the controller. The ASDE-X system mitigates this problem by fusing the data from several different sources, primary and secondary radar including MLAT and ADS-B, to provide the most accurate target information as compared to single sensor systems. The ASDE-X system receives the ADS-B position report, the radar return, and MLAT position report and “fuses” them into a single accurate target report. Data fusion provides the most complete and accurate picture of the intended target’s position and motion. For example, fused data, combining data from the SMR, MLAT, and ADS-B, would provide controllers with the aircraft’s size, identification, and position whereas each data source alone could only provide a piece of this information. These systems also can alert controllers to potential conflicts so they can take appropriate action to prevent surface incidents.

The radar component of the ASDE-X and ASSC systems can detect aircraft and vehicles in and around the airport operational area without the use of airport ground vehicle ADS-B squitter units. However, during periods of heavy and sustained precipitation, the precipitation may attenuate the radar, thus reducing the probability of vehicle detection. In these cases, vehicles equipped with airport ground vehicle ADS-B squitter units can be tracked by two additional sources of position data, ADS-B and MLAT, thus increasing the accuracy and probability of detection. Additionally, the ADS-B message set provides identification data that is not available from the ASDE-X or ASSC systems.

ADS-B differs from MLAT in the method in which position data is computed. An MLAT system depends on a series of receivers on the surface calculating the difference in the time of arrival of a signal from targets to determine position. At least four sensors are necessary to provide position information that is both accurate and has a high level of integrity. ADS-B transmits a signal, much like a transponder, but the position information is satellite based, such as those in the Global Positioning System (GPS) constellation. The position and

identification information derived from the ADS-B is transmitted to air traffic control and fused with ASDE-X surveillance sources. ADS-B can serve to supplement existing MLAT surveillance for air traffic control, and MLAT can be used as an input to the TIS-B service to provide a more complete traffic picture to operators who have equipped with the ability to display ADS-B.

b. ADS-B. The ADS-B system is an advanced surveillance technology that combines a satellite positioning service, aircraft avionics, and ground infrastructure to enable transmission of more accurate information between aircraft and air traffic control. The system enables equipped aircraft and ground vehicles to continually broadcast information, such as identification, current position, altitude, and velocity. ADS-B uses information from a position service, e.g. GPS, to determine the aircraft/vehicles location, thereby making this information more timely and accurate than the information provided by a conventional radar system. ADS-B also can provide the platform for aircraft to receive various types of information, including ADS-B transmissions from other equipped aircraft or vehicles. ADS-B is automatic because no external interrogation is required, but is “dependent” because it relies on onboard position sources and onboard broadcast transmission systems to provide surveillance information to air traffic control and ultimately to other airport users.

The capability of transmitting ADS-B information is referred to as “ADS-B Out”. ADS-B Out can provide a more accurate and timely position report that includes identity and other information, but it does not provide operators with any new services or information. Operators can voluntarily equip with the equipment necessary to receive ADS-B messages and other broadcast services, such as TIS-B, and display that information in the cockpit. The receive function of ADS-B is referred to as “ADS-B In”; ADS-B In is not required by the final rule but can provide significant benefits.

The ADS-B system provides aircraft/vehicle position information using data provided by the unit’s GPS navigation system and transmitted via Mode S Extended Squitter (ES) or Universal Access Transceiver (UAT). ADS-B equipment receives highly accurate GPS signals and uses them to determine the precise location of the aircraft/vehicles on the airport surface. The system converts that position into a unique digital code and transmits it, along with a unique identification code, to locate and identify the exact aircraft/vehicle. The broadcast of the ADS-B position provides a signal for MLAT, providing two separate sources of position data. This precise data also enables other ADS-B applications, including Airport Traffic Situation Awareness (ATSA with Indications and Alerts). Airport Traffic Situation Awareness involves the use of a cockpit display that depicts the runway environment and displays traffic from the surface up to approximately 1,000 feet above ground level on final approach and is used by the flight crew to help determine runway occupancy. This application also is designed to reduce the potential for deviations, errors, and collisions by increasing flight crew situational awareness while operating an aircraft on the airport. This application also provides an alerting function to assist in the identification of conflicts and/or the avoidance of runway incursions. Flight crews will use a cockpit display and possible aural notifications to increase awareness of other traffic positions in the squitter area.

The vehicle ADS-B squitter units will support the following ADS-B applications:

- Air Traffic Control (ATC) Surveillance for Airport Situation Awareness;
- Airport Traffic Situation Awareness; and
- Airport Traffic Situation Awareness with Indications and Alerts.

Airport ground vehicle ADS-B squitter units are being deployed to further enhance the ability to reduce the risk of runway incursions and conflict between aircraft and vehicles operating in the airport. The airport ground vehicle ADS-B squitter units utilize an ADS-B transmitter to broadcast a highly accurate position (GPS based), which is received by various ground stations and aircraft on or near the airport and presented on a display. Additionally, the ADS-B system provides a mechanism for the delivery and display of an integrated surface picture to airport operators through an additional display capability. While ATC surveillance benefits are only applicable to airports that currently have ASDE-X or ASSC, airport ground vehicle squitter units may be deployed at any airport. These airports could still derive benefit from airport ground vehicle squitter units through ADS-B cockpit applications and through airport operator displays.

The airport ground vehicle ADS-B squitter unit will utilize a sensor navigation source capable of providing highly accurate position data as outlined in the specification. The airport ground vehicle ADS-B squitter units can operate on either the 1090 ES link or the 978 MHz/UAT link; however, due to the 1090 MHz spectrum congestion and use by numerous other systems, the FAA strongly prefers the use of the 978 MHz/UAT link. The existing terminal radar secondary surveillance system, many aircraft transponders, and several other systems currently use the 1090 MHz frequency. The extensive use of the 1090 MHz frequency has the potential to cause numerous degradations to any system using 1090 MHz.

Whether the unit is capable of transmitting on just one link or both (1090 and 978 MHz), the unit must only transmit on one link at any given time. The airport ground vehicle ADS-B squitter transmissions will only be active when the vehicle position is within the defined squitter transmit area. The ADS-B equipment will contain a transmit map that will control the unit on/off function based on position of the vehicle on the airport.

The FAA will authorize the airport operator and potentially other entities to deploy the airport ground vehicle ADS-B squitter units. The vehicles equipped with the ADS-B squitter units will include airport vehicles, fire and rescue vehicles, other vehicles authorized by the airport operator, and FAA vehicles.

c. Airports Eligible for Early Implementation. The Federal Communication Commission (FCC) is pursuing a rulemaking to allow vehicles to transmit on 1090 MHz. The FCC approved the waiver request on February 12, 2010 in DA 10-259. The use of 978 MHz is already approved for use on vehicles.

Table 1. Proposed Locations for Airport Ground Vehicle ADS-B Early Implementation.
The future use of vehicle units at airports other than ASDE-X equipped airports is not yet defined. Below is a table of current equipped ASDE-X airports.

LOCID	Airport	ADS-B Key Site	ASDE-X Operational
MKE	General Mitchell International Airport		X
PVD	Theodore Francis Green State Airport		X
HOU	William P. Hobby Airport		X
MCO	Orlando International Airport		X
SEA	Seattle-Tacoma International Airport		X
STL	Lambert-St. Louis International Airport		X
ATL	Hartsfield-Jackson Atlanta International Airport		X
BDL	Bradley International Airport		X
SDF	Louisville International Airport	X	X
CLT	Charlotte Douglas International Airport		X
ORD	Chicago O'Hare International Airport		X
IAD	Washington Dulles International Airport		X
DTW	Detroit Metro Wayne County Airport		X
PHX	Phoenix Sky Harbor International Airport		X
FLL	Ft. Lauderdale/Hollywood Airport		X
JFK	John F. Kennedy International Airport		X
LAX	Los Angeles International Airport		X
BOS	Boston Logan International Airport	X	X
EWR	Newark International Airport		X
IAH	George Bush Intercontinental Airport		X
MIA	Miami International Airport		X
PHL	Philadelphia International Airport	X	X
DEN	Denver International Airport		X
DFW	Dallas/Ft. Worth International Airport		X
SNA	Santa Ana/Orange County Airport		X
SLC	Salt Lake City International Airport		X
SAN	San Diego International Airport		X

d. Definitions. In this AC, the words “must”, “should”, and “may” are used to define different levels of requirements:

- (1) **Must:** Conveys a requirement.
- (2) **Should:** Describes a recommendation.
- (3) **May:** Denotes a permissible practice or action, but not a requirement.
- (4) **Airport Ground Vehicle ADS-B Equipment:** The navigation source,

processing, and ADS-B transmission equipment that determines the position of the surface vehicle in which it resides and broadcasts that information on one of the two ADS-B data links (978 MHz UAT or 1090 MHz ES).

(5) **Squitter:** Output pulses from an airport ground vehicle ADS-B squitter unit generated by an internal triggering system rather than by external interrogation pulses.

(6) **Squitter Transmit Map for Airport Surface:** The squitter maps of the airport surface will define where the squitter unit will be active by controlling the squitter transmit out. The FAA will generate the squitter transmit maps and post them online for download. All airports with ASDE-X will have a Squitter Transmit Map available for download on the website for no charge. Squitter Transmit Maps for Airport Surface will be derived from ASDE-X maps.

4. Developing Equipment to Specification.

a. **Airport Ground Vehicle ADS-B Process Diagram.** The following process flow diagram (Figure 1) provides an overview of the steps and processes necessary to complete the vehicle ADS-B project.

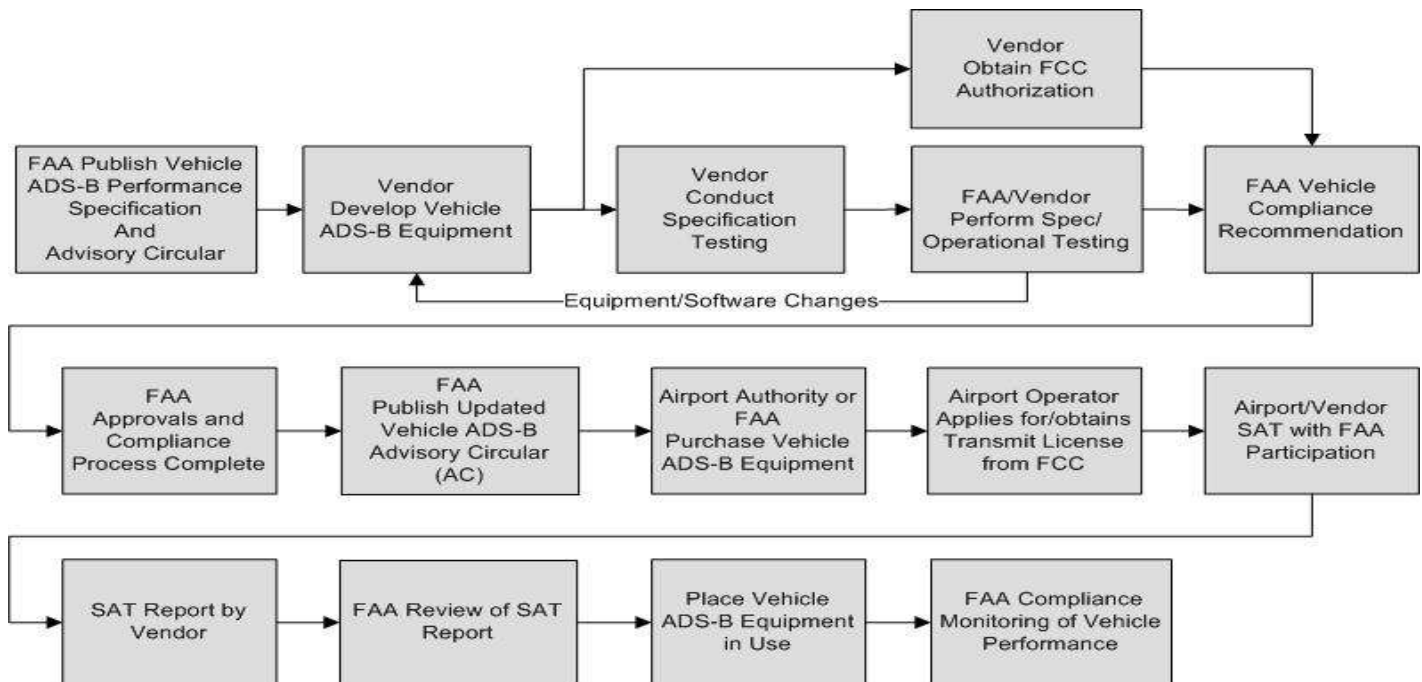


Figure 1. Vehicle ADS-B Process Diagram

b. **Airport Ground Vehicle ADS-B Specification.** The vehicle ADS-B squitter specification document (version 2.31) details requirements for the vehicle units residing in airport surface vehicles, which are necessary to determine the position of the surface vehicle in which it resides and broadcast that information on one of the two ADS-B data links. This document provides the requirements for both 978 MHz UAT and 1090 MHz ES

transmissions. Vendors producing equipment for surface vehicles must adhere to the requirements stated in the document.

The document addresses the broadcast of ADS-B only (the reception and display of ADS-B data in the vehicle is not addressed). Additionally, the document addresses testing and compliance of the airport ground vehicle ADS-B squitter units and includes guidelines for verification.

c. FAA Specification Testing. The airport ground vehicle ADS-B Factory Acceptance Test (FAT) plan and Site Acceptance Test (SAT) plan will outline the test procedures and processes necessary for the vehicle units to demonstrate compliance with the specification document. The airport ground vehicle ADS-B squitter units will be tested to verify they meet the functional and performance requirements. Testing includes the bench tests and environmental tests outlined in the specification document. Requirements for unit level testing are described for both 1090 MHz ES and 978 MHz UAT equipment. These tests are performed at the vendor's facilities as approved by the FAA. Integration testing of the airport ground vehicle ADS-B unit, including the navigation system and the ADS-B transmitting system, is conducted to verify system performance. The vendor submits test documentation to the FAA verifying successful completion of the specified tests. The FAA reserves the right to witness specific test procedures at the vendor's facility.

d. Subsequent to obtaining approval for the bench and environmental test results, the vendor will make a unit available to the FAA for additional testing at the FAA Technical Center. The FAA will conduct additional testing of the unit for an operational equivalent to a first article test. This testing will consist of limited bench testing of key requirements to verify performance. The FAA may require the vendor to provide test tool support similar to the capabilities that the vendor may have used for the factory bench testing to enable specific tests or provide access to internal test points for verification. Also, the unit will be subjected to testing at a specified test facility that verifies the operation at an airport location. The FAA will provide information to the vendor to generate a squitter transmit map for the airport surface to support the testing. The equipment will be tested to verify the squitter transmit map for the airport surface requirements within and outside of the squitter area. This test will consist of operating the equipment and subjecting the equipment to scenarios similar to those that would be encountered at the airport within which the vehicle is intended to operate.

The FAA Technical Center has developed test plans, which will reference the testing requirements in the specification document, additional equipment-level tests that may be required at the FAA facility, and a Site Acceptance Testing (SAT) Checklist that will provide a detailed description of the SAT procedures that are required to demonstrate vehicle unit compliance.

Additionally, equipment manufacturers shall provide the FAA Technical Center evidence of a quality control program for production of their airport ground vehicle ADS-B units when submitting the factory test report.

If the FAA authorizes the equipment, the FAA will update this AC to list the manufacturers whose vehicle units are authorized to operate on the airport surface.

5. Equipment Testing.

a. Vendor Site Acceptance Testing (SAT). The vendor will conduct Site Acceptance Testing (SAT) with assistance from the airport at each airport that implements the airport ground vehicle ADS-B units. The FAA will verify SAT compliance of the units for any airport installing and utilizing the vehicle units. Subsequent SAT events at the same airport may be approved via post-SAT report submittals. This operational testing will require manufacturers to validate that the airport ground vehicle ADS-B squitter units are installed properly, updated squitter transmit maps are in all equipment units, all squitter airport map boundaries are correct, International Civil Aviation Organization (ICAO) codes are properly entered, and the airport ground vehicle ADS-B units operate properly. Successful completion of this phase of testing will verify compliance of the equipment.

Upon completion of the SAT report, the vendor must submit a copy of the report to the FAA for review.

b. FAA Airport Ground Vehicle ADS-B Validation of SAT. All units must undergo SAT. The vendor must submit the SAT report to the FAA, who will evaluate the submitted report and associated data for any deficiencies to determine whether the airport ground vehicle ADS-B units at the airport are ready for operation. The FAA may participate in each airport's SAT upon delivery of the airport ground vehicle ADS-B squitter units or choose to evaluate the vendor-provided SAT report only.

If deficiencies are found during SAT, the FAA will notify the vendor, which must take corrective actions to make the units compliant with the SAT. The vendor must submit a follow-up SAT report to the FAA, who will decide whether the system has passed the SAT and can be put into operation.

6. Requirements to Operate Equipment.

a. FCC Equipment Authorization. Vendors are required to obtain FCC Equipment Authorization in accordance with 47 CFR Part 2, Subpart J. FCC form 731 must be filed for each unique product identifier and a unique FCC identifier is required on the product label. Product documentation must accompany the application, fees must be submitted, and descriptions of the required test data must be provided. Paragraph 2.1033(c) lists the requirements for equipment types other than those operating under Part 15 or Part 18 of the FCC rules.

Test requirements for equipment types other than those operating under Part 15 or Part 18 are described in the paragraphs listed in paragraph 2.1041. Paragraph 2.947 outlines the measurement procedure. The following paragraphs list measurement data requirements:

- 2.1046 – RF power output
- 2.1047 – Modulation Characteristics

- 2.1049 – Occupied Bandwidth
- 2.1051 – spurious emissions at antenna terminals
- 2.1053 – Field strength of spurious radiation (substitution method)
- 2.1055 – Frequency stability
- 2.1057 – Frequency spectrum to be investigated
- 2.1091 – RF radiation exposure evaluation: mobile devices
- 2.1093 - RF radiation exposure evaluation: portable devices

Applications for equipment authorization must be submitted electronically and the required exhibits must be in one of the following electronic file types : Adobe Acrobat (pdf), JPEG, Microsoft Excel, Microsoft Word, WordPerfect, or plain text. FCC requires up to 13 different exhibit types:

1. Identification label and location information
2. Attestation statements
3. External photos
4. Block diagrams
5. Schematics
6. Test Report
7. Test setup photos
8. User's manual
9. Internal photos
10. Parts list and tune-up information
11. RF exposure information
12. Operational description
13. Cover letters

All applications can be submitted to FCC via its OET Laboratory Division electronic filing site at <https://fjalfoss.fcc.gov/oetcf/eas/>. The application begins with the form 731 after which attachments are submitted. The web site automatically provides a fee form 159. Fees can be paid on-line via credit card or by mail using a hard copy of the form. Reviews take 5–10 weeks to complete.

b. FCC Transmit Authorization. Airport authorities or entities approved by the FAA to use Ground Vehicle ADS-B Out Squitter Equipment are required to obtain a license to transmit prior to operating. Title 47 CFR Part 87 governs the licensing and operation of equipment transmitting within aviation frequency bands. The applicable parts of 47 CFR Part 87 and references contained within shall be followed.

Applications for a transmit license can be filed through the FCC's Universal Licensing System (ULS). The ULS can be accessed at <http://wireless.fcc.gov/ULS/index.htm?job=home>. Airport authorities or entities approved by the FAA can apply to operate up to 200 vehicle squitters under a single application. A waiver adopted by the FCC on February 12, 2010 under DA 10-259 governs the use of 1090 MHz extended squitter on vehicles. Applications for a transmit licenses shall be filed under the station class MOU for Aeronautical Utility Mobile Stations.

Prior to filing with the FCC, the applicant is required to coordinate with the applicable FAA Regional Frequency Management Office (FMO). The Regional FMO will provide a coordination number that should be included in the application to the FCC. Contact information and geographic areas of responsibility can be found at http://www.ntia.doc.gov/files/ntia/publications/d_5_11.pdf

7. Airport Ground Vehicle ADS-B Operational Guidance.

a. Compliance Monitoring/Airport Ground Vehicle ADS-B Performance Compliance. The FAA will perform compliance monitoring throughout the life cycle of the airport ground vehicle ADS-B squitter units.

FAA will perform compliance monitoring of the units at airports where airport ground vehicle ADS-B units are installed. If system performance is degraded such that repair/replacement is required, the QRO will be notified. The airport operator will be notified to cease operating the nonfunctional airport ground vehicle ADS-B unit until the unit is operating within the specified requirements.

b. Airport Requirements. At airports implementing airport ground vehicle ADS-B squitter units, certain limitations will be imposed to maximize the benefits of this system. These limitations include the following:

(1) The FAA will only authorize the use of ADS-B squitter units by airport Operator or entities approved by the FAA and coordinated with the FCC and FAA Spectrum Office.

(2) The FAA will authorize a maximum of 200 total (1090 ES and UAT) airport ground vehicle ADS-B squitter units per location to ensure the performance of other FAA surveillance systems operating on the 1090 MHz frequency is not degraded. While any combination of 200 total units per airport is allowed, the FAA encourages airports to use the UAT units rather than the 1090 ES units due to potential congestion of the 1090 MHz spectrum.

(3) Vehicles equipped with the airport ground vehicle ADS-B squitter units must meet the requirements outlined in the Airport Ground Vehicle ADS-B Specification, Version 2.31.

(4) The operation of aircraft ground vehicle ADS-B squitter units is confined to the airport movement area. Use of the proper Squitter Transmit Map will ensure compliance with this requirement.

c. Airport Ground Vehicle ADS-B Squitter Unit Maintenance. The FAA will monitor compliance of the airport ground vehicle ADS-B squitter unit with the specification document through the SBS Compliance Monitor system. Any failures to comply will result in maintenance/replacement of the unit. Any observed issues with the airport ground vehicle ADS-B squitter units at the airport should be reported to FAA, who will in turn report the

deficient unit to the local airport operator. The airport operator is responsible for coordinating with the vendor to ensure the airport ground vehicle ADS-B squitter units are repaired or replaced.

d. Obtaining Current Airport Maps. The vendor-supplied user interface software will upload an airport ground vehicle ADS-B squitter transmit map for the airport surface to the airport ground vehicle ADS-B unit. The FAA must supply the vendor and airport with the current squitter transmit map for the airport surface in a .kml format from which the vehicle squitter transmit map for the airport surface should be created and uploaded to the airport ground vehicle ADS-B unit. The squitter transmit map for the airport surface must be used to control the airport ground vehicle ADS-B squitter on/off function of the vehicle unit.

The FAA will provide a website where the current squitter transmit map for the airport surfaces can be downloaded. If there is an updated squitter transmit map for the airport surface, the FAA will notify the airport operator.

e. Radio Call Sign Assignment. The airport ground vehicle ADS-B squitter units will be programmed with the vehicle radio call signs. The radio call signs are used in Air Traffic Control communications and will also be displayed on the ASDE-X display. A call sign is limited to a maximum of eight (8) characters. An example of possible call sign designators are as follows:

- CTYxxx is a city vehicle (xxx is number)
- ARFxxx is the aircraft rescue and fire fighting department vehicle
- FAAxxx is an FAA vehicle
- APTxxx is an airport operator vehicle

f. Vehicle 24-Bit ICAO Code Assignment. Each vehicle that is equipped with an airport ground vehicle ADS-B squitter unit must be uniquely identifiable. This will be accomplished by programming and storing the appropriate 24-bit ICAO identification and vehicle identification information into the unit in accordance with instructions provided by the manufacturer. Airport operators may request a block of 200 24-bit ICAO identification codes from the FAA Aircraft Registration Branch.

The block of 200 ICAO identification codes will enforce the limit of 200 airport ground vehicle ADS-B devices (total of 1090 ES and UAT) per airport.

To obtain the 24-bit ICAO identification codes, approved airport authorities must send a signed and dated letter that indicates the following:

- Request is for airport ground vehicle ADS-B equipment
- Number of 24-bit ICAO codes required
- Point of contact
- Name and address of the airport where equipment will operate

Airports should send their requests to the following addresses:

Via U.S. Postal Service:

Aircraft Registration Branch, AFS-750 PO Box 25504
Oklahoma City OK 73125

Via express courier:

Aircraft Registration Branch, AFS-750 6425 South Denning Ave
Registry Building
Oklahoma City OK 73169
866-762-9434

g. Training. The airport ground vehicle ADS-B equipment manufacturer must provide a detailed training manual as part of the FAA specification compliance process. The FAA will review the training material to ensure all training plans and materials are properly developed for use by the FAA and airports that purchase the equipment.

8. Obtaining FAA and Other Publications.

a. RTCA Documents. Obtain RTCA documents from RTCA, Inc., 1828 L Street NW, Suite 805, Washington DC 20036, (202) 833-9339, or from the RTCA website at <http://www.rtca.org>.

(1) RTCA/DO-260B, Minimum Operational Performance Standards for 1090 MHz Extended Squitter Automatic Dependent Surveillance Broadcast (ADS-B) and Traffic Information Services - Broadcast (TIS-B), December 2, 2009.

(2) RTCA/DO-282B, Minimum Operational Performance Standards for Universal Access Transceiver Automatic Dependent Surveillance - Broadcast Revision B, December 2, 2009.

b. Title 14 of the Code of Federal Regulations (14 CFR), Aeronautics and Space. Obtain copies of 14 CFR Parts 21, 23, 25, 27, 29, 43, and 91 from the Superintendent of Documents, Government Printing Office, PO Box 979050, St. Louis MO 63197. For general information, call 202-512-1800, fax 202-512-2250, or visit <http://www.gpo.gov/fdsys/> (select “Code of Federal Regulations”).

(1) 14 CFR Part 91, Automatic Dependent Surveillance-Broadcast (ADS-B) Out Performance Requirements to Support Air Traffic Control (ATC) Service, Final Rule, May 28, 2010, <http://www.gpo.gov/fdsys/pkg/FR-2010-05-28/pdf/2010-12645.pdf>.

c. FAA Advisory Circulars. Access copies of ACs on the FAA website at http://www.faa.gov/regulations_policies/advisory_circulars/.

d. FAA Technical Standard Orders (TSO). Find a current list of technical standard orders at <http://www.airweb.faa.gov/rgl>. You will also find the TSO Index of Articles at the same location.

e. ARINC, Inc. Obtain copies of ARINC documents from ARINC, Inc., 2551 Riva Road, Annapolis MD 21401, 800-633-6882 (telephone), 410-956-5465 (fax), or at <http://www.arinc.com>.

f. SAE International. Order SAE documents from SAE International, 400 Commonwealth Drive, Warrendale PA 15096-0001, 724-776-4970 (telephone), 724-776-0790 (fax) or at <http://www.sae.org>.

A handwritten signature in cursive script that reads "J.R. White for".

Michael J. O'Donnell
Director of Airport Safety and Standards

APPENDIX A

Identifier Airport

ASDE-X equipped airports

BWI	Baltimore-Washington International Thurgood Marshall Airport
BOS	Boston Logan International Airport
BDL	Bradley International Airport
MDW	Chicago Midway Airport
ORD	Chicago O'Hare International Airport
CLT	Charlotte Douglas International Airport
DFW	Dallas-Ft. Worth International Airport
DEN	Denver International Airport
DTW	Detroit Metro Wayne County Airport
FLL	Ft. Lauderdale/Hollywood Airport
MKE	General Mitchell International Airport
IAH	George Bush Intercontinental Airport
ATL	Hartsfield-Jackson Atlanta International Airport
HOU	Honolulu International –Hickam Air Force Base Airport
JFK	John F. Kennedy International Airport
SNA	John Wayne-Orange County Airport
LGA	LaGuardia Airport
STL	Lambert-St. Louis International Airport
LAS	Las Vegas McCarran International Airport
LAX	Los Angeles International Airport
SDF	Louisville International Airport-Standiford Field
MEM	Memphis International Airport
MIA	Miami International Airport
MSP	Minneapolis St. Paul International Airport
EWR	Newark International Airport
MCO	Orlando International Airport
PHL	Philadelphia International Airport
PHX	Phoenix Sky Harbor International Airport
DCA	Ronald Reagan Washington National Airport
SAN	San Diego International Airport
SLC	Salt Lake City International Airport
SEA	Seattle-Tacoma International Airport
PVD	Theodore Francis Green State Airport
IAD	Washington Dulles International Airport
HOU	William P. Hobby Airport

Airports to be equipped with ASSC

SFO	San Francisco International Airport
CLE	Cleveland/Hopkins International Airport
PIT	Pittsburgh International Airport
PDX	Portland International Airport
ADW	Andrews Air Force Base
ANC	Anchorage International Airport
CVG	Cincinnati/Northern Kentucky International Airport
MSY	New Orleans International Airport
MCI	Kansas City International Airport

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U.S. Department
of Transportation
**Federal Aviation
Administration**

Advisory Circular

Consolidated to include Changes 1-3

Subject: Airport Ground Vehicle Automatic
Dependent Surveillance - Broadcast (ADS-B)
Out Equipment

Date: 11/14/2011
Initiated by: AAS-1

AC No: 150/5220-26
Change: 3

1 Purpose of the Advisory Circular.

This Advisory Circular (AC) provides guidance on the development, installation, testing, approval, and maintenance of Automatic Dependent Surveillance – Broadcast (ADS-B) Out squitter units, commonly referred to as Vehicle Movement Area Transmitters (VMATs), for airport ground vehicles that regularly operate in airport movement areas. Using this AC, airports will be able to acquire approved and authorized VMAT units that are compliant with Title 14 Code of Federal Regulations (CFR), Part 91, *ADS-B Out Performance Requirements to Support Air Traffic Control (ATC) Service*. FAA-E-3032, *Vehicle ADS-B Specification*, dated January 7, 2015, established technical specifications for manufacturing VMAT units.

2 Application of this AC.

The Federal Aviation Administration (FAA) recommends the guidance in this AC for airport ground vehicles that regularly operate in the movement areas at public-use airports. This AC does not constitute a regulation, is not mandatory, and is not legally binding in its own right. It will not be relied upon as a separate basis by the FAA for affirmative enforcement action or other administrative penalty. Conformity with this AC is voluntary, and nonconformity will not affect rights and obligations under existing statutes and regulations, except as follows:

- a. While an airport has voluntary discretion to equip its vehicles with VMAT equipment, an airport that opts to implement VMATs must comply with federal regulatory requirements for radio frequency transmission. The National Telecommunications and Information Administration (NTIA) has authority over spectrum management for all Federal agencies as specified in 47 CFR § 300, the Manual of Regulations and Procedures for Federal Radio Frequency Management. Vehicle ADS-B use is regulated as a type of Aeronautical Mobile Utility station under 47 CFR § 87.345 and 47 CFR § 87.349. FAA Order 6050.32, *Spectrum Management Regulations and Procedures Manual*, serves as the governing FAA policy addressing spectrum management for aeronautical uses, including ADS-B Out. In support of the FAA's responsibilities for

spectrum management, the following requirements apply to an airport that opts to install VMATs on its vehicles:

- (1) Airports and other entities operating (such as airline super tugs) on the movement area must have FAA approval to use Ground Vehicle ADS-B Out equipment, in conjunction with the provisions of this AC.
 - (2) All airport VMAT units must meet the requirements stated in FAA-E-3032, *Airport Ground Vehicle ADS-B Specification*, January 7, 2015, or its successors.
 - (3) Airport authorities or entities approved by the FAA to use VMAT equipment must obtain a FCC license to transmit prior to operating, per 47 CFR Part 87.
 - (4) Vendors developing, installing, testing, and seeking FAA approval of ADS-B Out units for installation on airport ground vehicles, must comply with this AC.
 - (5) Use of these standards and guidelines is mandatory for projects funded under Federal grant assistance programs, including the Airport Improvement Program (AIP). See Grant Assurance #34. Refer to FAA Order 5100.38, *Airport Improvement Program Handbook*, for information on grant funding eligibility.
- b. This AC is mandatory for projects funded by the Passenger Facility Charge program. See 14 CFR Part 158, *ADS-B Out Performance Requirements to Support Air Traffic Control (ATC) Service*, Appendix A.
 - c. This AC provides one, but not the only, acceptable means of meeting the requirements of 14 CFR part 139, *Certification of Airports*.
 - d. The FAA recommends the guidance in this AC for vendors, airport operators, and other personnel to ensure proper implementation, monitoring, and operation of the VMAT units deployed to vehicles on the airport.
 - e. In this AC, the words “must”, “shall”, “should”, and “may” are used to define different levels of requirements or recommendations:
 - “Must” or “shall”: Conveys a requirement.
 - “Should”: Describes a recommendation.
 - “May”: Denotes a permissible practice or action, but not a requirement.

3 **Deployment considerations at airport locations.**

VMATs enable improved safety and situational awareness on the airport surface. The FAA encourages voluntary action by airport operators to install VMATs on vehicles that regularly operate in the movement area.

- a. Airports equipped with FAA Airport Surface Detection Equipment (ASDE) are the most suitable locations for installation of VMATs. ASDE systems are necessary to receive the ADS-B Out signals from VMATs for use on ATC displays. The ATC displays assist controllers with issuing separation

instructions to vehicles or aircraft to maintain safety. The precise location information from VMATs also enhance the performance of ASDE subsystems used to activate Runway Status Warning Lights (RWSL). The FAA strongly encourages airport operators at the ASDE-equipped airports (shown in Table 1) to equip their vehicles that regularly operate in the movement area with VMATs. If in the future, the FAA installs new ASDE at additional airports, those locations become suitable sites for equipage of vehicles with VMATs.

- b. Airports without ASDE may choose to equip their vehicles with VMATs. Aircraft equipped with ADS-B In avionics and Cockpit Display of Traffic Information (CDTI) will enable pilots to see the location of VMAT-equipped vehicles on cockpit moving map displays. Aircraft equipage with ADS-B In should become more widespread in future years. The FAA advises airports without ASDE to consider current and near-term ADS-B In equipage of aircraft using their airport when assessing investments in VMATs.

4 **Background.**

Every year, aircraft and vehicles are involved in incidents at airports that have potentially serious consequences. Many of these events occur in periods of reduced visibility, which results in reduced or lost situational awareness for flight crews and air traffic controllers. The FAA deploys and maintains several systems and technologies to help reduce the number and severity of these incidents within airport movement areas.

a. **Definitions.**

- (1) **VMAT:** Mobile equipment that determines the position of the surface vehicle in which it is installed using Global Positioning System (GPS) navigation and broadcasts that information on one of the two ADS-B data links (978 MHz UAT or 1090 MHz ES).
- (2) **Squitter:** Output pulses from an airport ground vehicle ADS-B transponder unit generated by an internal triggering system rather than by external interrogation pulses.
- (3) **VMAT Transmit Map for Airport Surface:** The transmit maps of the airport surface define where the VMAT unit is active by controlling the ADS-B transmit out off/on function. The FAA generates the transmit boundaries when requested by the airport.

b. **ASDE.**

The FAA deployed ASDE systems to Airport Traffic Control Towers (ATCTs) at 43 commercial airports as shown in Table 1. The design of the ASDE system supports safe ground operations at an airport by providing reliable and accurate information on the location of aircraft and ground vehicles. It does this through a combination of technologies, including ADS-B. ASDE includes both the Model X system, known as ASDE-X, or the Airport Surface Surveillance Capability (ASSC).

Due to the inherent problems associated with radio frequency and radar transmissions, a single sensor surveillance system may not provide a complete and accurate depiction of a target to the controller. The ASDE mitigates this problem by fusing the data from several different sources, including ADS-B, multilateration, and radar (as applicable) to provide the most accurate target information. The ASDE system receives the position reports from multiple sensors and “fuses” them into a single accurate target report. Data fusion provides the most complete and accurate picture of the intended target’s position and motion. The ASDE system alerts controllers to potential conflicts so they can take appropriate action to prevent surface incidents. The ASDE system also contains the logic needed to activate RWSL, where installed.

c. ADS-B.

ADS-B is a cornerstone technology in the FAA’s Next Generation Air Transportation System (NextGen) initiative. NextGen’s goal is to modernize the safety and efficiency of the National Airspace System. ADS-B provides improved surveillance of aircraft in the terminal, en route, and on surface environments, as well as vehicles on the airport surface; and provides equipped aircraft with shared situational awareness via a cockpit display of proximate traffic.

Aircraft and ground vehicles equipped with ADS-B transponders continually broadcast information, such as identification, current position, altitude, and velocity. ADS-B uses highly-accurate GPS navigation signals to determine the aircraft or vehicle location, thereby making the location information more timely and accurate than the position information provided by a conventional radar system. The system converts that position into a unique digital code and transmits it, along with a unique identification code, to locate, identify, and track the specific aircraft or vehicle. A network of ground-based and space-based ADS-B sensors, including some integrated into ASDE, receive the ADS-B data from aircraft and vehicles and send it to ATC automation systems and displays. ADS-B is “automatic” by not requiring external interrogation, but is “dependent” because it relies on onboard GPS position sources and onboard broadcast transmission systems to provide surveillance information to ATC, and other aviation users including pilots and airports.

“ADS-B Out” refers to the capability of transmitting ADS-B information. ADS-B Out provides an accurate and timely position report to ATC including aircraft or vehicle identity and other information. The ADS-B position broadcast also provides a signal for multilateration receivers. Aircraft or vehicles can voluntarily equip with the “ADS-B In” equipment necessary to receive ADS-B Out messages and other broadcast services, such as Traffic Information Service-Broadcast (TIS-B), and display that information in the cockpit or vehicle. ADS-B In improves situational awareness for pilots and/or vehicle operators.

d. VMATs.

VMAT units are ADS-B transponders deployed on airport ground vehicles to reduce the risk of runway incursions and conflicts between aircraft and vehicles

operating in the airport movement areas. VMATs utilize an ADS-B transmitter to broadcast a highly accurate position (GPS-based), which is received by various ATC ground stations and aircraft on or near the airport and presented on an ATC or vehicle display. Additionally, the ADS-B system provides a mechanism for the delivery and display of an integrated surface picture to airport operators through an add-on display capability.

The VMAT unit uses a GPS sensor navigation source capable of providing highly accurate position data as outlined in the specification. The VMAT units operate on either the 1090 ES link or the 978 MHz/UAT link. However, due to 1090 MHz spectrum congestion, the FAA strongly prefers the use of the uncongested 978 MHz/UAT link.

Whether the unit is capable of transmitting on just one link or both (1090 and 978 MHz), the unit must only transmit on one link at a time. The VMAT ADS-B transmissions are only active when the vehicle position is within or approaching the defined transmit area. The ADS-B equipment contains a transmit map that controls the on/off transmit function based on position of the vehicle on the airport when within or proximate to the movement area.

The FAA authorizes the airport operator and potentially other entities (e.g., airlines) to deploy and use VMATs on airport vehicles that regularly operate in the movement area. Typical vehicles equipped VMATs include airport inspection vehicles, fire and rescue vehicles, maintenance vehicles for snow and grass, and other vehicles authorized by the airport operator, such as airline supertugs. FAA vehicles operating in movement areas can be equipped with VMATs.

Table 1. Airports with Existing FAA ASDE Surveillance Systems in the ATCT

Below is a table of commercial service airports currently equipped with FAA ASDE surveillance systems in the ATCT.

Identifier	Airport
ASDE-X equipped ATCTs	
BWI	Baltimore-Washington International Thurgood Marshall Airport
BOS	Boston Logan International Airport
BDL	Bradley International Airport
MDW	Chicago Midway Airport
ORD	Chicago O'Hare International Airport
CLT	Charlotte Douglas International Airport
DFW	Dallas-Ft. Worth International Airport
DEN	Denver International Airport

Identifier	Airport
DTW	Detroit Metro Wayne County Airport
FLL	Ft. Lauderdale/Hollywood Airport
MKE	General Mitchell International Airport
IAH	George Bush Intercontinental Airport
ATL	Hartsfield-Jackson Atlanta International Airport
HNL	Honolulu International –Hickam Air Force Base Airport
JFK	John F. Kennedy International Airport
SNA	John Wayne-Orange County Airport
LGA	LaGuardia Airport
STL	Lambert-St. Louis International Airport
LAS	Las Vegas Harry Reid International Airport
LAX	Los Angeles International Airport
SDF	Louisville Muhammad Ali International Airport
MEM	Memphis International Airport
MIA	Miami International Airport
MSP	Minneapolis St. Paul International Airport
EWR	Newark International Airport
MCO	Orlando International Airport
PHL	Philadelphia International Airport
PHX	Phoenix Sky Harbor International Airport
DCA	Ronald Reagan Washington National Airport
SAN	San Diego International Airport
SLC	Salt Lake City International Airport
SEA	Seattle-Tacoma International Airport
PVD	Theodore Francis Green State Airport
IAD	Washington Dulles International Airport
HOU	William P. Hobby Airport

Identifier	Airport
ASSC equipped ATCTs	
SFO	San Francisco International Airport
CLE	Cleveland/Hopkins International Airport
PIT	Pittsburgh International Airport
PDX	Portland International Airport
ANC	Anchorage International Airport
CVG	Cincinnati/Northern Kentucky International Airport
MSY	Louis Armstrong New Orleans International Airport
MCI	Kansas City International Airport

5 **Developing VMAT equipment meeting FAA Specifications.**

a. **VMAT Technical Specification.**

The vehicle ADS-B squitter specification details functional requirements for the vehicle units installed on airport surface vehicles. These requirements are necessary to determine the position of the surface vehicle in which it resides and broadcast that information on one of the two ADS-B data links. See FAA-E-3032, *Vehicle ADS-B Specification*, dated January 7, 2015. The specification document provides the requirements for both 978 MHz UAT and 1090 MHz ES transmissions. Vendors producing equipment for surface vehicles must adhere to the requirements stated in the document.

The specification document addresses the broadcast of ADS-B only (the reception and display of ADS-B data in the vehicle is not addressed); and the testing, compliance, and verification guidelines of the VMAT units.

b. **FAA Specification Testing.**

The VMAT Factory Acceptance Test (FAT) plan outline the test procedures and processes necessary for demonstrating the vehicle unit's compliance with FAA-E-302. Testing of VMAT units serves to verify they meet the functional and performance requirements. Testing includes the bench tests and environmental tests outlined in the specification document. Unit level testing requirements exist for both 1090 MHz ES and 978 MHz UAT equipment. Performance of tests occur at the vendor's facilities as approved by the FAA. Integration testing of VMAT units, including the navigation system and the ADS-B transmitting system, verifies system performance. The vendor submits test documentation to the FAA verifying successful completion of the specified tests. The vendor provides the FAA with documentation of their quality control program for

production of their VMAT units when submitting the factory test report. The FAA reserves the right to witness specific test procedures at the vendor's facility.

Subsequent to obtaining approval for the bench and environmental test results, the vendor makes a VMAT unit available to the FAA for additional testing at the FAA Technical Center. This testing consists of limited bench testing of key requirements to verify performance. The FAA may request vendors to provide test tool support, similar to the capabilities that the vendor used for its factory bench testing, in order to enable specific tests or provide access to internal test points for verification. The FAA tests for correct use of the transmit map and function for operations on the airport surface.

c. FCC Equipment Authorization.

Vendors must obtain FCC Equipment Authorization in accordance with 47 CFR Part 2, Subpart J. Vendors must file FCC form 731 for each unique product identifier and a unique FCC identifier is required on the product label. The application must include product documentation, fees remittance, and descriptions of the required test data. Paragraph 2.1033(c) of FCC form 731 lists the requirements for equipment types other than those operating under 47 CFR Part 15 or Part 18 of the FCC rules.

For equipment type test requirements other than those operating under 47 CFR Part 15 or Part 18, refer to paragraphs listed in paragraph 2.1041 of FCC form 731. Paragraph 2.947 of that document outlines the measurement procedure. The following paragraphs list measurement data requirements:

- 2.1046 – RF power output
- 2.1047 – Modulation Characteristics
- 2.1049 – Occupied Bandwidth
- 2.1051 – spurious emissions at antenna terminals
- 2.1053 – Field strength of spurious radiation (substitution method)
- 2.1055 – Frequency stability
- 2.1057 – Frequency spectrum to be investigated
- 2.1091 – RF radiation exposure evaluation: mobile devices
- 2.1093 - RF radiation exposure evaluation: portable devices

Submit applications for equipment authorization electronically. Provide required exhibits the appropriate electronic file type. FCC requires up to 13 different exhibit types:

1. Identification label and location information
2. Attestation statements
3. External photos
4. Block diagrams
5. Schematics
6. Test Report
7. Test setup photos
8. User's manual

9. Internal photos
10. Parts list and tune-up information
11. RF exposure information
12. Operational description
13. Cover letters

Vendors submit applications to FCC via the OET Laboratory Division. Reviews take 5–10 weeks to complete.

d. Training Materials.

The VMAT manufacturer provides a detailed training manual for its equipment as part of its compliance with FAA technical specifications. The FAA reviews the training material to ensure proper development of all training plans and materials.

e. VMAT Qualified Units List.

When the FAA authorizes the new VMAT equipment, the FAA will update the qualified equipment list of the VMAT units authorized to operate on the airport surface and broadcast on ADS-B. The current listing of authorized VMAT units is published as an Addendum file to Appendix A of this AC. From <https://www.faa.gov/airports>, select “Airport Advisory Circulars” and continue to “AC 150/5220-26 Addendum.”

6 Deploying VMAT Equipment.

a. Site Acceptance Testing (SAT).

Conduct SAT at each airport deploying VMATs on vehicles. SAT validates every VMAT installation (i.e., current transmit map, International Civil Aviation Organization (ICAO) codes, and vehicle call signs) and confirms the VMAT units operate properly. Once the operator reviews the SAT report for satisfactory completion, the operator submits the report to the FAA within 30 days for review. If the FAA discovers deficiencies in the report, the FAA notifies the operator, who then takes corrective actions to address the deficiencies.

The airport operator may choose to contract with a third-party vendor to perform SAT. Refer to the current version of the *ATO Surveillance and Broadcast Services Vehicle ADS-B Out Deployment Plan* for additional information on the deployment process, including checklists. Complete a SAT checklist for each equipped vehicle.

The FAA may participate in an airport’s SAT at the time of VMATs deployment, or choose to evaluate the SAT report only. The FAA requests notification 60 days prior to the SAT to allow for optional participation. Successful completion of the SAT indicates the deployed VMATs meet all applicable regulatory requirements and equipment specifications. With completion of SAT, the airport operator can operate the VMAT equipment installed on its vehicles.

Complete SAT documents for transfer of VMATs from one vehicle to another.

b. FCC Transmit Authorization.

Airport operators or entities approved by the FAA to use VMATs must obtain an FCC license to transmit prior to operating. Title 47 CFR Part 87 governs the licensing and operation of equipment transmitting within aviation frequency bands. Operators adhere to the applicable parts of 47 CFR Part 87 and references contained within.

File applications for a transmit license through the FCC's Universal Licensing System (ULS). Airport operators or entities approved by the FAA can apply to operate up to 200 VMATs under a single application. Filing of applications for VMAT transmit licenses occurs under the station class Memorandum of Understanding (MOU) for Aeronautical Utility Mobile Stations.

Prior to filing with the FCC, the applicant must coordinate with the applicable FAA Regional Frequency Management Office (FMO). The Regional FMO provides a coordination number that is included in the application to the FCC.

c. Vehicle 24-Bit ICAO Code Assignment.

Each vehicle equipped with a VMAT unit is uniquely identifiable due to the use of the appropriate 24-bit ICAO identification and vehicle identification information programmed into the unit, in accordance with instructions provided by the manufacturer. Airport operators may request a block of 200 24-bit ICAO identification codes from the FAA Aircraft Registration Branch.

The block of up to 200 ICAO identification codes ensures compliance with the limit of 200 VMAT units (total of 1090 ES and UAT) per airport.

To obtain the 24-bit ICAO identification codes, approved airport operators must send a signed and dated letter that indicates the following:

- Request is for airport ground vehicle ADS-B equipment
- Number of 24-bit ICAO codes required
- Point of contact
- Name and address of the airport where equipment will operate

Airports should send their requests to the following addresses:

Via U.S. Postal Service:

FAA Aircraft Registration Branch
PO Box 25504
Oklahoma City OK 73125-0504

Via commercial delivery services:

FAA Aircraft Registration Branch
Registry Building Room 118
6425 South Denning
Oklahoma City OK 73169-6937
866-762-9434

7 **Operating VMAT Equipment.**

a. **VMAT Performance Monitoring.**

The FAA conducts performance monitoring throughout the life cycle of the VMATs deployed at airports, using the ADS-B and/or ASDE systems. If a unit broadcasts erroneous information, the FAA notifies the airport operator to cease operating the non-performing VMAT until repair or replacement of the unit. Or, the vehicle driver may notice a VMAT malfunction and so remove the unit from service. Operators must remove from service immediately any unit broadcasting erroneous information. The airport operator coordinates with the vendor to ensure repair or replacement of the non-performing VMATs.

b. **Airport Operator Responsibilities.**

At airports deploying VMATs, certain provisions apply ensuring system integrity and reliability. These provisions include the following:

- (1) The FAA authorizes the use of VMATs by the airport operator, or other entities (e.g., airlines towing aircraft) approved by the FAA and coordinated with the FCC and the FAA Spectrum Office. Other entities can include airlines that regularly operate super tugs in the airport movement area.
- (2) The FAA authorizes a maximum of 200 (1090 ES and UAT) VMATs per airport to ensure no performance degradation of other FAA surveillance systems operating on the 1090 MHz frequency. While any combination of 200 units per airport is permissible, the FAA strongly encourages airports to use the UAT units rather than the 1090 ES units due to potential congestion of the 1090 MHz spectrum.
- (3) Vehicles equipped with VMATs must meet the requirements outlined in FAA-E-3032, *Airport Ground Vehicle ADS-B Specification*, dated January 7, 2015.
- (4) FCC regulation defines the transmit area operation of VMATs, which is currently confined to the airport movement area. For vehicles equipped with 978 MHz UAT units, this includes operations in transit to the movement area. Use of the current transmit map ensures compliance with this requirement.
- (5) Promptly notify the FAA, AJM-421 SBS Surface Surveillance Programs, of unit configuration changes for new installations, transfers (including seasonal transfers), replacements and/or removals of VMAT units. Use the current configuration management template in the *ATO Surveillance and Broadcast Services Vehicle ADS-B Out Deployment Plan* to update the VMAT vehicle configuration information.

c. **Current Transmit Maps.**

The FAA provides the vendor and airport with the current transmit boundaries for the airport surface in a .kml format. The vendor then develops the transmit map for the deployed VMATs. The transmit map for the airport surface is used

to control the VMAT on/off function as the vehicle moves on the airport surface. The vendor-supplied user interface software uploads the transmit map to the VMAT.

The FAA notifies the airport operator when/if there are updates to the transmit boundaries.

d. Radio Call Sign Assignment.

Program VMAT units with distinct vehicle radio call signs. The radio call signs apply to communications with ATC and appear on the ASDE display. Call signs are limited to a maximum of eight (8) characters. Examples of possible call sign designators are:

- ARFxxx is the aircraft rescue and fire-fighting department vehicle
- FAAxxx is an FAA vehicle
- APTxxx is an airport operator vehicle

8 Obtaining FAA and Other Publications.

a. RTCA Documents.

Obtain RTCA documents from RTCA, Inc., 1828 L Street NW, Suite 805, Washington DC 20036, (202) 833-9339, or from the RTCA website at <https://www.rtca.org>.

- (1) RTCA/DO-260B, *Minimum Operational Performance Standards for 1090 MHz Extended Squitter Automatic Dependent Surveillance Broadcast (ADS-B) and Traffic Information Services – Broadcast (TIS-B)*, December 2, 2009.
- (2) RTCA/DO-282B, *Minimum Operational Performance Standards for Universal Access Transceiver Automatic Dependent Surveillance – Broadcast Revision B*, December 2, 2009.

b. Title 14 of the Code of Federal Regulations (14 CFR), Aeronautics and Space.

Obtain copies of 14 CFR Parts 21, 23, 25, 27, 29, 43, and 91 from the Superintendent of Documents, Government Printing Office, PO Box 979050, St. Louis MO 63197. For general information, call 202-512-1800, fax 202-512-2250, or visit <https://www.govinfo.gov> (select “Code of Federal Regulations”).

- (1) 14 CFR Part 91, *Automatic Dependent Surveillance-Broadcast (ADS-B) Out Performance Requirements to Support Air Traffic Control (ATC) Service*, Final Rule, May 28, 2010, <https://www.federalregister.gov/documents/2010/05/28/2010-12645/automatic-dependent-surveillance-broadcast-ads-b-out-performance-requirements-to-support-air-traffic>.

c. FAA Advisory Circulars.

Access copies of ACs on the FAA website at https://www.faa.gov/regulations_policies/advisory_circulars/.

d. **FAA Technical Standard Orders (TSO).**

Find a current list of technical standard orders at https://www.faa.gov/aircraft/air_cert/design_approvals/tso. You will also find the TSO Index of Articles at the same location.

e. **Collins Aerospace.**

Obtain copies of ARINC documents via Collins Aerospace from <https://www.collinsaerospace.com/what-we-do/service-and-support/support>.

f. **SAE International.**

Order SAE documents from SAE International, 400 Commonwealth Drive, Warrendale PA 15096-0001, 724-776-4970 (telephone), 724-776-0790 (fax) or at <https://www.sae.org>.

A handwritten signature in black ink, appearing to read 'John R. Dermody', with a stylized flourish at the end.

John R. Dermody
Director of Airport Safety and Standards

APPENDIX A. QUALIFIED VMATs

When the FAA authorizes new VMAT equipment, the FAA will update the qualified list of VMAT units authorized to operate on the airport surface and broadcast on ADS-B. The current listing of authorized VMAT units is published as an Addendum file to Appendix A of this AC. From <https://www.faa.gov/airports>, select “Advisory Circulars” and continue to “AC 150/5220-26 Addendum.”

The following VMAT units have met the requirements contained in FAA-E-3032, *Vehicle ADS-B Specification*. This listing contains the complete listing of currently certified VMAT units and their manufacturers. Equipment not listed here, but listed in prior addendums to the AC, has been deleted.

a. FAA Approved Model Number: FDL-978-GTX/E

ADS-B data link: 978 MHz Universal Access Transceiver

Vendor: Harris Corporation

Manufacturer: FreeFlight Systems

Contact:

Harris Corporation
(855) 890-5137
CAS@Harris.com
www.symphonycdm.com

b. FAA Approved Model Number: FDL-978-GTX/A (External Mount)

ADS-B data link: 978 MHz Universal Access Transceiver

Manufacturer: FreeFlight Systems

Note: This unit is no longer being manufactured and is not available for new installations; however, existing installations may continue for the lifecycle of the units.

Contact:

FreeFlight Systems
(800) 487-4662
<https://www.freeflightsystems.com>

c. FAA Approved Model Number: uAvionix VTU-20

ADS-B data link: 978 Mhz Universal Access Transceiver

Manufacturer: uAvionix

Contact:

uAvionix
(844) 827-2372
<https://uavionix.com>

Advisory Circular Feedback

If you find an error in this AC, have recommendations for improving it, or have suggestions for new items/subjects to be added, you may let us know by (1) mailing this form to Manager, Airport Engineering Division, Federal Aviation Administration ATTN: AAS-100, 800 Independence Avenue SW, Washington DC 20591 or (2) faxing it to the attention of the Office of Airport Safety and Standards at (202) 267-5383.

Subject: AC 150/5220-26 Change 3

Date: _____

Please check all appropriate line items:

- ☐ An error (procedural or typographical) has been noted in paragraph _____ on page _____.
- ☐ Recommend paragraph _____ on page _____ be changed as follows:

- ☐ In a future change to this AC, please cover the following subject:
(Briefly describe what you want added.)

- ☐ Other comments:

- ☐ I would like to discuss the above. Please contact me at (phone number, email address).

Submitted by: _____

Date: _____

FAI SRE LIST

Unit	LIC.	Year	Make	Model
Graders				
30	39960	2015	Cat	12M
31	40435	2018	Cat	14M3
32	40436	2018	Cat	14M3
33	35384	2004	Cat	14H
Brooms				
34	42633	2025	MB	MB3
35	39753	2015	MB	MB3
36	38623	2012	MB	MB3
37	40751	2020	Oshkosh	XF
38	40750	2020	Oshkosh	XF
39	40828	2020	Oshkosh	XF
47	36530	2007	Oshkosh/MB	HT
391	36532	2007	Oshkosh	H
Wheel loaders/ Displacement plow carriers				
60	41531	2023	Cat	980M
61	41530	2023	Cat	966M
62	41529	2023	Cat	966M
TBD		2027	Cat	966M
TBD		2025	Cat	980M
74	34820	2003	Volvo	L330E
End Dumps W/Sanders and Tractors W/Side dump				
63	37631	2009	International	7600
64	37630	2009	International	7600
65	33687	2001	Freightliner	FLD120
66	39934	2015	Freightliner	114SD
69	33688	2001	Freightliner	FLD120

FAI SRE LIST

De-Ice Trucks

67	39508	2015	Mack/Tyler	GU713/AD4000
68	40187	2018	Mack/Tyler	GU713/AD4000

Snow Blowers

85	39999	2017	MB	MB4
86	36533	2006	Oshkosh	H
87	40829	2021	Larue	T95
TBD		2027	MB	MB4

Other Vehicles To Get VMATS

Gen3 6x6

E1	41199	2022	Oshkosh ARFF	Gen3 6x6
E2	42472	2024	Oshkosh ARFF	Legacy 6x6
E3	38606	2012	Oshkosh ARFF	7400 SFA
E5	36231	2007	Pierce Structure	
CMD1	40170	2017	Ford P&F Comand Vehicle	Explorer
14	41938	2024	Ford Patrol Car	Expedition
15	38066	2011	Ford Patrol Car	Expedition
16	41940	2024	Ford Patrol Car	Expedition
17	40801	2020	Ford Patrol Car	Expedition
18	38969	2012	Ford P&F Truck	F350
22	40607	2019	Chevy Chief of Mtx	Tahoe
25	40791	2020	Chevy OPS Truck	
26	40789	2020	Ford OPS Car	Expedition
27	40790	2020	Ford OPS Car	Expedition
42	38609	2012	Ford Field Liting trk	F250
43	40323	2018	Chevy FM Foreman trk	Silverado 2500
210	38611	2012	Chevy FM Foreman trk	Silverado 2500
217	37854	2011	Ford FM Foreman trk	F350
216	40420	2018	Chevy Electrician Van	G2500
219	40322	2018	Chevy Electrician Van	G2500
241	38612		Chevy Electrician Van	G2500