

MEMORANDUM OF UNDERSTANDING

MEMORANDUM OF UNDERSTANDING BETWEEN THE FEDERAL AVIATION ADMINISTRATION AND CITY OF SAN ANTONIO

ARTICLE I. PARTIES

The parties to this Memorandum of Understanding ("MOU") are the Federal Aviation Administration ("FAA") and the City of San Antonio, (City), the owner and operator of San Antonio International Airport (SAT), which includes the San Antonio Airport System (SAAS) that will administer this MOU on behalf of the City.

ARTICLE 2. BACKGROUND

Runway Incursion Prevention through Situational Awareness (RIPSA) is an initiative sponsored by the Runway Incursion Reduction Program (RIRP) aimed at reinforcing protection of the Runway Safety Area (defined as the area within 250 ft. to each side of a Runway Center Line). RIPSA utilizes a "Right-Site-Right-Size" approach to address specific runway incursion causal factors identified at candidate airports. It is primarily intended to mitigate Pilot Deviations (PD) and Vehicle/Pedestrian Deviations (V/PD), which result in approximately 80% of all Runway Incursions (RIs) reported to the FAA. The RIRP team will work with the selected primary system vendor, Saab, Inc. to prototype, install and conduct test evaluations of the RIPSA prototype system at SAT. The outcome of these evaluations will be a set of operational evaluation reports summarizing the performance of the RIPSA prototype system at SAT.

SAT was identified based on factors such as the presence of a diverse operational mix, an expressed desire to partner as a technology testbed and RIs that require additional mitigations to supplement planned construction, signage upgrades, training, and outreach efforts.

This emerging technology will potentially improve RI reduction at airports without existing ground surveillance such as Airport Surface Detection Equipment - Model X (ASDE-X) and Airport Surface Surveillance Concept (ASSC) by utilizing targeted surveillance technologies to drive direct-to-pilot annunciators at key runway entry points (referred to as "protected intersections") that provide "just-in-time" situational awareness to pilots and vehicle operators.

ARTICLE 3. OBJECTIVES

The objectives of this MOU are as follows: To detail the scope of each party's efforts; the terms and conditions of the MOU; and to identify the roles and responsibilities of the parties with regard to the RIPSA project at SAT.

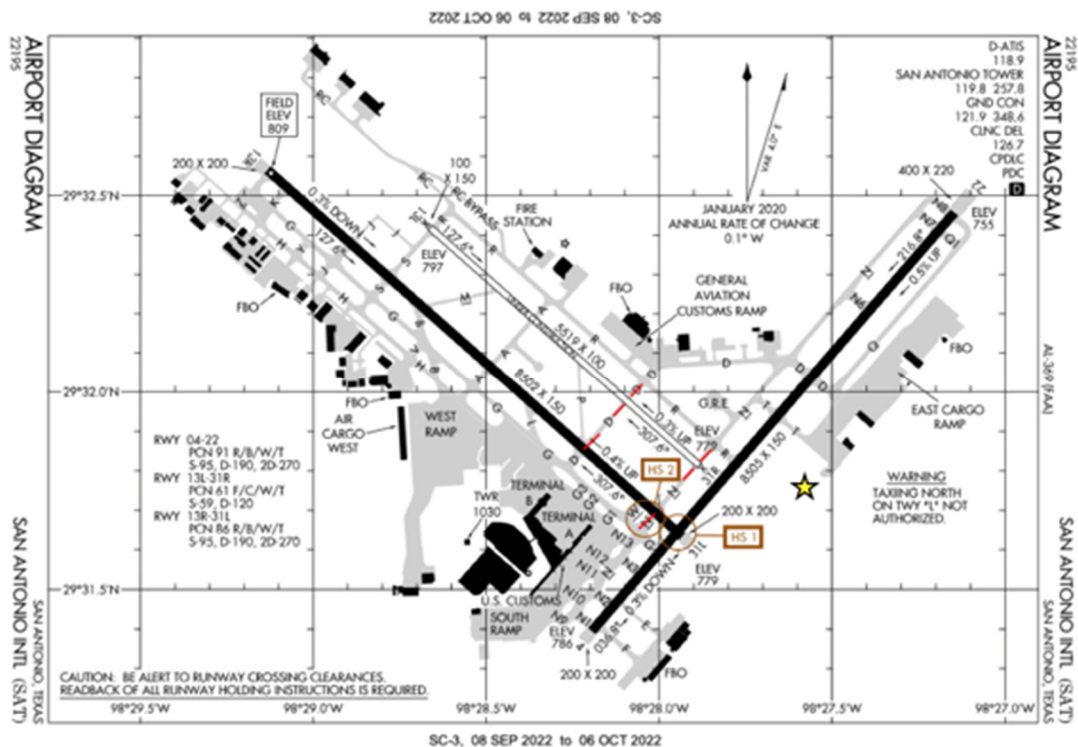


a) Purpose:

Pursuant to the FAA Technology Development and Prototyping Division, (ANG-C51), the FAA will install, test, and evaluate a RIPSAs prototype system at SAT. The FAA will contract with Saab, Inc. to perform the technology development, acquisition, installation, and selected test tasks described in this MOU. Following Operational Testing and Evaluation (OT&E), the RIPSAs prototype system will be uninstalled and installation sites will undergo site remediation. Refer to Article 22 “Future Activities Beyond the Terms and Conditions of The MOU (For Informational Purposes Only)”.

b) Goals and Objectives:

- Conduct site survey of Runways 4/22, 13R/31L, 13L/31R, and all intersecting taxiways in the area depicted.
- i. Based upon findings of the site survey and the impending award of the site implementation contract, there will be 6 sets of Runway Entrance Lights (RELs) and all are located along Runways 13R-31L and 13L-31R. They are identified by the taxiway that intersects with the runway, are listed below, and are shown by the following map graphic as Red Lines on the Runways:
 - Taxiway D at Runway 31L North side
 - Taxiway D at Runway 31R South side
 - Taxiway D at Runway 31R North side
 - Taxiway N at Runway 31L South side
 - Taxiway N at Runway 31R South side
 - Taxiway N at Runway 31R North side



- ii. Based upon site survey results, install RIPSA prototype system on airfield using either existing infrastructure, or add-on infrastructure as needed. Infrastructure includes, but is not limited to electrical vaults, equipment shelters, platforms, and underground concrete-encased electrical and communication wiring/conduits.
 - iii. Based upon findings of the SR-3 radar tower and equipment shelter site survey and the impending award of the site implementation contract, the SR-3 radar/tower and shelter will be installed in the vicinity of the FAA's Remote Transmitter/Receiver D (SATD RTR or RTR-D), at these approximate coordinates: Lat: 29-31-47.00N; Long: 98-27-33.00W.
 - Conduct an OT&E for a duration of not less than twelve (12) months and not more than eighteen (18) months to determine the effectiveness of the installed RIPSA prototype system. Should both parties concur, and operational conditions at SAT permit it, extend the RIPSA OT&E period for a determinable length of time.
- c) Tasks:
- The FAA RIPSA Project team will provide program management, acquire all RIPSA prototype system components, install contractor and government-furnished system components on the surface and in equipment enclosures, and conduct Site Acceptance Testing of the RIPSA prototype system.
- d) Communications:

Electronic correspondence will be the instrument for all communication pertaining to the RIPSA project at SAT.



ARTICLE 4. RESPONSIBILITIES OF THE PARTIES

The FAA intends to support the objectives of this MOU by:

Ensuring the FAA and contractor performance of tasks to complete the scope of work specified in this MOU. Tasks include the following:

- Complete and provide engineering documentation to SAT. Documents include, but are not limited to, site surveys, system installation plans and details, electrical design and layout, and test and evaluation plans.
- Coordinate and conduct any planning and construction progress meetings with all key parties to discuss installation plans, operations, and safety issues.
- Ensure that testing/evaluations are unobtrusive and do not adversely affect the live operations of the air traffic system. If negative interference occurs then FAA will take immediate action to halt operation, identify and resolve the source of interference before resuming operation.
- Provide the Spectrum Frequency Transmit Authorization (FTA) application request and approval, and the results of the on-site Spectrum Frequency Analysis Report to ensure that the RIPSA prototype system does not interfere with any existing systems at SAT.
- Provide all requests and determinations for 7460-1 (Notice of Proposed Construction or Alteration), and 7460-2 (Notice of Actual Construction or Alteration including on-site construction by sub-contractors).
- Submit the Surface Movement Radar (SMR) tower and shelter plans to SAAS for siting and code compliance as necessary. It is the FAA's responsibility to ensure that any structure is sited in accordance with the FAA-approved 7460-1.
- Designate a FAA Resident Engineer (RE) to coordinate and ensure that all sub-contractors performing work within SAT Airport Operating Area (AOA) adhere to all local, state, and federal regulations including the overview of standard operating procedures, Airport Rules and Regulations, and appropriate FAA Advisory Circulars (ACs) and Notices to Air Missions (NOTAMs).
- Provide general assistance in system assessment activities and operational evaluation, including coordinating and conducting informational briefings, distribution of system information for users, and coordinating with local airport representatives, including the FAA Airport Traffic Control Tower (ATCT) and Technical Operations Managers.
- Develop materials and conduct training for pilots/vehicle operators/ATC/operational staff.
- Conduct a Limited Environmental Analysis (Entrance/Exit) for the project site, and provide SAAS with its findings for the presence of any/all hazardous materials, for proper disposition and chain of custody records.



- Develop and publish Program NOTAMs and any information to be transmitted on the Automatic Terminal Informational Service (ATIS).
- Coordination Protocol for Installation Phase: Any interruptions to regular operations (Scheduled or Unscheduled) during the RIPSA system installation phase will be coordinated with the City. The FAA will work with SAAS to develop a Construction Safety Phasing Plan (CSPP) and its exhibits prior to the commencement of installation activities.
- Coordination Protocol for Operational Test and Evaluation Phase: Any interruptions to regular operations (Scheduled or Unscheduled) during the RIPSA OT&E phase will be coordinated with the City.

SAAS intends to support the objectives of this MOU by:

- Providing to the FAA Resident Engineer (RE) and Runway Incursion Reduction Program (RIRP) Engineers, SAT-specific requirements of standard operating procedures, and airport regulations.
- Providing general assistance in system assessment activities and operational evaluation, including coordinating informational FAA briefings to airport operators, distributing system information for users, and coordinating with local airport representatives.
- The City will provide real estate at SAT at no cost to the FAA, to house equipment in use under this MOU.
- Coordinating with FAA to allow authorized project personnel to access applicable real estate portion(s).
- Coordinating with FAA on the publication of letters to Airmen and NOTAMs, as necessary.
- Reviewing and, upon reaching mutual agreement on the improvements or modifications, approving any, and all facility improvements or modifications on airport property.
- Assisting with obtaining a joint use agreement for CPS Energy electric company to provide power supply for FAA equipment, if required.
- Assisting the FAA RIPSA Team in applying for AOA access credentials to include the Transportation Security Agency (TSA)-governed security badge, SAAS-managed Airfield Driver's License, and amendments to the Airport's Security Plan for construction activities.
- Taking good and reasonable measure to ensure that no further intersection, taxiway, or runway construction disrupts the RIPSA prototype system.

- Providing all airport-specific Construction Safety Phasing Plan (CSPP) requirements for the deployment of RIPSA such as recommended haul routes (i.e., entry/exit points).
- Developing and publishing construction-related NOTAMs.

ARTICLE 5. SCHEDULE

The FAA RIPSA project scope, schedule, milestones, and deliverables will be routinely updated by the FAA. Baseline schedules and updates will be distributed to the RIPSA team, and as appropriate to the project POCs identified in either the Installation Phase or the OT&E Phase.

ARTICLE 6. PUBLICITY

Marketing. Neither party intends to use the other party's name on any product or service which is directly or indirectly related to this MOU without express prior approval by the other party, nor imply that this MOU is an endorsement by one of the parties of the other party's research, product, or service. Notwithstanding the foregoing, if City Council approval is required in order for the City to execute this MOU, the process of attaining such approval shall not be deemed to be a public disclosure nor shall it require additional approval by the FAA to obtain City Council approval, and shall not be viewed as an endorsement of the FAA's research, product, or services pursuant to this paragraph.

Publication. The FAA reserves the right to publicly disclose and to publish the outcomes and results produced under this MOU. However, before public disclosure or submission for publication, the FAA will notify the City of its intention to publish, and submit the request and/or manuscript to the City for review and comment, and provide the City ample and reasonable opportunity to review proposed publications or disclosure and to submit objections. The FAA intends to obtain the prior written approval of the City prior to any public disclosure or submission for publication regarding any use of the SAT name, logo, or likeness.

ARTICLE 7. POINTS OF CONTACT (POCs)

MOU POCs

Contact	E-mail Address	Phone
Jesus H. Saenz, Jr. Director of Airports, SAAS	Jesus.Saenz@sanantonio.gov	210-207-3444 (o)
Maria Godina Planning & Administration Manager, SAAS	Maria.Godina2@sanantonio.gov	210-207-3896 (o) 210-325-1155 (c)
Susan St. Cyr Special Projects Manager, SAAS	Susan.StCyr@sanantonio.gov	210-207-3559 (o) 210-219-2761 (c)
Constance (Connie) G. Brown Contracting Officer (CO), FAA	Connie.Brown@faa.gov	202-267-3634 (o)



John Maffei Director, ANG-C	John.Maffei@faa.gov	202-267-5022 (o)
Benjamin Marple Manager, ANG-C51	Benjamin.Marple@faa.gov	202-267-3212 (o) 703-980-0855 (c)
Robert Higginbotham RIRP Program Manager, FAA	Robert.Higginbotham@faa.gov	202-267-5111 (o) 703-328-3057 (c)
John Dutton RIPSA Project Lead, FAA	John.Dutton@faa.gov	202-267-9746 (o) 304-707-6681 (c)

Project Correspondence POCs

The RIPSA project team will maintain a contact list designating the primary and backup points of contact (POCs) for all key stakeholders at SAT. The FAA will distribute the POC list to all POCs upon completion of each update.

ARTICLE 8. CHANGES, MODIFICATIONS

This MOU may only be modified by the written agreement of the City and FAA, duly signed by their authorized representatives. The Director of Airports shall have the authority to execute amendments to this MOU on behalf of the City. There shall be no amendment under this MOU which obligates either the City or the FAA to expend funds. Any obligations for the expenditures of funds will not be awarded under this MOU, but under a separate contractual agreement. Changes and/or modifications to this MOU shall only be in writing and signed by the designated FAA Contracting Officer and the Director of Airports, and shall be executed only for modifications which do not commit the city to expend funds. The modification shall cite the subject MOU, and shall state the exact nature of the modification. No oral statement by any person shall be interpreted as modifying or otherwise affecting the terms of this MOU.

ARTICLE 9. FUNDING

No funds between FAA and the City are obligated under this MOU. Each party shall bear the full cost it incurs in performing, managing, and administering its responsibilities under this MOU. NOTE: The funding of any effort referenced in this MOU; for example, the efforts addressed in Article 13 "Removal and Restoration" will be addressed and funded (if needed) under a distinct and separate contractual vehicle, and not under this MOU.

ARTICLE 10. WARRANTIES AND REPRESENTATIONS

Neither the FAA nor the City make any express or implied warranty whatsoever concerning:

- 1) The RIPSA test system at SAT; or
- 2) Any of the activities conducted therein, including accomplishment of objectives or success of outcomes of activities under this MOU; or
- 3) The ownership, merchantability, or fitness for a particular purpose of the research; or
- 4) Any invention or product, including any equipment, device or software that may be provided under this MOU.



ARTICLE 11. PROTECTION OF CONFIDENTIAL/PRIVILEGED INFORMATION

Acknowledging that Texas Government Code, Chapter 552 requires broad disclosure of information with limited exceptions, to the extent permitted by such statute, all parties shall take appropriate measures to protect proprietary, privileged, or otherwise confidential information obtained as a result of its activities under this MOU.

ARTICLE 12. EFFECTIVE DATE/TERM/TERMINATION

This MOU shall be effective on the date of the last signature of the parties and shall remain in force until terminated by mutual agreement, or unilaterally by either FAA or SAAS upon thirty (30) day notice to the other party.

ARTICLE 13. REMOVAL AND RESTORATION

This MOU shall not bind the FAA to expend any funds under this MOU. All discussions regarding Removal and Restoration activities occurring at the conclusion of RIPSA OT&E activities at SAT, will (if expenses are projected to be incurred) need to be addressed under a separate and distinct contractual vehicle, which will need to be funded (prior to expenditure of any removal and restoration costs) in an amount sufficient to cover the costs of the removal and restoration. Refer to ARTICLE 22 "Future Activities Beyond the Terms and Conditions of the MOU (For Informational Purposes Only)".

ARTICLE 14. RENEWAL PROVISIONS

The MOU ends on the date agreed to by both parties as addressed above, unless terminated by either party in accordance with Article 12, "Effective Date/Term/Termination."

ARTICLE 15. PROPRIETARY INFORMATION

The parties agree to take appropriate measures, to protect proprietary, privileged, or otherwise confidential information that may come into their possession as a result of this MOU.

NOTE: Texas Government Code, Chapter 552 requires broad disclosure of information with limited exceptions. As such, the FAA will first consult with the FAA Legal Department, before the FAA turns over any confidential/privileged/protected information under this agreement.

Under this MOU, the following information is considered in the public domain and not proprietary:

- Identification of organizations that are Users.
- Identification of activities conducted at the facility.



ARTICLE 16. TANGIBLE PROPERTY

FAA will maintain title to equipment, hardware, software, and other tangible property that it developed at its expense. FAA shall have ownership rights in the property it has developed at its own expense. Likewise, the City shall have ownership rights in the property it has developed at its own expense.

The following provisions applies for FAA property:

a. Rights in Data

The Government retains Government Purpose Rights in all data developed under this MOU.

"Data" means recorded information, regardless of form or method of recording, which includes but is not limited to, technical data, computer software, trade secrets, and mask works. The term does not include financial, administrative, cost, pricing or management information.

"Government Purpose Rights" means the rights to –

- a. Use, modify, reproduce, release, perform, display, or disclose data within the government without restriction; and
- b. Release or disclose technical data outside the government and authorize persons to whom release or disclosure has been made to use, modify, reproduce, release, perform, display, or disclose that data for government purposes.

"Government Purpose" means any activity in which the United States Government is a party, including cooperative agreements with international or multi-national defense organizations, or sales or transfers by the United States Government to foreign governments or international organizations. Government purposes include competitive acquisition by or on behalf of the government but do not include the rights to use, modify, reproduce, release, perform, display, or disclose data for commercial purposes or authorize others to do so.

b. Rights in Inventions

The respective rights of the Government and the other parties to this MOU are the same as those found at AMS 3.5-10 Patent Rights - Ownership by the Contractor (January 2009).

ARTICLE 17. FREEDOM OF INFORMATION ACT

The parties acknowledge that the Freedom of Information Act and the Texas Public Information Act, may apply to any or all public records generated or received as a result of this MOU, including but not limited to non-proprietary reports, plans and data.

NOTE: The Texas Public Information Act is much broader than the Freedom of Information Act (FOIA) and requires broad disclosure of information with limited exceptions. As such,



the FAA will first consult with the FAA Legal Department, before the FAA turns over any confidential/privileged/protected information that the FAA believes needs to be protected.

ARTICLE 18. DISPUTE RESOLUTION

Where possible, disputes will be resolved by informal discussion between the parties. In the event the parties are unable to resolve any disagreement through good-faith negotiations, the dispute may be resolved by the FAA Administrator, or designee whose decision is not subject to further administrative review and, to the extent permitted by law, is final and binding. Either party may terminate this MOU under Article 12 "Effective Date/Term/Termination."

ARTICLE 19. 3.2.4-1 OFFICIALS NOT TO BENEFIT (April 2021)

No member of or delegate to Congress, or resident commissioner, shall be permitted to any share or part of this contract, or to any benefit arising from it. However, this clause does not apply to this contract to the extent that this contract is made with a corporation for the corporation's general benefit.

ARTICLE 20. CIVIL RIGHTS ACT

The City shall comply with Title VI of the Civil Rights Act of 1964 relating to nondiscrimination in Federally-assisted programs and provide a certification to that effect.

ARTICLE 21. INDEMNIFICATION

Indemnification. The FAA shall not indemnify the City, its affiliates, associates, contractors, or any third party against any third party claims or third-party liability.

Force Majeure. Neither party will be liable to the other for any unforeseeable event not caused by the fault or negligence of such party, including but not limited to natural disasters or human strife and disputes, which causes such party to be unable to perform its obligations under this MOU, and which it has not been able to overcome by the exercise of due diligence.

The party unable to perform shall use its best efforts to resume performance, suspending it only for that period reasonably necessary to overcome the effects of the force majeure event. If performance is suspended for more than seven (7) calendar days, the party unable to perform shall provide weekly progress reports with a forecast of recovery for the period of suspension.

ARTICLE 22. FUTURE ACTIVITIES BEYOND THE TERMS AND CONDITIONS OF THE MOU (FOR INFORMATIONAL PURPOSES ONLY)

A Memorandum of Understanding (MOU) is an agreement to agree and is not legally binding on either party. MOUs are appropriate where the parties seek only to memorialize policies and procedures of mutual concern, or describe other relationships that are not intended to create legally binding obligations.



As such, any efforts which will require FAA funds will be addressed under a distinct and separate contractual vehicle pending the Availability of Funds by the FAA. This includes (but may not be limited to):

Removal and Restoration activities occurring at the conclusion of RIPSA OT&E activities at SAT and the verification, by both parties, of the completion of facility restoration activities following final evaluation. Refer to Article 13 "Removal and Restoration" as it relates to future activities which are mentioned, but are not to be conducted under this MOU.

ARTICLE 23. INSURANCE

The City shall arrange, by insurance or otherwise, for the full protection of the San Antonio International Airport from and against all liability to third parties arising out of, or related to, its performance of this MOU in accordance with its normal business practices. City and the FAA shall each maintain a commercial insurance or a self-insurance fund for liability claims and causes of action to meet their statutory obligations for their employees' acts, negligence and/or malpractice.

The FAA assumes no liability under this MOU for any losses arising out of any action or inaction by the other party, its employees, or contractors, or any third party acting on its behalf.

ARTICLE 24. MISCELLANEOUS

Entire Agreement.

This MOU constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements, understandings, negotiations and discussions, whether oral or written.

Waivers.

None of the provisions of this MOU shall be considered waived by any party hereto unless such waiver is given in writing. The failure of any party to insist upon strict performance of any term or condition hereof, or failure or delay to exercise any rights provided herein or by law, shall not be deemed a waiver of any rights of any party hereto.

Severability.

The illegality or invalidity of any provisions of this MOU shall not impair, affect, or invalidate the other provisions of this MOU.

Assignment.

Neither this MOU, nor any rights or obligations of any party hereunder, shall be assigned or otherwise transferred by either party without the prior written consent of the other party.

