PARAS PROGRAM FOR APPLIED RESEARCH IN AIRPORT SECURITY

PARAS 0037 November 2021

# Planning and Operational Security Guidance for Construction Projects at Airports

**National Safe Skies Alliance, Inc.**

Sponsored by the Federal Aviation Administration

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**NOTICE**

The project that is the subject of this report was a part of the Program for Applied Research in Airport Security (PARAS), managed by Safe Skies and funded by the FAA.

The members of the technical panel selected to monitor this project and to review this report were chosen for their special competencies and with regard for appropriate balance. The report was reviewed by the technical panel and accepted for publication according to procedures established and overseen by Safe Skies.

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Through the ASSIST (Airport Security Systems Integrated Support Testing) Program, Safe Skies conducts independent, impartial evaluations of security equipment, systems, and processes at airports throughout the nation. Individual airports use the results to make informed decisions when deploying security technologies and procedures.

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Problem Statements, which are descriptions of security problems or questions for which airports need guidance, form the basis of PARAS projects. Submitted Problem Statements are reviewed once yearly by the Safe Skies Oversight Committee, but can be submitted at any time.

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## AUTHOR ACKNOWLEDGMENTS

The research conducted for the development of this guidebook was performed by Garver, LLC in collaboration with the University of Arkansas.

The authors would like to thank the numerous airports, consultants, regulators, and contractors who contributed to the research effort by participating in focus groups, interviews, and case studies. It is only through the support of airports and industry professionals that Safe Skies is able to continue to provide the aviation industry with valuable research on practical airport-related topics.

Additionally, the authors would like to thank the project panel and Safe Skies for their support throughout the research process.

# CONTENTS

## TABLES & FIGURES

## SUMMARY

The primary focus of this document is to provide practical and systematic guidance to airport operators on ways to improve their compliance with operational security requirements in relation to airport construction projects. Airport construction projects and their specific security considerations vary significantly based on the location of the project, the complexity of the airport and project, the number of stakeholders engaged, and the project's scope. As such, this guidance has been established to enable airports to better integrate security considerations as part of the general project life cycle (e.g., planning, design, construction, and closeout) while identifying specific considerations and mitigations strategies that could be applicable under certain circumstances. This guidebook includes:

- A summary of lessons learned and pitfalls related to security compliance and construction
- Discussion on the policies, procedures, and training strategies that airports should consider related to airport security and construction
- A summary of ways to integrate security considerations into the planning, design, construction, and closeout of a construction project
- A review of current and emerging technologies that could be employed to improve the operational security of a construction project

Additionally, this guidebook includes four appendices to aid airports in implementing these research findings:

- Appendix A: A summary of other relevant reference materials
- Appendix B: A security training guide for contractors
- Appendix C: A proposed outline for a project-specific security plan
- Appendix D: Checklists related to airport security and construction activities

An aggregate list of research findings from the project is also included as an attachment to this guidebook.

The Introduction section of the guidebook provides additional information on each section, appendix, and attachment.

## PARAS ACRONYMS

| | |
|---|---|
| **ACRP** | Airport Cooperative Research Program |
| **AIP** | Airport Improvement Program |
| **AOA** | Air Operations Area |
| **ARFF** | Aircraft Rescue & Firefighting |
| **CCTV** | Closed Circuit Television |
| **CEO** | Chief Executive Officer |
| **CFR** | Code of Federal Regulations |
| **DHS** | Department of Homeland Security |
| **DOT** | Department of Transportation |
| **FAA** | Federal Aviation Administration |
| **FBI** | Federal Bureau of Investigation |
| **FEMA** | Federal Emergency Management Agency |
| **FSD** | Federal Security Director |
| **GPS** | Global Positioning System |
| **IED** | Improvised Explosive Device |
| **IP** | Internet Protocol |
| **IT** | Information Technology |
| **MOU** | Memorandum of Understanding |
| **RFP** | Request for Proposals |
| **ROI** | Return on Investment |
| **SIDA** | Security Identification Display Area |
| **SOP** | Standard Operating Procedure |
| **SSI** | Sensitive Security Information |
| **TSA** | Transportation Security Administration |

# ABBREVIATIONS, ACRONYMS, INITIALISMS, AND SYMBOLS

| | |
|---|---|
| **AS** | Authorized Signatory |
| **ASC** | Airport Security Coordinator |
| **ASP** | Airport Security Program |
| **CBP** | U.S. Customs and Border Protection |
| **CHRC** | Criminal History Records Check |
| **CSPP** | Construction Safety and Phasing Plan |
| **FF&E** | Fixtures, Furnishings, and Equipment |
| **LEO** | Law Enforcement Officer |
| **NCIC** | National Crime Information Center |
| **ORAT** | Operational Readiness and Transition |
| **PIO** | Public Information Officer |
| **SeMS** | Security Management System |
| **SPCD** | Safety Plan Compliance Document |
| **STA** | Security Threat Assessment |

# SECTION 1: INTRODUCTION

By their nature, airport construction projects frequently impact regular security operations at an airport by requiring changes to existing security infrastructure and/or operational practices. Unless properly managed, these changes can create security vulnerabilities that can leave the airport susceptible to a variety of threats. As a result, maintaining operational security during a construction project is essential, and is a regulatory requirement that requires detailed planning and stakeholder collaboration. The primary focus of this guidebook is to assist airport operators by providing practical and systematic guidance on ways to improve compliance with operational security requirements in relation to airport construction projects.

For the purposes of this guidebook, operational security is defined as the security posture and the activities, processes, and systems that are regularly employed to maintain compliance with an airport's Airport Security Program (ASP). Specific security considerations will vary based on the airport and the scope of the project. This guidebook examines both overarching and scope-specific security concepts for airport construction projects.

The content of this guidebook was compiled using a variety of research methods, including a literature review, focus groups, case study reviews, and technology research. Airports and airport construction projects in a variety of sizes, geographic locations, and project scopes were included to ensure the guidance is applicable to airports and projects of various sizes across the United States.

## 1.1 Using This Document

This document is divided into six sections and includes four appendices, described below. It is organized using a combination of standalone and chronological formats to enable the reader to easily identify specific subjects and phases of the project life cycle on which they would like to focus.

- **Section 1 – Introduction:** This section introduces the guidebook and provides recommendations on how readers can best leverage its contents.
- **Section 2 – Summary of Pitfalls & Lessons Learned:** This section summarizes research findings related to common pitfalls and lessons learned related to security and construction that should be considered throughout the life cycle of an airport construction project.
- **Section 3 – Developing Security Policies, Procedures, & Training Strategies Before Construction:** This section addresses developing security policies, procedures, and training strategies prior to the initiation of a construction project. These are intended to prepare airports to better handle construction projects when they occur.
- **Section 4 – Security Integration in Project Planning, Execution, & Closeout:** This section addresses security integration during project planning/design, execution, and closeout, and identifies key considerations during each phase of the project life cycle.
- **Section 5 – Security Technologies Relevant to Airport Construction:** This section discusses current and emerging security technologies that could be leveraged during airport construction projects to improve operational security.
- **Appendix A – Summary of Relevant Reference Materials:** This section summarizes relevant reference materials that were identified during the research process for this guidebook. It provides a summary of each reference, a brief description of how it applies to the focus of this guidebook, and a link to available references.

- **Appendix B – Contractor Training Guide for Airport Security:** This appendix serves as a training guide template that can be used to educate contractor personnel on security requirements related to a particular airport and project. The document is also attached to this PDF in a Microsoft Word format to enable airports to modify the template based on their unique requirements and circumstances.
- **Appendix C – Project-Specific Security Plan Outline:** This appendix provides an outline for a project-specific security plan. The document is also attached to this PDF in Microsoft Word format to enable airports to develop their own project-specific security plans.
- **Appendix D – Construction Security Checklists:** This appendix includes a number of construction security checklists:
    - Security Stakeholder Engagement Checklist for Project Planning and Execution
    - Security Training Checklist for Contractor Personnel
    - Gate Guard Training/Documentation Checklist
    - Tenant Led Construction Planning Checklist
    - Daily Construction Inspection Checklist

  These checklists are also attached to this PDF in Microsoft Excel format to enable airports to use and modify them based on their circumstances.
- **Consolidated Research Findings:** This attachment provides a list of consolidated research findings. It is provided in Microsoft Word format so that airports can update it for their own purposes as they identify new best practices and lessons learned.

It should be noted that the use of the term "regulatory" in this document may refer to federal law, airport rules and regulations, the ASP, or other established policies/requirements that govern security practices at an airport.

**Note to Guidebook Users**

Some research findings and recommendations are reiterated in multiple sections of this guidebook due to their broad application.

# SECTION 2: SUMMARY OF PITFALLS & LESSONS LEARNED

This section provides an overview of some of the common pitfalls and lessons learned identified during the research process. Many of these concepts are further discussed in Sections 3 and 4 as strategies that airports may wish to employ in their approach to managing security during construction. This section is grouped into key themes that emerged over the course of the research effort, identified in Figure 2-1.

**Figure 2-1. Common Themes of Pitfalls and Lessons Learned**


Detailed research findings are listed under each theme to provide further context. Some findings may apply to more than one theme but have been placed under the theme the research team deemed most applicable. A consolidated list of all research findings is also attached to this PDF.

## 2.1 Theme #1 – Establishing a Strong Security Culture

Ensuring a strong security culture is a key foundational piece of an airport's approach to construction security. Airports that do not establish a strong security culture typically struggle more with collaboration efforts related to security during construction. Emphasizing the importance of security before, during, and after the completion of a project helps maintain a focus on good security practices as an airport moves from one project to another, and as different stakeholders are involved. This also helps set a clear standard for contractors who may work at the airport on different projects.

The airport's ASC must play a key role in developing and maintaining the airport's security culture. The following is a list of best practices and lessons learned pertaining to building and maintaining a strong security culture.

- **Collaboration is important to a strong security culture:** Multiple documents reviewed in the research process emphasized the need to establish a culture that supports collaboration and working together to improve security outcomes. Good collaboration/teamwork is key to building a strong security culture.
- **Establish a business-like approach to security:** As part of developing a culture that supports security, the airport should develop a business-like approach to security (e.g., SeMS) that includes a clear, formal written commitment to security by airport leadership, a written security policy, security awareness activities, training, and communications.
- **Incorporate insider threat considerations:** Identify potential insider threat vulnerabilities and establish mitigation strategies for them during a project. More information can be found in PARAS 0026 *Insider Threat Mitigation at Airports*.
- **Focus on achieving security outcomes:** Frequently, security is thought of in a compliance mentality. However, several documents reviewed during the research process emphasized the need to think beyond compliance, and instead emphasize improving security outcomes.
- **Make security a regular point of discussion in meetings:** Similar to safety, construction security should be a standing agenda item in all construction meetings, including pre-construction and project planning meetings.
- **Identify ways to continually reinforce security requirements:** A key to ensuring that stakeholders understand security requirements and processes is to continually reinforce these messages. Several documents identified reinforcement methods like creating security posters, wallet cards, and newsletters.
- **Hold in-depth security briefings when making changes:** To prevent errors related to changing conditions, airport staff should hold detailed security briefings with contractor personnel to let them know when security processes/requirements are changing.
- **Make reporting easy and establish a recognition program:** Airports must make it easy for personnel to report security issues (e.g., hotline, mobile applications). Additionally, airports may want to establish programs to encourage reporting.
- **Create a progressive enforcement strategy:** Airports may wish to create a tiered or progressive enforcement program, where businesses and personnel receive an elevated penalty for each repeated violation of security protocols.
- **Host post-project review sessions:** Once a construction project is complete, the airport should complete an After-Action Review (AAR) with the project stakeholders to identify any security-related lessons learned and document them for future projects.
- **Discuss security at pre-bid meetings and contractor open house meetings:** The importance of airport security and any applicable security-related processes/requirements should be discussed with prospective contractors as part of any project pre-bid meetings and/or contractor open house meetings.

## 2.2 Theme #2 – Importance of Simplicity

A common finding throughout the research was the need to keep things simple, particularly as it pertains to the contractor and security standards/requirements. If information or processes are particularly lengthy or complicated, much of the intent may be lost on personnel who do not have a strong

familiarity with the airport environment and its security requirements. Several specific pitfalls and lessons learned from the research effort support this finding.

- **Strive for simplicity:** A general best practice is to keep the airport's construction security policies, procedures, and messaging as simple as possible. The more complex these items become, the more difficulty contractors will typically have in following them.
- **Separate construction areas from security-related areas:** One of the best ways to ensure the security of the airport and a construction project is to completely separate the construction site from any security-related areas, when possible.
- **Establish standardized review and approval forms:** Airports should establish standardized processes for construction projects related to the review and approval of security-related items (e.g., door activation, CCTV impacts, etc.).
- **Ensure consistency in ASP amendments/change of condition drawings:** It is a best practice to ensure that all ASP amendment drawings submitted to TSA have a consistent look/format. This can reduce confusion and improve the efficiency of the review process.
- **Establish clear roles and responsibilities for construction security:** For any construction project, but especially large projects, it is important to have clear lines of communication and responsibility. For large projects, various security stakeholders (e.g., airport security, LEO, TSA, etc.) should consider having a designated liaison for the project.

## 2.3 Theme #3 – Clearly Documenting Expectations

The research results clearly indicated that contractors often do not have a good understanding of many of the airport and TSA's expectations related to security. Conversely, many contractors feel that airports do not sufficiently document their security-related requirements. Consequently, it is imperative that airports sufficiently document their security standards and processes that are applicable to construction projects to help ensure they are properly communicated to contractors. By providing clear documentation through a variety of mediums, airports can help ensure that these expectations are well communicated to the contractor before the project begins.

- **Develop and publish standardized policies/practices:** Multiple airports have established standardized policies and practices related to security during construction activities, and have made the guidance available to construction stakeholders online.
- **Require the contractor to develop a security plan:** Some airports require contractors to develop a project-specific security plan that describes how the contractor will comply with all security requirements. If implemented, this practice should improve the contractor's awareness of the airport's security requirements and acceptable practices for complying with them.
- **Require tool management plans for terminal work:** Some airports have developed standard tool management plans and policies for work in the terminal area. These describe requirements regarding the proper storage and tracking of tools.
- **Develop a security start-up plan:** As part of the initial planning of a construction project, the airport should determine whether to develop a security start-up plan that focuses on establishing a strategy for commissioning/activating the facility once construction is complete.

- **Include requirement to adapt to changing security regulations:** Airports should include standard language in their construction security standards or other contract documents to make contractors aware that security measures may need to be altered if regulatory changes occur.
- **Contractually define responsibilities for providing security personnel and equipment:** It is important to clearly define what will be provided by the airport and/or provided by the contractor. For example, is the airport required to provide personnel and screening equipment related to various project access points, or will that be the responsibility of the contractor? For large scale projects this can have a significant financial impact on both the airport and the contractor.
- **Build security-related timelines into the project schedule:** A variety of airport security-related matters (e.g., badging and ASP amendments) have associated review/approval timelines. To properly account for this, the contractor should build the timelines into the project schedule. This expectation should be discussed at the pre-bid meeting.

## 2.4 Theme #4 – Sufficient Contractor Training

An effective construction security program hinges on effective and sufficient training for contractor personnel. Sometimes, contractors have not previously worked in an airport environment and are not familiar with the airport's unique security requirements. In other cases, a contractor may have worked at an airport in the past but may not be familiar with security requirements specific to a new airport. Practices can vary for many reasons, such as airport size and project location. There is also the potential for contractors to carry over habits from previous airport work and/or practices that may have been allowable at a previous airport but are not allowable at the new airport.

- **Make contractor security training project specific:** The security training provided to contractors is typically generic and focuses on security concepts applicable across the airport and those necessary to receive an airport security badge. To improve the contractor's ability to apply security principles/concepts to their project, airport staff should take the time to talk with contractor personnel about how the airport's security requirements will specifically impact their project. Contractor security requirements should also be discussed and integrated during project planning and design and reflected in contract documents.
- **Ensure key front-line contractor personnel are well-trained in security requirements:** It is a best practice for airports to work with key contractor personnel such as supervisors, site foreman, etc., and not just the contractor's project manager, to improve their awareness of security requirements and processes so they can properly communicate them to other construction personnel.
- **Administer refresher training related to security requirements:** Some contractor (or sub-contractor) personnel may only work on a project on a limited basis, or they may have long periods where they do not work on the project. As a result, security refresher training/briefings should be provided to staff who have not been active on the construction site recently.

## 2.5 Theme #5 – Comprehensive Stakeholder Engagement

The research found that some stakeholders are often insufficiently engaged or even completely omitted from stakeholder engagement efforts related to security considerations for airport projects. Engaging the right security stakeholders in the project will help ensure key security factors are properly accounted for.

- **Start security planning/coordination efforts early:** Start planning for project security during the initial planning/design phases of a project. Get security stakeholders involved early.
- **Broaden stakeholder coordination efforts related to project security measures:** It is a best practice to invite airport security, TSA, and law enforcement personnel to regular project coordination meetings to ensure their awareness of upcoming construction activities and to properly coordinate the security-related aspects of those project activities.
- **Coordinate security plans and processes with the Construction Safety and Phasing Plan (CSPP):** If the project has a CSPP, make sure that any security plans and processes are properly coordinated with the requirements in the CSPP.
- **Establish collaborative review processes:** It is important that construction plans are collaboratively reviewed to ensure security considerations are properly integrated and addressed. Some airports have a single set of plans that they require all personnel to review and comment on. Other airports utilize online programs that enable multiple people to review and comment on a plan set. Both of these approaches allow reviewers to see the comments made by other reviewers.
- **Communicate importance of security to sustain stakeholder engagement:** Airports should identify find ways to continually reemphasize the importance of security to help sustain stakeholder engagement. A good way of doing this is to utilize current events (e.g., news articles discussing security mishaps at other airports) to emphasize the importance of security.
- **Hold regular security stakeholder update meetings:** For larger airports with multiple construction projects occurring at the same time, the airport may want to consider holding regular construction update meetings with a broad set of stakeholders focused on the security-related aspects of each project.
- **Establish a formal construction project liaison for each stakeholder:** A common problem in construction is having different individuals represent the interest of a stakeholder group over the life of a project. To avoid this, each security-related stakeholder group should designate a specific liaison or point of contact for all construction-related matters.
- **Establish a plan with TSA for ASP amendments:** The airport should work with TSA prior to the start of construction to identify the best way to handle amendments to the ASP during the project. Some TSA personnel prefer to receive all the proposed amendments at the beginning of the project while others prefer to do the amendments one at a time as the project progresses.
- **Pre-coordinate ASP amendments:** Prior to project initiation, airport security, the engineer/designer, contractor, and TSA should identify the various amendments to the ASP that will be required as part of the construction project. This precoordination can improve the efficiency of the development and review process for ASP amendments as part of the project.

## 2.6 Theme #6 – Compliance Assurance Strategies

The complicated nature of many construction projects can lead to security compliance challenges. The research findings yielded several ways by which specific facets of compliance can be enhanced through focused strategies. Areas of compliance addressed include escorting, personnel vetting and screening, prohibited items, access monitoring, and ASP amendments.

- **Determine escorting feasibility and set clear limitations:** When deciding whether construction personnel should be badged or escorted, consider whether it is feasible to perform escorting in a manner that will meet regulatory requirements. To prevent organizations from not badging individuals who regularly operate in in a regluated area, some airports have established a limit on the number of times an individual can be escorted during a given year.
- **Complete personnel vetting for projects involving sensitive information:** When personnel will have access to sensitive information, including information designated as SSI, the airport should consider conducting background checks, even on personnel who will not be badged.
- **Mandate physical screening and Secure Flight checks for unbadged personnel:** Some airports screen unbadged personnel who will be escorted in the Sterile Area to ensure they are not bringing in any prohibited items. Additionally, other airports have utilized Secure Flight to verify that unbadged individuals under escort are not on a watchlist.
- **Utilize towers to monitor security compliance in an open area:** Some airports have utilized temporary monitoring/guard towers to observe personnel during construction projects and ensure they do not leave the limits of the construction project. If used, the location and height of these towers may need to be considered for airspace impacts under 14 CFR § 77.
- **Separate construction trash from public areas:** Sometimes contractors will discard prohibited items (e.g., razor blades, etc.) in public trash receptacles where they could be picked up by a member of the traveling public. To avoid this scenario, provide contractors with separate trash receptacles and instruct them only to use those receptacles.
- **Consider security implications of drainage outlets:** Drainage outlets that are large enough for a person to get through should be identified during the project planning effort, and a discussion should be held regarding whether any additional security measures need to be implemented.
- **Inspect outdoor construction after major weather events:** Outdoor construction sites should be inspected after major weather events to determine if any conditions developed that could be a security issue (e.g., erosion under fences, etc.).
- **Stop construction work during phase changes:** Security issues often occur during the process of moving from one construction phase to the next. As a result, construction work should be paused during phase changes to allow safety- and security-related aspects of the project (barricades, entry points, etc.) to be properly relocated before resuming construction activities.
- **Engage security personnel in tenant construction:** Tenant construction projects were identified as an area of vulnerability because the airport is typically not leading the project planning. It is important to engage security personnel in tenant construction projects and ensure they have a defined role if the airport has an established Tenant Improvement Program (TIP).
- **Coordinate security-related aspects of moving tenants into facilities:** As part of building/facility-related projects, a tenant may need to complete a facility build-out and/or move their equipment into the new facility. Since this process may involve tenant personnel or contractors who are less familiar with airport security requirements, it is important to ensure that security-related aspects of these activities are closely coordinated with airport security.
- **Conduct security-focused site walks:** Regular security-focused construction site walks should be performed to identify any potential security issues.

- **Redesignate regulated areas where possible:** To reduce the need for airport badges, some airports have redesignated SIDA areas as non-SIDA AOA or non-security regulated areas during construction. This should be closely coordinated with TSA, and appropriate measures should be taken to ensure contractor personnel understand airport security practices and concepts.
- **Utilize continuous visual barriers to show limits of construction:** Using visual barriers (e.g., construction fence, snow fence, etc.) to continuously delineate the limits of a construction project helps prevent construction personnel from inadvertently accessing areas they are not authorized to be in.
- **Ensure any temporary construction walls extend to the ceiling:** Temporary construction walls should extend all the way to the ceiling to prevent an individual from climbing or throwing something over.

## 2.7 Theme #7 – Access Control Considerations

Most airport construction projects require a specific focus on access control considerations. The research findings indicated a number of strategies to reduce access control needs, mitigate risks associated with access control, and reduce administrative burdens associated with access control compliance.

- **Maintain a running list of active access points:** During major terminal construction projects, a common challenge is ensuring construction stakeholders' knowledge of active access points at a given time. Consequently, airports should maintain a running list of active access points throughout the life of the project and make it available to stakeholders.
- **Consider staging area locations:** When possible, the airport and contractor should establish staging areas outside of the SIDA.
- **Limit contractor access:** A good general practice is to limit contractor access to only the access points and areas necessary for the project.
- **Identify potential access "bottlenecks" related to security:** During various phases of a construction project, there may periods where numerous construction vehicles need to enter and leave a project site (e.g., when a contractor is delivering materials). It is important to determine whether security procedures may become a bottleneck to the efficiency of these activities, and develop appropriate solutions that maintain both security and efficiency. Solutions may include adding security guards, locating the materials stockpile within the AOA, or instituting escorting procedures to improve efficiency.
- **Establish inner and outer gates for construction staging areas:** It can be helpful to have inner and outer gates to the construction staging area for airfield-related projects. This can allow the inner gate to be locked during deliveries to the staging area by non-contractor personnel.
- **Maintain badged personnel during the warranty period:** During the warranty period for a project, the contractor may be required to come back to the project site for repairs. To facilitate personnel access, the contractor should maintain a small number of badged individuals during this period.
- **Establish a go list:** Some airports have provided gate guards with a "go list" instead of a "stop list" for access control for a construction project. In general, only people on the go list are allowed to use the project access point.

- **Use electronic gate operators for AOA access points:** For construction projects that require airfield access, installing electronic gate operators that automatically open and close will prevent AOA gates being left open during high volume construction activities.
- **Create a signage tool kit for projects and include multiple languages:** During the course of a project, the near-term need for a sign can arise, especially in the terminal environment where access points and other items can change frequently. Airports should develop a signage tool kit that frontline personnel can utilize to create signage that is consistent over the life of the project. If English is not the primary language for a significant portion of the project personnel, the airport should consider developing project signage in other appropriate languages.
- **Use visual cues to improve stakeholder awareness of changing conditions:** Place visual indicators in critical areas when security conditions have changed related to a project. For example, place signage identifying active access points or identifying when active access points will be deactivated.

## 2.8 Theme #8 – Public Safety Assurance

Considerations for broader public safety assurance were also collected in the research findings. These considerations are generally less specific to 49 CFR § 1542 compliance, and discuss other concerns that may impact public safety.

- **Guard against construction site theft:** Construction site theft can be a significant issue depending on the location of the project and the security measures established. To guard against theft, contractors should ensure that all valuable materials are properly secured, access to valuable construction materials is controlled, and cameras monitor the construction site during non-construction hours.
- **Require work schedule documentation:** Contractors should be required to provide the airport with a schedule of when they will have personnel at the project site, as well as to notify the airport any time they have personnel at the project site. This practice can help the airport guard against unauthorized access to the site.
- **Invite outside security stakeholders into project planning efforts:** In some circumstances, it could be beneficial to engage outside security stakeholders (e.g., FBI) to bring a fresh perspective to identifying security concerns. Airport law enforcement should be engaged when coordinating with any outside law enforcement agencies.
- **Consider cybersecurity:** If construction projects involve technological improvements, cybersecurity should be a consideration. The website StopRansomware.gov provides some resources and recommendations.

# SECTION 3: DEVELOPING POLICIES, PROCEDURES, & TRAINING STRATEGIES BEFORE CONSTRUCTION

Before starting the initial planning of a construction project, there are steps that an airport should take to establish a foundation for improving security during construction. These include developing proactive security policies, procedures, and training programs, and are discussed in this section. The effective use of third-party security providers (e.g., contract security), establishing security compliance strategies, and effective collaboration with TSA are also discussed.

## 3.1 Developing a Culture that Embraces Security

The development of an organizational culture that supports and values airport security is a key component of a successful airport security program, and is essential for improving security during airport construction projects. While all airports understand the importance of security, some have taken additional steps to improve collaboration and information sharing, to aid airport staff and stakeholders in understanding and valuing the integral role they play when it comes to security. When staff and stakeholders understand their roles, they are more likely to discuss security concerns, report potential issues, and think proactively about ways to improve security. Once developed, the culture can lay a foundation that supports the effective planning, design, execution, and closeout of airport construction projects.

**Key Point**

While all airports understand the importance of security, some have taken additional steps to improve collaboration and information sharing that aid airport staff and stakeholders in understanding and valuing the integral role they play when it comes to security.

There are several strategies that can be employed to develop and continue to cultivate a strong and positive security culture.

- **Focus on security outcomes rather than solely on compliance:** A significant focus should be placed how to prevent security issues from occurring rather than just identifying and responding to security violations. While this may seem obvious, the research identified that many airports focus on "catching" security problems as opposed to identifying ways to prevent them. Data from previous security violations should be analyzed to identify common points of failure, and proactive strategies should be established to prevent these failures in the future.
- **Establish a security recognition program:** Developing a security recognition program will also help foster a positive security culture. These programs may include rewarding individuals for identifying security issues or responding appropriately during a security test (e.g., testing whether someone will challenge an unbadged individual in the SIDA).
- **Make it easy for people to report security concerns:** It should be easy for people to report security concerns. Airports should consider establishing security hotlines or other mechanisms, such as a reporting app, to enable individuals to report security concerns quickly and efficiently.
- **Establish a Security Management System (SeMS) program:** Airports should consider establishing a formal SeMS program. A key part of an SeMS program is cultivating an organizational culture that embraces security. Additional information on SeMS can be found in *PARAS 0009: Guidance for Security Management Systems*.

## 3.2 Establishing Security-Related Policies and Procedures for Contractors

Research conducted for this guidebook indicated that airports often find that contractors do not sufficiently understand the airport's security requirements. The research also found that contractors often feel as though security requirements are insufficiently documented and communicated. It is important for airports to establish and communicate clear security expectations for contractors working in the airport environment.

To ensure expectations are set clearly and consistently, airports should create documentation that explicitly states all security requirements and limitations the contractor should be aware of. This documentation can be conveyed in:

- **Contract documents for the project:** These documents are provided to contractors as part of the bidding process. Including security standards and requirements in these documents helps ensure a contractor's awareness of them as part of the bidding process.
- **Published construction safety and security standards:** To ensure consistency across projects, some airports have published safety and security standards for airport construction projects on the airport website.
- **Security-related training for contractor personnel:** Airports should consider providing project-specific training to contractor personnel to ensure their awareness of how security requirements apply specifically to the project they will be working on.

When including documentation in contract documents, any airport documents that are referenced (such as construction security standards), should be attached, unless security restrictions (SSI, etc.) prevent doing so. Airports should review all security-related policies and procedures and make any needed revisions before a new project commences. Specific considerations should also be given to the project delivery method and how documentation and communication of these standards may vary as a result.

In the airport's documented security expectations for contractors, the airport should encourage contractors to self-report any security violations or errors. Self-reporting is a key part of developing a strong security culture that supports effective compliance.

**Key Point**

When including documentation in contract documents, any airport documents that are referenced (such as construction security standards), should be attached, unless security restrictions (SSI, etc.) prevent doing so. Airports should review all security-related policies and procedures and make any needed revisions before a new project commences.

### 3.2.1 Include Security Standards in Contract Documents

At a minimum, all applicable airport security policies and procedures that are relevant to the project should be conveyed to prospective contractors via the documents that are provided as part of the bidding process. Providing the information in this manner aids contractors in properly developing their resource plans and schedules for the project, which can reduce the potential for security-related delays or cost increases once the project starts.

To support prospective contractors' awareness of the project's security requirements, it is recommended that airports discuss these requirements during project pre-bid meetings or contractor open house meetings. This will allow contractors to ask questions related to security requirements before submitting a bid for the project.

### 3.2.2 Published Construction Security Standards

Some airports have created and published construction safety and security standards for use in all projects. Construction security standards may cover a wide range of topics related to 49 CFR § 1542 compliance and circumstances specific to the airport. Providing security standards to contractors as a standalone document helps ensure consistency between projects, and can minimize the potential for omission errors when compiling the contract documents.

Airports should specifically consider discussing the following critical security compliance items:

- **Badging:** This information should include an overview of what to expect in the badging process, eligibility requirements and disqualifying offenses, process steps and timelines, authorized signatory requirements, and badge return/closeout procedures.
- **Escorting:** This information should detail all requirements, procedures, and limitations, particularly with regard to the number of individuals who can be escorted and any limitations on escorting frequency.
- **Gate guards:** This information should specify gate guard responsibilities, staffing needs, required training, and communication procedures.
- **Security-related changes:** This information should identify minimum lead times for making change requests. These changes could include items such as perimeter fence removal or alteration, relocation of a staging area, or significant changes to escorting needs.
- **ASP amendments:** A clear process should be established for the facilitation of any needed ASP amendments. Contractors should have an understanding of the regulatory requirements associated with this process, as well as a more detailed process as it applies to the project itself.

An example of an airport's published construction security standards is provided in Section 6.

### 3.2.3 Contractor Training

Security policies and procedures for construction projects must be supported by sufficient contractor training. In some cases, airports may wish to include this training as part of the badging process and badging training that is required under 49 CFR § 1542. The training also may take place as a standalone session facilitated by the airport or by a contractor. If contractor personnel facilitate the training, the airport should first administer a train-the-trainer process to ensure contractor personnel are sufficiently well-versed in the curriculum. The train-the-trainer instruction should be thorough and comprehensive. Contractor personnel who have prior experience working in an airport environment may be best suited to lead the training. Airport should also consider the potential need for training to be conducted in multiple languages. This could be accomplished by providing the training in a different language, through a multilingual train-the-trainer process, or through a recorded training that contains subtitles.

Key contractor personnel, including those responsible for training, should be trained not only in the policies and procedures themselves, but also why they exist. Incorporating real-world examples of past incidents at the airport or at other airports can provide context and increase emphasis on the need for these standards. It is important to consider tailoring the training to the specific project. This allows contractor personnel to understand how security requirements apply to the project they will be working on.

For prolonged projects and when contractor personnel may not be working on the project continuously, refresher training should also be considered, either at scheduled time intervals or coinciding with project phase changes.

A customizable Contractor Training Guide (CTG) is provided in Appendix B and attached to this PDF. This document should be used as a template for airports to incorporate their airport- and project-specific circumstances and policies. Airports can then use the guide as part of the contractor training curriculum. The CTG structure and content should be based on the information provided in writing as discussed earlier in this section.

## 3.3 Planning for the Utilization of Third-Party Security Providers

Many airport construction projects require the use of a third-party security provider (i.e., contract security) to support security compliance. It is important for airports to establish a collaborative relationship with these providers to ensure they can operate effectively. There are several actions that airports can take to accomplish this.

- **Training involvement:** Airports should have involvement in the training of these personnel, either directly or through input on company-provided training. Facilitating direct interaction between airport security personnel and third-party providers is encouraged to ensure a good mutual understanding of operational requirements. This also allows for the third-party provider to gain additional familiarization from airport subject matter experts. On-the-job training with airport security staff should be implemented as part of the training process. It is recommended that this include a period of airport security staff working alongside contract security personnel to ensure they are comfortable with their responsibilities.
- **Establishing SOPs:** Along with training, SOPs should be developed to provide guidance and and ensure consistency in the way the third-party provider operates. In general, guidance and training should be kept simple, and specifically focus on the provider's tasks related to the project. It should be emphasized to third-party security providers that they should contact airport security personnel if an event occurs outside the scope of their established SOPs.
- **Open communication:** Open and prompt communication should be emphasized, especially when there is a doubt as to what action should be taken in a given scenario.
- **Selecting the right personnel:** Airports should ensure that the correct personnel are selected for the job. For example, personnel who cannot stand for long periods of time should not be assigned to positions that will require prolonged standing.
- **Engagement in project planning:** Third-party security providers should be integrated into the project planning effort to enable them to properly develop their resourcing plan, develop post orders, and train their personnel.

## 3.4 Developing Compliance/Enforcement Strategies

Establishing effective compliance/enforcement strategies is an important component of a comprehensive approach to project security. A system for ensuring security compliance should be established prior to the start of a project to ensure clear standards are set and responsibilities are clearly delineated. The following compliance/enforcement strategies were identified to aid in improving security outcomes during the project:

- **Progressive enforcement program:** Many security-related compliance/enforcement strategies focus specifically on the individual responsible for the security violation. However, in some instances the contractor may need to be penalized for reoccurring violations of a security requirement. To facilitate compliance, some airports have established tiered or progressive enforcement programs that fine the contractor in increasing increments for multiple or repeated violations of security requirements.

- **Security deposits:** A common issue at the end of a project is collecting all the SIDA badges back from the contractor. To facilitate compliance, some airports require contractors to pay a SIDA badge security deposit at the beginning of the project. The deposit is refunded to the contractor at the end of the project once all the SIDA badges have been returned. The amount of the security deposit is tiered based on the value of the project.

Compliance/enforcement strategies can be communicated to contractors in multiple ways including:

- Project contract documents
- Published Construction Security Standards
- Airport rules and regulations

In general, it is recommended that compliance/enforcement strategies be conveyed to contractors using all three of these mediums. Incorporating compliance standards into contract language is beneficial because it provides a direct, legally-binding, means of ensuring compliance. The use of airport rules and regulations to establish and communicate enforcement mechanisms can be particularly effective as they apply to anybody operating at the airport. Consequently, compliance/enforcement strategies defined in airport rules and regulations apply to contractors operating at the airport, even if their contract is not with the airport sponsor (i.e., a construction project where the tenant has hired the contractor). Airports may also consider incorporating language into their rules and regulations stating that civil penalties assessed to the airport because of a contractor's actions may be passed on to the contractor.

Other key considerations related to compliance/enforcement strategies are:

- Compliance strategies should consider the airport's ASP and general operating environment.
- Standards should include specific compliance and enforcement language for items such as badging, access, escorting, and any other violations that pose a notable security risk and/or violations of the ASP.

Airports should consider the project and the variety of factors discussed here to determine which strategy or strategies will be most effective in ensuring security compliance.

## 3.5 Preparing for Unanticipated Regulatory Changes

Regulatory changes, whether at the federal, state, or local level, can negatively impact a project if not properly accounted for during project planning. For example, TSA may issue a new security directive, or an airport may revise a badging or escorting policy. These changes have a high potential to cause confusion and conflict if proper expectations are not set and documented at the start of the project. Including appropriate contract language addressing this eventuality can help establish expectations with the contractor, and help the project team better prepare for potential changes. An example of such language is included here, with the airport identifier redacted:

*1.2 REGULATIONS FOR CONTRACTORS*

*A. This section contains rules and regulations related to construction activities at [airport redacted]. To the extent that any rules and regulations contained in this section conflict with the rules and regulations now or hereafter adopted by the [airport redacted] Rules, the [airport redacted] Rules shall control.*

*B. The regulations contained in this section and the [airport redacted] Rules are subject to change at any time without notice. Current [airport redacted] Rules can be found on the airport's public website at: [insert website URL here]*

In general, a best practice is for contract language to acknowledge that regulatory changes may occur, and that good-faith negotiations may need to be conducted to address these changes. It should also be noted that changes may take effect immediately in some cases. Potential for regulatory changes should also be a point of discussion in the project kickoff meeting and other meetings occurring prior to the start of work.

The airport should be prepared to communicate any regulatory changes to project stakeholders via established communication channels prior to the change going into effect, if possible. Depending on the nature of the change(s) and their immediacy, they should either be discussed at regular project meetings or at a standalone meeting. Once the impacts of the change on the project are understood by the airport and contractor, any proposed changes in scope and/or schedule should be communicated to stakeholders, and a period for feedback should be provided. Any feedback received should then be addressed as part of changes to project scope and/or schedule.

## 3.6 Planning for TSA Coordination & ASP Management During Construction

Effective coordination with TSA and management of associated regulatory requirements is key to ensuring that expectations and processes are established and followed during project planning. Airports should involve local TSA personnel early in project planning and maintain collaboration throughout the life of the project. As a component of this collaborative approach, it is recommended that airports hold discussions with TSA prior to starting a project to identify how TSA will be involved in project planning/execution, the plan for handling any ASP amendments associated with the project, and establishing a standard format for ASP amendments. Each of these items is further discussed below.

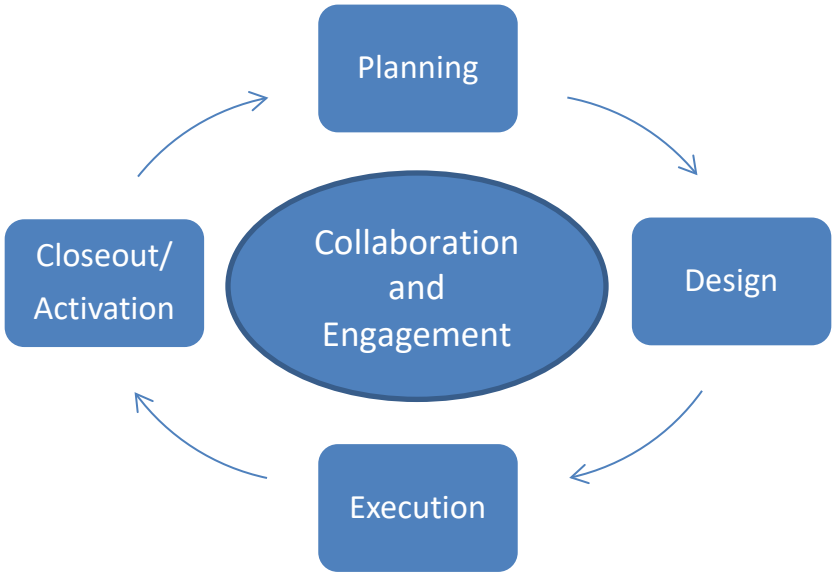
- **Collaboration with TSA:** In general, the airport should work with TSA to establish a general set of expectations related to collaboration on airport projects. For example, there should be general agreement about when airport personnel will involve TSA in project planning efforts, and when TSA will be asked for any regulatory reviews/approvals.
- **Approach to submitting ASP amendments:** TSA preferences regarding the submittal of ASP amendments may vary based on a multitude of factors. The project may best be served by submitting all required amendments at the beginning of the project, or amendments may need to be submitted as the project progresses. Airports should coordinate with local TSA officials prior to the project starting to identify an acceptable approach to submitting ASP amendments.
- **Standard form for ASP amendments and amendment drawings:** Airports may also want to consider collaborating with TSA to establish a standard form for ASP amendments and drawings. The research identified that consistency in the format and look of ASP amendments promotes better understanding, and reduces the likelihood of errors and omissions. Additionally, it can aid TSA in reviewing the amendments quickly.

Projects impacting TSA-occupied areas and equipment (e.g., checkpoints, baggage screening, etc.) can require significant coordination with TSA personnel at headquarters and locally. Consequently, it is imperative that coordination related to TSA impacted areas and equipment be initiated early as part of project planning. This is further discussed in Section 4.2.

# SECTION 4: SECURITY INTEGRATION IN PROJECT PLANNING, EXECUTION, & CLOSEOUT

This section provides airports with systematic guidance that can be followed throughout the life cycle of a project to ensure security is properly integrated. The general life cycle of a project is shown in Figure 4-1.

**Figure 4-1. Project Life Cycle**




Areas of focus for this section include:

- Stakeholder coordination and engagement
- Integrating security and public safety considerations in project planning and design
- Maintaining a security focus during project execution
- Security and project closeout

Each of these items is discussed further in the remainder of this section. Multiple checklists are provided in Appendix D to support guidebook users in implementing elements of this section.

## 4.1 Security Coordination & Stakeholder Engagement

Proper stakeholder coordination and engagement is a critical consideration throughout the project life cycle. As with any project, it is important that the right set of stakeholders be identified at the outset of the project and engaged and coordinated with throughout the project's life. There are a number of strategies that can be employed to support these efforts.

### 4.1.1 Security Coordination

Specific strategies can be employed to improve security coordination during a project. Starting security planning and coordination efforts early in project planning ensures there is enough time to sufficiently consider the needs of the project and its stakeholders.

#### 4.1.1.1 Coordination with Other Project Documents

Along with starting early, coordination with other project components is key to ensuring good security coordination. Airports should ensure that those responsible for the Construction Safety and Phasing Plan (CSPP), when one is required for the project, have properly integrated security plans and processes as applicable into the CSPP. Security personnel should be given an opportunity to review and comment on the CSPP as well as the contractor's Safety Plan Compliance Document (SPCD).

Security considerations should also be sufficiently discussed in the project bid specifications and contract. This should include defining security roles and responsibilities, as well as any security-related equipment that may be provided by either the contractor or the airport. Some projects, and particularly those with larger scopes, may also benefit from a project-specific security plan. This plan is discussed further in Section 4.2.3.

**Key Point**

Ensure security requirements are properly integrated with other project documents, including the project's CSPP and SPCD, if required.

#### 4.1.1.2 Security-Related Coordination with Contractors

A number of strategies can be used to improve an airport's security-related coordination with the contractor.

- **Contractor work schedules:** Airports should consider requiring the contractor to provide a work schedule that includes information on where and when work will be taking place, as well as the type of work that will taking place. This will give airport personnel better awareness of construction activities, and can help identify unauthorized personnel, who may be observed on-site outside of the schedule provided by the contractor. A work schedule also helps airport personnel reduce the potential for impacts to construction activities resulting from airport emergencies and other special events (such as presidential visits). These events sometimes occur with little warning and access to a work schedule will help the airport operator respond quickly and effectively.
- **Contractor security liaison:** Airports should consider asking the contractor to appoint a dedicated security liaison to serve as the contractor's main point of contact for security compliance and coordination matters. Establishing a single point of contact can help improve communication and coordination by streamlining the flow of information and creating a clear division of labor with regard to security responsibilities. Likewise, the airport should also identify a point of contact to serve as the contractor liaison's counterpart. On some projects this may be the project manager, while on larger projects it may be a member of the airport's operations, law enforcement, or security staff. Establishing liaison positions reduces the likelihood of miscommunication or having duplicative lines of communication. The contractor and airport should each also establish an alternate security liaison, who should be kept involved in case the designated liaison becomes unavailable.

#### 4.1.1.3 Establish Security Decision-Making Processes, Timelines, and Logs

Airports should also consider establishing clear decision-making timelines for security-related matters. Lead times for key items such as badging, or work impacting a security checkpoint or CCTV system, for example, should be explicitly established in writing. These timelines should be adhered to in order to

ensure that activities are sufficiently coordinated and delays/negative impacts are mitigated to the extent possible. Providing explicit timelines also reduces potential for confusion, and provides a consistent standard through the life of the project.

It is prudent to maintain project security decision logs in project documentation, particularly on long duration projects. On longer projects, some stakeholders and decision-makers typically change during the project. By consistently documenting decisions, including why and when they were made, and by whom, new project stakeholders who may be assuming similar roles will be able to understand the justification of past decisions. This may help reduce delays and potential rework as a result.

### 4.1.2 Stakeholder Engagement

It is important that security stakeholders are involved in project planning from an early stage and invited to planning meetings. Depending on the airport, these stakeholders may include airport law enforcement, security compliance personnel, TSA personnel, CBP personnel, and third-party providers with which the airport contracts for security services. It is critical that the stakeholder group also includes the ASC. A security stakeholder engagement checklist is included in Appendix D. Airports can use this checklist to help identify the security stakeholders that should be involved in a project.

Some airports may also choose to engage FBI or other federal or state law enforcement agencies, depending on the location and scope of the project. This can provide a unique, external perspective to the project that might otherwise be missed. Local law enforcement should be involved in coordinating with state and federal law enforcement agencies.

If TSA or CBP facilities are part of the scope of a project or will be impacted, it is critical that they be highly engaged in the project from the beginning. In these cases, airports should expect to address specific requirements these agencies have for construction involving their facilities. Specifically, airports must ensure they have sufficient understanding of any space and/or equipment impacts associated with these facilities. Identifying the right stakeholders from these organizations to participate in the project is also key to effectively addressing these concerns. If possible, participants from these agencies should have some decision-making authority so that not all discussions need to be escalated to a higher-level manager. Airports should make similar considerations for other tenants that may have specific security requirements, including FAA, airlines, concessionaires, etc.

Airports should also endeavor to create a collaborative review process during the project design. Stakeholders should be allowed to review documents either using hard copies of plan sets or via an online collaborative software platform. In both cases, this approach allows reviewers to see each other's comments, further fostering a collaborative environment.

Establishing a project planning committee that includes the stakeholders can be an effective way of promoting engagement. Hosting security focus groups is another means by which airports can facilitate a collaborative and engaging approach to stakeholder involvement. Focus groups allow not only for the review of proposed plans, but also a dialogue among participants, which promotes increased and more comprehensive feedback.

**Key Point**

Airports should endeavor to create a collaborative review process during the project design process.

Security should be a standing point of discussion in all project meetings, and the importance of security should be continually reemphasized to encourage sustained stakeholder engagement. As with security

training, real-world events can be used as a basis for reemphasizing the importance of security throughout the life of a project. For example, if the airport has recently had an incident in which a passenger entered a restricted area, the airport may emphasize the risks associated with this type of occurrence.

Especially at larger airports, regular meetings should be held to update security stakeholders on the project(s) with security related considerations. This is particularly important when multiple projects are occurring simultaneously, as the same set of stakeholders may be involved in more than one of these projects. A concise but thorough update tailored to security-related aspects of each project is recommended, with time for questions and discussion. It may be prudent to offer occasional site walks as part of these meetings, particularly if some stakeholders are not typically able to visit the site.

#### 4.1.2.1 Tenant Construction

Construction projects undertaken by airport tenants pose additional concerns because airport personnel are generally not in a leadership role on these projects, and typically have a limited role in project planning. As a result, tenant construction projects are sometimes not properly coordinated with the airport and security stakeholders, which can result in security compliance issues and an increased risk to both the tenant and the airport. It is important that airport security personnel are engaged in these tenant projects to ensure security is properly addressed. If the airport has an established Tenant Improvement Program (TIP), airport security engagement should be explicitly discussed in the program documents.

If a tenant project involves a completely new facility or one that had to be vacated during construction, careful coordination between the airport, tenant, and contractor should be undertaken well in advance of facility commissioning and tenant move-in. Both tenants and contractors need to always have a thorough understanding of the current security environment to avoid violating security regulations. All parties should communicate their proposed timelines in advance to ensure that activities are properly coordinated and security requirements are understood.

## 4.2 Security and Public Safety Considerations in Project Planning and Design

In addition to ensuring Part 1542 compliance, there are other public safety and security considerations that should be taken into account when planning a project. As discussed in Section 4.1.2, ensuring engagement with a wide range of security stakeholders, including external agencies, will help facilitate a greater focus on public safety considerations.

Insider threat concerns should also be considered as part of a comprehensive approach to public safety and security. Insider threat concerns should be integrated into contractor security training, and should be emphasized as part of the ongoing project security focus. A “see something, say something” mentality should be encouraged to avoid complacency among contractor personnel.

### 4.2.1 Security Threat Assessment

Conducting a project risk analysis or security threat assessment can ensure a comprehensive focus on public safety and security, help identify potential security vulnerabilities, and determine how they should be addressed.

The process should be systematic and collaborative in order to effectively identify potential security problems and establish a plan for managing them. The threat assessment should look at potential

security risks associated with the execution of the project, as well as any changes to existing risks or new risks that may result from the completed project.

Local/airport law enforcement, TSA, FBI and, in locations where they have jurisdiction, Federal Protective Services, may be able to assist in facilitating these assessments, and provide feedback to guide the assessment outcomes.

### 4.2.2 Contingency Planning

Contingency planning for critical security processes and systems should also be considered when planning a project. Construction projects often affect normal security operations; planning for these impacts will help mitigate them. Examples of security functions that may be affected include passenger and baggage screening, CCTV, access control systems, and vehicle and pedestrian portals. Contractors should have at least a general understanding of these systems and the criticality of their functions, and should know to immediately report any issues. Airports should consider installing backup systems or establishing other workarounds to prepare for system impacts or complete outages. Airports should also ensure a process is in place to notify TSA and other key stakeholders of any changes in condition that may affect ASP compliance and/or airport operations.

Considerations should also be made for ensuring sufficient contractor access to and from the site during an emergency. This should include ensuring the right personnel have access, either by key, badge, or other means, and that procedures for emergency egress have been established and communicated.

### 4.2.3 Badging and Escorting

During project planning and design, a focus should be placed on badging and escorting considerations. This may include a standalone meeting with key project and security stakeholders. It is important that coordination start early so that the contractor understands the requirements and timelines of the badging process. The vetting process and the list of disqualifying criminal offenses should also be emphasized in this meeting. This information should also be included in the bid specifications to establish these requirements from the project outset.

For projects occurring in non-public areas of the airport, determinations must be made regarding when to badge construction personnel and when it may be possible to escort them. The airport's escorting policies must be taken into account along with the needs of the project. Clear limitations should be set regarding how often someone can be escorted. This policy helps guard against potential circumvention of the badging process by individuals who regularly access the site. For example, a contractor may wish to avoid the badging process for some of their employees who will not be able to pass their background checks, or who do not want to take the time to complete the badging process. As discussed previously, clearly defining the badging process early on may help reduce the likelihood of these types of issues. More information on escorting considerations can be found in PARAS 0035 *Synthesis of Escort Privileges and Escorting Practices*.

For projects taking place on the airfield in an area designated as SIDA, airports may want to temporarily convert the project area to an AOA. If the security risks associated with the project location are relatively low, converting from SIDA to AOA reduces security compliance burdens for the contractor, and may help improve project efficiency. In circumstances where badging of some personnel is not required, airports should still provide security awareness training that includes an overview of key security requirements and practices. This can be an acknowledgement form signed by each individual working on the project. The form should include key security items such as access limitations, use of

pedestrian and vehicle gates, definition of the project boundaries, and method for reporting suspicious activity or emergencies. This ensures a measure of accountability and security familiarization for all project personnel, even those who are not badged.

### 4.2.4 Access Considerations

In circumstances where not all personnel will be badged, particularly for projects occurring in the Sterile or Secured Area, airports may consider conducting physical screening and/or utilizing the Secure Flight database to vet unbadged individuals needing site access. Some airports have technology that conducts instant background checks through state and federal criminal databases using an individual's driver's license (see Section 5). It should be noted that these background checks are not equivalent to the background checks required for badging under Part 1542. However, the vetting processes are another means of reducing some risk associated with admitting unbadged personnel to a project site.

In projects where significant work is occurring within an active Sterile or Secured Area, additional considerations may need to be made for the use of haul routes and screening. For example, for an airline project that requires the movement of fixtures, furnishings, and equipment into the Sterile Area, adequate processes and resources must be in place to facilitate both the movement and inspection of these items. In most cases, these inspections will need to be conducted by airport personnel or third-party security providers.

To the greatest extent practical, construction activities should be separated from non-construction operations. In some instances, airports have even created haul routes that are separate from existing airport roadways to minimize the construction project's impact on non-construction operations.

It is always preferable, when possible, to completely separate construction areas from security-regulated areas. This significantly reduces overall security risk while also reducing administrative and compliance burdens associated with badging. When access to regulated areas is required for the project, contractor access should be limited to those gates and doors that are critical to construction operations. This practice also reduces risk and allows for more efficient access control monitoring related to the project. For terminal projects, a running list of all active access points should also be maintained by the airport and provided to the contractor during the project. Particularly as conditions change, contractor personnel should be kept aware of which portals are "live" to avoid potential misuse of these access points and increased security compliance issues as a result.

When complete separation of construction from security-regulated areas is not possible, efforts should be made to locate staging areas outside the SIDA. This helps facilitate the movement of personnel, equipment, and materials, particularly deliveries and pickups. Since subcontracted or third-party truck drivers may not be badged, locating the staging area outside the SIDA significantly reduces access control and escorting burdens, as well as overall security risk associated with these operations. Conversely, locating a staging area outside of a security-regulated area may result in the increased need for vehicles to enter and exit through an access gate. In this scenario, airports may wish to take several additional steps. First, staging areas outside the SIDA or AOA can be separately fenced in against the outside of the AOA or SIDA perimeter fence. This allows for secondary access to the staging area and reduces the potential for unauthorized entry and criminal activity in the staging area. Second, it may be possible to keep unbadged vehicle drivers under escort during their entire route of travel between the project site and the staging area. In other words, vehicles would remain under escort after exiting the AOA or SIDA perimeter fence while they remain within the fenced-in staging area. The vehicle could then re-enter the secure perimeter under the same continuous escort. This would negate the need to rescreen vehicles or re-verify identification when the vehicle re-enters the SIDA from the staging area.

In these and other scenarios, vehicle congestion at access gates can occur during high-volume trucking or movement of other equipment. The likelihood of traffic "bottlenecks" resulting from these conditions should be assessed, and plans should be established to facilitate the efficient movement of materials.

Airports should also ensure that documented policies prohibit personal contractor vehicles within security-regulated areas. Personal vehicle parking areas that are outside the regulated environment should be established during project planning and clearly communicated to the contractor early to ensure sufficient logistical planning.

On smaller projects, airports may consider using a "go list" instead of a "stop list" to determine who can access the project site. By doing so, the potential for confusion as to who can and cannot enter the site is reduced. The gate or door guard is instructed that only those individuals shown on the go list can be granted access. Just as with the use of a stop list, it is critical that the list be updated frequently to remain accurate. It is also important airport stakeholders who normally use the access portal(s) in question understand that they will not be granted access through that portal while the go list is in effect, unless they have coordinated with the airport to be included on the list.

Even in areas where access control is not required by security regulation, such as in landside environments or other public areas, contractors may wish to utilize an access control system to manage and track the flow of personnel and equipment in and out of a site. This can improve accountability and tracking of assets, as well as reduce the potential for unauthorized access to the site. Several technologies that serve this purpose are discussed in Section 5.

### 4.2.5 Tool Management

For projects occurring in a security-regulated area, and particularly for work in the terminal environment, airports should require the contractor to employ a tool management plan to track and manage the use of tools and equipment. Using a tool management plan encourages accountability and allows for corrective actions to be taken quickly when a problem is identified. Tool management plans should include a complete inventory of all tools in use in the project area, as well as a sign-out process to document who has or has used each tool and when. The plan should also indicate how any tools being stored in the project area will be secured when not in use. A tool management plan is also another means of emphasizing a project focus on security.

### 4.2.6 Project-Specific Security Plans

On larger projects, a project-specific security plan can be used to clearly document and communicate how security will be addressed during the project. Roles and responsibilities should be clearly defined, as well as any security processes and procedures that will be utilized during the project. All applicable security timelines should also be discussed, such as badge issuance and renewal, requests for access changes, escort requests, or any other security-related changes or requests contrary or in addition to those established in the project bid specifications or other contract documents. The security plan itself should also be identified in the bid specifications as a contractor compliance requirement. Airports should be prepared to provide the plan requirements to the contractor soon after the project contract has been awarded to allow sufficient time for collaboration on any revisions that may be needed and for contractor familiarization.

An outline for a project-specific security plan is provided as Appendix C.

## 4.3 Maintaining a Security Focus During Project Execution

It is critical, especially during large projects or those with particularly significant security impacts, that security requirements and messaging be continually reinforced. This can be accomplished in a number of ways.

Establishing and enacting a multi-tiered security Quality Assurance/Quality Control (QA/QC) plan is a means of ensuring an ongoing effective security focus. Airports should collaborate with TSA on this plan to identify any overlap with TSA QA/QC processes. The plan should specifically focus on three key activities:

- **Inspections:** Regular security inspections of construction activities should be conducted by appropriate personnel. These inspections should be in addition to other project walk-throughs, and include the appropriate security subject matter experts.
- **Tests:** Security testing should be conducted to ensure project personnel respond appropriately. Strategies could include testing for badge challenging, proper use of access portals, and reporting of suspicious activities. Rewards can also be incorporated into successful tests.
- **Audits:** Security records should be audited to ensure compliance with standards and regulations. This should include a review of authorized signatory records for badging, tool management plan records, and any logs related to site access or key control.

While security should be a point of emphasis in all meetings, additional in-depth security briefings should be considered any time security processes or requirements are changing, either as a result of a regulatory change or because of a project scope or phase change. Airports should also consider employing the use of visual cues to ensure stakeholder awareness of changes in security conditions related to the project. This could include signage in the vicinity of the project site, placement of cones or barricades, or diagrams distributed by email or other means.

A means to communicate urgent security messages to the contractor should also be considered. This might be accomplished using an existing emergency notification system, or by phone or text through an established process. Contractors must also understand the need to adhere to any instructions accompanying such messages.

During project phase changes, work should be halted to allow for reconfiguration of all access control infrastructure and other visual cues. Phase changes can create additional security risks due to the potential for confusion and misunderstanding. Considering this, notification of the phase change should be disseminated to project and contractor staff as well as any airport stakeholders that may be impacted by either the completion of the prior phase, the start of the next phase, or both. This communication should occur in advance of the phase change, and additional updates should be provided during the phase change and after its completion.

## 4.4 Security and Project Closeout

Ensuring a well-coordinated project closeout and commissioning can help avoid technical issues with new or modified security systems, as well as improve stakeholder and operator awareness and knowledge of these changes. If the project involves multiple security components, and especially if the project involves a large facility, airports should establish a security working group for Operational Readiness and Transition (ORAT). This working group should be formed early in the project to ensure good project familiarization prior to the commissioning of the project. The group should involve the project manager (or a designee), airport personnel with responsibility for the system(s), a contractor or appropriate subcontractor representative, and any other stakeholder agencies, such as TSA or CBP.

If included in the scope, the working group should also include any personnel specifically tasked with ORAT, either from the airport, contractor, a consultant, or some combination thereof. A key role of this working group should be to create a security start-up plan that can be integrated with any other ORAT processes in use at the airport or for the project. The start-up plan should detail the commissioning process for security systems, and include roles and responsibilities, timelines, and points of contact. Any security sweeps that may be required as part of the activation of an area should also be detailed in this plan. In some cases, tenants, such as airlines or other service providers, may also need to be involved if the project includes or impacts their systems.

Understanding lessons learned and resulting best practices from a project can benefit all project stakeholders. Airports should consider facilitating an after-action review of the project with key stakeholders to understand what worked well and what could be improved. These findings should be documented and maintained for application on future projects.

# SECTION 5: SECURITY TECHNOLOGIES RELEVANT TO AIRPORT CONSTRUCTION

Security technologies that could potentially be applied to airport construction projects were reviewed and documented as part of the research process. Technologies were categorized by type, and cost and infrastructure requirements were collected to the extent security vendors were willing to share. The technology categories are as follows:

### ACCESS/ASSET TRACKING

- **Description:** These systems track the presence and movement of personnel, assets, and vehicles within a defined area via Bluetooth technology. Some of these systems can also be integrated with access control.
- **Security Application:** Verified tracking of personnel and assets enhances accountability and asset management. It also allows for quicker identification of potential malicious activity.
- **Cost:** Not provided
- **Infrastructure Considerations:** LTE modem/Wi-Fi/Ethernet; 110V wall power; solar-options available

### ACCESS CONTROL & CCTV REMOTE MONITORING

- **Description:** These systems are generally an add-on to an existing system, and enable authorized users to access CCTV and access control systems from a smartphone or tablet
- **Security Application:** Access control and CCTV systems can be monitored with more flexibility and from locations other than the airport's control center or a desktop computer.
- **Cost:** Not provided
- **Infrastructure Considerations:** Software and smartphone or tablet

### AUTOMATED INSPECTION/SURVEILLANCE – AERIAL

- **Description:** These systems provide automated inspection and surveillance of defined areas using unmanned aerial systems (UAS). They are designed to be self-sufficient, and can be programmed to conduct autonomous patrols and respond to detected threats. They can also be operated manually. Regulatory restrictions associated with operating UAS at airports should be considered.
- **Security Application:** These systems add an additional inspection and monitoring capability, thereby reducing security risk and enabling quick identification of hazards.
- **Cost:** Approximately $85,000 initial cost + $16,000 yearly maintenance
- **Infrastructure Considerations:** Electrical power for recharging; comes with weatherproof base station

### AUTOMATED INSPECTION/SURVEILLANCE – GROUND

- **Description:** These systems provide automated inspection and surveillance of defined areas using a variety of ground-based units. They are designed to be self-sufficient, and can be programmed to conduct autonomous patrols. Some systems can also conduct 3D site mapping.
- **Security Application:** These systems add inspection and monitoring capabilities without increased manpower, thereby reducing security risk and enabling quick identification of hazards.
- **Cost:** Approximately $7/hr; $60,000-$70,000/year (rental from vendor)

- **Infrastructure Considerations:** Mobile robots will need a recharging connection point; stationary systems require wall power.

### BACKGROUND CHECKS

- **Description:** This product allows for instant background checks on individuals using the same databases used by law enforcement. The individual's driver's license is required for the background check. It is important to note that these background checks are not equivalent to the checks required under Part 1542 for airport badging.
- **Security Application:** Allows for increased vetting of personnel entering a project site to identify potential security risks.
- **Cost:** Approximately $800–$1,000 per month
- **Infrastructure Considerations:** Personnel to operate scanners, network connection to local law enforcement

### CCTV

- **Description:** These systems provide video site monitoring a standalone systems or through integration into existing CCTV. They can be operated in a self-contained capacity through solar and/or generator power or be plugged in to house power.
- **Security Application:** Provides active and/or passive monitoring with recording capability to observe and document activity at the site.
- **Cost:** Approximately $15,000–$80,000
- **Infrastructure Considerations:** Self-contained (solar or diesel with battery) or plug-in

### CONSTRUCTION WALLS

- **Description:** These walls serve as customizable but durable barriers around a construction site.
- **Security Application:** These barriers prevent access to and from construction areas to other airport areas, particularly in the terminal environment.
- **Cost:** Approximately $14–$18 per square foot
- **Infrastructure Considerations:** N/A

### ELECTRONIC ACCESS CONTROL

- **Description:** These systems use a variety of RFID-based technologies to manage and control both pedestrian and vehicular access to a site.
- **Security Application:** Access control systems provide an additional measure of site security and verification of who is accessing the site.
- **Cost:** Varies
- **Infrastructure Considerations:** Ethernet or other low voltage control standards including Power over Ethernet (PoE); some have power supplies with 110V input

### ELECTRONIC KEYS

- **Description:** Programmable key systems can be used to grant access through doors or gates.
- **Security Application:** Reduces need for traditional lock and key issuance and tracking. Electronic keys provide an additional layer of security due to limited battery lifespan.
- **Cost:** Approximately $1,700–$3,500 for headend equipment; $150–$200 per key
- **Infrastructure Considerations:** Integrates with existing cylinders

### INFRARED BARRIERS

- **Description:** These systems create an invisible "wall" that triggers an alarm when breached
- **Security Application:** Means of detecting motion in a protected area, thereby identifying potential criminal or terroristic activity.
- **Cost:** Approximately $100–$300 per sensor; $10,000 for head-end equipment
- **Infrastructure Considerations:** Designed to integrate into existing security systems; infrastructure considerations may vary.

### KEYLESS VEHICLE ENTRY

- **Description:** Keyless vehicle entry and can also ensure windows are closed when a vehicle is locked
- **Security Application:** Can help ensure doors and windows are secured and keys are not left in the vehicle ignition.
- **Cost:** Approximately $100–$250
- **Infrastructure Considerations:** Integrates within vehicle.

### LICENSE PLATE AND VEHICLE DETECTION

- **Description:** These portable systems can be used to automatically document and track license plates. Some systems can also recognize vehicle make, model, body type, and direction of travel.
- **Security Application:** License plate and vehicle-type tracking provides additional awareness regarding activity occurring at or near the site, and can be used as an investigative tool when an incident occurs.
- **Cost:** Approximately $10,000–$45,000; $1,800/month lease
- **Infrastructure Considerations:** Self-contained with solar and battery.

### MODULAR ACCESS CONTROL

- **Description:** These scalable systems can be placed at pedestrian ingress/egress points to track and control access to and from a site. Some systems include a small office space, and some can also be integrated into an existing access control system.
- **Security Application:** Allows for creation of a secure pedestrian access portal at outdoor locations where other means of access control may not be feasible.
- **Cost:** Approximately $7,000–$151,000
- **Infrastructure Considerations:** 110–240V power, cell antenna for data (if needed).

### OBJECT SCREENING

- **Description:** These systems screen bags and other belongings to identify potential prohibited items.
- **Security Application:** Can identify weapons or other prohibited items contained in the belongings of an individual that is entering the site.
- **Cost:** Approximately $15,000–$300,000
- **Infrastructure Considerations:** Requires 110–240V wall power

### PERSONNEL SCREENING

- **Description:** These systems provide pedestrian screening to identify potential prohibited items on a person.
- **Security Application:** Can identify weapons or other prohibited items being carried on a person entering the site.
- **Cost:** Approximately $60,000–$80,000
- **Infrastructure Considerations:** Requires 110V wall power.

### VEHICLE SCREENING

- **Description:** These systems provide vehicle inspection capabilities using video and AI-based camera systems. Some systems are stationary, while others can be used in a handheld capacity.
- **Security Application:** These systems can be used to reduce security risks associated with contraband that could be brought into a construction site or security-regulated area of the airport on a vehicle.
- **Cost:** Approximately $9,000–$75,000
- **Infrastructure Considerations:** Some systems require 110V wall power with a dedicated circuit

### AUTOMATED VIDEO MONITORING

- **Description:** These systems provide analytics-based surveillance monitoring, supplemented by vendor staffing. Threats identified using CCTV systems equipped with video analytics are sent to the vendor's video operations center for further review and subsequent mitigative actions, if necessary.
- **Security Application:** Identifies suspicious activity before it might otherwise be identified by human active or passive monitoring, resulting in quicker response actions.
- **Cost:** Not provided
- **Infrastructure Considerations:** Unknown

It should be noted that the technologies identified in this section are deliberately vendor-agnostic. All product costs should be considered rough order of magnitude.

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# APPENDIX A: SUMMARY OF RELEVANT REFERENCE MATERIALS

This section discusses several key reference materials that contain information relevant to PARAS 0037. Each reference is briefly summarized and its application to PARAS 0037 is discussed. Guidebook users may wish to consult these references for further information. Links to each document are provided however it should be noted that some documents require an ACI membership and must be purchased.

### PARAS 0028 – RECOMMENDED SECURITY GUIDELINES FOR AIRPORT PLANNING, DESIGN, AND CONSTRUCTION

This document is an update to guidance that was published by Safe Skies in 2017. It explores real-world experience and best practices, and provides recommendations that include specific planning and design concepts related to airport security that are scalable to airports of varying sizes and projects of varying scopes. A host of processes and methods are discussed, beginning with project planning, as well as various infrastructure components. The document also provides procedural guidance for construction and the hand-over process, including considerations for security during construction, testing, training, operational readiness and transition, and commissioning. Checklists are provided throughout the document to assist the user with various facets of the project process pertaining to security.

- **Applicability to PARAS 0037:** PARAS 0028 can be referenced for more in-depth, technical coverage of security topics related to planning for and managing airport construction projects. Many processes and procedures supporting concepts discussed in this guidebook are detailed in PARAS 0028.
- **Link:** https://www.sskies.org/images/uploads/subpage/PARAS_0028.Recommended_Security_Guidelines_.FinalReport_.pdf

### PARAS 0005 – AIRPORT PERIMETER BREACH CLASSIFICATION AND POST-INCIDENT BEST PRACTICES

This document provides Part 139 airport operators with best practices for addressing perimeter security breaches, and guidance for determining the severity of a breach.

- **Applicability to PARAS 0037:** Considerations for perimeter security are an important facet of any construction project occurring along or within an airport's secured perimeter. Construction activity in these areas can result in increased perimeter vulnerability, both with regard to the physical integrity of the perimeter and the vulnerability to bad actors attracted to the site by the presence of construction equipment and supplies.
- **Link:** https://www.sskies.org/images/uploads/subpage/PARAS_0005.BreachClassification.FinalReport.pdf

### PARAS 0006 – EMPLOYEE INSPECTIONS

This synthesis discusses different inspection processes used in the industry, and recommends best practices regarding inspections, badges, and checkpoints.

- **Applicability to PARAS 0037:** Some airport construction projects may require employee screening, particularly when work is being conducted in SIDA, Sterile, or Secured areas of the airport.
- **Link:** https://www.sskies.org/images/uploads/subpage/PARAS_0006.Employee_Inspections.FinalReport.pdf

### PARAS 0009 – GUIDANCE FOR SECURITY MANAGEMENT SYSTEMS (SEMS)

This guidebook introduces the concept of SeMS, its benefits, and guidance for implementation at airports.

- **Applicability to PARAS 0037:** Personnel responsible for construction project security may be able to apply SeMS concepts to the management of construction security.
- **Link:** https://www.sskies.org/images/uploads/subpage/PARAS_0009SeMS_Guidance-Final.pdf

### PARAS 0010 – GUIDANCE FOR PROTECTING ACCESS TO VITAL SYSTEMS IMPACTING AIRPORT SECURITY

This guidebook discusses protection of systems and provides users with information and tools to address related challenges.

- **Applicability to PARAS 0037:** Airport construction often involves and/or impacts security systems during the course of a project. It is important to have an understanding of these systems and make appropriate considerations when planning and executing a project that will touch one or more of these systems.
- **Link:** https://www.sskies.org/images/uploads/subpage/PARAS_0010.SecuritySystemsAccess.FinalReport.pdf

### PARAS 0011 – GUIDANCE FOR AIRPORT SECURITY MASTER PLANNING

This guidebook addresses developing and implementing a Security Master Plan, and discusses how it may be used to plan for future security needs in terms of infrastructure, technology and policy/procedure development.

- **Applicability to PARAS 0037:** Any planned airport construction project should take into account an existing Security Master Plan, if one exists. If one does not exist, security personnel should consider how a given construction project may impact future security planning at the airport.
- **Link:** https://www.sskies.org/images/uploads/subpage/PARAS_0011.SecurityMasterPlanning.FinalReport.pdf

### PARAS 0013 – MANAGING CONGESTION IN PUBLIC AREAS TO MITIGATE SECURITY VULNERABILITIES

This guidebook identifies scalable solutions and strategies and addresses concerns associated with mitigating airport congestion, with the goal of reducing the potential for casualties during a terrorist attack.

- **Applicability to PARAS 0037:** Airport construction projects occurring in areas accessible to the public often impact passenger flow, which in turn can exacerbate congestion issues in terminal and landside areas. Project planners and managers should be cognizant of these issues and take steps to mitigate them to the extent possible.
- **Link:** https://www.sskies.org/images/uploads/subpage/PARAS_0013.MinimizingCongestion.FinalReport-Final.pdf

### PARAS 0014 – BLAST MITIGATION STRATEGIES FOR NON-SECURE AREAS AT AIRPORTS

This guidebook encourages implementing a risk-based approach to blast mitigation strategies, and provides a framework for identifying measures that will result in a holistic and cost-effective strategy.

- **Applicability to PARAS 0037:** Blast mitigation should be considered both in the design of non-secure airport facilities and in the layout of the construction site itself.
- **Link:** https://www.sskies.org/images/uploads/subpage/PARAS_0014.BlastMitigationStrategies.FinalGuidebook.pdf

### PARAS 0015 – GUIDANCE FOR AIRPORT PERIMETER SECURITY

This guidebook discusses general perimeter security concepts, and provides some specific guidance focused on physical, electronic, and operational security as it pertains to perimeter protection. Stakeholder engagement, needs assessments, business cases, and project management guidance is also provided, along with best practices and lessons learned.

- **Applicability to PARAS 0037:** Considerations for perimeter security are an important facet of any construction project occurring along or within an airport security perimeter. Any construction project involving or impacting an airport perimeter should consider the guidance provided in the PARAS 0015 guidebook.
- **Link:** https://www.sskies.org/images/uploads/subpage/PARAS_0015.AirportPerimeterSecurity.FinalReport.pdf

### PARAS 0016 – AIRPORT SECURITY VULNERABILITY ASSESSMENTS

This guidebook provides a methodology and tools that can be used for planning and conducting airport Security Vulnerability Assessments (SVA) to address potential actions by bad actors, natural hazards, and other threats.

- **Applicability to PARAS 0037:** Airports should consider conducting SVAs both as part of the project design process and as a means to assess vulnerabilities that may be associated with the construction process itself. Conducting a sufficient SVA will reduce security risks both during the construction process and in the final project deliverable(s).
- **Link:** https://www.sskies.org/images/uploads/subpage/PARAS_0016.SVAGuidebook__.Final__.pdf

### PARAS 0017 – ACCESS CONTROL CARD TECHNOLOGY GUIDANCE

This guidebook provides information on access control technologies with the intent of helping airports upgrade or replace their access control systems.

- **Applicability to PARAS 0037:** Airport construction projects may involve expanding and/or altering components of an access control system as part of the scope of work. As a result, airports should understand available technologies in order to identify opportunities to improve their access control systems.
- **Link:** https://www.sskies.org/images/uploads/subpage/PARAS_0017_Access_Control_Card_Tech_Guidance.pdf

### PARAS 0018 – AIRPORT SECURITY TRAINING FOR LAW ENFORCEMENT AND SECURITY PERSONNEL

This guidebook provides recommendations for training law enforcement and security personnel at airports. A comprehensive outline of topics and content are included to facilitate familiarization with the unique characteristics and requirements of the airport environment.

- **Applicability to PARAS 0037:** Well-trained security personnel are critical to ensuring security compliance and assurance during a construction project.

- **Link:** https://www.sskies.org/images/uploads/subpage/PARAS0018_LEOAirportSecurityTraining.FinalReport_.pdf

### PARAS 0019 – EMPLOYEE/VENDOR PHYSICAL INSPECTION PROGRAM GUIDANCE

This report provides guidance for developing and maintaining physical inspection programs at airports regulated under Part 1542.

- **Applicability to PARAS 0037:** Depending on project location, some construction projects may require implementation of an inspection program for equipment and materials entering and within the construction site.
- **Link:** https://www.sskies.org/images/uploads/subpage/PARAS_0019.EmployeeVendorPhysicalInspectionPrograms__.FinalReport__.pdf

### PARAS 0022 – ACTIVE SHOOTER MITIGATION AND RECOVERY STRATEGIES

This report provides guidance related to planning for, responding to, and recovering from an active shooter event. The report is framed by the two significant events that have occurred at airports since 2013, identifying specific lessons learned and resulting best practices.

- **Applicability to PARAS 0037:** Planning for construction projects, particularly those that are situated in public areas, should include considerations for emergencies like active shooter events. Construction personnel should be made aware of any existing airport plans and procedures, and this information should be incorporated in project safety and security plans to the extent appropriate. Related training should also be included with other airport training provided to construction personnel.
- **Link:** https://www.sskies.org/images/uploads/subpage/PARAS_0022.ActiveShooterMitigationRecovery_.FinalReport_.pdf

### PARAS 0029 – CRIMINAL HISTORY RECORDS CHECKS (CHRC) AND VETTING AVIATION WORKERS GUIDEBOOK

This report provides guidance and reference material for the administration of the CHRC process at airports regulated under Part 1542. The document also provides guidance for airports who wish to conduct background checks beyond the required federal standard.

- **Applicability to PARAS 0037:** Many airport construction projects require some or all personnel to be badged. The background check process can be an obstacle to maintaining project schedules and efficiency. Establishing a process based on lessons learned and best practices can help minimize these challenges.
- **Link:** https://www.sskies.org/images/uploads/subpage/PARAS_0029.CHRCsVettingAviationWorkers_.FinalReport_.pdf

### PARAS 0033 – MENTAL HEALTH AND AIRPORT SECURITY

This research, currently ongoing as of the writing of PARAS 0037, will discuss potential impacts of mental health on airport security. It will provide airport security personnel with resources to identify and address potential mental health issues in the airport environment.

- **Applicability to PARAS 0037:** Mental health considerations are also referenced in PARAS 0037. PARAS 0033 will provide airports with a significantly more comprehensive resource on this topic.
- **Link:** Not available at the time of this publication

### PARAS 0035 – SYNTHESIS OF ESCORT PRIVILEGES AND ESCORTING PRACTICES

This report identifies current airport practices related to escorting programs, including limits, vetting, training, recordkeeping, enforcement/compliance strategies, and technologies available to support escorting programs.

- **Applicability to PARAS 0037:** Escorting is a key consideration in many airport construction projects. PARAS 0035 provides further insight on current best practices that may be applicable to construction projects.
- **Link:** https://www.sskies.org/images/uploads/subpage/PARAS_0035.EscortPrivilegesPractices_.Final_Report_.pdf

### AIRPORTS COUNCIL INTERNATIONAL – POST-COVID-19 AVIATION SECURITY PLAYBOOK

This "playbook" provides guidance for airports centered on security considerations in the COVID-19 and post-COVID-19 environment. The guidance is based on the Council Aviation Recovery Taskforce guidance from ICAO, and includes suggestions and processes centered around the security screening process. It also includes additional considerations for overall security processes and responsibilities, including the roles of security personnel and other airport personnel.

- **Applicability to PARAS 0037:** COVID-19-related changes to airport security operations are likely to impact construction projects, and particularly those occurring within the terminal footprint. Project planners and managers should take these changes into consideration, particularly on projects that were planned or designed prior to COVID, and at airports that may still be adjusting their security processes and procedures to meet the needs of the new environment.
- **Link:** https://store.aci.aero/product/post-covid-19-aviation-smart-security-playbook/

### AIRPORTS COUNCIL INTERNATIONAL – AIRPORT SECURITY RISK ASSESSMENT HANDBOOK – FIRST EDITION 2020

This handbook provides airport operators with guidance on how to conduct security risk assessments and manage risk, framed by case studies and real-world risk assessment examples.

- **Applicability to PARAS 0037:** Security risk assessments can be incorporated into both project planning and design to reduce or mitigate risk, resulting in a safer environment for all airport users.
- **Link:** https://store.aci.aero/product/airport-security-risk-assessment-handbook-first-edition-2020/

### AIRPORTS COUNCIL INTERNATIONAL – MANAGEMENT OF SECURITY HANDBOOK

This handbook promotes seven key components for a comprehensive, process-based approach to managing security. It emphasizes a top-down security-focused culture that is proactive and uses business metrics to guide decision-making. It also encourages sufficient planning and training.

- **Applicability to PARAS 0037:** Applying a comprehensive approach to security like the one discussed in this handbook will be beneficial to airport construction projects, as it will facilitate an effective, project-wide focus on ensuring that security is emphasized through the project process.
- **Link:** https://store.aci.aero/product/management-of-security-handbook/

### AIRPORTS COUNCIL INTERNATIONAL – LANDSIDE SECURITY HANDBOOK

This handbook focuses on the areas of an airport that are not generally governed by aviation-specific security regulations. The handbook uses case studies and best practices to inform strategies and solutions for managing security in these areas.

- **Applicability to PARAS 0037:** Airport construction projects occurring in landside areas require a different set of security considerations, and airports should tailor their processes and requirements accordingly.
- **Link:** https://store.aci.aero/product/landside-security-handbook-first-edition-2018/

### AIRPORTS COUNCIL INTERNATIONAL – MANAGING CONSTRUCTION DURING OPERATIONS HANDBOOK 2018

This handbook provides a comprehensive review of a wide range of factors to consider when managing airport construction. Factors include stakeholders, the regulatory environment, types of airport projects, and the planning, execution, and commissioning phases of a project, all framed by lessons learned and case studies.

- **Applicability to PARAS 0037:** Many airport construction projects occur while airport operations continue in the vicinity of the project. The handbook discusses security considerations that should be addressed when planning and executing a project in this environment.
- **Link:** https://store.aci.aero/product/managing-operations-construction-handbook-first-edition-2018/

### AIRPORTS COUNCIL INTERNATIONAL – ADDRESSING INSIDER THREAT HANDBOOK; FIRST EDITION, 2019

Insider threat has become a key airport security consideration. This handbook provides a global view of the insider threat problem and multifaceted methods for addressing insider threats. These methods include organizational structure, considerations for human factors, physical security measures, and IT considerations.

- **Applicability to PARAS 0037:** All airports should consider insider threat as part of construction planning and execution. Research conducted for the PARAS 0037 guidebook found that airports generally focus on ensuring construction personnel do not have a criminal background and are eligible to work in the airport environment. These concerns have led some airports to implement background checks beyond what is required under Part 1542. However, airports should also consider insider threat mitigation in all project aspects, not just workforce vetting.
- **Link:** https://store.aci.aero/product/addressing-insider-threat-handbook/

### THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY AIRPORT SECURITY GUIDELINES MANUAL

This document provides a comprehensive overview of airport security standards for planning, design, construction, operation, and maintenance of facilities at the airports operated by the PANY/NJ. These standards are provided as minimum guidelines that supplement other building codes. The standards are applied to any new construction, and proportionately to any renovations or modifications of facilities. The document discusses various areas of the airport and the associated security requirements and considerations, requirements related to various security systems, and security procedures that need to be considered or established during a construction project. The standards also require the establishment of a Project Security Plan for each project following contractor selection. A tool management plan is also required for projects occurring in any public Part 1542-regulated area of the airport.

- **Applicability to PARAS 0037:** PARAS 0037 guidebook users with frequent construction projects may want to consider creating a security guidelines manual. The PANY/NJ manual may provide best practices and serve as a guide for airports developing their own similar document.
- **Link:** https://www.panynj.gov/content/dam/airports/employees/airport-security-guidelines-manual.pdf

### BROOMFIELD POLICE DEPARTMENT CONSTRUCTION SITE SECURITY SURVEY CHECKLIST

This checklist, which is designed to address construction not specific to airports, provides for the designation of responsibilities related to both overall coordination and site security, processes, policies, and infrastructure considerations.

- **Applicability to PARAS 0037:** This checklist provides an overarching law enforcement perspective on construction security that can be directly applied to airport construction projects. Users of the PARAS 0037 guidebook can use this checklist as a means to gain a more holistic perspective of construction security considerations.
- **Link:** https://www.broomfield.org/DocumentCenter/View/3380/Construction_Site_Security_Survey_Checklist?bidId=

# APPENDIX B: CONTRACTOR TRAINING GUIDE

This appendix serves as a training guide template that can be used to educate contractor personnel on security requirements for a particular airport and project. The document is also attached to this guidebook in Microsoft Word format to enable airports to modify the template based on their unique requirements and circumstances. Airports may choose to designate this document as SSI once it has been populated with airport- and project-specific information.

# Contractor Training Guide

November 2021

## TABLE OF CONTENTS

## 1.0 OVERVIEW AND PURPOSE

This Contractor Training Guide (CTG) has been prepared to assist airports with providing security-related guidance/training to contractor personnel who will be involved in construction activities at the airport. The document has been set up in a modular fashion to allow airport sponsors to utilize only the portions of the CTG they feel are applicable to their airport and the specific construction project being undertaken.

## 2.0 USE OF CONTRACTOR TRAINING GUIDE (CTG)

Airport sponsors should review the material presented in the CTG, identify what is applicable to their airport and the proposed construction project, and then supplement the CTG with specific information regarding their airport and the construction project to be completed. This information should then be utilized as a basis for providing customized training to contractor personnel specific to the airport and project. The recommended process for utilizing the CTG is shown in Figure 1. Airport sponsors should identify security training requirements prior to initiating the project bidding process, and ensure all training requirements are set forth in the project bid documents.

**Figure 1. Recommended Process for Utilizing CTG**


Utilizing the CTG in this manner will aid contractor personnel in understanding general security concepts related to operating at the airport, and how those concepts apply to the specific and project they will be working on.

For ease of use, an "Airport and Project Application" section has been added to each portion of this training guide to enable airports to add any specific airport or project information directly to the CTG. Airports utilizing the CTG in this manner may choose to provide the updated version of the CTG to the contractor to use as a reference during construction. Figure 2 shows an example of the "Airport and Project Application" section included in each module of the CTG.

**Figure 2. Example Airport and Project Application Section**

Airport and Project Applications:
(Airport- and project-specific information should be added to this area.)

Providing the CTG directly to a contractor without the airport sponsor reviewing the CTG materials and notating how the materials apply to the airport and project is not recommended, as all portions of the CTG template may not be applicable to all airports and projects.

Additionally, any items that have been identified as critical points of understanding for contractor personnel to maintain a security focus while operating have been identified with a red octagon and red outline as shown below in Figure 3.

**Figure 3. Critical Security Points**

Critical security-related items are identified with red boxes and red octagons throughout the text.

## 3.0 CTG INTEGRATION WITH REGULATORY TRAINING REQUIREMENTS

This CTG is not intended to replace any regulatory training (e.g., security badge training, Authorized Signatory training, etc.) that may be required under federal regulations. The airport sponsor should utilize the Airport and Project Applications space provided below to denote any specific regulatory training that the contractor will be required to complete prior to starting construction. The airport sponsor should also note if the specified training will be required for all construction personnel or just personnel performing certain tasks (e.g., driving, gate guards, authorized signatory, etc.). It is also critical to identify any timelines associated with regulatory training that could impact construction schedules (e.g., typical time frame for completing a Criminal History Records Check to get a security badge at an airport).

Airport sponsors can also utilize the Contractor Training Checklist attached to the PARAS 0037 guidebook to document the modules of the CTG that contractors need to be trained on, and any regulatory training that is required.

Airport and Project Applications:
(This space should be utilized to document any required regulatory training that contractor personnel will be required to complete prior to starting construction.)

## 4.0 ACRONYMS AND TERMINOLOGY

The aviation industry has a significant number of acronyms and industry-specific terms. It is important that contractors become familiar with common security-related acronyms and terms. The list below includes some of the more common acronyms and terms related to airport security.

- **49 CFR § 1542:** The Code of Federal Regulations governing security requirements at airports with commercial service (airline) operations.
- **Air Operations Area (AOA):** AOA means a portion of an airport, specified in the airport security program, in which security measures are carried out. This area includes aircraft movement areas, aircraft parking areas, loading ramps, and safety areas, and any adjacent areas (such as general aviation areas) that are not separated by adequate security systems, measures, or procedures. This area does not include the Secured Area of the airport terminal building. Some general aviation airports may refer to the entire area inside the airport perimeter fence as the AOA.
- **Airport Security Coordinator (ASC):** The individual(s) identified in the Airport Security Program (ASP) as the airport's primary and immediate contact for security-related activities and communications with TSA.
- **Airport Security Program (ASP):** A required program for all airports operating under 49 CFR § 1542 that must be approved by TSA. The ASP describes how the airport will comply with federal security requirements.
- **Airport Traffic Control Tower (ATCT):** A control tower staffed by FAA or contract personnel providing air traffic control services to aircraft operating in the airport movement area and the airspace surrounding the airport.
- **Authorized Signatory (AS):** A designated representative who is authorized by the airport to sponsor individuals and request airport badges for them.
- **Criminal History Records Check (CHRC):** A TSA-defined process for taking and checking fingerprints against the FBI database.
- **Closed Circuit Television (CCTV):** A camera system used to monitor activity.
- **Construction Safety and Phasing Plan (CSPP):** The overall plan for safety and phasing of a construction project. The CSPP is developed by the airport operator or by the airport operator's consultant and approved by the airport operator. It is included in the invitation for bids and becomes part of the project specifications.
- **Federal Aviation Administration (FAA):** A branch of the U.S. Department of Transportation with regulatory authority for civil aviation.
- **General Aviation (GA):** All non-scheduled flights other than military conducted by non-commercial aircraft. GA covers air transport that is not operating under the FAA regulations for commercial air carriers, such as local recreational and business flights.

- **Safety Plan Compliance Document (SPCD):** A document that provides details on how the performance of a construction project will comply with the CSPP. The SPCD is developed by a contractor and submitted to the airport operator for approval.
- **Security Identification Display Area (SIDA):** An area of the airport regulated under Part 1542 in which security badges are required to be displayed.
- **Security Threat Assessment (STA):** A background check process in which TSA reviews applicant information and checks it against domestic and international government databases.
- **Sensitive Security Information (SSI):** Information which, if publicly released, would be detrimental to transportation security, as defined by federal regulation.
- **Transportation Security Administration (TSA):** The agency of the U.S. Department of Homeland Security with authority over the security of the traveling public in the United States.

Airport and Project Applications:
(This space should be utilized to document any specific acronyms or terms that are utilized at the airport or that are expected to be utilized during the project. This may include local airport acronyms and terms such as building names [e.g., CMF – Consolidated Maintenance Facility], airport policies [R&R – Rules and Regulations], and other terms.)

## 5.0 CONTRACTOR BEST PRACTICES

As part of PARAS 0037: *Planning and Operational Security Guidance for Construction Projects at Airports*, a number of construction security best practices were identified that apply directly to contractors. These are provided below:

- **Establish a dedicated security officer/liaison:** Contractors should consider designating a security officer who is responsible for coordinating security activities from the contractor's perspective and ensuring their compliance. This makes security activities/compliance a clear responsibility of someone on the contractor's team, and gives the airport a single point of contact for security-related matters.
- **Ensure key front-line contractor personnel are well-trained in security requirements:** Airports should work with key contractor personnel such as supervisors, site foreman, etc., and not just the contractor's project manager, to improve their awareness of security requirements and processes so they can properly communicate them to other construction personnel.
- **Identify potential access "Bottlenecks" Related to Security:** During various phases of a construction project, there may be periods where numerous construction vehicles and/or personnel need to enter a leave a project site (e.g., when a contractor is delivering materials to a construction site, and during shift changes for construction personnel). It is important to determine whether security may become a bottleneck to the efficiency of these activities, and develop appropriate solutions that maintain both security and efficiency. Solutions may include adding security guards, locating the materials stockpile within the AOA, or instituting escorting procedures to improve efficiency.
- **Ensure any temporary construction walls extend to the ceiling:** Temporary construction walls should extend all the way to the ceiling to prevent an individual from climbing or throwing something over.
- **Inspect outdoor construction after major rain events:** Outdoor construction sites should be inspected after major weather events to determine if any conditions developed that could be a security issue (e.g., erosion under fences, etc.).
- **Guard against construction site theft:** Construction site theft can be a significant issue depending on the location of the project and the security measures established. To guard against theft, contractors should ensure that all valuable materials are properly secured, access to valuable construction materials is controlled, and cameras are utilized to monitor the construction site during non-construction hours.
- **Stop construction work during phase changes:** Security issues often occur during the process of moving from one construction phase to the next. As a result, construction work should be paused during phase changes to allow safety- and security-related aspects of the project (barricades, entry points, etc.) to be properly relocated before resuming construction activities.
- **Utilize continuous visual barriers to show limits of construction:** Using visual barriers (e.g., construction fence, snow fence, etc.) to continuously delineate the limits of a

construction project helps prevent construction personnel from inadvertently accessing areas they are not authorized to be in.

- **Build security-related timelines into the project schedule:** A variety of airport security related matters (e.g. badging, ASP amendments, etc.) have associated review/approval timelines. To properly account for this, the contractor should build the timelines into the project schedule.

**Contractors should adopt a "see something, say something" mentality. If any suspicious activity is observed it should immediately be reported to the airport.**

Contractors should consider the utilization of these best practices, in consultation with the project manager, to improve operational security during construction.

Airport and Project Applications:
(This space should be utilized to document any best practices that should be utilized during a specific construction project.)

## 6.0 BADGING PROCESS AND TIMELINES

Depending on the location and scope of the project, contractor personnel may need to complete the airport badging process to be able to fulfill their project duties. At airports regulated under Part 1542, badging follows a strict process with specific requirements and timelines. This section provides an overview of what a contractor can expect for this process.

Contractors should work closely with the project engineer/designer and airport staff to determine the scope of the badging needs for the project. In some cases, strategies may be employed that reduce badging needs. In general, it is always preferable to issue as few badges as possible to complete the project efficiently while maintaining regulatory compliance. CTG users should also refer to the escorting discussion in Section 7.0.

### 6.1 Authorized Signatory

Each badge application must be approved by an Authorized Signatory. An Authorized Signatory is a designated representative who is authorized by the airport to sponsor individuals and request airport badges for them. In most cases, the Authorized Signatory will be a managerial position with the contractor. This person must undergo additional training provided by the airport. The Authorized Signatory is essentially the gatekeeper for all badging activity related to the company they are representing. It is the Authorized Signatory's responsibility to determine the validity and need for each badge application submitted by their company, and to approve each application for submittal. Likewise, the Authorized Signatory must keep track of any staffing changes, lost or stolen badges, or any other changes that might necessitate action to prevent unauthorized badge use. At the conclusion of the project, the Authorized Signatory must ensure the return of all airport badges, unless other agreements have been put in place with the airport for a warranty period or other work.

### 6.2 Badge Eligibility

Any person wishing to obtain an airport security badge must complete a vetting and background check process. If an individual has committed one of 28 disqualifying criminal offenses, they are automatically prohibited from obtaining a badge. This list of offenses, as identified in Part 1542, is as follows:

1. Forgery of certificates, false marking of aircraft, and other aircraft registration violation; 49 USC 46306.
2. Interference with air navigation; 49 USC 46308
3. Improper transportation of a hazardous material; 49 USC 46312
4. Aircraft piracy; 49 USC 46502
5. Interference with flight crew members or flight attendants; 49 USC 46504
6. Commission of certain crimes aboard aircraft in flight; 49 USC 46506
7. Carrying a weapon or explosive aboard aircraft; 49 USC 46505
8. Conveying false information and threats; 49 USC 46507

9. Aircraft piracy outside the special aircraft jurisdiction of the United States; 49 USC 46502(b)
10. Lighting violations involving transporting controlled substances; 49 USC 46315
11. Unlawful entry into an aircraft or airport area that serves air carriers or foreign air carriers contrary to established security requirements; 49 USC 46314
12. Destruction of an aircraft or aircraft facility; 18 USC 32
13. Murder
14. Assault with intent to murder
15. Espionage
16. Sedition
17. Kidnapping or hostage taking
18. Treason
19. Rape or aggravated sexual abuse
20. Unlawful possession, use, sale, distribution, or manufacture of an explosive or weapon
21. Extortion
22. Armed or felony unarmed robbery
23. Distribution of, or intent to distribute, a controlled substance
24. Felony arson
25. Felony involving a threat
26. Felony involving –
    a. Willful destruction of property
    b. Importation or manufacture of a controlled substance
    c. Burglary
    d. Theft
    e. Dishonesty, fraud, or misrepresentation
    f. Possession or distribution of stolen property
    g. Aggravated assault
    h. Bribery
    i. Illegal possession of a controlled substance punishable by a maximum term of imprisonment of more than 1 year
27. Violence at international airports; 18 USC 37
28. Conspiracy or attempt to commit any of the criminal acts listed in this paragraph

### 6.2.1 Badge Background Checks

After submitting a badge application that has been approved by the contractor's Authorized Signatory, personnel must undergo a two-part background check in order to obtain an airport security badge. This consists of a fingerprint-based Criminal History Records Check (CHRC) and a Security Threat Assessment (STA). Badge applicants must coordinate scheduling of fingerprinting with the airport credentialing office. Once the fingerprint and other identification

information has been collected, the airport will submit the information to the appropriate databases for processing. This process can take several weeks to complete under some circumstances.

**Adequate time must be programmed into project schedules for the badging process. Determination of badging strategy, completion and approval of badge applications, background checks, badge training, and badge issuance all must be completed before contractor personnel can begin work in Part 1542-regulated areas of the airport. Contractors should seek a good understanding of the expected timelines associated with this process as early as possible in order to allocate resources accordingly.**

**A common issue that slows down the badging process is the failure to present two acceptable forms of identification. Airports should clearly communicate to contractors the acceptable forms of ID and contractors should clearly communicate these requirements to staff.**

## 6.3 Badge Issuance and Training

Once a badge applicant has been notified that their background checks are complete and the badge can be issued, another visit to the credentialing office must be coordinated so that required training can be completed. Each badge applicant must successfully complete this training in order to receive their badge. Once the badge is issued to the applicant, it becomes the responsibility of that individual to maintain control of the badge and use it responsibly.

Airport and Project Applications:
(This space should be utilized to describe the airport's established planning timelines for the badging process including estimated weight times for scheduling training, CHRC, etc. Additionally this space can be used to describe any particular badging requirements and ID requirements.)

## 7.0 ESCORTING

In some cases, certain contractor or subcontractor personnel may be escorted in security-regulated areas as opposed to being issued a badge. For project personnel who will be on site for very limited periods of time over the course of the project, the airport may allow for a badged individual to provide an escort. Escorting personnel must be authorized to conduct escorts and must follow strict guidance while escorting, including maintaining continuous positive control of the escorted individual(s).

Escorting is generally discussed as a training topic in the required security training discussed in Section 6.0 of the CTG, however in some cases additional or modified rules may apply for project work. Escorting processes must be clearly established in advance of any escorting activity. Failure to adhere to established escorting policies can result in penalties against the badgeholder and the escorted individual(s). Contractors should check with the airport sponsor to identify specific escorting requirements and processes.

**Escorting cannot be used as a means to grant access to individuals who do not qualify to obtain a badge, or as a means of circumventing the badging process.**

Airport and Project Applications:
(This space should be utilized to document specific escorting limitations and requirements that contractors should be aware of.)

## 8.0 TOOL MANAGEMENT PLAN

For work occurring in the terminal building environment, a tool management plan should be employed to closely manage and track of the use of tools that would otherwise be prohibited in these areas. A tool management plan should include a detailed inventory of tools to be used within the terminal area, how they will be stored/secured, identification of the individual(s) responsible for administering the plan, a sign-out/sign-in process, and a procedure for addressing any tools identified as missing. Some airports may require other specific information or processes to be included in tool management plans.

**Disposable tools such as razor blades should not be disposed of in trash receptacles available to the public.**

Airport and Project Applications:
(This space should be utilized to describe the airport's specific tool management policies and requirements that contractors should be aware of.)

## 9.0 CHALLENGE PROCEDURES

"Challenging" refers the act of asking to see the badge of another individual located in a SIDA, where badge display is required. When challenging, the challenger should verify that the badge matches those issued by the airport, that the badge photo matches the badgeholder, and that the badge has not expired. Individuals who are challenged are required to produce their badge for inspection. Contractors working in security-regulated areas should be prepared to conduct challenging regularly. Airport or TSA personnel may test contractor personnel by walking through a SIDA either without their badge properly displayed or with a badge that contains incorrect information. Contractor personnel should be prepared to challenge any time a badge is not visible above the waist of the individual. If an individual is found to not have a badge or to have a badge with invalid information, the challenger must report this information to the airport immediately via the designated phone number. If possible, the violating individual should be escorted out of the SIDA and monitored until security or law enforcement personnel arrive. If the violating individual attempts to flee, the challenger should not attempt to pursue, but should report all available information to the airport immediately.

Airport and Project Applications:
(This space should be utilized to document any specific challenging requirements such as the phone number to report unauthorized access to the airport.)

15

## 10.0 SITE ACCESS

Control of access to the project site is a key consideration for any airport construction project. If the site is located within a security-regulated area, additional considerations must be addressed. Whenever possible, as much of the project footprint as is feasible should be located outside of a security-regulated area. If the project site borders a security perimeter, the site can sometimes be "fenced out" so that it is no longer within the regulated area. If completely fencing out the project is not feasible, staging areas should be located outside the security perimeter when possible. As an added measure of security, the staging area can then be contained with a secondary fence and gate. When employing this strategy, it is critical that all personnel understand the location of the security-regulated perimeter and the differences in rules that apply. It is also important to consider that personal vehicles are generally prohibited from entering any security-regulated areas, unless under escort for a specific business purposes.

### 10.1 Gate Guards

Projects requiring ongoing ingress and egress through a security perimeter gate will often be required to employ the use of a gate guard. The contractor may be required to staff the gate guard position or the position may be provided through an existing airport contract with a third-party security provider. Regardless, it is critical that the role of the gate guard is clearly defined, and that sufficient training is provided to individuals who will serve as gate guards.

Common gate guard responsibilities include:

- Verifying the identity and authority of drivers and vehicles requesting access through the gate;
- Inspecting vehicles;
- Logging and tracking gate activity;
- Reporting any suspicious activity; and,
- Ensuring the gate is operated and secured in accordance with security protocols.

Gate guards must have clear instruction as to who can and cannot enter the site through the portal they are staffing, and they must also understand the need to immediately report any unusual activity or security violations. Contractors should expect that gate guards will be tested by TSA or airport personnel. For example, an individual may attempt to gain access through the guard's post without proper credentials. Failure to pass these tests can result in contractual or civil penalties, as well as potentially requiring the gate guard to be replaced.

Gate guards should be provided with a "stop-list," "go-list," or other method of verifying whether an individual should be allowed to access.

**It is recommended that airport security staff work with new gate guard personnel to help them understand the job requirements and duties. Additionally, a general best practice is to tell gate guards to contact airport staff if they are unsure whether they should grant access to a specific individual.**

Airport and Project Applications:
(This space should be utilized to document specific gate guard procedures and requirements applicable to the airport and project.)

## 11.0 ENFORCEMENT PROCEDURES

Security enforcement procedures may be handled by airport operations personnel, law enforcement, TSA, or some combination thereof. As discussed in other sections of the CTG, contractors should assume that their activities are being regularly monitored and could be subject to testing at any time. Penalties for non-compliance may be leveraged by the airport through the ASP, airport rules and regulations, or municipal code, or in some cases may be imposed by TSA. Penalties will range in severity, and can include contractual or civil penalties and criminal charges for serious violations. Contractors should ensure they have a good understanding of the enforcement framework for the airport.

Airport and Project Applications:
(This space should be utilized to document specific security enforcement mechanisms and procedures that will be utilized by the airport.)

# APPENDIX C: PROJECT-SPECIFIC SECURITY PLAN

This appendix provides an outline for a project-specific security plan. Depending on the size and complexity of a project, some airports may wish to develop a documented project-specific security plan that details how the contractor will meet the airport's operational security requirements during the project. This document is also attached to this guidebook in Microsoft Word format to enable airports to use the outline to develop their own plans. Airports may choose to designate this document as SSI once it has been populated with airport and/or project-specific information.

Project Specific Security Plan – Template

# [Insert Project Name]

# Project Security Plan (PSP)

Contractor Name: [Insert Contractor Name]

Date: [Insert Date]

Revised: [Insert Revision Date]

Project Specific Security Plan – Template

## I. Purpose of PSP

The purpose of this Project Security Plan (PSP) is to define how the contractor for [Project Name] will comply will all applicable security requirements established by [Airport Name] and the Transportation Security Administration (TSA).

## II. Project Description

[Provide a general description of the project's scope.]

## III. Project Schedule

[Insert the project's schedule.]

## IV. Project Phasing, Security Impacts, and Mitigations

This section provides an overview of each phase of the project, any security impacts associated with the phase, and the security mitigations (e.g., policies, procedures, personnel, etc.) that will be utilized to ensure security compliance.

A. Phase [Insert Phase Designation]

1. Phase Description/Schedule – [Insert a Phase Description and the schedule, including how long the phase is and when the work will be performed. Include maps or diagrams as appropriate.]
2. Security Impacts/Vulnerabilities – [Describe the impacts the phase will have on typical security policies, procedures, and operations, and any security vulnerabilities the phase could create.]
3. Security Technology Impacts – [Identify and describe any security technology impacts, such as impacts to CCTV, access control readers, etc.]
4. Access Points/Controls – [Identify and describe security access points to the construction project and the access control strategy. Include maps or diagrams as appropriate.]
5. Security Mitigations Strategies to Ensure Compliance – [Describe the security mitigation strategies that will be utilized to ensure security compliance.]

B. Phase [Insert Phase Designation]

1. Phase Description/Schedule – [Insert a Phase Description and the schedule, including how long the phase is and when the work will be performed. Include maps or diagrams as appropriate.]
2. Security Impacts/Vulnerabilities – [Describe the impacts the phase will have on typical security policies, procedures, and operations, and any security vulnerabilities the phase could create.]
3. Security Technology Impacts – [Identify and describe any security technology impacts, such as impacts to CCTV, access control readers, etc.]
4. Access Points/Controls – [Identify and describe security access points to the construction project and the access control strategy. Include maps or diagrams as appropriate.]
5. Security Mitigations Strategies to Ensure Compliance – [Describe the security mitigation strategies that will be utilized to ensure security compliance.]

C. Phase [Insert Phase Designation]

1. Phase Description/Schedule – [Insert a Phase Description and the schedule, including how long the phase is and when the work will be performed. Include maps or diagrams as appropriate.]
2. Security Impacts/Vulnerabilities – [Describe the impacts the phase will have on typical security policies, procedures, and operations, and any security vulnerabilities the phase could create.]
3. Security Technology Impacts – [Identify and describe any security technology impacts, such as impacts to CCTV, access control readers, etc.]
4. Access Points/Controls – [Identify and describe security access points to the construction project and the access control strategy. Include maps or diagrams as appropriate.]
5. Security Mitigations Strategies to Ensure Compliance – [Describe the security mitigation strategies that will be utilized to ensure security compliance.]

# APPENDIX D: CONSTRUCTION SECURITY CHECKLISTS

This appendix provides a number of construction security checklists. These checklists are also attached to this PDF in Microsoft Excel format to enable airports to use and modify them based on their circumstances. The following checklists are included:

- Security Stakeholder Engagement Checklist for Project Planning and Execution
- Security Training Checklist for Contractor Personnel
- Gate Guard Training/Documentation Checklist
- Tenant Led Construction Planning Checklist
- Daily Construction Inspection Checklist

# Security Stakeholder Engagement Checklist for Airport Construction Projects

**Checklist Purpose:** The purpose of this checklist is to aid airport personnel in identifying the security stakeholders that may need to be involved in security-related aspects of an airport construction project. The checklist can be utilized during initial project planning, design, and execution to aid in identifying key security stakeholders for an airport construction project.

**Instructions on How to Use the Checklist:** This checklist presents a list of common security stakeholders for airport construction projects, identifies their general security interest in airport construction projects, and allows the person completing the checklist to notate when and how the stakeholder will be engaged in the project. Checklist users should review the list of security stakeholders and their general security interest to determine which stakeholders need to be involved based on the scope of the project. Then the user should identify how the stakeholder will be engaged in the project and identify any individuals representing the stakeholder group who need to be engaged. Ideally, this checklist should be completed during initial project planning and updated as needed throughout design and execution of the project. Broader stakeholder groups (e.g. TSA) that may have a diverse interest in various security-related aspects of a project are grouped and color-coded for ease of use.

**Note Regarding Checklist Customization:** Airports should customize this checklist based on the organization of their security stakeholders and their responsibilities. For example, in some cases an airport's staff that is responsible for 1542 compliance may be separate from the airport's law enforcement staff. In other instances, the airport's law enforcement staff may be responsible for 1542 compliance.

| Security Stakeholder | | Stakeholder's General Security Interest Related to Airport Construction Projects | Does This Stakeholder Group Need to Be Involved in This Construction Project? (Yes/No) | Identify How This Stakeholder Will be Engaged in the Project Planning, Design, and Execution (e.g., invited to project meetings, reviewing plans, specific meetings at various project milestones, etc.) | Identify Specific Individuals Representing the Stakeholder Who Need to Be Engaged |
|---|---|---|---|---|---|
| Airport Security Staff | Security 1542 Compliance | Primary focus is compliance with Part 1542 security requirements. Should be engaged if the project will take place in or adjacent to any area regulated under Part 1542 (e.g., AOA, Sterile, Secured, SIDA) and if the ASP will need to be amended. | | | |
| | Security Operations | Primary focus is managing daily security operations. Should be engaged in any project taking place on airport property. | | | |
| | Security Technology/Systems | Primary focus is on ensuring the continued operations of security technologies/ systems at the airport (e.g. CCTV, access control, etc.). Should be engaged if the project has the potential to impact any of the airport's security technology systems. | | | |
| | Badge and ID | Primary focus is on ensuring the administration of the airport's security badging program. Should be engaged if the project will require personnel to be badged. | | | |
| | Airport Law Enforcement | Primary focus is on ensuring public safety, traffic control, and enforcing federal, state, and local laws. Should be engaged in any project taking place on airport property. | | | |
| Transportation Security Administration (TSA) | TSA Regulatory (Local) | Primary focus is on ensuring that airport's comply with regulatory standards established by the TSA and the proper upkeep of the airport's ASP. Should be engaged if the project is located in or adjacent to a regulated area (e.g. SIDA, AOA, Sterile, Secured) or that could require an amendment to the ASP. | | | |
| | TSA Screening (Local) | Primary focus is on the safe, efficient, and secure screening of the traveling public. Should be engaged if the project will impact the operation of the airport's Security Screening Checkpoint (SSCP). | | | |
| | TSA Law Enforcement (Local) | Primary focus is on public safety and coordination with local law enforcement. Should be engaged if the project is expected to have a significant impact to law enforcement operations at the airport. | | | |
| | TSA Checkpoint Design (Headquarters) | Primary focus is on the design and layout of airport SSCPs. Should be engaged if the project is expected to require any modifications to the SSCP including the relocation of any SSCP equipment. | | | |
| Other Security Stakeholders | Contract Security Providers | Primary focus is on the administration of security related duties assigned to them by the airport. This commonly includes serving as a gate guard and escorting requirements. Should be engaged if the project will require their services. | | | |
| | U.S. Customs and Border Protection (CBP) | Primary focus is the processing of international flights arriving at the airport and ensuring the security of CBP related facilities. Should be engaged if the project will impact any CBP facility or if it will impact international flight operations. | | | |
| | Community (Non-Airport) Law Enforcement | Primary focus is on traffic control and law enforcement duties outside of airport property. Should be engaged if the project will impact vehicle traffic operations outside of airport property or if the project may impact law enforcement operations outside of the airport. | | | |

# Airport Security Training Checklist for Contractors

**Checklist Purpose:** The purpose of this checklist is to aid airport personnel in identifying the security-related training that airport contractors should be required to complete based on the scope and size of the project.

**Instructions on How to Use the Checklist:** This checklist provides a listing of common security-related training that an airport may provide to contractors as part of their regulatory compliance efforts, and to improve a contractor's awareness of security-related items. Airport personnel should identify the training contractors will be required to completed during the project design effort. The checklist identifies various potential security training programs, describes their focus, and states when they may be appropriate to administer to contractor staff. Not all contractor staff may be required to undergo each training. Consequently, the checklist enables users to identify specific individuals or groups of individuals (e.g., site supervisors/foreman) who should take each training.

**Note Regarding Checklist Customization:** Airports should customize this checklist based on the specific security training programs they offer. If an airport doesn't offer one of these training programs but believes that educating contractor personnel related to the subject matter would be prudent, airport staff should consider at least holding a meeting with key contractor personnel to discuss all requirements related to the topic. For example, if the airport doesn't have a formal tool management training program but believes training related to the airport's tool management requirements would be beneficial to the contractor, the airport should consider meeting with key contractor personnel to review the requirements.

| Contractor Training Programs | Training Program Description | When Should an Airport Consider Administering this Training to a Contractor | Should Contractor Personnel Be Required to Complete This Training for the Project? (Yes/No) | Identify Who Should be Required to Take the Training |
|---|---|---|---|---|
| **Airport Security Badge Training** | Personnel are required to complete this training under Part 1542 to receive an airport security badge that will allow them access to protected areas (e.g., SIDA, AOA, Sterile, and Secured). | If a construction project is going to require access to a protected area, then the airport should ensure that a sufficient number of contractor personnel are trained and badged to support security compliance during the project. | | |
| **Authorized Signatory Training** | This is the training personnel are required to complete under Part 1542 to be an Authorized Signatory (AS) to approve individuals to receive an airport security badge. | If a construction project is going to require access to a protected area and contractor personnel will need to receive an airport security badge, Authorized Signatory Training should be completed. | | |
| **Project Specific Security Logistics Training** | Some airports provide project orientation training to help contractor personnel understand how the airport's security requirements apply to the project they will be completing. This type of training is typically tailored to the project the contractor will be completing and focuses on how security compliance is to be maintained for the project. | This training should be considered if the project will take place inside a protected area, if any complicated security requirements will be applicable, and/or if the contractor has limited familiarity with the airport. | | |
| **Escorting Training** | This training focuses on communicating escorting-related security requirements to contractor personnel. | This training should be considered if the contractor will employ dedicated individuals who will be responsible for escorting other individuals. | | |
| **Tool Management Training** | Some airports establish specific tool management programs for work taking place within the Sterile Area. This training would provide details regarding the airport's tool management requirements. | This training should be considered if the contractor will be bringing construction tools into the Sterile Area. | | |
| **Gate Guard Training** | This training provides specific guidance to individuals who will be serving as gate guards for the project. It will communicate specific policies and procedures they should be aware of. | This training should be considered if the contractor will have individuals serving as gate guards for an access point during the project. | | |

# Gate Guard Training Checklist

**Checklist Purpose:** The purpose of this checklist is to aid airport personnel in training gate guards to perform their duties during a construction project. Gate guards are individuals who control access to protected areas during a project.

**Instructions on How to Use the Checklist:** This checklist provides a list of common topics that gate guards should be trained on prior to completing their duties. This checklist includes locations for documenting information about the training for record keeping purposes.

**Note Regarding Checklist Customization:** Airports should customize this checklist based on the specific information they feel should be communicated to gate guards to enable them to properly perform their duties.

**Name of Individual Completing Gate Guard Training:** _____

**Date of Training:** _____

**Airport Staff Member Administering Training:** _____

| Gate Guard Training Topics | Completed (Yes/No) | Trainers Initials |
|---|---|---|
| Gate Opening/Closing Operation | | |
| Properly Checking Security Badges | | |
| Utilizing the "Stop List" or "Go List" | | |
| Vehicle Inspection Requirements | | |
| Emergency Procedures | | |
| When to Contact Airport Security for Assistance | | |
| Escorting Procedures | | |

# Tenant-Led Construction Checklist

**Checklist Purpose:** The purpose of this checklist is to aid airport personnel with ensuring the security regulatory compliance of airport construction projects led by tenants. The results of the research identified tenant-led projects as a particular area of vulnerability. These projects could include terminal, hangar, and other development projects funded and led by a tenant instead of the airport.

**Instructions on How to Use the Checklist:** This checklist includes a list of the actions airports should take during the planning, design, construction, and activation phases of tenant-led construction projects. Several items appear in multiple phases. Airports should review the list of items with each phase and ensure they are completed in each phase. It is important that airport security personnel stay engaged in all four phases of the project.

**Note Regarding Checklist Customization:** Airports should customize this checklist to incorporate any existing policies and procedures they have that are related to tenant-led construction projects. This includes integration with the airport's Tenant Improvement Program (TIP), if one is established.

| | Action Items | Completed (Yes/No) | Comments/Notes |
|---|---|---|---|
| Planning | **Single Point of Contact:** Require the tenant to identify a single point of contact on the project team for all security-related matters and coordination. | | |
| | **Airport Security Integration in Project Planning:** Identify an individual from the airport security team to participate in project planning meetings. | | |
| | **Identify Security-Related Impacts and Requirements:** Work with the tenant to identify specific security impacts and requirements that the project design and construction will need to integrate. | | |
| | **Review Project Documents:** Airport security personnel should review all project planning documents that will be used to inform project design. Security personnel should ensure the documents properly integrate airport security requirements. | | |
| | | | |
| Design | **Single Point of Contact:** Require the tenant to identify a single point of contact on the project team for all security-related matters and coordination. | | |
| | **Airport Security Integration in Project Design:** Identify an individual from the airport security team to participate in project design meetings. | | |
| | **Engage with TSA:** During project design, TSA should be engaged to ensure they are familiar with the project and any concerns they have are addressed prior to project bidding and construction. | | |
| | **Evaluate Feasibility of Fencing Out the Construction Site:** During design, work with the designer and tenant to evaluate the feasibility of fencing the entire project out of protected areas (e.g., AOA, SIDA, Sterile, Secured) to minimize the potential for compliance issues. | | |
| | **Identify Security-Related Impacts and Requirements:** Work with the tenant to identify specific security impacts and requirements that the project construction will need to integrate. | | |
| | **Review Final Design and Bidding Documents:** Airport security personnel should review all project design and bidding documents that will be used to bid the construction. Security personnel should ensure the documents properly integrate airport security requirements. | | |
| | | | |
| Construction | **Project Security Contact (24/7):** Require the tenant and contractor to provide the airport with a single point(s) of contact for all security-related matters. Requiring a contact to be available 24/7 is important during construction and activation. | | |
| | **Airport Security Integration in Project Status Meetings:** Identify an individual from airport security to participate in all regularly scheduled project status meetings and request that security be a standing agenda item. | | |
| | **Conduct Regular Inspections:** Airport security staff should conduct regular inspections of the project area to ensure security procedures are being followed. | | |
| | **Contractor Training:** Work with the contractor to ensure their personnel have received the proper security training. | | |
| | **Security Signage:** Ensure proper security signage is posted in the construction area to remind contractor personnel of security requirements. | | |
| | | | |
| Activation | **Project Security Contact (24/7):** Require the tenant and contractor to provide the airport with a single point(s) of contact for all security-related matters. Requiring a contact to be available 24/7 is important during construction and activation. | | |
| | **Airport Security Integration in Project Status Meetings:** Identify an individual from airport security to participate in all regularly scheduled project status meetings and request that security be a standing agenda item. | | |
| | **Conduct Regular Inspections:** Airport security staff should conduct regular inspections of the project area to ensure security procedures are being followed. This can be especially important during activation, as new personnel may be on the project site who have not worked on the project previously. | | |
| | **Ensure Proper Activation of Security Systems and Infrastructure:** Airport security staff should work with the tenant to verify that any security systems related to Part 1542 compliance are working properly as part of facility activation. | | |

# Daily Construction Security Inspection Checklist

**Checklist Purpose:** The purpose of this checklist is to aid airport personnel with inspecting airport construction sites to ensure their compliance with security standards and procedures.

**Instructions on How to Use the Checklist:** This checklist provides a list of common items that should be checked for security compliance as part of a daily construction inspection.

**Note Regarding Checklist Customization:** Airports should customize this checklist based on their specific security requirements/practices.

**Name of Airport Construction Project:** _____

**Name of Individual Completing Inspection:** _____

**Date/Time of Inspection :** _____

| Inspection Item | Any Deficiencies (Yes/No) | If Yes, Describe the Deficiency |
|---|---|---|
| Access control points are properly secured | | |
| Access control systems are functioning properly | | |
| Gate guard is performing duties in compliance with standards | | |
| Escorting is being conducted in compliance with standards | | |
| Individuals are properly badged | | |
| Airport security badges are properly displayed | | |
| Vehicles are properly marked | | |
| Tools are stored and tracked properly | | |
| Construction trash is disposed of properly | | |
| No conditions are present that could create a security vulnerability (e.g., construction apparatus close to a fence that could enable someone to circumvent a fence) | | |