OSPREY

FLIGHT SOLUTIONS

Osprey Flight Solutions Risk Assessment Methodology

This document gives an overview of the methodology and terminology used in Osprey Flight Solutions' risk assessments, notifications and reports. It is separated into ground risk assessments (airports and country) and airspace risk assessments (airspace risk areas).

Airport/Country

Airport/Country Assessment - Risk Categories & Criteria

The Airport/Country Assessment evaluates ten separate risk criteria of a ground-based aviation operating environment. The ten risk categories are 1) terrorism evaluation, 2) security evaluation, 3) physical airport security evaluation, 4) operational evaluation, 5) crew support evaluation, 6) infrastructure evaluation, 7) safety audit – international, 8) safety assessment – national, 9) safety management system (SMS) evaluation and 10) safety surveillance evaluation. The three following risk categories of Security, Operational and Safety further stratify the methodology for assessing airport/country risk. Each risk criteria is given a score of between 0-5 which, when totalled, equates to the entire Airport/Country score of between 0-50.

Lower Bound	Descriptor	Upper Bound
>0	**INCIDENTAL**	<=10
>10	**LOW**	<=20
>20	**MODERATE**	<=30
>30	**HIGH**	<=45
>45	**EXTREME**	<=50

Tel: +44 (0) 2086 112 659 | info@ospreyfs.com | www.ospreyflightsolutions.com
Osprey Flight Solutions is the trading name of Sora Risk Solutions Ltd and registered in England and Wales. Company Registration number 11418513

COMMERCIAL IN CONFIDENCE

Osprey Flight Solutions Risk Assessment Methodology V3.18   *July 2024*

Risk Category	Security
Risk Criteria	**Definition**
Terrorism Evaluation	Terrorism evaluation is a quantified analysis that systematically ranks terrorist activity by country on a global scale. The score qualifies multiple factors connected to terrorist attacks to express a quantified view of the impact of terrorist activity over time to illustrate trends and identify patterns. Terrorism is the use or threat of violence by non-state actors against state or civilian targets to advance an ideological cause by influencing a wider audience
Security Evaluation	Security evaluation assesses the likelihood of state or non-state actors engaging in disruptive, hostile and or violent acts that exploit vulnerabilities of assets and may cause harm to operators.
Physical Airport Security Evaluation	Physical Airport Security scoring reflects the level of effective implementation of ICAO Annex 17 — Security on regional, national and airport levels (as well by industry and all other stakeholders). The AVSEC Evaluation also addresses measures outlined in the US TSA Aviation Guidelines to secure facilities, aircraft, passengers and crew: **People** ·Based ·Transient ·Itinerant ·Other **Aircraft** ·Based ·Transient **Infrastructure** ·Airport ·Facilities ·Symbolic ·Specific - Hangars - Locks - Key control - CCTV - Intrusion detection system - Fencing - Perimeter security - Access points - Gates

- Lighting

- Signage

- Identification system

- Airport planning

Caveat: The status of armed conflict within the country plays a key role in determining the overall score. Countries in an active state of war and/or armed conflict may not be able to maintain pre-war levels of aviation security for various reasons and these factors are evaluated by Osprey.

Risk Category	Operational
Risk Criteria	Definition
Operational Evaluation	Operational evaluation assesses the influence of security, political stability, government effectiveness, regulatory, macroeconomic, trade, financial, tax policy, labour market and infrastructure factors on business activity in a country, and the likelihood of state and non-state actors either facilitating or impeding efficient operations.
Crew Support Evaluation	Hotel accommodation (HOTAC), crew ground transport and medical facility access are the key components of the Crew Support Evaluation. The Crew Support Evaluation is comprised of the following outputs scored on a 1-5 scale: - Vetted lodging and transport + access to medical facilities = '1' - Secure lodging and transport + access to medical facilities = '2' - Short-turnaround operation + access to medical facilities = '3' - 24/7 life support + access to medical facilities = '4' - Non-viable operation = '5' - typically reserved for airports in country in an active state of war and/or armed conflict. In cases such as this, much of this evaluation will look at internal and external government advisories on travel and movement.

	International Airport An international airport is an airport that offers customs and immigration facilities for passengers travelling between countries. International airports are typically larger than domestic airports and often feature longer runways and facilities to accommodate the heavier aircraft commonly used for international and intercontinental travel. - Tier 1 = score of '1' - Tier 2 = score of '2' **Domestic Airport** A domestic airport is an airport that handles only domestic flights—flights within the same country. Domestic airports do not have customs and immigration facilities and so cannot handle flights to or from foreign airports. These airports normally have short runways sufficient to handle short- or medium-haul aircraft and regional air traffic. In less developed countries, domestic airports may not have adequate security checks, baggage screening or metal detectors. - Tier 1 = score of '3' - Tier 2 = score of '4'
Aviation Infrastructure Evaluation	**Non-viable operation** = score of '5' – typically reserved for airports in a country in an active state of war and/or armed conflict.
Risk Category	**Safety**
Risk Criteria	**Definition**
Safety Audit – International	Automated ICAO Universal Safety Oversight Audit Programme (USOAP) score averages the following metrics: primary aviation legislation and civil aviation regulations; civil aviation organisation; personnel licensing and training; aircraft operations; airworthiness of aircraft; aircraft accident and incident investigation; air navigation services; and aerodromes and ground aids. The status of armed conflict within the country plays a key role in determining the overall score. Countries in an active state of war and/or armed conflict may

	not be able to maintain pre-war levels of aviation safety for various reasons and these factors are evaluated by Osprey.
Safety Assessment – National	Assessments conducted by leading national-level civil aviation governing bodies (US, UK, France, Germany, Australia, China and India) to determine compliance with international standards by focusing on the critical elements of an effective aviation safety oversight authority. The key critical elements of national-level aviation assessments include the following: primary aviation legislation; specific operating regulations; country civil aviation system and safety oversight functions; technical personnel qualification and training; technical guidance, tools and the provision of safety critical information; licensing, certification, authorisation, and approval obligations; surveillance obligations; and resolution of safety concerns. The status of armed conflict within the country plays a key role in determining the overall safety assessment score. Countries in an active state of war and/or armed conflict may not be able to maintain pre-war levels of aviation safety for various reasons and these factors are evaluated by Osprey.
Safety Management system (SMS) Evaluation	Automated ICAO Safety Management score provides a quantified metric of the effective implementation of the country's SMS, aerodrome studies and airport risk assessments. The status of armed conflict within the country plays a key role in determining the overall score. Countries in an active state of war and/or armed conflict may not be able to maintain pre-war levels of aviation safety for various reasons and these factors are evaluated by Osprey.
Safety Surveillance Evaluation	Automated ICAO Surveillance Obligations score provides a quantified metric of the effective implementation of a country's processes, such as inspections and audits, to proactively ensure that aviation license, certificate, authorisation and/or approval holders continue to meet the established requirements and function at the level of competency and safety required by the State to undertake an aviation-related activity for which they have been licensed, certified, authorised and/or approved to perform. The status of armed conflict within the country plays a key role in determining the overall score. Countries in an active state of war and/or armed conflict may not be able to maintain pre-war levels of aviation safety for various reasons and these factors are evaluated by Osprey.

Airport - Level of Risk Definitions

Incidental

Rarely occurring security and safety incidents have a minimal negative impact on the airport operating environment affecting civil aviation flight operations.

Low

Infrequently occurring security and safety incidents have a minor negative impact on the airport operating environment affecting civil aviation flight operations.

Moderate

Occasionally occurring security and safety incidents have a significant negative impact on the airport operating environment affecting civil aviation flight operations.

High

Frequently occurring security and safety incidents have a severe negative impact on the airport operating environment affecting civil aviation flight operations.

Extreme

Persistently occurring security and safety incidents have a critical negative impact on the airport operating environment affecting civil aviation flight operations.

Country - Level of Risk Definitions

Incidental

Rarely occurring security and safety incidents have a minimal negative impact on the country's aviation operational environment affecting civil aviation flight operations.

Low

Infrequently occurring security and safety incidents have a minor negative impact on the country's aviation operational environment affecting civil aviation flight operations.

Moderate

Occasionally occurring security and safety incidents have a significant negative impact on the country's aviation operational environment affecting civil aviation flight operations.

High

Frequently occurring security and safety incidents have a severe negative impact on the country's aviation operational environment affecting civil aviation flight operations.

Extreme

Persistently occurring security and safety incidents have a critical negative impact on the country's aviation operational environment affecting civil aviation flight operations.

Airspace Risk Areas

Airspace Risk Area Assessment - Risk Categories & Criteria

The Airspace Risk Area assessment evaluates four separate risk categories of an airspace operating environment. The four risk categories are 1) Capability, 2) Intent, 3) Operational and 4) Airspace. The Airspace Risk Area and risk category scoring is completed at three separate altitude levels: 0 - FL100, FL100 - FL260 and FL - 260 - UNL. Each risk category is given a score of between 0-25 which when totalled equates to the entire Airspace Risk Area score of between 0-100.

Lower Bound	Descriptor	Upper Bound
>0	**INCIDENTAL**	<=20
>20	**LOW**	<=40
>40	**MODERATE**	<=60
>60	**HIGH**	<=90
>90	**EXTREME**	<=100

Capability

The Capability risk category of the Airspace Risk Area assessment addresses non-state actor and in-conflict state-actor capability to target aviation. The five risk criteria addressed are as follows: 1) availability of weapons, 2) portability of weapons, 3) lethality of weapons, 4) logistical constraints and 5) expertise in use of weapons. Each risk criteria is given a score of between 0-5 which, when totalled, equates to the risk category score of 0-25.

Intent

The Intent risk category of the Airspace Risk Area assessment addresses non-state actor and in-conflict state-actor intent to target aviation. The five criteria addressed are as follows: 1) terrorism evaluation, 2) security evaluation, 3) documented targeting of military assets, 4) documented targeting of civilian assets and 5) current civil aviation flight prohibitions. Each risk criteria is given a score of 0-5 which, when totalled, equates to the risk category score of 0-25.

Airspace

The Airspace risk category of the Airspace Risk Area addresses state actor structural activities that impact the aviation environment. The five criteria addressed are as follows: 1) air navigation service provision, 2) airspace congestion, 3) civil/military deconfliction, 4) airspace infringement and 5) air & air defence activity. Each risk criteria is given a score of 0-5 which, when totalled, equates to the risk category score of 0-25.

Operational

The Operational risk category of the Airspace Risk Area addresses state actor procedural, natural landscape and infrastructure-based dimensions of the aviation environment. The five criteria addressed are as follows: 1) operational evaluation, 2) conventional conflict & insurgency, 3) infrastructure evaluation, 4) environmental evaluation and 5) Customs, Immigration, and Quarantine (CIQ) process. Each risk criteria is given a score of between 0-5 which, when totalled, equates to the risk category score of 0-25.

Airspace Risk Area - Level of Risk Definitions

Incidental

Rarely occurring security and safety incidents have a minimal negative impact on the airspace environment affecting civil aviation flight operations.

Low

Infrequently occurring security and safety incidents have a minor negative impact on the airspace environment affecting civil aviation flight operations.

Moderate

Occasionally occurring security and safety incidents have a significant negative impact on the airspace environment affecting civil aviation flight operations.

High

Frequently occurring security and safety incidents have a severe negative impact on the airspace environment affecting civil aviation flight operations.

Extreme

Persistently occurring security and safety incidents have a critical negative impact on the airspace environment affecting civil aviation flight operations.

Osprey Incident Database & Notifications

Osprey Incident Database

The Osprey incident database (containing c. 5,000,000 data points) is updated in real time by our analysts. It contains incidents or events occurring daily that are assessed to have a minor, significant, severe or critical potential impact on operations within a country, airspace or airport. Osprey Alerts, discussed below, are issued on incidents or events within the database that are assessed to have a significant, critical or severe potential impact on aviation operations. Within the database, our incidents are first stratified into the categories of Aviation Safety, Aviation Security, Conventional Military Activity and Conflict Zone Dynamics. The database includes 24 incident types related to aviation safety, security, operational and regulatory occurrences as well as conflict zone dynamics and conventional military issues. The database is fully searchable in free text format, and the following sortable functions can be applied to the incident data: country, geo-place (i.e. province, district, city or airport), incident event type or weapon type (if applicable). In addition, users can select multiple fields within the sortable functions and set specific date spans to generate custom incident data reports for trend analysis purposes.

Ping Category	Aviation Safety
Ping Type	Definition
Accident	Crash of any form of air asset, including both civilian and military aircraft

Aviation Safety Event	An incident or event that inhibits the safe conduct of flight activity by an air asset or operation of an aviation installation
Civil Aviation Notice	Airport/airspace-specific guidance released by governing bodies regarding the safe and secure conduct of civilian flight operations
Diverts	Unplanned landing at airport by an air asset, civilian and/or military
GPS Event	GPS and or electromagnetic interference that directly affects the safety of civilian flight activity
Bio-Safety	Specific practices, safety equipment and specially designed buildings to ensure that workers, the community, and the environment are protected from infectious agents and toxins and biological hazards
Lasing Event	Use of a laser to interfere with civil aviation flight activity
UAV Event	Non-military drone activity that involves a nefarious intent, kinetic attack or criminal element

Ping Category	Aviation Security
Ping Type	Definition
Aviation Security Event	An incident or event that inhibits the secure conduct of flight activity by an air asset or operation of an aviation installation
Corruption	Corruption, bribery, scams, money laundering, kickbacks in involving aviation entities
Crime	Robbery, theft, petty crime, kidnapping and other forms of non-terrorism or conflict-associated violence within local environs of an aviation installation
Social Unrest	Protest, demonstration, rally, industrial action, wildcat strike, walk-out, sit-in, march that occurs within local environs of an aviation installation

Cyber Event	Cyber attacks, computer or systems outages, IT glitches, data breaches or loss of sensitive information involving aviation entities

Ping Category	Conventional Military Activity
Ping Type	Definition
POL/MIL Activity	POL/MIL Activity is short for "Political/Military Activity" and includes security incidents and events related to both the non-military and military spheres of defence – not related to military aircraft activity
Military Aircraft Movements	Military aircraft movements within national air borders and sourced directly via publicly available ADS-B transponder data
Air Patrol & Air Intercept	Military air activity outside national air borders that occurs in contested or sensitive airspace
Missile Launch	Unannounced missile launches (i.e. without NOTAMs or No-Sail warning)
Weapons Test	Weapons development - including legal or announced missile tests - that does not involve air and air defence assets

Category	Conflict Zone Dynamics
Ping Type	Definition
Airstrikes	Military aircraft, drone or helicopter air-to-surface strikes
Projectile Event	Attack using rocket, mortar, artillery, RPG, ATGM, ATW, recoilless rifle, tank shelling or launched IED and AAA (not against aircraft)
Weapons Cache & Trafficking	Displays or weapons by actors or weapons caches recovered from actors that include rockets, mortars, RPGs, artillery, tanks, AAA, ATWs, recoilless rifles, ATGMs, MANPADS, SAM systems and omilitary-grade heavy weapons
Inflight Attack - Asset	Armed attack targeting an aerial target: helicopter, aircraft, drone, missile or aerostat

Airport/Airbase Attack	Armed attack targeting an airport, heliport, airbase, airfield or military installation capable of supporting aviation

Osprey Notifications

Forecasts

Osprey issues Forecasts on activity that has a realistic possibility, is likely or has a near certain likelihood of occurring in the future. Each Osprey Forecast notification includes a specific likelihood probability and timeframe for which the activity is expected to occur, along with defined geographic areas, airspaces, countries and/or airports which may be impacted. Please see below for the definitions related to likelihood and timeframes:

Likelihood

Unlikely	Rare	<10% chance
Possible	Infrequent	10% up to 35% chance
Realistic Possibility	Occasional	35% up to 65% chance
Likely	Frequent	65% up to 90% chance
Near Certain	Persistent	90% or greater chance

Timeframes
- **Near-term:** 1-7 days; can be articulated in hours, dates, days or weeks
- **Short-term:** 1 week to 3 months; can be articulated in weeks, dates or months
- **Medium-term:** 3 months to 9 months; can be articulated in dates or months
- **Long-term:** 9 months to 2 years; can be articulated in dates, months or years

Osprey Forecasts include a set of recommendations and/or advice to aid in minimising the impact of the activity and/or limit exposure to the activity to flight operations. Our Forecasts also include lists of most recent historical data from the Osprey incident database. The incident data provides operators with additional awareness of aviation safety, security, operational and regulatory occurrences as well as conflict zone dynamics and conventional military issues that may affect flight operations within the country, airspace or airport.

Standard Alerts

Osprey delivers Standard Alerts on incidents or events that are assessed to have a significant potential impact on operations within a country, airspace or airport. In addition, Standard Alerts are issued when the incidence re-enforces our assessment, advice and recommendation for a country, airspace or airport. Osprey Standard Alerts cover the following topics: aviation security, safety, operational and regulatory occurrences as well as conflict zone dynamics and conventional military issues.

Critical Alerts

Osprey delivers Critical Alerts when incidents or events cause severe disruption to civilian flight operations or are assessed to have a critical impact on aviation operations within a country, airspace or airport. In addition, our Critical Alerts cover incidents or events where the situation precipitates aviation industry-wide visibility. Critical Alerts cover the following topics: aviation security, safety, operational and regulatory occurrences as well as conflict zone dynamics and conventional military issues.

Situation Updates

Osprey delivers Situation Updates to highlight developments in a specific situation (e.g. conflict or other geopolitical issue or major incident) that is assessed to have a significant potential impact on operations within a country, airspace or airport. Each Osprey Situation Update includes a specific set of recommendations, which operators are advised to enact to mitigate security, safety and operational risks to their aircraft, passengers and crew. Our Situation Updates also include lists of the most recent historical data from the Osprey database to provide context.

Regulatory Updates

Osprey delivers Regulatory Updates to highlight prohibitions, restrictions and recommendations issued by industry regulators assessed by Osprey to have a significant potential impact on operations. Each Osprey Regulatory Update includes relevant analysis of potential security, safety and operational risks to aircraft, passengers and crew as well as lists of the most recent historical data from the Osprey incident database to provide context.

Risk Rating Change Update

Osprey delivers Risk Rating Change Updates to alert Osprey clients to changes in our untreated airport, airspace or country risk ratings. Each Osprey Risk Rating Change Update includes relevant analysis of the factors that have contributed to the change and an assessment of likely further developments. Our Risk Rating Change Updates also include relevant analysis of potential security, safety and operational risks to aircraft, passengers and crew as well as lists of the most recent historical data from the Osprey incident database to provide context.

Thematic Analysis

Osprey delivers Thematic Analysis to highlight developments and trends in longstanding issues that are assessed to have a potential impact on operations within a country, airspace or airport. Such issues include gold-smuggling, drug trafficking and irregular migration, as well as terrorism, cyber incidents, environmental activism and unruly passengers. Osprey's Thematic Analysis alerts include a set of recommendations and/or advice to aid in minimising the impact of the activity and/or limit exposure to the activity to flight operations as well as lists of recent historical data from the Osprey incident database to provide context.

Osprey Glossary

The glossary below defines the terminology of our Risk Mitigation Recommendations, which are contained in Osprey alerts as well as airspace risk area, airport and country reports. For more specific information on our Risk Mitigation Recommendations and terminology and to ensure you understand the provisions we advise for safe and secure flight operations, please consult your account manager.

Threat	A threat is typically associated with a deliberate intention to cause harm or disruption.
Hazard	A hazard is a condition or situation that has the potential to cause harm or disruption, often without any intent behind it.
Violent Non-State Actors (VNSAs)	VNSAs are individuals or organisations that have economic, political or social power and are able to influence at a national and sometimes international level but do not belong to or ally themselves with any particular country or state, who employ violence in pursuit of their objectives. VNSAs play a prominent, often destabilising role in nearly every humanitarian and political crisis faced by the international community. Types of VNSAs are: • Warlords • Militias • Insurgencies • Terrorist organisations • Criminal organisations • Gangs
State Actors	State actors are constrained by and operate within the structural hierarchy of the international system. State actors have the autonomous capacity to determine their own purposes and interests. In addition, State actors typically have the capability to mobilise human and material resources to achieve these purposes

	and interests. State actors often possess enough to influence the state-to-state relations or the behavior of VNSAs in the global system.
Anti-aircraft artillery (AAA)	AAA weapons are designed to attack aircraft via a high rate of fire of unguided ammunition shells with a caliber up to 100mm. AAA systems 57mm in caliber and below are capable up to approximately FL200 and pose no threat to operations at cruising altitude with most aircraft flying above FL300. However, aircraft are vulnerable upon ascent after take-off and descent while landing. AAA systems above 57mm in caliber can be capable up to approximately FL400 and pose a kinetic threat to aircraft at cruising altitude. A plethora of AAA weapons are available to VNSAs in conflict zones and failed states across the globe. AAA systems in the possession of VNSAs are highly mobile; the majority are vehicle-mounted and some are towed/self-propelled. Vehicle mounted and towed/self-propelled AAA weapons are relatively easy to use; however, these systems are highly inaccurate.
Conventional surface-to-air missile (SAM) systems	Conventional SAM systems are typically radar-guided, some have an effective operating altitude that reaches above FL900, and mainly are reliant upon an infrastructure to support their employment. When effectively employed, these systems are highly lethal and are likely to lead to a catastrophic aircraft loss. At this time, VNSA groups in the Ukraine, Yemen, Libya, Nagorno-Karabakh and Syria are in possession of conventional SAM systems and or components of these air defence weapons. The threat posed by conventional SAM systems to aircraft is present at nearly all altitudes, including flight operations above FL300, in any airspace where VNSAs possess these types of air defence weapons.
Manportable Air Defence Systems (MANPADS)	MANPADS are essentially shoulder-fired missiles used to target aircraft and usually guided by an infrared seeker. MANPADS are short-range SAM systems intended for attacking and defending against low-flying aircraft at altitudes of up to approximately FL200-260. Because MANPADS are easy to transport, conceal, and use – and because a single successful attack against an airliner would have serious consequences for the international civilian aviation industry – they are particularly attractive weapons to VNSAs. With most aircraft flying above FL300, MANPADS pose no threat to aircraft at a typical cruising altitude. However, aircraft are vulnerable as they transit the threat envelope upon ascent after takeoff and descent upon landing.

Air-to-Air Missile (AAM) & Air-to-Air Gun (AAG)	The risk factors (and mitigations) associated with an unintentional attack via AAM or AAG fired by a military aircraft, due to misidentification of civilian aircraft flying in conflict zones or zones of high tension/sensitivity, would be broadly similar to those for conventional SAM systems, except that: • Military aircraft are less likely to be available to VNSAs; • Military pilots are considered less likely to misidentify a civilian aircraft as a military target.
Surface-to-Surface Missile (SSM)	SSMs can be launched from the ground or the sea and strike targets on land or at sea. They may be fired from hand-held or vehicle-mounted devices, from fixed installations, or from a ship. These weapons, when launched without the necessary advance notifications to civil aviation entities, pose an indirect kinetic risk to aircraft inflight. SSMs can affect altitudes from FL050 up to above FL900.
Anti-tamper measures	As an aviation security precaution, locks, tags, and seals should be fully utilised for all aircraft left unattended at an airport overnight. Seals can be used for tamper indication or forced entry protection and locks can be used to secure doors and hatches.
Aviation security checklist	Security measures and procedures may vary among airports and FBOs. As a precaution, a thorough inspection performed by the flight crew completed prior to any air asset movement is advisable. Aviation security checklists should be built by each operator based on air asset type and operating location or airport.
Vetted lodging and transport	In operating environments classified as LOW risk and below, the use of hotels with business-class levels of security, cleanliness, and amenities is recommended. Typically, hotels of this type are branded international hotels. Branded international hotels often provide uniform levels of safety and security measured in each of their locations globally. Such hotels are more likely to have desirable levels of amenities and sanitation in less-developed areas. In locations classified as LOW risk and below, use of a ground handler, FBO, locally embedded staff or trusted contact is advised to ensure access to logistical and ground transportation support within local environs.
Secure lodging and transport	In MODERATE risk locations, it is advisable to pre-arrange an escort meet-and-greet service at the airport. The escort should consist of a hired car and driver at

	a minimum. This can be done via a meet-and-greet service, ground handlers, FBOs or third-party security providers. Ensure that personnel are able to verify the identity of the person meeting them. Crews should not leave the airport/lodging site unless accompanied by a verified contact. A comprehensive risk assessment should be conducted for all crew lodging sites; including branded international hotels, especially in locations classified as MODERATE risk and above. The risk assessment may be generated via an in-house web-based exercise or via a third-party security provider. Secure lodging site options typically include an adequately protected property, well-lit perimeter areas, overt presence of 24-hour security staff, and monitored access to the foyer and check-in and service areas.
24/7 life support	In HIGH or EXTREME risk environments, access to 24/7 life support means, at a minimum, shelter from the elements, basic sustenance, potable drinking water, and sanitary facilities. In addition, facilities may also be required to fulfill the needs of security, fire protection, medical and administrative services. Depending upon the type, location, and duration of the 24/7 life support site, it is possible that everything normally associated with a civic inventory may need to be provided.
96 hour stand fast resources	In HIGH or EXTREME risk environments, access to 96-hour "stand fast" resources is advised. Beyond verified access to lodging, transport and medical services, personnel should have access to individual emergency sustainment kits. Kits should include items required to be completely self-sustainable for a minimum of 96-hours of an initial deployment or emergency event. The kits may include: • Basic medical or first aid kit • Food and sustenance • Water and water purification • Clothing and improvised shelter • Personal hygiene items • Copies of all travel documents • Emergency event contact card
Locally sourced threat intelligence	In HIGH or EXTREME risk environments, the use of a third-party security provider is advised to obtain information that can be gathered from human sources. Third-

	party security providers can be employed to develop local source or informant networks that provide early warning of imminent danger.
Personnel tracking	Personnel tracking refers to the method of tracking personnel by using GPS, BLE, SATCOM or RFID tags, which broadcast their location.
Asset tracking	Asset tracking refers to the method of tracking physical aviation assets by using ADS-B, GPS, BLE, SATCOM or RFID tags, which broadcast their location.
Reliable and redundant communications	Time and circumstances in an emergency mean that normal channels of authority and communication may not be relied upon to function routinely. At a minimum, establish a reliable means of communication where messages are guaranteed to reach their destination complete and uncorrupted and in the order they were sent. In addition, it is critical to develop communication strategies, which include redundant forms of communication in advance of an emergency situation. Redundant communication refers to having backup communication modes and is imperative in emergency response planning.
Communications plan	A communications plan describes what an organisation wants to accomplish with the information it sends out. It lists objectives, the tools used to produce communications and intended recipients. Time and circumstances in an emergency mean that normal channels of authority and communication may not be relied upon to function routinely. A communications plan meets the following: ● Provides standard operating procedures to personnel involved in aviation activities; ● Ensures personnel involved in aviation activities are aware of reporting and escalation requirements; ● Enables support personnel to understand the responsibilities of specific aviation positions; ● Increases safety by giving critical information to personnel performing aviation tasks.

Emergency response plan	An urgent need for rapid decisions, shortage of time, and lack of resources and trained personnel can lead to chaos during an emergency. An emergency response plan is a course of action developed to mitigate the damage of potential events that could endanger an organisation's ability to function. Such a plan should include measures that provide for the safety of personnel and assets, along with property and facilities. An emergency response plan specifies procedures for handling sudden or unexpected situations. The objective is to be prepared to: • Prevent fatalities and injuries; • Reduce damage to assets, facilities and equipment; • Protect the environment and the community; • Accelerate the resumption of normal operations.
International airport	An international airport is an airport that offers customs and immigration facilities for passengers travelling between countries. International airports are typically larger than domestic airports and often feature longer runways and facilities to accommodate the heavier aircraft commonly used for international and intercontinental travel.
Domestic airport	A domestic airport is an airport that handles only domestic flights—flights within the same country. Domestic airports do not have customs and immigration facilities and so cannot handle flights to or from foreign airports. These airports normally have short runways sufficient to handle short- or medium-haul aircraft and regional air traffic. In less developed countries, domestic airports may not have adequate security checks, baggage screening or metal detectors.
Dedicated security support	In HIGH or EXTREME risk environments, the use of a third-party security provider is advised to ensure safe, secure and dependable crew transportation services. In addition, the third-party security provider may be required to conduct a security assessment of lodging sites and/or provide on-site guarding of personnel for the duration of time at the destination.

Evaluate use of aircraft guards	In MODERATE, HIGH or EXTREME risk environments, the use of aircraft guards may be a viable mitigation measure. Aircraft guards may be provided via a third-party security provider, ground handler, FBO or airport authority-approved personnel for aviation asset protection on the ramp. Airport authorities have generally become more stringent on who is permitted airside and what outside third-party security providers are approved. Be mindful of local airport authority regulations regarding permission to post aircraft guards airside. Operators are advised to ensure flight plans are correctly filed at the arrival airport and attain proper special approvals from the airport authority for aircraft guard services.