Managing Airside Emergency Response

Sofema Online (SOL) www.sofemaonline.com considers key elements and roles within the Aerodrome Emergency Response Environment. In aerodrome safety, managing the roles and responsibilities of various stakeholders is complex, requiring strong collaboration, clear communication, and continuous attention to competence

Managing airside emergency response involves a comprehensive and coordinated approach to handle emergencies effectively. EASA's regulations set stringent requirements for aerodromes to ensure safety, minimize risks, and ensure swift responses to various emergency situations on the airside.

By adhering to EASA's regulations, aerodromes can ensure that they are prepared to handle emergencies efficiently, minimize risks, and protect the safety of passengers, personnel, and aircraft.

The emphasis on multi-agency collaboration, regular training, and a structured command system are key elements that contribute to an effective airside emergency response strategy.

The following considers key aspects involved in managing airside emergency response in the context of EASA-compliant aerodromes:

- **EASA Regulations**: The management of airside emergency response at EASA-compliant aerodromes is guided by the European Union Aviation Safety Agency's standards, particularly those outlined in Part-ADR (Aerodromes) of the EASA regulations.
    - These regulations require aerodromes to develop and maintain an Aerodrome Emergency Plan (AEP) that addresses various emergency scenarios, including aircraft accidents, fires, hazardous material spills, medical emergencies, and other incidents that may occur on the airside.
- **Compliance and Audits**: Aerodromes must regularly audit and review their emergency response procedures to ensure compliance with EASA regulations.
    - This includes conducting exercises and drills to test the effectiveness of their emergency response plans.

Aerodrome Emergency Plan (AEP)

The AEP should be based on a comprehensive risk assessment that identifies potential emergency scenarios relevant to the aerodrome's operations.

This includes:

- Aircraft accidents,

- Structural fires,
- Unlawful interference, and
- Public health emergencies.

It should involve coordination with all relevant stakeholders, including aerodrome operators, airlines, ground handling agencies, and local emergency services such as police and medical teams.

Continuous training is essential to ensure that all personnel involved in emergency response are competent and ready to perform their duties. This includes regular theoretical and practical training for rescue and firefighting personnel, as well as other emergency responders.

The AEP should mandate proficiency checks for all personnel at intervals not exceeding 12 months. This ensures that skills remain sharp and that personnel are up-to-date with the latest emergency response techniques.

Consider the following key aspects related to the AEP:

- **Development and Scope**: The AEP is a critical document that outlines the procedures and responsibilities for responding to airside emergencies. It covers coordination between aerodrome operators, emergency services, airlines, and other stakeholders.
    - The plan must be tailored to the specific risks and operational characteristics of the aerodrome.

- **Coordination with National and Local Emergency Plans**: The AEP should be aligned with broader national or local emergency plans to ensure coherent responses.

- **Specificity and Adaptability**: The plan must be specific to the aerodrome's characteristics and adaptable to different types of emergencies.
    - For example, aerodromes near water or difficult terrain must include specialist rescue services in their planning.

- **Documentation and Communication**: The AEP should include detailed documentation of all emergency procedures, responsibilities, and communication protocols.
    - It must also ensure that all involved parties have access to necessary information, such as emergency contact numbers and response protocols.

AEP Best Practices and Exercises

- **Regular Testing through Exercises**: To ensure the effectiveness of the AEP, the aerodrome must conduct regular emergency exercises. This includes:
    - **Full-scale Exercises**: These should be conducted at least every two years, simulating a wide range of emergency scenarios.
        - The objective is to test the overall readiness of the aerodrome and involved agencies.
    - **Partial Exercises**: These should be carried out in the years between full-scale exercises, focusing on specific components of the emergency response, such as the firefighting or medical response teams .
    - **Tabletop Exercises**: These are regular, scenario-based discussions that allow stakeholders to verify that roles and procedures are well understood. They are particularly useful for testing new or revised procedures before they are implemented in full-scale exercises.
- **Debriefing and Improvement**: After each exercise, a thorough debriefing should be conducted to identify any deficiencies in the plan.
    - This critique process is vital for continuous improvement, allowing the aerodrome to adjust the AEP and address any gaps in response.
- **Multi-Agency Coordination**: Effective emergency exercises involve all relevant agencies, both on and off the aerodrome.
    - This ensures that everyone is familiar with the plan and can work together seamlessly during an actual emergency.

Competence Management & Training and Certification

- Personnel involved in risk assessment should undergo specialized training to ensure they have the necessary skills and knowledge.
    - This includes understanding the specific risks associated with aerodrome operations, EASA regulations, and risk assessment methodologies.
    - Competence can also be enhanced through cross-functional learning, where personnel involved in risk assessment collaborate with other departments, such as firefighting, medical services, and operations.

Integrated Risk Management System

Ensuring effective risk assessment for EASA-compliant aerodromes is a dynamic process that requires continuous attention. Through regular audits, robust training programs,

proficiency checks, and a commitment to continuous improvement, aerodromes can ensure that they effectively identify and mitigate risks.

Risk assessments should be carried out across all business areas and revisited whenever there is a significant change in aerodrome operations, infrastructure, or external conditions (e.g., new flight routes, weather patterns, or security threats).

- Implement an integrated risk management system that links risk assessment to the broader safety management system (SMS).
- Establish feedback loops where the outcomes of risk assessments and real incidents are used to improve both the risk assessment process and the competence of personnel.
- After any incident, a thorough analysis should be conducted to understand what risks were not adequately identified or mitigated.

Emergency Response Stakeholders

- **Multi-Agency Coordination**: Effective emergency response management involves coordination between various agencies, including fire and rescue services, medical teams, law enforcement, and the airport's operations team. EASA emphasizes the importance of clear communication channels and predefined roles for each agency.
- **Rescue and Firefighting Services (RFFS)**: aerodromes must maintain adequate rescue and firefighting resources, including personnel, vehicles, and equipment, to respond to emergencies swiftly.
    - The level of service (category) required depends on the types of aircraft the aerodrome handles.
- **Medical Facilities**: Aerodromes should have medical facilities and trained personnel ready to respond to medical emergencies.
    - This includes the provision of first aid, triage, and coordination with local hospitals for more severe cases.
- **Emergency Equipment**: Properly maintained emergency equipment, such as firefighting apparatus, communication tools, and protective gear, is essential for a successful response.

Emergency Communication and Coordination

Aerodromes should establish robust communication protocols to ensure that information flows efficiently during an emergency. This includes both internal communication within

the aerodrome and external communication with emergency services, airlines, and the public.

- **Incident Command System (ICS)**: An effective airside emergency response requires a clear command and control structure.
    - The ICS ensures that there is a clear chain of command and that all agencies work together seamlessly during an emergency.

Post-Emergency Evaluation

After an emergency, the aerodromes should conduct a thorough review of the incident. This includes analyzing what went well, identifying areas for improvement, and updating the AEP as necessary.

Next Steps

Sofema Aviation Services Provides Regulatory Training covering Airside Safety please see the following https://sassofia.com/course/airside-safety-training-3-days/ for questions and comments please email team@sassofia.com