

CHANGING MINDSETS: EMS IN AVIATION



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INTRODUCTION



- As a member of the international aviation community Air-Tec's goal is to manage our land and air resources in an environmentally responsible manner.
- Air-Tec is in the early stages of our EMS implementation.
- Compliance with international EMS regulations and recommendations is our goal.

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SCOPE

- Implementation of an EMS at Air-Tec Global: EMS Policy Statement.
- Air-Tec's EMS Manual.
- EMS Promotion within Air-Tec Global.
- EMS Objectives and Targets.



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Air-Tec EMS Implementation - Policy Statement

As a member of the international aviation community Air-Tec's goal is to manage our land and air resources in an environmentally responsible manner. Air-Tec will be guided in our efforts by the following principles:

- Progressively enhancing the environmental sustainability of activities and operations, improving efficiency and outcomes over time.
- Protecting the environment and preventing pollution by managing risks and maximizing the environmental opportunities of all activities and flight operations.
- Minimizing the carbon footprint and increasing the resource-efficiency of operations and facilities management, to include the management of materials, water, energy, and waste.



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Air-Tec EMS Policy Statement (Cont.)

- Promote awareness and strive to incorporate best international practices to reduce environmental impact with regard to sustainability, avoidance of environmental pollution, minimizing energy use, water, wastewater management and solid waste management.
- Compliance with local standards, international and relevant ICAO regulatory practices as prescribed by the National Civil Aviation Authorities.
- Protecting our limited and valued natural resources is a key component of Air-Tec's operational portfolio.



As CEO I task all Air-Tec employees to be mindful of these principles in their daily operations.



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Air-Tec EMS Manual

- Air-Tec has drafted an EMS Manual which is in alignment with ICAO and ISO 14001:2015 guidance materials.
- Environmental Management System Manual – Revision 0 dated 10 January 2022.
- Submission to CAA (regulatory approval / acceptance) by the end of March 2022.
- Objectives and Targets have been set and either already being implemented or planned.



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Challenges faced by Air-Tec EMS Manager

- ICAO EMS guidance documentation is challenging to interpret by the EMS Manager. How does an operator establish an EMS within a relatively small organization/fleet?
- ICAO EMS documentation does not guide an EMS Manager on the structure and content of an EMS Manual.
- The ICAO EMS documentation on aircraft carbon emission calculations is very complex and is difficult to interpret for operators of smaller, non-commercial aircraft (e.g. aircraft with engines below 1000hp).
- Due to Air-Tec's operations being mostly humanitarian and located in challenging environments and countries, local assistance with EMS will be difficult. For example, the removal and correct handling of waste oils, used rags, etc.

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Challenges faced by Air-Tec EMS Manager

- Challenging Operational Environments: Bio-fuel for example would likely not be an option in Central Africa due to the logistic challenges alone (remote bush airfields, a limited number of serviceable fuel bowzers, fuel storage, and the use of fuel drums, etc.). Aircraft FCUs may need to be calibrated for bio-fuel, and with fuel supply, in remote areas an existing challenge, uplifting both Jet-A1 and Bio-fuel on the same leg may not be an option and may even pose a safety risk (loss of engine power or engine failure).



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EMS Manual – Table of Contents



Environmental Management System Overview & Policy Air-Tec Group

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Rev. 0
Date 10 JAN 22

0 Overview & Policy

0.0 Detailed Table of Contents

Subpart	Title of Subpart
0	Overview & Policy
0.0	Detailed Table of Contents
0.1	Purpose and Alignment with ISO 14001:2015 (and ICAO guidance material)
0.1.1	Extract from ICAO DOC 9968 – Report on EMS Practices in the Aviation Sector
0.1.2	Extract from ICAO DOC 10013 – Operational Opportunities to Reduce Fuel Burn and Emissions
0.2	Environmental Management System
0.2.1	EMS Objective and Targets
0.3	Company Information
0.3.1	General Description
0.4	Environmental Policy Statement – Signed by CEO

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0.5	Aeroplane CO2 Emissions (ICAO guidance material)
0.6	Environmental Management System Requirements
0.6.1	General Requirements
0.6.2	Environmental Policy
0.6.3	Environmental Aspects
0.6.4	Aspects Procedure
0.6.5	Responsibilities
0.7	Legal and Other Requirements
0.7.1	Responsibilities
0.8	Objectives and Targets
0.8.1	Objectives and Targets Procedure
0.8.2	Responsibilities
0.9	Resources, Roles, Responsibility, and Authority
0.9.1	Resources, Roles, Responsibility, and Authority Procedure
0.9.2	Company EMS Organigram
0.10	Competence, Training, and Awareness
0.10.1	Competence, Training and Awareness Procedure
0.10.2	Responsibilities (personnel)
0.11	Communication
0.11.1	Communication Procedure

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0.11	Communication
0.11.1	Communication Procedure
0.12	Documentation
0.13	Operational Controls
0.13.1	Operational Control Procedure
0.14	Emergency Preparedness and Response (ERP)
0.14.1	Emergency Preparedness and Response Procedure
0.15	Monitoring and Measurement
0.15.1	Monitoring and Measurement Procedure
Subpart	Title of Subpart
0.16	Evaluation of Compliance
0.16.1	Evaluation of Compliance Procedure
0.17	Audits
0.17.1	Internal Audit Procedure
0.18	Management Review

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0.4 Environmental Policy Statement

As a member of the international aviation community Air-Tec's goal is to manage our land and air resources in an environmentally responsible manner. Air-Tec will be guided in our efforts by the following principles:

- Progressively enhancing the environmental sustainability of activities and operations, improving efficiency and outcomes over time.
- Protecting the environment and preventing pollution by managing risks and maximizing the environmental opportunities of all activities and operations.
- Minimizing the carbon footprint and increasing the resource-efficiency of operations and facilities management, to include the management of materials, water, energy, and waste.
- Promote awareness and strive to incorporate best international practices to reduce environmental impact with regard to sustainability, avoidance of environmental pollution, minimizing energy use, water, wastewater management and solid waste management.
- Compliance with local standards, international and relevant ICAO regulatory practices as prescribed by the National Civil Aviation Authorities.

Protecting our limited and valued natural resources is a key component of Air-Tec's operational portfolio. I task all Air-Tec employees to be mindful of these principles in their daily operations.

Jan Rehousek
CEO Air-Tec Group

Dated: 10 January 2022



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EMS Promotion – Safety Gazette FEB 2022

The Gazette



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- FIRE SAFETY IN ACCOMMODATION
- HEAT STROKE
- SAFETY TOPIC: SEE AND AVOID
- PHOTO COMPETITION

✱ ENVIRONMENTAL MANAGEMENT SYSTEM - "AIR-TEC GROUP GOES GREEN"

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To minimise the environmental impact of our organisation and to ensure that we comply with the latest international environmental legislation, the Air-Tec Group is implementing an Environmental Management System.

An Environmental Management System manual is being developed to, among others, monitor and reduce:

- Carbon Emissions,
- Disposal of waste Oils, Oil Rags and Unusable fuel.

Air transportation contributes significantly to the global economy's health and well-being. Aviation improves our quality of life by allowing us to see friends and family, travel, see new areas, and shrink the world. Furthermore, the aviation industry employs 56 million people globally in direct, indirect, and induced jobs. Aviation, on the other hand, has a number of negative effects on the environment: residents living near airports are subjected to aircraft noise; aircraft engines emit greenhouse gases and other pollutants into the atmosphere; large amounts of energy and water are consumed for passenger needs, as well as large volumes of waste; streams, rivers, and wetlands may be impacted.

Many species of plants and animals are expatriated from the region of airports due to contaminants produced in storm water runoff from airports.

These negative externalities have been recognised in recent decades, and the aviation industry is rapidly implementing mitigation measures. To achieve environmentally friendly results, national and international authorities, aviation institutions, aircraft manufacturers, airlines, and airports produce advisory documents and manuals, set environmental standards, implement new technology, and implement environmental management systems. Noise, air, and water quality; energy usage, trash production, and biodiversity protection are all aspects of environmentally responsible activities.



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EMS Objectives & Targets

Item #	Objective	Target	Proposed Date
1	Reduce the total Aircraft Carbon Emissions Footprint.	Let410: Upgrade the Let410/420 Fleet from GE H80 to the de-rated H75 engines. More fuel-efficient engines = reduced carbon emissions. GE H-series engines: produced with zero harmful materials such as lead and asbestos. B1900: Future avionics upgrades could reduce weight & reduce emissions. General: - Monitoring of annual CO2 emission totals on Air Maestro. - Continue implementing aircraft flight procedures and practices (good airmanship) to reduce aircraft fuel usage and emissions at airports.	2021 (Implemented) 2024 (Implemented)
2	Dispose of hazardous waste, in line with regulations (used oils, rags, etc.).	Dispose of waste in accordance with EMS regulations at maintenance facilities, line stations, and satellite stations. Subcontract waste removal.	2021 to 2024 (Partially implemented)
3	Promote EMS awareness and incorporate best international practices.	Inform all employees through training and internal publications. Avoidance of environmental pollution.	2022 to 2024
4	Reduce energy usage	Investigate the use of solar energy and renewable energy solutions for applicable operations.	2024

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CONCLUSION

- Air-Tec Global has taken the first steps in implementing an EMS.
- With the guidance of industry leaders, we strive to reduce our environmental impact by complying with international regulatory requirements and recommendations.



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