

AVIATION SAFETY

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WHAT IS THE FRENCH INSTITUTE FOR AVIATION SAFETY (IFSA)

- Aviation Safety refers to the **set of measures and practices implemented in Air Operations to prevent and minimize the risk of accidents and incidents** and make **safety recommendations** whenever they occur.
- They encompass a **range of activities, procedures and regulations in a collective effort** from all stakeholders, including Air Forces, Airlines, Regulatory bodies, Investigation boards, Airports, manufacturers, Air ground and Air traffic control crews.

YOUR CAPABILITY BUILDING PARTNER

- We help you to set up/optimize your Safety Management System (SMS) and improve the Safety Culture with the most recent theoretical features from research and national and international organizations experience (International Civil and Aviation Organization, Flight Safety Foundation and International Society of Air Safety Investigators).
- **Since 1987, IFSA** provides Staff and Executives on **safety-related positions** with courses in Investigation, Prevention and Operational Risk Management, through a comprehensive Organizational and Human Factors approach.
- Our catalogue of courses and consulting services are:
 - **Flight Safety Officer** course
 - **SMS implementation** course
 - **Human and Organizational Factors** course
 - **Operational Risk Management** course
 - **Decision making** course
 - **Investigation Techniques** (Fixed-wings, Rotary-wings and UAV)

ADVANTAGES OF OUR COURSES

- **40+ High-level experts & lecturers**, active duty or retired from the French Forces, academic research and industry.
- Training syllabus with adequate theoretical and **practical case studies**,
- **Trainings in France or directly in your country** with a proven record of accomplishment of customer references (>10 000 attendees from 106 different countries).
- The courses are also appropriate to the railways, industrial, nuclear and medical fields.

DCI GROUP

DCI group is a French state-owned company transferring the French Armed Forces' know-how to international partners. Our **900+ experts from 38 nationalities** are involved along the entire chain of capability development, force preparation and employment: academic training, operational training and simulation, provision of operational capabilities, Defence & Security expertise.

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Safety Management Systems



FLIGHT SAFETY OFFICER

Reference: SAFE-001-0322

 <p>Awarded Qualification « Flight Safety Officer » & « Safety Management Systems Expert » Certificate</p>	 <p>Length 4 weeks</p>	 <p>Language English</p>	 <p>Location France Paris</p>
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OBJECTIVES

- To be able to implement and administer an SMS within an organisation, by understanding the basics and tools of Safety Management Systems.
- To have the essential knowledge covering the whole of the items relating to the safety in flight and on the ground of the civil and military, fixed wing and rotary wing, aircraft.
- To be able to animate the function of Flight Safety Officer or SMS Manager within his organisation by the missions of Advice, Analyse, Surveillance and Promotion of safety.

AUDIENCE & PREREQUISITES

All personnel involved in the aviation safety process: manufacturers, air forces, airlines and air work operators and managers, pilots, engineers, controllers, staff and executives of civil and military aviation administrations, airport managers, members of professional associations, insurance companies, lawyers and aeronautical experts.

Multinational course, English intermediate level (B1/B2).

Duration : 4 weeks -108 hours

COURSE CONTENT

- Introduction and implementation of Safety Management Systems: see leaflet (ISMS).
- Human and Organisational Factors : see leaflet (HOF).
- Investigation Data Collection and Processing: see leaflet (IDCP).
- Problems Solving and decision making techniques: see leaflet (PS).
- Safety Risk Management: see leaflet (SRM).



INTRODUCTION OF SAFETY MANAGEMENT SYSTEMS

Reference: SAFE-002-0322

 <p>Awarded Qualification « Introduction of Safety Management Systems » Certificate</p>	 <p>Length 4,5 days</p>	 <p>Language English</p>	 <p>Location Any country</p>
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OBJECTIVES

- To be able to implement and administer an SMS within an organisation, by understanding the basics and tools of Safety Management Systems.
- To be trained on the essentials of the SMS toolbox.
- To have the basic knowledge necessary to follow the training courses : HF, IDCP, PS and SRM.

AUDIENCE & PREREQUISITES

All personnel involved in the aviation safety process: manufacturers, air forces, airlines and air work operators and managers, staff and executives of civil and military aviation administrations, airport managers, members of professional associations, insurance companies, lawyers and aeronautical experts.

Multinational course, English intermediate level (B1/B2).

Duration : 4,5 days - 27 hours

Location: France or Partner's country.





COURSE CONTENT

- Basics on incident and accident prevention: the accident continuum, the sequence of events and the accident mechanism, systemic causation.
 - Regulatory references: basics on SMS, responsibilities, reporting obligations.
 - SMS tools: safety information exchange and feedback, flight operations Quality Assurance, flight data follow up and analysis, safety investigation, accident preparedness and contingency planning.
 - Safety Culture.
 - SMS implementation and animation.
- For more advanced training, this course can be usefully complemented by the HF, IDCP, PS and SRM courses.



HUMAN AND ORGANISATIONAL FACTORS

Reference: SAFE-003-0322

 <p>Awarded Qualification « Human and Organisational Factors » Certificate</p>	 <p>Length 4,5 days</p>	 <p>Language English</p>	 <p>Location France Paris</p>
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OBJECTIVES

- To be familiarised with human sciences applicable to the aviation activities.
- To have individual and collective capabilities, limitations, flaws and errors Knowledge.
- To be able to detect and control their frequency and their impact on safety.
- To be able to measure the role of organisational factors in incidents.

AUDIENCE & PREREQUISITES

All civilian and military managers and executives of the aviation system, and particularly staff personnel involved in the prevention and investigation of aircraft accidents or incidents.

Multinational course, English intermediate level (B1/B2).

HF module can be usefully complemented by the Fatigue Risk Management System course.

Duration : 4,5 days - 27 hours





COURSE CONTENT

- Human performance: scope of the human factors within complex socio-technical systems, intellectual mode of operation (memory, schemes, representations, expertise, workload), physiological and psycho-sociological aspects (behavior, personality, emotions, stress), major factors affecting the intellectual work.
 - Improving human performance: individual and organisational methods, automation (advantages and drawbacks).
 - Situation awareness and decision making process.
 - Teamwork, co-activity, coordination, cooperation and communication.
 - Organisational Factors in aviation occurrences.
 - The role of safety culture in safety performance.
 - Biases in the sociology of organisations.
 - Management of vigilance and fatigue, particularly in long-range flights.
- HOF module can be usefully complemented by the Fatigue Risk Management System course.



INVESTIGATION DATA COLLECTION AND PROCESSING

Reference: SAFE-004-0322

 <p>Awarded Qualification « Investigation Data Collection and Processing » Certificate</p>	 <p>Length 4,5 days</p>	 <p>Language English</p>	 <p>Location France Paris</p>
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OBJECTIVES

- To acquire skills and techniques for interviewing witnesses to an aviation aeronautical event.
- To optimise collective work in meetings in the context of safety management or analysis of aeronautical events.
- To organise and classify the causal origins of events.

AUDIENCE & PREREQUISITES

All personnel involved in the aviation safety process within the framework of SMS, either in charge of conceiving and conducting an accident prevention program or managing risks, taking part in an aviation accident or incident investigation, or having to obtain safety information from individuals or from groups.

Multinational course; English intermediate level (B1/B2).

Duration: 4,5 days- 27 hours

COURSE CONTENT

- Introduction to witness hearings: limitations of witnesses statements, inter-individual communication, adaptive communication styles, obstacles to communication, concordance and discordance, territories and zones, nonverbal communication, body and facial languages, installing and maintaining a witness motivation, managing an interview session, active listening and facilitation, coping with silences and transactions, discussion and questioning techniques.
- Introduction to group communication: meetings and working groups, installing group dynamics, synergy, collective problems solving and decision making.
- Numerous practical exercises and role playing sessions.
- This course uses concepts covered in the ISGS course.



PROBLEM SOLVING AND DECISION MAKING TECHNIQUES

Reference: SAFE-005-0322

 <p>Awarded Qualification « Problem Solving and Decision making Techniques » Certificate</p>	 <p>Length 2 days</p>	 <p>Language English</p>	 <p>Location France Paris</p>
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OBJECTIVES

- To use appropriate problem solving and decision making techniques, adapted to the context of preventing safety risk management or investigating incidents.

AUDIENCE & PREREQUISITES

All personnel involved in the safety process, either in charge of conceiving and conducting an accident prevention program or taking part in an aviation accident or incident investigation.

Multinational course, English intermediate level (B1/B2).

Duration: 2 days - 12 hours

COURSE CONTENT

- Problem solving: what the problem is and is not, how to find out facts and opinions, defining the problem causes, working out possible solutions, and selecting the most appropriate.
- Making a decision: implementing, protecting and controlling an action plan.
- Reasoning method applicable to solve a Safety Risk Management or an analysis of incident.
- Practical exercises and case studies.



SAFETY RISK MANAGEMENT

Reference: SAFE-006-0322

 <p>Awarded Qualification « Safety Risk Management » Certificate</p>	 <p>Length 2,5 days</p>	 <p>Language English</p>	 <p>Location France Paris</p>
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OBJECTIVES

- To develop a qualitative and quantitative approach to Safety Risk Management.
- To develop a systemic approach to risk management to steer more realistically and more efficiently an accident prevention program.
- To be capable of giving solutions based on systematic risk analysis and ensure a continuous supervision of the implemented risk control measures.

AUDIENCE & PREREQUISITES

Executives with decision-making responsibilities in an aviation organisation, in the context of leadership, management, planning and command both on the ground as in flight. This course complements the ISMS course and is also intended for any field personnel responsible for conducting safety and operational risk management studies.

English intermediate level (B1/B2).

Duration: 2,5 days - 15 hours.





COURSE CONTENT

- The integration of operational risk management into a safety management program.
- The risk and consequence studies in safety-related areas (reputational and economic).
- The safety Risk Management process.
- The identification of hazards inherent in the activities of an aviation organisation.
- Use of risk matrix and risk reduction tools.
- Managing a Safety Risk Management process, strategies of risk control.
- Practical work (Case studies).
- Supporting change through safety risk management or operational risk management.



SAFETY COMMANDERS COURSE

Reference: SAFE-007-0322

 <p>Awarded Qualification « Safety Commanders Course » Certificate</p>	 <p>Length 4,5 days</p>	 <p>Language English</p>	 <p>Location France Paris</p>
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OBJECTIVES

- To have a full understanding of a risk management process.
- To understand the Human and Organisational Factors including Fatigue / Stress management
- To have an up to date information about incident and accident prevention as well as change management on safety risk.
- To provide decision making and problem solving tools.

AUDIENCE & PREREQUISITES

All high ranking managers, officers in charge of aviation safety supervision at company, HQ or Airbase level and who are already trained on FSO or SMS.

This course is customized in order to cover the various aspects of risk management and constantly adapted during the stay to meet trainees' requirements.

Multinational course, English intermediate level (B1/B2).

Duration: 4,5 days - 27 hours.





COURSE CONTENT

- Management and Safety: basic concepts, accident prevention models, Just Culture and Safety Culture.
- Organisation of a Safety Management System.
- Human and Organisational Factors including Fatigue and Stress management.
- Managing an event investigation (use of Human Factors Analysis and Classification System).
- Safety Risk Management: a risk management program as an integral part of an accident prevention program, financial impacts, Safety Risk Management process, building a Safety Risk Management program.
- Safety Risk Management process : change management and deviation management.
- Practical exercises and case studies.



FATIGUE RISK MANAGEMENT SYSTEM

Reference: SAFE-008-0322

 <p>Awarded Qualification « Fatigue Risk management System » Certificate</p>	 <p>Length 3 days</p>	 <p>Language English</p>	 <p>Location France Paris</p>
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OBJECTIVES

- To have the theoretical basis on the physiological factors of fatigue.
- To understand the consequences of fatigue on aviation safety.
- To understand regulations and obligations inherent in fatigue management.
- Principles and assets for the implementation of a FRMS.

AUDIENCE & PREREQUISITES

This training is intended for executive officers engaged in safety-related activities: air force, airline operators, air groups in public sector, supervisory authorities, members of professional organisations, insurers, jurists, experts.

Multinational course, English intermediate level (B1/B2).

Duration: 3 days - 18 hours.

COURSE CONTENT

- Theoretical basis of fatigue and its management: fatigue, vigilance, sleep, circadian rhythms, sleep inertia.
- Consequences and factors of fatigue in air operations, Fatigue management strategies.
- Regulatory references: ICAO, EASA, national regulations.
- Fatigue Risk Management System principles: fatigue management policy, fatigue management tools (hazard identification, quantification of the risks, strategies to master fatigue), maintaining safety (respect of safety objectives, constant improvement of fatigue management), promoting safety (training on fatigue and communication).
- Case studies.

Aircraft Accident Investigations



AVIATION ACCIDENT INVESTIGATOR

Reference: SAFE-011-0322

 <p>Awarded Qualification « Aviation Accident Investigator Expert » Certificate</p>	 <p>Length 4 weeks</p>	 <p>Language English</p>	 <p>Location France Paris</p>
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OBJECTIVES

To be knowledgeable about all aspects of the professional practice, both in a national and international context, of an aircraft accident investigator, covering civil as well as military, light and heavy weighted, fixed, rotary winged aircraft and RPAS.

To be able to participate as an Accredited Representative and then Investigator in an aviation safety investigation.

AUDIENCE & PREREQUISITES

All civil and military personnel involved in an aircraft accident investigation process.

A thorough knowledge of the aviation system is required before attending this course.

The course Aviation Accident Investigator is in compliance with ICAO Annex 13 and Circular 298, It qualifies for expert on Aircraft Accident Investigation.

Multinational course; English intermediate level (B1/B2).

Duration: 4 weeks - 108 hours.

COURSE CONTENT

- Basics on accident prevention: the accident mechanism, systemic causation, safety investigation.
- Regulatory aspects: International, European organisation, jurisdictional and litigation aspects.
- Investigation of the accident scene: the wreckage, securing and protection.
- Investigations of technical factors: aircraft systems, fire investigation, FDR, CVR, power plant, fracture analysis, aircraft records and operational status.
- Investigation of environmental factors: airport facilities, meteorology, etc.
- Investigation of human factors: limitations, forensic, accident survival.
- Investigation of organisational factors: operations, flight planning, resources management, accident response plan.
- Witness interviews and group communication: limitations of witnesses statements, inter-individual communication, communication styles, obstacles to communication. Practical exercises and role playing sessions.
- Analysis and sequence of events: preparatory measures, general organisation, determination of causes, recommendations and exploitation of reports.
- Technical visits: voice and data recorders laboratory, metallurgy and chemical laboratory.
- Case studies: reconstruction of accident investigation.



AVIATION ACCIDENT INVESTIGATION TECHNIQUES (FIXED WING)

Reference: SAFE-010-0322

 <p>Awarded Qualification « Aviation Accident Investigator Technique » Certificate</p>	 <p>Length 2 weeks</p>	 <p>Language English</p>	 <p>Location France Paris</p>
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OBJECTIVES

- To have a practical and up to date training about an aircraft accident investigation (fixed wing), international regulations, preliminary measures, investigation of events and causes, report writing.
- To fully understand an investigation process and roles of expert board members.
- To be able to participate as an advisor in an aviation safety investigation.

AUDIENCE & PREREQUISITES

All personnel who can be occasionally involved in an aviation accident investigation: aircraft, engines and equipment manufacturers, airlines, civil and military aviation supervising authorities, airport managers, air traffic controllers, insurers, lawyers and other experts specialised in aviation matters. Multinational course; English intermediate level (B1/B2). Duration: 2 weeks - 54 hours.

COURSE CONTENT

- Basics on accident prevention: the accident continuum, the sequence of events and the accident mechanism, systemic causation.
- Aviation accident investigation: International and European regulations.
- Investigation techniques: accident response and crisis management, individual and organisational preparation, wreckage and site investigation, recorders, investigation of aircraft systems and instruments, Investigation of fire, report writing and safety recommendations.
- Visits to investigation laboratories: FDR, CVR, chemical, metallurgy and workshops.
- Case study.



ROTARY WING ACCIDENT INVESTIGATION TECHNIQUES

Reference: SAFE-012-0322

 <p>Awarded Qualification « Rotary Wing Accident Investigation Techniques » Certificate</p>	 <p>Length 2 weeks</p>	 <p>Language English</p>	 <p>Location France Paris</p>
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OBJECTIVES

- To have a practical and updated training about helicopter accident investigation, international regulations, preliminary measures, investigation of events and causes.
- To fully understand an investigation process and roles of expert board members.
- To be able to participate as an advisor in a helicopter safety investigation.

AUDIENCE & PREREQUISITES

All personnel who can be occasionally involved in a helicopter accident investigation: helicopter, engines and equipment manufacturers, airlines, civil and military aviation supervising authorities, airport managers, air traffic controllers, insurers, lawyers and other experts specialised in aviation matters.

Multinational course, English intermediate level (B1/B2).

Duration: 2 weeks- 54 hours.





COURSE CONTENT

- Basics on accident prevention: the accident continuum, the sequence of events and the accident mechanism, Systemic causation.
- Aviation accident investigation: International and European regulations.
- Investigation techniques: accident response and crisis management, individual and organisational preparation, wreckage and site investigation, recorders, investigation of systems and instruments, aerodynamics, flight mechanics and power plant related causes, investigation of fire, safety recommendations.
- Visits to investigation laboratories (FDR, chemical, metallurgy) and workshops.
- Case study.



DRONE ACCIDENT INVESTIGATION TECHNIQUES

Reference: SAFE-013-0322

 <p>Awarded Qualification « Drone Accident Investigation Techniques » Certificate</p>	 <p>Length 4,5 days</p>	 <p>Language English</p>	 <p>Location France Paris</p>
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OBJECTIVES

- To have a practical and updated training on drone accident investigation, regulations, preliminary measures, search for evidences and causes and safety recommendation.
- To understand the investigation process as well as the role of experts and members of an investigation committee.
- To be able to participate as an advisor in a RPAS safety investigation.

AUDIENCE & PREREQUISITES

This training is intended for any person who might take part in drone accident investigations: manufacturers, airlines, military or civilian authorities, air traffic control, airport managers, insurers, jurists and aeronautical experts.

Multinational course, English intermediate level (B1/B2).

Duration: 4,5 days - 27 hours.





COURSE CONTENT

- Basics on accident prevention: the accident continuum, the sequence of events and the accident mechanism, systemic causation.
- Aviation accident investigation: International and European regulations, responsibilities, National specifications, Military specificities.
- Drones investigation techniques: aerodynamics, operations principles, systems' configuration, RPAS particularities.
- Human Factors: performances, stress and fatigue management, situation awareness, crew communication, CRM, decision making process, drones and ordnances.
- Case studies.



BLOODBORNE PATHOGENS PROTECTION

Reference: SAFE-014-0322

 <p>Awarded Qualification The BBP certificate is delivered after completion of this course (valid 1 year)</p>	 <p>Length 0.5 day</p>	 <p>Language English</p>	 <p>Location France Paris</p>
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OBJECTIVES

- To be familiarized with "Bloodborne Pathogens".
- To be trained who are at risk, how to protect themselves, how to behave on an accident site.

AUDIENCE & PREREQUISITES

All Accident Investigators and personnel having access to an accident site or in contact with materials coming from the site.

Multinational course, English intermediate level (B1/B2).

Duration: 0.5 day - 3.5 hours.





COURSE CONTENT

- Biohazards associated with aircraft accident investigation.
- Procedures to control exposure to Bloodborne pathogens in an accident investigation.
- Modes of Bloodborne pathogen transmissions.
- Exposure control plan.
- Recognition of biohazards.
- HBV vaccination.
- Personal Protection Equipment.
- Exposure incidents.



SENIOR INVESTIGATOR TRAINING

Reference: SAFE-009-0322

 <p>Awarded Qualification « Senior Investigator Training » Certificate</p>	 <p>Length 4 days</p>	 <p>Language English</p>	 <p>Location France Paris</p>
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OBJECTIVES

- To improve knowledge about the manage on a major investigation.
- To have an up to date information about the Safety Management Systems in operations.
- To be able to understand accident survival aspects.
- To be aware of media and family management.

AUDIENCE & PREREQUISITES

Civil and military personnel selected to lead a major national or a multinational accident investigation with multidisciplinary teams.

Have an investigator background Multinational course, English intermediate level (B1/B2).


























Duration: 4 days - 24 hours.

COURSE CONTENT

- Safety Concepts : Human Factors, Safety Culture and Just Culture
- Management of large teams on a major investigation.
- To be able to understand the contribution of the forensic doctor to the investigation and accident survival aspects.
- Management of media and families during investigation.
- Safety Management System and Safety Risk Management: Understand how operators manage their safety risks.
- Practical exercises and case studies.

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DCI group transfers the French Armed Forces' know-how in all domains and specialties. Ask for our extensive training course catalogs or contact us for «customized» training solutions !

LAND		COMBAT			SUPPORT		
	AIR		FIXED-WING			AIRSPACE CONTROL	
NAVAL			AVIATION SAFETY			SURFACE	
		JOINT		SUBMARINE			DIVING & EOD
			HELICOPTERS			AERONAUTICAL MAINTENANCE	
	C2			ISR			
	ELECTRONIC WARFARE			GROUND-BASED AIR DEFENCE			
	HEALTH & CBRN			CYBER DEFENCE			
	DRONES			COUNTER-UAV			
SPECIAL FORCES & INTERNAL SECURITY		SPECIAL FORCES			COUNTER TERRORISM		
		LAW ENFORCEMENT			SITE & VIP PROTECTION		
ACADEMIC TRAINING		ARMAMENT			ACADEMIC TRAINING		
		STAFF OFFICER TRAINING					