

Center for Aviation and Space Competence

# ANNUAL REPORT 2022



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# Introduction by the President

After two special years, we returned "to normality" and were able to start the first module of the CAS program "Accountable Management in Aviation" in January. This was followed in March by the first module of the new executive education program "Space for Business", which CFAC is organising in cooperation with the NOVA School of Business and Economics in Lisbon, the Rotterdam School of Management and ESA Space Solutions, with eleven participants in St. Gallen.

A lot of preparation went into the long-planned Aviation & Space Symposium on the topic of New Frontiers: "Aviation meets Space" on 1/2 June. The event kick-off was with the opening of the 10<sup>th</sup> Bodensee Aerospace Meeting followed by company visits to Starrag Group, VarioSystems, Berhalter tec-spiration (Widnau) and Meteomatics (St. Gallen). On 2 June 2022, the doors opened in the Olma Hallen St. Gallen for over 300 participants and more than 80 exhibitors in the aviation and space sectors.

Thanks to the lifting of some Covid requirements, a group of 10 people travelled to Singapore in mid-June for the International Management Module. During almost a week, lectures on the topic "Doing Business in Asia" took place at the St. Gallen Institute of Management Asia in the morning. In the afternoon, company visits followed to Singapore Airlines, Changi Airport, Bell Helicopters, Rolls-Royce, Airbus Training Center and Association of Aerospace Industries. With this CAS executive training program "Accountability, Safety and Compliance Management", CFAC offers a unique program for aviation managers at various career levels. A special feature is the close practical relevance while at the same time conveying the latest scientific findings.

In cooperation with the FFAC (Foundation for Aviation Competence), the first Airport Forum on the topic of Just Culture and Airport Management followed at Zurich Airport in November. More than 60 participants attended the forum and heard exciting presentations from recognised experts on the legal aspects of Just Culture in Switzerland and its practical implementation, also in the context of airport management.

We are very happy with the expansion of our team. The "Space" department is now affiliated to the Center. The two new staff members Marc Chavy-Macdonald and Benoit Cornet are responsible for research assignments and projects in the area of Space. This development leads to the change of the name of our Center to new: Center for Aviation and Space Competence.

On the following pages you will get a deeper insight into our activities in the past business year as well as an outlook on the upcoming events in 2023/2024.

All this would not have been possible without the valuable support of numerous supporters and CFAC alumni. A big thank you for your trust!

Prof. Dr. Thomas Geiser
President of the Academic Advisory Board

# Einleitung des Präsidenten

Nach zwei speziellen Jahren kehrten wir wieder zur «Normalität» zurück und konnten bereits im Januar mit dem ersten Modul «Accountable Management in Aviation» des CAS-Weiterbildungsprogramms starten. Im März folgte dann das erste Modul der neuen Weiterbildung «Space for Business», welches das CFAC in Kooperation mit der NOVA School of Business and Economics in Lissabon, der Rotterdam School of Management und ESA Space Solutions organisiert, mit elf Teilnehmern in St. Gallen.

Viel Vorbereitung wurde in das schon lange geplante Aviation & Space Symposium zum Thema New Frontiers: «Aviation meets Space» investiert. Der Auftakt bildete die Eröffnung des 10. Bodensee Aerospace Meetings mit Firmenbesichtigungen bei Starrag Group, VarioSystems, Berhalter tec-spiration (Widnau) und Meteomatics (St. Gallen). Am 2. Juni 2022 öffneten dann die Tore in den Olma Hallen St. Gallen für über 300 Teilnehmer und über 80 Austeller im Aviatik- und Space Bereich.

Dank der Aufhebung von einigen Covid-Vorgaben, reiste Mitte Juni eine Gruppe von 10 Personen für das International Management Modul nach Singapur. Während knapp einer Woche fanden am St. Gallen Institute of Management Asia jeweils am Morgen Vorlesungen zum Thema «Doing Business in Asia» statt. Am Nachmittag folgten Firmenbesichtigungen bei Singapore Airlines, Changi Airport, Bell Helicopters, Rolls-Royce, Airbus Training Center and Association of Aerospace Industries. Mit diesem CAS Executive Weiterbildungsprogramm «Accountability, Safety and Compliance Management» bietet das CFAC ein einmaliges Angebot für Luftfahrtmanager auf verschiedenen Karrierestufen an. Ein besonderes Kennzeichen ist der enge Praxisbezug unter gleichzeitiger Vermittlung neuester wissenschaftlicher Erkenntnisse.

In Zusammenarbeit mit dem FFAC (Foundation for Aviation Competence) folgte im November das erste Airport Forum zum Thema Just Culture and Airport Management am Flughafen Zürich. Über 60 Teilnehmer nahmen am Forum teil und hörten spannende Referate von anerkannten Experten zu den rechtlichen Aspekten der Just Culture in der Schweiz und deren praktischer Umsetzung, auch im Kontext des Flughafenmanagements.

Erfreulich war auch die Vergrösserung unseres Teams. Neu ist am Center der Bereich «Space» angegliedert. Die zwei neuen Mitarbeiter Marc Chavy-Macdonald und Benoit Cornet sind für Forschungsaufträge und Projekte im Space Bereich zuständig. Diese Entwicklung führte auch zum Namenwechsel unseres Centers welches neu «Center for Aviation and Space Competence» heisst.

Auf den folgenden Seiten erhalten Sie einen tieferen Einblick in unsere Tätigkeiten im vergangenen Geschäftsjahr sowie einen Ausblick auf die bevorstehenden Events im 2023/2024.

Dies alles wäre ohne die wertvolle Unterstützung von zahlreichen Supportern und CFAC Alumni nicht möglich gewesen. Ein herzliches Dankeschön für Ihr Vertrauen!

Prof. Dr. Thomas Geiser *Präsident des Fachrats* 

# The CFAC-HSG at the University of St. Gallen



Photo: University of St.Gallen

**Mission:** We provide scientific, applied and practice-oriented research as well as training and education for managers in systemic industries, governmental or non-profit organizations. We also serve as discussion partners or counterparts for experts and interested parties in the fields of aviation and space and related industries. By these activities we aim to help the aviation and space industry in its complex interrelated and heterogeneous fields of application.

**Vision:** The CFAC is the number one independent university institution in Switzerland when it comes to research, trainings and executive education in the field of management, economics and law in the aviation and space and related systemic industries such as mobility.

Values: independent, reflective, systemic, practice-oriented, collaborative

**Stakeholder:** Managers in systemic industries, public or non-profit organizations as well as experts and interested parties.

As one of Europe's leading business universities, the University of St.Gallen is globally recognized as a place for thought leadership on current economic, business and societal matters and for the development of talents able to integrate perspectives and act both entrepreneurially and responsibly.

The Center for Aviation Competence (CFAC-HSG) is an independent institution of the University of St.Gallen. We offer services as well as basic and advanced training courses in aviation and provide service projects, such as market research and studies, using the knowledge that has been generated through research, publications and the experience of our academic advisory board members, partners and our Managing Director and his Team.

## 1 Organization

The Center for Aviation and Space Competence is supported by six institutes. The Center's academic advisory board is made up of the full professors of the participating institutes. The CFAC-HSG is administratively managed by the Institute for Systemic Management and Public Governance (IMP-HSG) and is led by Dr. Andreas Wittmer. The five institutes which have been established are:

- The Institute for Systemic Management and Public Governance (IMP-HSG) Prof. Dr. Christian Laesser
- The Chair of Supply Chain Management (ISCM-HSG) Prof. Dr. Wolfgang Stölzle
- The Institute for Operations Research and Computational Finance (ior/cf-HSG) Prof. Dr. Karl Frauendorfer
- The Research Institute for International Management (FIM-HSG) Prof. Dr. Winfried Ruigrok
- The St. Gallen Institute of Management in Asia Pte Ltd (SGI-HSG) Prof. Dr. Stefan Morkötter

Additionally, the Center for Aviation of the Zurich University of applied Science in Winterthur (ZHAW), the Institute for Tourism and Leisure Research (ITF) of the University of Applied Sciences, Chur (HTW) are external partners with whom collaboration in projects as well as in teaching and advanced education at university/other tertiary educational level is being intensified. AeroEx, as an associate partner, is part of the executive education offer of the CFAC-HSG. The Aviation Research Center Switzerland (ARCS) is a partnership where swiss academic institutions with a focus on aviation and space collaborate. The CFAC is an active partner in this network.

#### 1. ARCS

Partnership of University Research Centers in the field of Aviation integrating the following institutes: ZHAW School of Engineering's Center for Aviation (ZAV), University of St. Gallen's Center for Aviation Competence (CFAC), the Swiss Federal Institute of Technology in Lausanne (EPFL), ETH Zurich and University of Zurich (UZH)

#### 2. Center for Aviation, Zurich University of applied science (ZAV-ZHAW)

The Center for Aviation combines various technologies, methods and areas of expertise in a bid to find sustainable solutions for the ever-increasing challenges of global mobility, to explore new approaches of making aviation even more efficient and safe. The results of our research are integrated into the Bachelor's degree program in Aviation.

#### 3. Institute for Tourism and Leisure Research, University of Applied Sciences (ITF-FHGR), Chur

The Institute for Tourism and Leisure Research (ITF) of the University of Applied Sciences (FHGR) in Chur, Switzerland develops inter and transdisciplinary methods as well as incorporating knowledge into service and consulting projects relevant to practical applications. The combination of research results and methods with a practical approach to a problem and the close connection with teaching and executive education/advanced training are the man corner stones for success in the specific area of tourism.

#### 4. AeroEx GmbH

AeroEx GmbH is a Swiss-based company and offers a wide range of services with particular focus on the delivery of consultancy and support services to companies in the aviation industry. The key competences are seminars and workshops tailored individually to customers' needs. AeroEx GmbH provides high customer value through a quality expert team with know-how which has been gained overa long period.

The CFAC-HSG provides scientific research, training courses at university level as well as services for private companies and public institutions. The results of market research and consulting concentrate on the competences of the institutes involved which employ together around 120

scientific researchers. The goals of CFAC-HSG are supported by sponsors from industry as well as from public institutions.

#### 1.1 Academic HSG-Partners

The HSG-Center for Aviation Competence is a center that caters to a number of institutes at the University of St. Gallen, supported by six institutes with their professors:

- Em. Prof. Dr. Thomas Geiser, President, IRP-HSG
- Prof. Dr. Christian Laesser, IMP-HSG
- Prof. Dr. Wolfgang Stölzle, ISCM-HSG
- Prof. Dr. Karl Frauendorfer, ior/cf-HSG
- Prof. Dr. Winfried Ruigrok, FIM-HSG
- Prof. Dr. Stefan Morkoetter, SGI-HSG

#### 1.2 Team

The CFAC-HSG is managed by the Institute for Systemic Management and Public Governance (IMP-HSG) and is run by Dr Andreas Wittmer and his team:

- Dr. Andreas Wittmer, Managing Director
- Dr. René Puls, Co-Director and Project Lead Aviation
- Dr. Marc Chavy-Macdonald, Project Lead Space
- Adrian Müller, Research Associate and Aviation Doctoral Student
- Benoit Cornet, Research Associate Space
- Daniela Schüpbach, Research Associate Regulation
- Nicole Denk, Administration and Program Manager
- Rosi Hess, HR and Accounting
- Colin Kübler, Research Assistant
- Alessandro Buchmann, Research Assistant

#### 1.3 CFAC Fellows

The four CFAC fellows are practitioners from the Industry with a strong scientific background that complement our team:

- Prof. Dr. Dominic Foray, Professor EPFL, Economics and Innovation Management
- Joel Hencks, Managing Director AeroEx GmbH
- Dr. Claudio Noto, Airline Pilot
- Mark Roth, Captain/Examiner and Chief Medical Officer
- Dr. Raphael Widmer-Kaufmann, Lawyer and Notary

All employees are involved in various projects as well as lectures. In addition to staff directly employed at CFAC-HSG, there are around 120 employees split among the other partner-institutes at the University of St.Gallen who can be appointed depending on their expertise for project works of the CFAC-HSG.

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## 2 Our Work

## Academic and Executive Education



#### 2.1 CFAC-HSG offering:

- Risk Management (1 module)
- Corporate Governance (1 module)
- Service Management (1 module)
- ➤ Leadership (1 module)
- > Business Model and Strategy (1 module)
- Overview of the Future Air Traffic Market and Aerospace Industry (1 module)
- Liability and Insurance (1 module)
- Air Traffic Corporations and Air Traffic Standards (2 modules)
- Aviation Management Module
- Accountable Manager Module
- Commander Upgrade Module
- Safety Management System Manager Module
- Aviation Auditor Module
- Civil Aviation Instructor Module
- ► Human Factor in cooperation with the Air Zermatt
- Training Center (ATC)
- Project Leadership (1 module)

#### 2.2 Together with AeroEx:

- Overview of EASA Regulation (1 module)
- > Documentation and Management of Records (1 module)
- ➤ SMS Essentials (1 module)
- Internal and External Auditing including Compliance
- Monitoring (1 module)
- Industry Standards in Aviation (1 module)
- Authority & Organization Requirements for
- "Operations" (Part ARO/ORO) (1 module)

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#### 2.3 HSG Master core elective: Aviation Systems

The Master core elective Aviation Systems" was offered in the spring semester 2022. The course was held by Dr. Andreas Wittmer. Around 35 students including exchange students regularly attended the lectures and actively contributed to the lessons/classes. The evaluation of the course by the attendees was very positive. The course was held partly at the University and partly online.

#### 2.4 HSG Asia Compact course: Aviation Management

From 31 October - 8 November 2022, the course "Asia Compact: Aviation Management" took place in Singapore and Dubai.

A group of 14 students had the opportunity to listen to top-level guest speakers from different companies in Singapore to get a first-hand insight into the industry and to expand their network. The program included – among others – guest lectures from Singapore Airlines, Changi Airport, Association of Aerospace Industries Singapore and IATA. Thanks to an input lecture by Prof. Dr. Stefan Morkötter, the students were able to learn about the challenges and opportunities of doing business in Singapore.

Highlight for our students was the excursion to Dubai, where the students were able to listen to input lectures from Emirates Airlines, Dubai South Airport, EKHQ – EK Engineering and Swiss Residence including a visit of their companies.



#### 2.5 CAS in Aviation Accountability, Safety and Compliance Management (ASCM-HSG)

The Certificate of Advanced Studies in Aviation Accountability, Safety and Compliance Management (CAS-ASCM) is a unique executive education at university level. For almost 20 years, CFAC-HSG has been educating aviation managers. The CAS-ASCM develops high potential aviation managers into global aviation leaders by turning their aviation practice into capabilities for managing global aviation. It prepares participants to maintain, stream and improve insights about the aviation market, competition, customers, suppliers and regulations. Capacities are built with respect to challenges in project management, internal auditing, safety management and cross cultural management.

The direct transfer into practice is achieved by applying specific business cases, which are often introduced by the participants. Equipped with an overview, frameworks and tools, the participants will be able to lead, control and increase the efficiency of processes in global aviation management. They will receive structures and tools to auditing their companies and will be able to

reduce the risk by using the provided risk management framework. Schemes for quality and safety management help them to comply with regulations. Finishing this program will enable the participants to influence and steer the company by applying their knowledge of the global system of aviation. Participants of the entire program (four modules, 17 days in total and Transfer Paper) receive 10 ECTS and the CAS-Certificate of University of St. Gallen. It is possible to attend only one module or individual days as well (these participants receive a confirmation of participation).

#### Module 1: Accountable Aviation Management

The goal of this module is to educate and update the skills of accountable managers in Global Aviation Management.

#### Module 2: International Aviation and Leadership

It is the aim of the module to train international management and leadership skills in the context of the aviation industry. Therefore, a special focus on how to do business in Asia and how to lead international teams is in focus. In addition, it is the goal to feel the Asian business culture and to meet Asian leaders of the aviation industry.

#### Module 3: Safety & Security Management

The management of safety is highly regulated, but is regulation enough? This module explains how to be compliant with regulation and offers tools and practices to be efficient. Different company cultures will be discussed and how a safety and security culture can be achieved. Furthermore, Cyber Security and Data privacy issues have become relevant topics on agendas of managements. Challenges are to know how to deal with these risks and how to prevent from them. Both Cyber Security and Data Privacy are addressed and help managers to deal with it.

#### Module 4: Auditing in Aviation

Internal auditing becomes highly important to ensure compliance consistently. This module deals with compliance, the basic regulations to it and with how to install efficient internal auditing processes.

#### CAS Graduation 2022



Alex Schönenberger (Swiss Int. Airlines), Andreas Wittmer (Managing Director CFAC), Sonja Bollier (Hesse Digital AG), Joel Hencks (Aeroex GmbH) (from left)

#### 2.6 Aviation & Space Symposium

With over 300 participants and more than 80 exhibitors a successful first Aviation & Space Symposium (#AS22) took place on 1 & 2 June 2022 at the OLMA Exhibition in St. Gallen. As a unique highlight, the event was held together with the 10th Bodensee Aerospace Meeting (#BAM22), bringing the industry event to Switzerland for the third time, hosted by the Swiss Aerospace Cluster and co-organized by four partner clusters from Germany (BodenseeAIRea, LR BW & bavAIRia) and Austria (AAIG). The AS Symposium, organized by the Center for Aviation Competence of the University of St. Gallen, focused on the sustainable future of civil aviation and opportunities in the New Space Economy.

Under the title New Frontiers: Aviation meets Space, a large table-top exhibition of companies from the DACH region was combined with a top-class range of speakers from the aerospace industry. In this combination, the Aviation & Space Symposium organized two expert panels for the conference part, which presented and discussed current research and industry trends to the B2B and academic audience and addressing the challenges of the future, followed by two exciting panel discussions.



#### 2.7 CFAC/FFAC Airport Forum 2022

On 11 November 2022 the first FFAC/CFAC Airport Forum took place at Airport Zurich and offered a platform for the controversial discussion of relevant topics in aviation with special consideration of the stakeholder perspective of airports and airfields. It aimed at disseminating knowledge and practical experiences across the industry while providing a networking opportunity among the participants.

We had exciting presentations by recognized experts on the legal aspects of the Just Culture in Switzerland and its practical implementation, also in the context of airport management. In addition, panel discussions with all the speakers enabled us to deepen the insights from various perspectives and initiate controversial debates. Finally, the gathering of the community fostered the sharing of experience and exchange of practical information within and beyond the aviation industry. Next to aviation and airport executives, the target audience included suppliers, service providers and specialists from the industry, regulators, the federal administration and cantonal aviation delegates, as well as stakeholders from other sectors that were interested in an interdisciplinary knowledge transfer.

A big thank to our sponsors who made the event possible: Flughafen Zürich, EuroAirport Basel, Swiss Aerospace Cluster and skyguide



#### 2.8 Space for Business Program

The program has been developed by three of Europe's renowned business schools in collaboration with the European Space Agency. The program is aimed at space and non-space professionals (with at least several years of working experience) and entrepreneurs who want to grow their management skills and know-how, who want to understand how the space sectors and space assets offer new business opportunities and offers new business models, and who want to kickstart their career in the space sector.



#### 2.9 Bachelor- and Master Theses, Dissertations and CAS Papers

The following theses and dissertations were completed at the HSG in 2022:

#### Bachelor

Electric air vehicles – ein Weg zur Eliminierung negativer Emissionen?

Ecological impact of business air travel in Europe, a quantitative analysis

Travel Behavior of Senior Citizens - Changes related to Covid-19

Sustainable Business Air Travel: Analysis of Swiss Corporate Air Travel with Regards to Carbon Offsetting Purchases

Carbon offsetting on the corporate level: the willingness of organizations to offset their business air travel emissions

Sustainable Aviation Fuels – Challenges and Opportunities

#### Master

Wechselwirkungen zwischen dem Flughafen Zürich und seiner Umgebung

IATA's New Distribution Capability (NDC) standard, industry insights on its benefits and on costs.

Role of Night Trains for Intra-European Mobility in the European Green Deal

The Market Value of Airline Sustainability Initiatives

Low-carbon travel mode choices: Nudging customers towards reducing personal air travel within Europe

Airline Cooperation Dyssynergies (Negative effects of different cooperation types in the airline industry)

Hybrid Airline Business Models (Evaluation of the Economic Viability from a Passenger Perspective)

The Role of Carbon Accounting in the Reduction of Business Air Travel Emissions: A Qualitative Analysis of Swiss-based Companies

#### **CAS Transfer Papers**

Digitale Umsetzung von Luftfahrzeug-Versicherungen

**Evidence Based Training for Flight Crews** 



## 3 Presentations and Publications

#### 3.1 Presentations

The CFAC made the following public presentations:

#### Andreas Wittmer

Gymnasium Friedberg: Herausforderung Nachhaltigkeit in der Mobilität

#### Egli, Nico & Wittmer, Andreas

ATRS 25th World Conference (Antwerpen): Pricing for sustainability: Analysing the demand-side steering effect of a flight ticket levy in Switzerland.

#### Müller, Adrian

25. Jahrestagung der Deutschen Gesellschaft für Tourismuswissenschaft (DGT) (Bern): Strukturelle Rahmenbedingungen für die Dekarbonisierung von Geschäftsreisen. Explorative Fallbeispiele aus wissensintensiven Sektoren.

#### Müller, Adrian

AIEST Konferenz. (Cologne): Structural Preconditions for Decarbonizing Business Travel. Case Study Evidence from Knowledge-Intensive Industries.

#### Müller, Adrian & Wittmer, Andreas

The choice between business travel and video conferencing after COVID-19 – Insights from a choice experiment among frequent travelers. Tourism Management

#### Müller, Adrian

Decision-making autonomy - a novel approach to business traveler segmentation

#### 3.2 Publications

Various papers and articles were published:

Müller, Adrian; Walls, Judith Louise & Wittmer, Andreas: Sustainable Aviation: An Introduction. In Walls, Judith Louise & Wittmer, Andreas (Hrsg.): Sustainable Aviation. Cham: Springer

Stauch, Alexander & Müller, Adrian: Technology Assessment for Sustainable Aviation. In Walls, Judith Louise & Wittmer, Andreas (Hrsg.): Sustainable Aviation. Cham: Springer

Müller, Adrian; Stauch, Alexander; Walls, Judith Louise & Wittmer, Andreas: Towards Sustainable Aviation: Implications for Practice. In Walls, Judith Louise & Wittmer, Andreas (Hrsg.): Sustainable Aviation. Cham: Springer

#### 3.2.1 CFAC – The Aviation Series

The Aviation Series of the Center for Aviation Competence are edited by Prof. Dr. Roland Müller and Dr. Andreas Wittmer:

- Die Flugunfalluntersuchung nach schweizerischem Recht (Band 19): Widmer-Kaufmann, Raphael
- Green Air Travel: Its Market and Regulations (Band 20): Wind, Corinna
- Pricing for sustainability: Analysing the demand-side steering effect of a flight ticket levy on young adults in Switzerland (Band 21): Egli, Nicole

#### 3.2.2 Sustainable Aviation (A Management Perspective), Springer Verlag

Our new publication "Sustainable Aviation" was published in 2022 and fills a gap in the literature on a central topic of aviation of the next decades.

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# 4 Projects

These are three projects of the CFAC and its partners in 2022/2023:

Subject:	New Space Innovation
Customer:	Swiss Space Office
Business Partners:	EPFL
Description:	The NewSpace Innovation project, in collaboration with Prof. Dominique Foray of EPFL, looks at the accelerating dynamics of the space sector from the perspective of Innovation Studies. The interdisciplinary project proposes a theoretical explanation, termed "innovatization", and new data on the sector's transformation. A key outcome will be innovation policy recommendations to the Swiss Space Office, who are funding the work and now revising their policy.
Subject:	Kennzahlen & Wechselwirkungen des Flughafen Zurich in der Metro- polregion Zurich (Mit Sonderbetrachtung Region Hochrhein-Boden- see)
Customer:	Kanton Zürich
Business Partners:	CFAC
Description:	Der Report mit integrierter Studie wurde vom Amt für Mobilität des Kantons Zurich in Auftrag gegeben und hat zum Ziel, die Wechselwirkungen zwischen dem Flughafen Zurich und seiner Umgebung zu untersuchen. Es geht dabei primär um verkehrliche und oko- nomische Effekte. Der Bericht soll zudem auf der Studie zur Bedeutung des Metropolraums Zurich für die Region Sudbaden aus dem Jahr 2013 aufbauen, weshalb sowohl der Metropolraum Zurich als auch die Wechselwirkungen des Flughafens mit der Region Hochrhein-Bodensee eine wichtige Rolle spielen.
Subject:	Standortbestimmung zur Nachhaltigkeit am Flughafen Zürich (FZAG)
Customer:	Kanton Zürich
Business Partners:	CFAC
Description:	Die Studie für den Kanton Zürich erarbeitete eine Standortbestimmung zur Nachhaltigkeit am Flughafen Zürich. Sie hat die Einflussfaktoren der ökologischen Nachhaltigkeit transparent dargestellt, die Massnahmen zur Erreichung von Net Zero erarbeitet, und bildete die Grundlage für eine Abstimmung zwischen Flughafenpolitik, Umweltstrategie des Kantons ZH und dem Klimaziel des Bundes. Die Analyse stützte sich auf qualitative Primär- und Sekundarerhebungen.

## 5 Public Relations

#### 5.1 Media

The Center with Andreas Wittmer and its team was again present in various newspapers, online platforms and social media and was able to transfer many insights from research into impacts to the society:



#### Wittmer Andreas

SRF1/Tagesschau Hauptausgabe, January 11, 2022 Halbleere Flugzeuge

NZZ am Sonntag Online, February 5, 2022 Airlines schalten in den Angriffsmodus

travelnews.ch, February 11, 2022 Wohin bewegen sich die Airline Tarife?

Tagblatt.ch, February 12, 2022

Corona stärkt den Ferienflugverkehr, davon profitiert Edelweiss mehr als Swiss

Touring, March 1, 2022 Was Aviatik-Experte Andreas Wittmer noch von der Luftfahrtbranche erwartet

Sonntagsblick/Blick.ch, March 20, 2022 Luftfahrt kämpft gegen Long Covid

Cockpit, April 14, 2022

Umsetzung der Just Culture: eine komplexe Materie

Srf.ch, May 3, 2022

Hohe Kerosinpreise verteuern das Fliegen erheblich

St. Galler Tagblatt/Tagblatt.ch, June 4, 2022

Fliegen ohne schlechtes Gewissen? Kerosin aus Luft und Sonnenlicht solls möglich machen

TVO, June 8, 2022

Swiss streicht Flüge wegen Personalmangel

Fm1today.ch,

Wut auf Swiss: Ostschweizer Reisebüros haben massiven Zusatzaufwand

20min.ch, June 22, 2022

Personalmangel: In den Sommerferien droht an Schweizer Flughäfen Chaos

Watson.ch, June 25, 2022

So schlimm wird der Sommer und so vermeidest du Chaos am Flughafen

Htr.ch, June 30, 2022

Der geplante Ausbau ist bedarfsgerecht

Srf1, 10vor10, October 14, 2022 Swiss Boeing 777 mit Haifischhaut

Nau.ch, October 18, 2022

Swiss: Experte analysiert Ausganglage vor Streik-Verhandlung

Cockpit, November 10, 2022 Chaos erfolgreich verhindern

#### Puls René

20min.ch, June 15, 2022

Schweizer Luftraum gesperrt : Gesperrter Luftraum – darum gibts keine Entschädigung für Passagiere

#### 5.2 Conferences and Conventions

The CFAC was part of the following conferences and conventions in 2022:

- Air Transport Research Society (ATRS) in Antwerpen
- AIEST in Cologne
- DGT in Berne



## 6 CFAC Supporters and Alumnis

#### 6.1 Supporters

As an independent institution of the University of St. Gallen, the CFAC-HSG focuses its academic research on relevant aviation topics. Thanks to the generosity of our supporters and partners, we were able to do research and contribute important insights to the academic debate and also transfer our knowledge directly to the industry.

Our main supporters are: Foundation of Aviation Competence (FFAC\*), AviSwiss GmbH, Canton St. Gallen (Amt für Wirtschaft und Arbeit, Standortförderung), Alex Schönenberger

#### 6.2 Benefits for Supporters

Not only are supporters of the Center for Aviation Competence contributing to the academic research of Aviation significantly, but can profit from several benefits at the same time, as listed below.

- ➤ CFAC News (Monitoring of Aviation Law, Literature and Judicative in Air Law, Literature in Aviation Management, Politics, Economics and Society in Aviation) with two editions per year.
- Academic works in the field of aviation can be written to requested topics by our supporters (Master theses or Dissertations which are advised at University of St.Gallen or Bern)
- ➤ Project works and applied research projects to requested topics in the field of aviation of supporters (Bachelor and Master level at the University of St.Gallen and at the ZHAW)
- Advisory opinion with special conditions (Opinion papers in the field of regulation or management in aviation for supporters with reduced hourly rates)
- Participation at Events with Aviation lectures and aviation forums with special conditions (free participation at gatherings, participation at forums with exchange of experience and Apéro with 10 % discount)
- > Participation at our Executive Education programs with special benefits
- > Access to our Aviation publications and information with login on our CFAC Supporters webpage.
- > Books published by the CFAC and of the CFAC Aviation Series can be bought with 30 % discount.
- Network of aviation specialists (relaxed exchange of know-how and meetings with direct contact with us)
- ➤ Fast and free legal advice about aviation issues (advise by our Professors of the CFAC for free, if an advise can be given by phone without research effort)
- ➤ Fast and free advice about aviation topics in the fields of Aviation Management, Aviation Political Issues, Aviation Economy, Air Law, Aviation Environment and Society, Aviation Logistics, Aviation Operation if an advise can be given by phone without research effort.

St.Gallen, March 2023

\*The Foundation for Aviation Competence was founded in 2019. The purpose of the foundation is to support the Center for Aviation Competence (CFAC-HSG) in the field of education, academic research and as a provider for answers for any regulatory questions from the industry.



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#### 6.3 CFAC Alumni

All participants of our executive education courses (DAS and CAS) automatically become CFAC alumni. CFAC Alumni are regularly informed about the activities of the Center and are invited once a year to a networking dinner in St. Gallen. In addition, smaller events are organized by the alumni members. Contact person and responsible for the CFAC Alumni is Raphael Widmer-Kaufmann (raphael.widmer@unisg.ch).



Visiting Lufthansa Aviation Training Switzerland AG

#### 6.4 HSG Alumni Aviation and Space Club

The HSG Alumni Aviation and Space Club is a new club within the thriving HSG Alumni community. We aim to connect alumni and alumnae working and/or interested in the aviation and space industry by offering events organised by our members for members.



Kick-Off Event at University of St. Gallen/Square

## 7 Preview 2023

#### CAS in Aviation Accountability, Safety and Compliance Management (ASCM)

A group of 11 participants on side and 2 online started the CAS module "Accountable in Aviation Management" together with the DAS Global Air Transport Management Program at WBZ University of St. Gallen.

#### Accountable Aviation Management Module:

16-21 January 2023, St. Gallen

**International Aviation Management Module:** 

13-16 June 2023 in Singapore

Safety&Security Management Module:

5-8 September 2023 in St.Gallen

**Auditing in Aviation Module:** 

22-24 November 2023 in St.Gallen

Interested people can apply on www.cfac.ch or contact the CFAC administration office cfachsg@unisg.ch.

#### **Space for Business Program**

Together with partner universities Nova (Lisbon), RSM (Rotterdam) and with support of the European Space Agency (ESA) we started a management executive program for managers in the space industry and managers aiming at entering the space industry.

The CFAC will deliver one five days module in Switzerland, starting in March 2023.

#### **Global Air Transport Management DAS**

The Diploma of Advanced Studies is offered in cooperation between University of St. Gallen and International Air Transport Association (IATA). The program content is delivered by academic and industry leading lecturers from HSG and IATA. The first issue started in January 2023 with the Aviation Systems & Accountabilities Module. Please find more information on Global Air Transport Management (DAS) (unisg.ch)

Further information on: Global Air Transport Management DAS | Executive School HSG (unisg.ch)

#### FFAC/CFAC Forum Risk, Safety and Liability in Aviation 2023

The next Forum will take place on Tuesday, 14<sup>th</sup> November 2023 at Zurich Airport (Besucherraum). Registration can be done on <a href="https://www.cfac.ch">www.cfac.ch</a>

#### FFAC/CFAC Airport Forum 2024

The next Forum will take place on 15th November 2024 at Zurich Airport (Besucherraum). More information will follow end of 2023.



# The Sky is still full of opportunities....



#### Contact / Publisher

#### **Center for Aviation Competence (CFAC-HSG)**

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Editors: Dr. Andreas Wittmer / Nicole Denk Pictures: © CFAC, HSG, Pixabay, ESA