



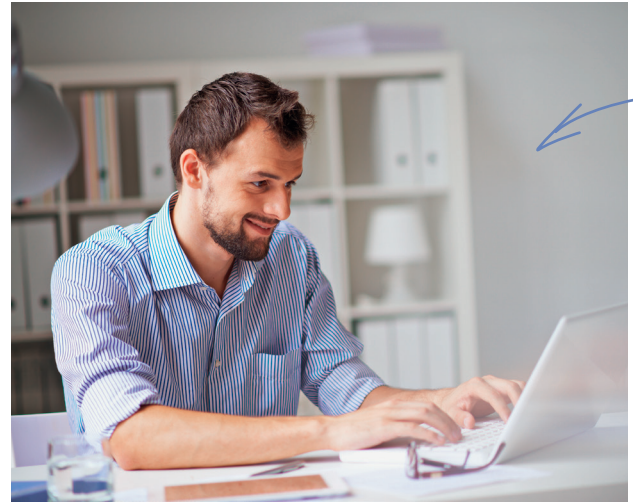
Annual Report 2014/2015/2016

Content

07 The Head Office of the Federal Aviation Office is situated in Braunschweig, the Regional Offices are located in Hamburg, Berlin, Düsseldorf, Frankfurt/Main, Stuttgart and Munich.



09 Large increase of staff: The number of staff members has doubled within a period of 5 years.



25 Ramp checks throughout Europe: randomised security checks of foreign aircraft were introduced by the LBA and are being introduced by more and more countries.

04 Foreword

07 The Federal Aviation Office (LBA)

More than 100 tasks relating to approval, licensing and supervision are within the areas of responsibility of our divisions

09 Staff development

Increase of staff for the LBA – a story of success

10 Organizational chart of the LBA

14 Management system

The left hand knows what the right hand is doing

16 General Aviation Roadmap

Working together for the European General Aviation and for simplifications of the regulations for operators of non-commercial aircraft

20 Aviation security in Germany

European requirements ensure an increasing scope of tasks of the division

24 Lithium batteries

LBA security experts are faced with great challenges due to more and more new chemical compositions of the batteries and increasing transport quantities

25 Checks of foreign aircraft

An LBA concept is being established worldwide

28 New occurrence reporting procedures for more safety

30 Air passenger rights

Support of consumer protection in a proactive and committed way

32 How to find us

34 Statistics 2014/2015

Imprint

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Foreword



Jörg Mendel, President of the Federal Aviation Office

Dear reader,

You are holding in your hands the latest edition of the Annual Report of the Federal Aviation Office (LBA) published every two years. For the first time, the report has been designed in the form of a magazine, allowing us to not only look back over the last two years in terms of figures and facts, but also to look ahead in a number of different respects.

The aeroplane connects the continents and the people that inhabit them. Air traffic has brought the world closer together. However, we must unfortunately also accept that – due to an accident or severe incident – a high-level working system, which is in principle reliable, still cannot provide 100 % security.

We were shocked and deeply moved, to hear of the tragic incident involving a Germanwings aircraft, in the French Alps on 24 March 2015. This tragedy, still incredible today, not only influenced the official activities of the Federal Aviation Office in the days and weeks after the incident, but until the present day.

Right from the outset, with determination and a great sense of responsibility, the LBA supported the investigations of the French Bureau of Investigation and Analysis for Civil Aviation Safety (BEA), to help establish the cause of the incident, and participated actively in working groups at national and European level, in particular in the task force set up by Alexander Dobrindt, Federal Minister of Transport and Digital Infrastructure. The results of the consultations will lead to numerous changes in the fields of national and European legislation. The relevant consultations took place in the competent parliamentary bodies and were completed in May 2016. On 3 July 2016, the new regulations entered into force. The work and range of tasks, of our authority, and other relevant authorities, will noticeably change in the future.

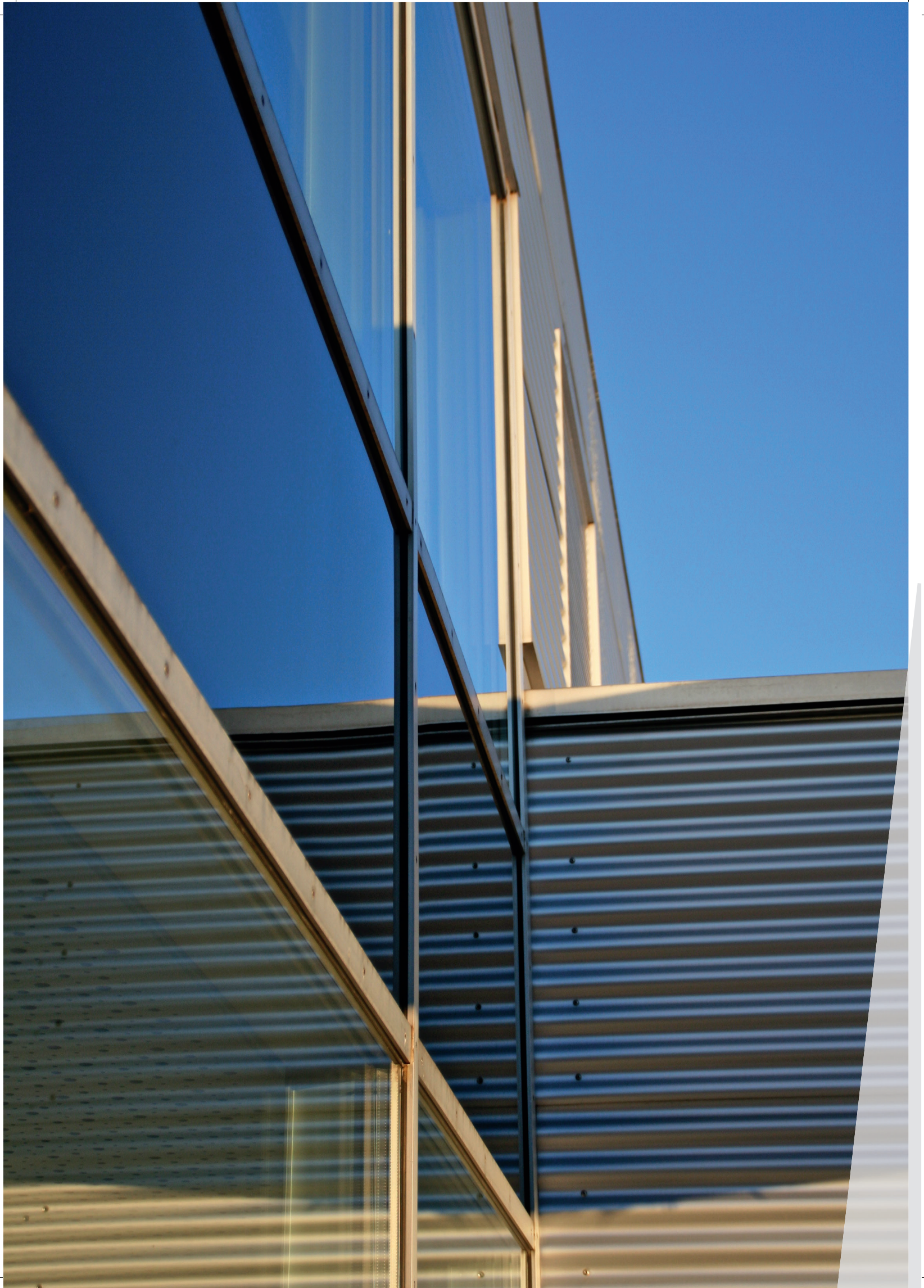
Braunschweig, July 2016

A handwritten signature in black ink, appearing to read 'J. Mendel'.

Jörg Mendel
President of the Federal Aviation Office



The LBA Head Office
in Braunschweig



Providing safety *before the flight begins*

The LBA is responsible for over 100 tasks regarding certification, approval and oversight. We herewith present our divisions.

The Federal Aviation Office consists of the Staff Unit of the President and five further Divisions: 'Operations', 'Aviation Personnel', 'Airworthiness/Environmental Protection', 'Aviation Security' and 'Administration'. The tasks of the LBA are fulfilled by the LBA Head Office in Braunschweig and by Regional Offices situated at the commercial airports of Frankfurt/Main, Munich, Stuttgart, Düsseldorf, Hamburg and Berlin.

President

The President of the Federal Aviation Office is the head of the authority and represents the LBA at national and international level. The President is also responsible for strategic planning and control.

Staff Unit of the President

The 'Staff Unit of the President' reports directly to the President. It is, among other things, responsible for the strategic support of the President, comprehensive national and international tasks, the preparation of regulations, the management system and risk management. Further responsibilities include emergency and crisis management, press and general public relations and customer and citizen services.

Operations

The 'Operations' Division is responsible for any questions concerning the operation of aircraft. Its essential tasks are the approval and oversight of German air carriers. Additionally, it is also responsible for the, assessment and supervision of the financial resources of air carriers as well as for ensuring that flight operational preconditions are carried out. Furthermore, the Division is responsible for granting entry permissions for foreign air carriers, for carrying out unannounced spot checks (ramp checks) on foreign aircraft, and for granting approval for the transportation of dangerous goods by air.

Aviation Security

The Division 'Aviation Security' is responsible for the approval, amendment and extension of Air Carrier Security Programs of German and foreign air carriers, as well as for the supervision of air carrier applied security measures at German airports. In the field of air cargo, the LBA is responsible for the approval of regulated agents, the approval of known consignors, the approval of regulated suppliers for in-flight supplies, and the supervision of all parties involved in the safe supply chain.

Finally, in the field of aviation security training, it is within the LBA's responsibility to evaluate aviation security training programs, approve instructors for aviation

Units of the Staff Unit of the President

- 1 Comprehensive National and International Affairs
- 2 Management System/ Implementation State Safety Program (SSP)
- 3 Press and Public Relations/Emergency and Crisis Management/ Customer and Citizen Services

‘Professionally competent, LBA staff ensure personnel, technical and flight operational safety standards consistently meet the highest levels.’

security training; supervise aviation security training; and where appropriate, issue certificates of competency.

Aviation Personnel

The Division ‘Aviation Personnel’ is responsible for overseeing all tasks related to professional aviation personnel. This includes, the oversight of training organisations for airmen; qualification and approval of flight simulators; checks of flight operational preconditions; admission to training programmes to obtain licences; permissions to conduct examinations to obtain licences and ratings; and the licensing of aviation personnel.

Further, tasks for the Division comprise of approval and oversight of Aeromedical Centres and experts. This includes substantial participation in national and international bodies for the development of standards for training and examination of aviation personnel.

Airworthiness/ Environmental Protection

The Division ‘Airworthiness/Environmental Protection’ is responsible for the approval and oversight of national design organisations, production organisations, maintenance organisations, aeronautical workshops, Continuing Airworthiness Management Organisations (CAMO) and training organisations for technical personnel. Furthermore, the Division is responsible for

the granting of licences and ratings for inspectors of aeronautical products, for certifying staff, for airworthiness review, and for the Aircraft Continuing Airworthiness Monitoring (ACAM). It also oversees the German airports associations, publishes airworthiness directives and is responsible for the registration of aircraft. Finally, the Division also supports the European Aviation Safety Agency (EASA) with the supervision of type investigations and type certifications, as well as the allocation of noise certifications.

Administration

The Division Z ‘Administration’ performs administrative tasks on behalf of the other Divisions as well as the typical administrative tasks of an authority. This includes human resources, budgeting and accounting, internal services, and the provision of information technology. In addition, the Division Z performs tasks dealing with consumer protection.



» Staff development

Increase of staff for the LBA – *a story of success*

In 2014 and 2015, the Federal Aviation Office recorded an, initially moderate but then steady, increase in new staff.

Due to these increases, by the end of 2015 the LBA – in cooperation with the Federal Ministry of Transport and Digital Infrastructure – was able to ensure adequate staffing to complete its tasks properly and successfully.

Furthermore, by the end of the year 2015, the Federal Aviation Office was able to advertise a further 220 vacancies that, until that point, could only be filled by excess staff from other Federal Authorities, as well as another 40 new vacancies. By mid 2015, approximately 100 vacancies were advertised to be filled without restrictions. Thus, as of 1 January 2016, there are in total 952 posts available. Considering that in 2011 the LBA had only 380 posts, one can imagine the tremendous level of change that the LBA has undergone in recent years.

Many young professionals

Due to the level of competition within the economy to recruit qualified specialists – especially engineers with bachelor and master degrees – the LBA is largely restricted to recruiting young professionals or persons with little professional experience. This is a new challenge for the authority as, due to rela-

tively restrictive legal requirements of the European Union regarding the qualification of authority staff, new staff members are highly motivated, but cannot always immediately fulfil their specialized tasks one hundred per cent or operate independently.

Needless to say, the current positive staffing situation will not reduce the German aviation authority's commitment to reviewing the staff requirements of its operations. This is the only way the authority can comply with its main task: to ensure maximum aviation safety and security, and efficient and rapid case management.

Development of staff figures

1954 In the main building of Braunschweig Airport, the Federal Aviation Office started its work with 28 staff members.

2014 It is the celebration of the 60th anniversary of the LBA. Today, the authority, Head Office and six Regional Offices, has a total of 813 staff members.

Officer for Gender Equality

Birgid Selpien-Bahr



**President of the
Federal Aviation Office¹**

Jörg Mendel
Vice President:
Fred Müller⁴

**Division Z
Administration**

Fred Müller
Deputy:
Thomas Slaba

Department Z 1
**Organization/Internal Services/
Air Passenger Rights**

Thomas Slaba

Department Z 2
**Human Resources/
Legal Affairs of Division Z**

Judith Pätzold

Department Z 3
Budget/Controlling Support/Costs

Detlef Jürgens

Department Z 4
**Information and Communication
Technologies**

Andreas Johannes

**Division T
Airworthiness/Environmental Protection**

Thomas Burlage
Deputy:
N. N.

Department T 1
**Design, Production and Maintenance
Organizations/EASA Framework Service
Contract Performance/EASA Budgetary
Management**

Matthias Plehn

Department T 2
**ACAM/Certifying Staff/
Airworthiness Directives**

Jürgen Feldhoff

Department T 3
**Certification/Environmental and
Radiation Protection**

Helmut Fendt

Department T 4
**Aircraft Registration/Legal Affairs of
Division T**

Ulrike Urban

Department T 5
**CAMO/Maintenance Programmes/
Continued Airworthiness**

Joachim Wichmann

**Division B
Operations**

Axel Losansky
Deputy:
Volker Cirkseña

Department B 1
**Licensing of Air Carriers/Entry
Permissions/Legal Affairs of Division B**

Jörg Straube

Department B 2
Flight Operations

Martin Kaiser

Department B 3
Aviation Safety/Dangerous Goods

Olaf Zernick

Department B 4
Airline Finances

Volker Cirkseña

**Regional Offices of the Federal
Aviation Office²**

Hamburg, Berlin, Düsseldorf, Frankfurt,
Stuttgart, Munich

**Office Air Navigation Services at the
Federal Aviation Office**

Administrative and technical supervision
executed by the Federal Ministry of
Transport and Digital Infrastructure



**Staff Unit
of the President**
SBI
Dirk Sajonz⁴
Deputy:
Cornelia Cramer

Unit 1
**Comprehensive National and
International Affairs**

Dirk Sajonz⁴

Unit 2
**Management System/
Implementation State Safety
Program (SSP)**

Dr. Thomas von Borstel

Unit 3
**Press and Public Relations/
Emergency and Crisis Management/
Customer and Citizen Services**

Cornelia Cramer



**Division L
Aviation Personnel**

Udo Dehning
Deputy:
Eckhard Fegel

Department L 1
**Training Organizations/
Authorized Instructors and Examiners**

Eckhard Fegel

Department L 2
Theoretical Examinations

Martin Neumann

Department L 4
Licensing/Legal Affairs of Division L

Yvonne-Christine Schmidt

Department L 5
Aviation Medicine

Dr. Andreas Kirklies



**Division S
Aviation Security**

Birgit Loga
Deputy:
Irina Ried

Department S 1
**Policy Matters/Legal and International
Affairs of Division S**

Rolf Monning

Department S 2
Aviation Security Training

Matthias Petersen

Department S 3
**Approval of Regulated Agents/
Designation of Air Carriers as ACC3**

Xenia Ellebrecht

Department S 4
Approval of Known Consignors

Irina Ried

Department S 5
**Approval of Air Carrier Security
Programmes/Regulated Suppliers**

(Kristina Hill)⁵

Department S 6
Supervision

Dr. Marion Nikodem

Budget Officer
Detlef Jürgens³

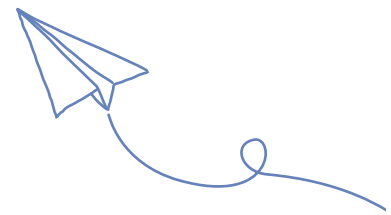
Data Protection Officer
Christine Ende³

**Contact Person for the Prevention
of Corruption**
Holger Kasperski³

General Staff Council, Chairman
Sara Klare

Local Staff Council, Chairman
Manfred Wolthusen

**Representative/Person of Trust
for severely disabled persons**
Olaf Schneider



¹ For subject-related matters, the Heads of the Divisions act as deputies in their respective area of responsibility

² Administrative and technical supervision of the Heads of the Regional Offices (HRO) by the Head of Division T, technical supervision of the HRO in their function as Head of the Authority (for their relevant RO) by the Head of Division Z

³ Functions under the direct authority of the President

⁴ Functions are simultaneously performed by the same person

⁵ In charge of the performance of the functions

Germanwings

When the LBA learned of the crash involving Airbus A 320 of the German air carrier Germanwings in the French Alps on 24 March 2015 it was clear that the event would significantly determine the official activities of the LBA in the future, even before the tragic cause of the incident was ultimately established.

The LBA was also in the focus of the accident investigation and of the media as competent authority in terms of approval and oversight with respect to the air carrier, as licensing authority for the pilots, as competent authority for aircraft registration and as competent authority in terms of approval and oversight regarding aeromedical centres and aeromedical examiners.

2-persons-in-the-cockpit recommendation

From the outset, the LBA supported the investigation of the French Bureau of Investigation and Analysis for Civil Aviation Safety (BEA) into the cause of the accident.

Parallel to the accident investigation, Alexander Dobrindt, Federal Minister of Transport and Digital Infrastructure, established an expert group ('task force') at national level, which included contributions from LBA experts.

Only a few days after the accident, the first measure of the so-called 2-persons-in-the-cockpit recommendation was introduced, with all German air carriers considering that the right to make the final decision remains with the commander. This measure, which was initially implemented only in Germany, was later recommended by the EASA to all European air carriers. Even at international level, many air carriers implemented this measure.

Changes to the cockpit door locking system/mechanism have not been carried out. It is

the view of the LBA and other leading aviation authorities that the safety and security of cockpit and cabin crew must be permanently ensured, in particular when dealing with the issue of access procedures and the avoidance of unnecessary door openings (unnecessary leaving of the cockpit).

Aeromedical database

A key focus of the investigation, and associated media coverage, was the performance of flight medical checks of pilots in Germany.

Already long before the publication of the final report of the BEA on 10 March 2016 there have been reactions.

In Germany, necessary measures were taken to introduce an electronic database including flight medical examinations and assessments so that the authority is able to ensure, among others, its oversight of aeromedical examiners and aeromedical centres. This database will include all medical reports with personal data, i.e. no longer anonymous. Furthermore, there should be unannounced drugs and alcohol testing of pilots. The necessary amendment of the Air Traffic Act was carried out in 2016. Parallel to that, amendments of the European regulations by the EU Commission/EASA are in planning.

» Management system

Everything *in balance*

The European aviation regulations require the introduction and application of a management system not only from air carriers and organizations requiring an official approval for their activity on the part of the aviation authority, but also from the approving and supervisory authorities themselves such as the LBA.

Although the European legislation imposes regulations, which the LBA management system must be in accordance with; it is neither an EU nor an EASA management system. It is only the LBA itself that determines how the management system of the German aviation authority must look like. The management system of the Federal Aviation Office describes measures and methods applied by the Federal Aviation Office to comply with Regulation (EC) No 216/2008 and its implementing rules.

It is the system by which the head of the authority defines his aims and, considering risks and chances, determines how to achieve these aims. Furthermore, the head of the authority can find out if the defined aims were achieved and if the LBA is in a position to perform the tasks in a proper way. It is a targeted system by which the LBA ensures that the left hand knows what the right hand is doing.

Control of the management system was delegated to the Staff Unit of the President.

Parts of the management system include: performance of internal audits; introduction of risk assessments (risk management) and their application to the LBA procedures; implementation of the LBA management manual; restructuring of the process map; introduction of a systematic designation

(nomenclature) for all LBA procedures; and the standardization and control of documents.

Ensuring topicality

Subject of the three last-mentioned topics are first the authority requirements, processes and procedures relevant for EU aviation legislation. The overriding aim is to ensure the topicality of the management system documentation and to reduce the overall complexity of maintaining processes and procedures. This will also be achieved by the centralizing control of all specification documents.

» 21,213

aircraft were registered in Germany in 2015 including 1,164 balloons.



Manual as a guide

The management manual together with the rules of procedure constitutes the basis of the LBA management system. It describes its structure and regulates central procedures such as the preparation and control of specification documents. Moreover, for all employees, it is a guide to the relevant specification documents of the respective tasks.

Internal audits are part of the management system in accordance with the relevant requirements and must be carried out by an organizational unit working independently from the auditing organizational unit.

As a part of the management system, risk management incorporates both internal LBA contributions and contributions from other authorities.

In this instance, responsible LBA staff communicate closely with the Ministry of Trans-

port and Digital Infrastructure, the aviation authorities of the federal states and EASA. Furthermore, the LBA reports to the Ministry of Transport and Digital Infrastructure on the risk situation in aviation as far as its area of responsibility is concerned.

The Management System

The management system of the Federal Aviation Office describes measures and methods applied by the Federal Aviation Office to comply with Regulation (EC) No 216/2008 and its implementing rules. It is the system by which the head of the authority defines his aims and, considering risks and chances, determines how to achieve these aims.



Working together for General Aviation



General Aviation



In coordination with the Federal Ministry of Transport and Digital Infrastructure, Germany has been represented in the 'General Aviation Roadmap NAA Group' by the Federal Aviation Office since the beginning of 2014. At present, it consists of 13 representatives of interested national aviation authorities of the EU member states and, under the leadership of EASA, regularly meets with representatives of interest groups of the European General Aviation. The working group discusses topics associated with the 'GA Roadmap' to promote general aviation, thus serving as a platform to exchange information on the current situation of relevant partial projects.

The focus of the LBA's participation lies on the best involvement of the Federal Ministry of Transport and Digital Infrastructure and the individual aviation authorities of all federal states. Since 2015, this has been achieved by direct communication as well as by reporting and discussing on the occasion of working groups of the federal government and federal states in the field of licensing and flight operations meeting at regular intervals. In addition, the active acquisition of staff members of regional aviation authorities participating in relevant EASA partial projects was successful in 2015.

Harmonization of European regulations

Furthermore, the LBA actively participates in projects and in the handling of specific topics in the field of General Aviation. Staff members of the Staff Unit of the President take part in the European 'expert group for non-commercial operations'. Moreover, the LBA contributed intensively in the revision of the European Regulations for the operation of balloonists.

Apart from the GA Roadmap activities, staff members of the Staff Unit of the President are also represented in other bodies. They support a further simplification and harmonization of the complex European regulations and, in cooperation with the responsible departments, they regularly comment on rules drafted by EASA.

Additional essential elements include the further development of relationships and cooperation with associations such as AOPA, Germany, Bundesverband der Betriebe der Allgemeinen Luftfahrt (BBAL) or Deutsche Aeroclub e.V. (DAeC) in order to identify positions of commonality, exchange ideas and improve external communication. As part of this policy of open communication, the Federal Aviation Office additionally created the website 'GA Roadmap – jointly for General Aviation'. The information published for General Aviation is updated at regular intervals.

With the entry into force of Regulation (EU) 2015/1088 at the end of July 2015, diverse amendments to Part-M (Appendix 1 of Regulation (EU) No 1321/2014) have been introduced with the purpose of alleviating considerably the implementation of the requirements specified in Part-M for owners and operators, respectively, of General Aviation. These amendments are a first concrete outcome resulting from the 'timetable' of the European Commission to promote General Aviation ('GA Roadmap Project'). It was set up in 2012 after General Aviation and national aviation authorities such as the LBA had serious doubts regarding the existing scope and adequacy of the EU regulations for General Aviation.

Amendments in Part-M

Meanwhile the EASA has also published Acceptable Means of Compliance (AMC) material and Guidance material (GM) referring to the amendments in Part-M. These consist of five essential elements:

① Concerning ELA2 aircraft (ELA = European Light Aircraft) operated non-commercially, a maintenance organization (according to Part-145 and Part-M-F, respectively) having

fulfilled the preconditions for the approval, can develop a maintenance programme for the owner/operator of the aircraft and handle its approval (by the authority or a CAMO by means of a direct approval procedure).

② Having fulfilled the preconditions for the approval for ELA1 aircraft operated non-commercially, the aforementioned organisations can combine airworthiness review and annual inspection and issue the Airworthiness Review Certificate (ARC) or an appropriate recommendation.

③ For ELA1 aircraft operated non-commercially, the possibility of a 'simplified' maintenance programme is introduced.

④ The owner/operator of an ELA1 aircraft operated non-commercially has the possibility of validating the 'simplified' maintenance programme of the aircraft by a self-declaration. He is then fully responsible for the content of the maintenance programme. Up to now, the approval of the maintenance programme by the authority and a CAMO by means of an indirect approval procedure, respectively, has been mandatory and remains a further option in these cases.

⑤ A minimum inspection programme is introduced for ELA1 aircraft (except ELA1 airships) operated non-commercially that, as an option, can be used as a basis for the development of a maintenance programme and the scope of which must be at least observed when establishing a 'simplified' maintenance programme.

Necessary adaptations


However, within the framework of the amendments of the regulations and the intended simplifications for General Aviation, diverse adaptations are required. The organizations concerned will have to adapt their procedures to the new circumstances, if the new possibilities are to be applied. Maintenance organizations will have new privileges regarding airworthiness review and preparation of maintenance programmes and will thus file applications to extend their scope of approval by the new privileges.

The LBA has started to review the internal rules of procedures and external publications (LBA internet, notice to airmen) with regard to the new regulations. Step by step, they will now be adapted to the new amendments of Regulation (EU) 2015/1088. Apart from additional work due to the

amendment of the regulation, there is a noticeable relief after only a few months in the LBA. The number of applications for the approval of maintenance programmes for ELA1 aircraft has decreased; obviously many owners/operators of these aircraft make use of the self-declaration.




Within the scope of the 'GA Roadmap', the LBA actively participates in the revision of the European Regulations for the operation of ballooning and is part of the European 'expert group for non-commercial operation'.



GA Roadmap

GEMEINSAM FÜR DIE ALLGEMEINE LUFTFAHRT

Luftfahrt-Bundesamt 

The image shows the cover of a document titled 'GA Roadmap'. The top half features a photograph of a glider in flight against a clear blue sky. Below the photo, the title 'GA Roadmap' is written in large, white, sans-serif font on a dark blue background. Underneath the title, the subtitle 'GEMEINSAM FÜR DIE ALLGEMEINE LUFTFAHRT' is written in a smaller, white, sans-serif font. At the bottom right of the cover, the text 'Luftfahrt-Bundesamt' is followed by the LBA logo, which consists of the letters 'LBA' in a stylized, blue and red font with a small airplane icon above the 'A'.

Reliable by *official approval*

The Division 'Aviation Security' was founded four years ago, during which time, apart from the organizational structure, the division had a continuous increase in tasks, primarily resulting from European requirements.



In the years 2012 and 2015, the approval of known consignors was a key focus of the Division 'Aviation Security' so that an evaluation can now be made. German air carriers positively accepted the official status of the known consignors. The certification, as such, enables the air carrier to put air cargo into circulation without any external control measures.

Apart from the new certification of known consignors, the support of the already approved air carriers as well as the performance of the continuous status check was of increasing importance for the LBA. The support of air carriers ranges from principal questions regarding the protection of identified air cargo to the approval of relocations and to new areas relevant for aviation security. The continuous status check designates a recurrent and complete validation to be repeated at regular intervals of not more than five years. It is performed both for known consignors and regulated agents and regulated suppliers.

Only after validation has been granted by on-the-spot EU validation examiners, can air carriers be designated as 'Air Cargo/Mail Carrier operating into the Union from a Third Country Airport' (ACC3) in a third country since July 2014. Having the aim of further promoting the harmonization of the implementation of ACC3 requirements and

of achieving, if possible, EU-wide quality standards by a steady exchange of experience and information, the Federal Aviation Office participates in the 'ACC3 Practitioner Group', among other EU member states.

Modular training system

The modular system in the field of aviation security training has already been applied since the previous business year. Due to the introduction of the modular training system, there is more freedom for the instructors when planning their training. In order to ensure the quality of the training offered, the Federal Aviation Office has carried out more and more quality checks with the approved instructors in the past years.

The validation of regulated suppliers of in-flight supplies was one of the main tasks in the field of the approval of suppliers. By checking them on-the-spot, the compliance with the aviation security standards could be improved in a sustainable manner and the constructive exchange between the authority and the air carriers could be further developed.

Designation of 'account consignor' is suspended

An important innovation is the abolition of the status 'account consignor' in Germany as of 1 April 2016. An account consignor is a company that, as a first step, puts the goods into the shipment process, the transport of which was only allowed by all-cargo aircraft. No official approval is provided for the receipt of the status 'account consignor', but a designation by the regulated agent. The Federal Aviation Office revealed increasingly serious deficiencies in the past so that the announcement of the suspension of the 'account consignor' as a stricter measure pursuant to article 6 of Regulation (EC) No 300/2008 got the European Commission's attention. Therefore, regarding the regulat-

ed agents located in the Federal Republic of Germany, the possibility of designating 'account consignors' is suspended.

Approval of hauliers

Currently, the LBA is working on a concept dealing with the approval of carriers involved in a safe supply chain. The haulier's task is the collection, transport and delivery of secure air cargo/air mail. He/she is employed by known consignors or regulated agents, only signing a 'haulier declaration' by which he commits himself to comply with certain security standards regarding the protection of secure air cargo when being transported. European right grants the possibility to the authority of an official approval of hauliers. In order to ensure a smooth official approval of hauliers, the Federal Aviation Office will perform accompanying information measures to integrate the air carriers concerned into the change process at an early stage.

Impact of legal regulations

On the legislative side, implementing regulations were adopted during the past two years and have innovated the safe supply chain. One innovation worth mentioning is that of the so-called Third Party Logistic Providers (TPL). Regulated agents are given the possibility of transporting cargo, which was not subject to security controls by a shipper,

» 2,332

German companies are certified as known consignors at present.

on board an aircraft without any further controls. The safe supply chain does not start with the known consignor, as was usual in the past, but directly with the external storekeeper approved as a regulated agent, without any further controls. The status 'SPX by RA' is assigned. Primarily, production

organizations that manufacture mass products and have outsourced storage to external companies benefit from this innovation.

A harmonisation of the customs authorities for Authorized Economic Operators (AEO) programme and the aviation security regu-



lations for known consignors and regulated agents was incorporated into the aviation security law. Thus, the verification of business premises by the competent customs authorities is recognised as the verification of the operating site of a known consignor or regulated agent, provided that this verifi-

cation was not longer than three years ago. In order to harmonise the status of the AEO, an enhanced exchange of information between the LBA and the customs authorities has been established.



2,332 companies

were recognized as officially approved known consignors in 2015. This certification enables them to safely bring air cargo into circulation, without external control measures.

1,754 approved regulated agents

ensured security controls for cargo and mail.

623 assessments of inspectors

in the areas of staff, goods and cargo, as well as for the screening of in-flight supplies, were performed by the LBA in 2015.

27 Air Carrier Security Programmes

of air carriers were approved in 2015.

Lithium batteries *in air transport*

Even now, millions of lithium batteries are shipped by air annually worldwide, both by passengers and by air cargo. Estimations say that this quantity will drastically increase in the coming years – a development that will challenge the LBA’s security experts. Differing compositions of lithium batteries makes them especially unpredictable. In the production of lithium-ion batteries, which are widely used, about 300 different combinations of materials are possible. These combinations can have a varied impact on the batteries’ characteristics. Visions for future battery technology involve lithium sulfur or lithium air combinations.

Risk of short circuit or fire

The high energy density in such a small space can lead to short circuits and fire including toxic gases, which cannot be fought effectively with fire-extinguishing appliances in modern aircraft. Therefore, many companies and institutions, including German companies, continue their research into materials that do not trigger any unwanted chemical reactions.

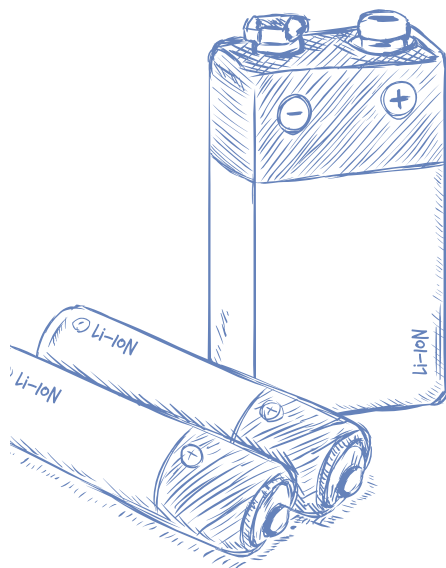
At present, different variations of how these batteries must be transported according to regulations, exists. Thus, an exact knowledge of the legal requirements concerning the individual modes of transport is absolutely necessary for a safe and smooth transport. Before lithium cells/lithium batteries may be transported at all, they must pass certain tests. These tests simulate transport conditions such as pressure, temperature, impact and squash.

The LBA’s task consists of evaluating, approving and checking the transport of lithium batteries. Due to the variety of batter-

ies mentioned, a considerable know-how, both of the fast-developing technology and of the legal requirements, is needed. The LBA experts participate in many national and international bodies of the European Union and of the International Civil Aviation Organization (ICAO) on this topic. They have to implement the relevant legal provisions in their area of responsibility and inform the public of these.

A current example is the decision of ICAO, as of 1 April 2016, to prohibit the transport of lithium-ion batteries (UN3480) as cargo on board of passenger aircraft. This decision only allows the transport of these batteries as cargo on board of cargo aircraft (Cargo Aircraft Only = CAO) in compliance with the packing instructions. Another example is the regulation that battery-powered vehicles such as self-stabilizing electronic unicycles or electronic boards with or without handlebars (the so-called self-balancing scooter roller boards or Segways), may neither be carried in the carry-on baggage, nor in the checked baggage of passengers or aircrew members, but only as air cargo shipment according to the rules of the applicable packing instructions.

This list could be continued. Therefore, the LBA website offers current information and instructions on dangerous goods for companies and for passengers.



» 100,704

dangerous goods incidents were reported to the LBA in 2015.



» Check of foreign aircraft

National measure *becomes international* *success*

Many German air passengers use foreign air carriers to reach their destination. However, these air carriers are not directly subject to the supervision of the Federal Aviation Office. Ramp checks aim to ensure more security – a LBA concept that meanwhile has been established throughout Europe.

The European regulations regarding flight operations (AIR OPS), which apply since October 2014, provide that the LBA, as competent national authority, must ensure the safety of foreign aircraft at German airports. For this reason, ramp inspections (ramp checks) are randomly carried out.

During these inspections, it is checked whether aircraft and crew comply with the legal requirements. The provisions of the International Civil Aviation Organization and

» 1,540

ramp checks were performed on aircrafts of foreign air carriers.

the relevant EU regulations are applied to foreign air carriers, respectively. Certificates and pilot licences, flight planning, technical condition of the aircraft, safety equipment as well as cargo including dangerous goods are checked.

In most cases, the check takes less than one hour and is performed in the period between the landing and the take-off of the aircraft.

Transnational exchange

Should it happen that, during the check, defects are identified on the aircraft, these defects are then recorded in the minutes. Depending on what impact the defects have on flight safety, they are assigned different categories. Minor defects are reported to the captain of the aircraft, considerable

defects to the operator and to the competent aviation authority as well. In case of major safety defects, emergency measures are taken which could mean operational restrictions for the next flight, corrective measures before the next flight or even grounding of the aircraft.

At present, these results are shared beyond European borders with more than 40 countries under the leadership of the European Aviation Safety Agency (EASA). This is done by means of a transnational database, which is regularly coordinated and evaluated amongst countries.

In case of recurring serious defects in several countries, a ban can be imposed for some or all aircraft of a state or of an air carrier. A common list of air carriers which are not allowed to serve the EU member states

is regularly updated and published by the European Commission. The granting of the required rights of entry, however, remains with the sovereign competence of each single EU country.

In Germany these checks have been in place for 20 years

This programme established to verify foreign aircraft, was started two decades ago in 1996. The reason for the introduction of these checks was a sad event: On 7 February 1996, a Boeing 757 belonging to Birgenair crashed off the coast of the Dominican Republic. Predominantly German tourists perished on board the aircraft.

Very shortly after the accident, and as a result of the consultation of a promptly established expert group, the former Federal

The task force carries out ramp checks on a random basis as well as unannounced checks on foreign aircraft at German airports.



Minister of Transport ordered that the Federal Aviation Office would issue the entry permissions for all foreign aircraft in the future. It would also form a task force that checks foreign air carriers by means of inspections on a random basis (ramp checks) at German airports, in consultation with the air traffic control of the federal states. Furthermore, parallel to this, a database for the central collection of safety information and of the ramp check results was established, initially at national level.

The group 'aviation security (task force)' of the Federal Aviation Office, which checks foreign aircraft at German airports, was officially established on 26 May 1996. It has supervised all foreign air carriers regarding the compliance of technical and flight operational regulations on the basis of the ICAO Convention, since 1 July 1996.

Because air traffic is not limited to the borders of a country, the European Civil Aviation Conference (ECAC) established the SAFA Programme (Safety Assessment of Foreign Aircraft) at a European level in 1996. This programme was initiated by Germany and was initially a system that functioned on a voluntary basis.

In the following two decades, the group 'aviation security' became an important building block of aviation security in Germany and in Europe. Apart from national inspection and monitoring activities, the LBA staff additionally contribute their experience to numerous European and international bodies – initially only in the relevant working groups of the Joint Aviation Authorities (JAA), a merger of European aviation authorities, and later in the relevant bodies of the European Commission (Air Safety Committee), of the European Aviation Safety Agency (EASA, SAFA Steering Group, SAFA Standardization Audits) and of ICAO (Universal Safety Oversight Audit Program).

Starting as a national measure, the programme for checking of foreign aircraft in order to improve passenger safety, has meanwhile, over a period of two decades, developed into a binding and standardized procedure for the improvement of aviation safety, and is also in practice beyond Europe. A voluntary programme developed into a legally prescribed programme for each member state of the European Union, and includes a central European database that each national authority, such as the LBA, has access to.





» Civil Aviation

New occurrence reporting procedure *for more safety*

Regulation (EU) No 376/2014 of the European Parliament and the Commission of 3 April 2014 has been applicable since November 2015, which regulates the reporting, analysis and follow-up of occurrences in civil aviation. The LBA informed all German air carriers by circular letter about the evidence to be provided. Furthermore, the publication of the LBA in the 'Notice of Airmen' was adapted to the new legal position.

What is new?

The real innovation of the reporting procedure is that organizations (e.g. design, production and maintenance organizations, air carriers, aerodromes, flight training schools and air navigation service providers) must establish and operate systems and procedures in order to collect, evaluate, process, analyse, store and transmit reportable occurrences through the mandatory occurrence reporting systems.

To simplify the procedure for all parties concerned, the EU Commission provides its electronic tool 'Aviation Safety Reporting' for the reporting procedure, free of charge. This tool was developed by the Commission and may be used throughout Europe. The group of persons named in the regulation shall report occurrences to the competent national aviation authority (provisionally the

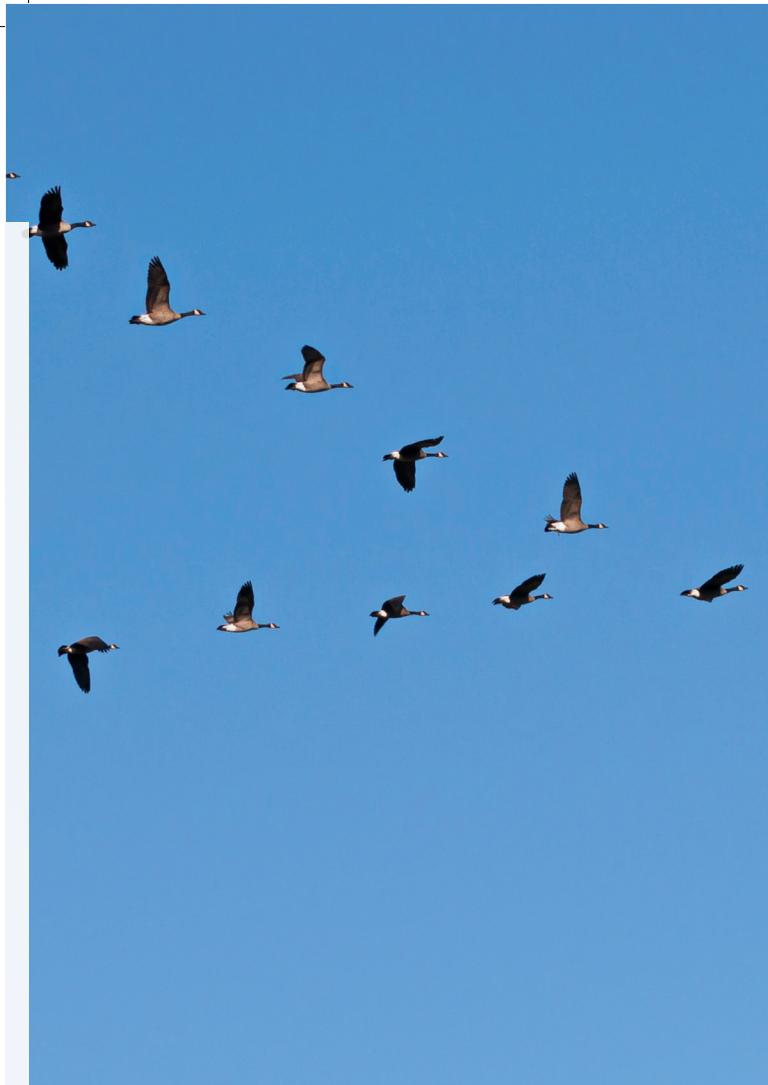
LBA), primarily by using the webpage 'Aviation Security Reporting', within a period of 72 hours. This group of persons includes the commander of an aircraft, persons involved in design, production, continued monitoring of airworthiness and maintenance or change of aircraft, persons of air navigation services, persons of the safety management of an aerodrome or persons of the ground handling services. Passengers, however, do not belong to the group of persons mentioned in the regulation. They still have the option of contacting the Customer and Citizen Service Centre of the LBA to address flight safety matters.

What else will be changed?

The application of this regulation repealed the previous provisions on the reporting of occurrences in civil aviation specified in Directive 2003/42/EC, as well as the implementing rules for the dissemination and merging of exchanged information on civil aviation occurrences in the Regulation (EC) No 1330/2007 and (EC) No 1321/2007. At the same time, Regulation (EU) No 996/2010 was changed by eliminating the provisions on the reporting of occurrences included therein.

Apart from Regulation (EU) No 376/2014, the regulations on the reporting of occurrences in civil aviation in the existing regulations

» **2,211**
occurrence reports
reached the LBA
in 2015.



Categories of mandatory occurrence reporting

Occurrences subject to mandatory reporting, which may represent a significant risk to aviation safety in terms of Regulation (EU) No 376/2014, and which can be assigned to the following categories, are:

- Occurrences related to the operation of the aircraft,
- occurrences related to technical conditions, maintenance and repair,
- occurrences related to air navigation services and facilities, as well as
- occurrences related to aerodromes and ground services.

A detailed list laid down in Implementing Order (EU) 2015/1018 specifies which occurrences are to be assigned to these categories.

of the European Union, in particular of the Basic Regulation (EC) No 216/2008 and the associated implementing rules of Regulation (EU) No 965/2012 are applicable. However, this should not lead to two parallel reporting systems, as the mentioned regulations are complementary. In detail, Regulation (EU) No 376/2014 includes the following provisions:

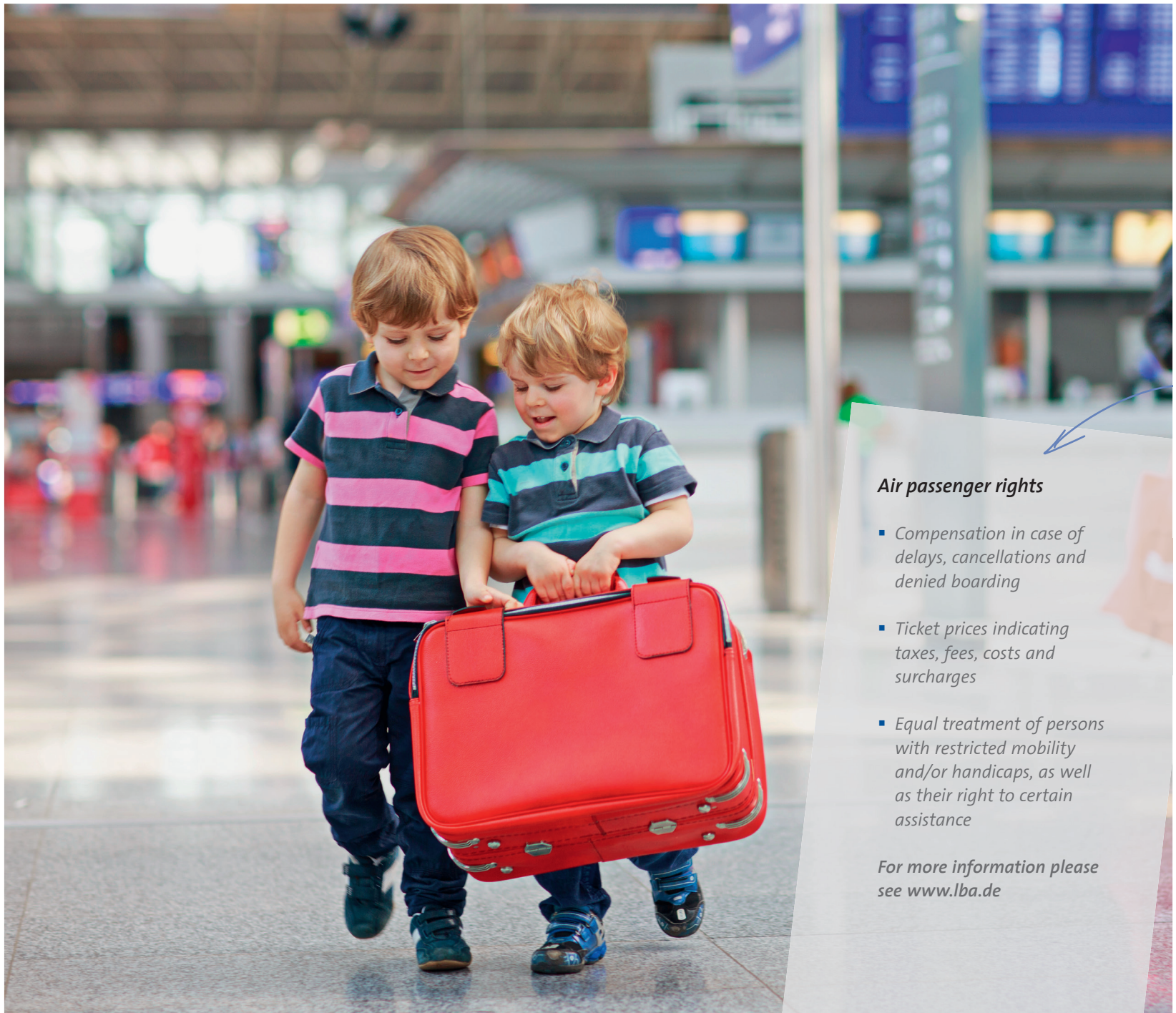
- The reporting of occurrences that endanger, or that if not corrected or addressed would endanger an aircraft, its occupants, any other person, equipment or installation affecting aircraft operations; and the reporting of other relevant safety-related information in that context,
- analysis and follow-up action in respect to reported occurrences and other safety-related information,
- the protection of aviation professionals,
- appropriate use of collected safety information
- the integration of information into the European Central Repository, and
- the dissemination of anonymized information about reported incidents to interested parties for the purpose of providing

such parties with the information they need in order to improve aviation safety.

For occurrences that possibly do not fall under the system of reporting mandatory occurrences, the establishment of a system for voluntary reporting by each organization and aviation authority located in a Member State, as well as by EASA, is intended. Regarding quality and content of the occurrence reports, specifications in terms of mandatory data fields were made in the Appendix of Regulation (EU) No 376/2014. Furthermore, occurrence reports are subject to a safety risk classification and in future, must be checked. If necessary they must be changed and then be approved by the competent authority of a Member State or by EASA.

Finally, within the scope of the final handling of occurrence reports, an analysis and a follow-up at national and EU level is intended.

Proactive and involved *in the field of consumer protection*

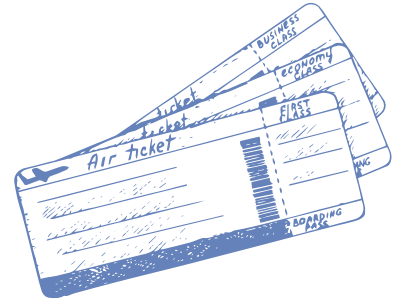


Air passenger rights

- Compensation in case of delays, cancellations and denied boarding
- Ticket prices indicating taxes, fees, costs and surcharges
- Equal treatment of persons with restricted mobility and/or handicaps, as well as their right to certain assistance

For more information please see www.lba.de

Protection



With the establishment of conciliation bodies in air traffic as of 1 November 2013, passengers were offered an effective and generally cost-free opportunity of enforcing their civil claims towards air carriers.

Since then, a fall in complaints submitted to the Federal Aviation Office has been recorded. However, a considerable number of passengers still address the LBA to enforce their civil claims instead of the two approved conciliation bodies: the Conciliation Body for Public Transport (söp) and the Federal Office of Justice. The main reason for this being, that, despite intensive information spread by the LBA, many passengers are still not sufficiently informed about the new consumer-friendly possibility of enforcing their claims.

Informing air passengers about their rights

The most important requirement to ensure effective consumer protection is the passengers' knowledge of their rights and the possibilities available to enforce these rights. Therefore, the competent information of the passengers is of pivotal importance for the LBA.

Thus, within the scope of our proactive activities as National Enforcement Body, we began to place special focus on the general implementation of the air carriers' obligation to inform passengers. This is done to achieve an improvement, in terms of quantity and quality, of information regarding Regulation (EU) No 261/2014. When performing checks at German airports, the LBA concentrates on checking the air carriers' obligations to generally inform the passengers and on the information material provided by them.

In order for passengers to have comprehensive knowledge of their consumer rights, in accordance to the Regulation of Air Passenger Rights, the LBA developed its own information material: a leaflet dealing with air passenger rights and FAQs provided on its internet site. This information offer is expanded by also providing advice on conditions and procedures of conciliation. Thus, as a first step, the LBA assists passengers in enforcing their civil claims towards air carriers.

The continuous improvement and adaptation of information provided to passengers on current developments in the field of air passenger rights, for example due to the judgments of the European Court of Justice, will in future be a considerable part of the 'air passenger rights' team's work. Other tasks of this team include the handling of complaints and further proactive measures.

How to find us

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Division 'Aviation Security'

Air cargo	38
Screeners	38
Approved Air Carrier Security Programmes	38
Supervision	38

Division 'Operations'

Number of German air carriers approved by the LBA	36
Flight operational occurrence reports	36
Foreign air carriers	37
Ramp checks	37
Dangerous goods incidents/accidents	37

Statistics



Division 'Aviation Personnel'

Flight Training Organizations approved by the LBA	39
Flight Simulation Training Devices (FSTD)	39
Trend of theoretical examinations (total)	39
Trend of skill tests (total)	39
Total number of licences of aviation personnel with the LBA	39
Aviation medicine	40

Division 'Administration'

Development of staff in the Federal Aviation Office	46
Air passenger rights	46

Division 'Airworthiness/Environmental Protection'

Organizations	41
Technical staff	42
Total number of registered aircraft	42

Division Operations

Number of German air carriers approved by the LBA

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
42	45	44	46	50	54	61	182	160	145	133	120
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
119	153	170	171	163	165	170	169	158	147	138	137

Flight operational occurrence reports

Occurrence reports total

2011	2012	2013	2014	2015
1,568	1,886	2,079	2,483	2,211

Laser attacks on German air carriers

2011	2012	2013	2014	2015
279	342	322	303	234

Bird strikes

2011	2012	2013	2014	2015
56	91	107	413	342

Occurrences dealing with the smell of oil¹

2011	2012	2013	2014	2015
39 ¹	50 ¹	68	55	44

Engine failures

2011	2012	2013	2014	2015
38	18	16	19	23

Turbulences

2011	2012	2013	2014	2015
21	53	43	74	41

¹ Due to the application of improved ECCAIRS database queries, the information on occurrences dealing with the smell of oil was updated for the years 2009–2012.

² Since 2006, all air carriers and airports have additionally been reporting all dangerous goods incidents/accidents to the LBA where items were taken out of the baggage.

Foreign air carriers

Number of foreign air carriers

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1,002	1,037	1,044	1,140	1,147	1,252	1,299	1,280	1,306	1,350	1,378

Traffic rights granted for foreign air carriers

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
10,540	8,567	8,679	8,796	6,593	6,550	6,090	4,953	4,955	5,290	4,954

Traffic rights refused for foreign air carriers

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
2,226	2,063	1,836	1,692	1,426	1,115	887	852	991	772	932

Ramp checks

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1,426	1,401	1,364	842	1,188	1,469	1,553	1,431	1,286	1,641	1,439	1,540

Dangerous goods incidents/accidents

2005	2006 ²	2007	2008	2009	2010	2011	2012	2013	2014	2015
1,149	5,231	11,641	20,851	37,510	80,399	74,094	88,007	73,085	58,822	100,704

Status for all statistics as of 31 December of each year.

Division Aviation Security

Air cargo

Approved regulated agents

2013	2014	2015
1,792	1,810	1,754

Officially approved known consignors

2013	2014	2015
2,374	2,447	2,332

Approved ACC3 locations

2013	2014	2015
1,500	726	763

Approved EU aviation security validators

2013	2014	2015
23	28	27

Approved regulated suppliers including approved business premises

2013	2014	2015
4	2	9

Screenerers

Number of examinations for screenerers

2013	2014	2015
1,116	1,127	623

Approved Air Carrier Security Programmes

2013	2014	2015
116	66	27

Supervision

Supervision air carriers

2014	2015
1,671	1,757

Supervision regulated agents

2014	2015
2,009	1,239

Supervision known consignors

2014	2015
1,099	712

Supervision regulated suppliers

2014	2015
47	30

Supervision other entities

2014	2015
188	10

³ Since 2003, only flight training organizations have been considered which were approved according to JAR-FCL.

⁴ As of 2012, devices out of Europe have not been taken into account.

Division Aviation Personnel

Flight training organizations approved by the LBA

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003 ³
26	24	25	26	25	28	33	65	64	66	62	53
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
74	90	95	84	86	86	83	84	79	77	79	82

Flight Simulation Training Devices (FSTD)

Simulators⁴

2007	2008	2009	2010	2011	2012	2013	2014	2015
62	66	70	71	74	55	76	76	64

Flight and Navigation Procedures Trainer (FNPT)/Flight Training Devices (FTD)⁴

2007	2008	2009	2010	2011	2012	2013	2014	2015
49	64	66	63	58	55	59	49	53

Trend of theoretical examinations (total)

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
2,245	1,461	1,266	1,420	2,229	1,952	1,745	1,741	1,683	1,509	1,452	1,338

Trend of skill tests (total)

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1,739	1,588	1,598	1,674	1,785	1,897	2,006	2,186	1,932	1,603	1,126	*

Total number of licences of aviation personnel with the LBA

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
10,801	10,053	10,340	10,425	10,894	11,435	10,418	16,457	15,826	16,378	17,032	16,279
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
16,885	16,690	16,788	17,093	17,439	17,531	17,942	19,080	20,297	20,357	20,565	20,524

³As of 2015, no statistics could have been raised as no allocation of examinations has been recorded by the LBA.
Status for all statistics as of 31 December of each year.



Aviation medicine

Number of Aeromedical Centres (AMC)

2010	2011	2012	2013	2014	2015
5	5	5	9	9	8

Aeromedical Examiners (AME) class 1 within the competency of the Federal Aviation Office

2010	2011	2012	2013	2014	2015
176	196	208	213	229	235

Aeromedical Examiners (AME) class 2 within the competency of the Federal Aviation Office (as of 08/2013)

2010	2011	2012	2013	2014	2015
-	-	-	238	261	244

⁵ Since 2006, the LBA has been responsible for the approval of national design organizations. All other design organizations are approved by EASA.

Division Airworthiness/Environmental Protection

Organizations

Production organizations approved by the LBA

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
126	118	123	123	135	126	126	114	110	126	132	137
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
139	139	144	150	149	151	151	153	153	152	152	157

Maintenance organizations approved by the LBA

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
427	433	504	527	507	481	461	473	437	425	437	433
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
465	465	436	430	501	593	593	522	512	465	434	403

Design organizations approved by the LBA

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
45	41	36	44	44	43	45	44	37	35	43	47
2004	2005	2006 ⁵	2007	2008	2009	2010	2011	2012	2013	2014	2015
76	76	15	10	23	24	24	26	26	15	15	12

CAMOs approved with the air carriers by the LBA

2011	2012	2013	2014	2015
194	166	166	162	157

Other CAMOs approved by the LBA

2010	2011	2012	2013	2014	2015
136	152	152	153	171	158

Status for all statistics as of 31 December of each year.

Technical staff

Training organizations Part-147 approved by the LBA

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
22	31	32	34	35	36	37	37	37	35	35	35

Ratings for certifying staff according to Part-66

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
3,629	5,740	5,524	7,021	11,186	13,131	14,185	14,678	13,202	19,505	20,032	20,255	20,119

Ratings for inspectors of aeronautical products

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
3,402	3,545	3,535	3,533	3,678	3,551	3,621	3,634	3,620	3,636	3,490	3,125
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
2,592	2,485	2,828	1,849	3,229	3,359	3,415	4,430	4,255	3,480	2,914	2,096

Total number of registered aircraft

Aircraft

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
19,025	19,820	20,303	20,579	20,829	20,777	20,795	20,890	20,844	20,859	20,714	20,610
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
20,613	20,707	20,865	21,017	21,327	21,570	21,703	21,603	21,546	21,462	21,395	21,213

Registration mark category A: Aeroplanes above 20 t

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
395	431	436	441	460	466	493	527	572	612	619	653
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
619	651	663	702	734	757	772	770	767	758	751	751

Registration mark category B: Aeroplanes from 14 up to 20 t

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
46	44	40	41	39	40	44	51	54	60	55	54
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
55	54	56	51	45	43	40	38	30	34	33	34

Registration mark category C: Aeroplanes from 5,7 up to 14 t

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
135	125	131	127	121	115	130	158	176	191	184	179
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
172	176	181	200	224	231	228	236	217	199	207	191

Registration mark category E: Single-engine aeroplanes below 2 t

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
6,718	6,863	7,056	7,161	7,188	7,208	7,121	7,034	6,919	6,813	6,731	6,658
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
6,670	6,682	6,704	6,705	6,738	6,752	6,801	6,744	6,757	6,733	6,689	6,596

Registration mark category F: Single-engine aeroplanes from 2 up to 5,7t

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
53	143	147	143	143	77	82	85	90	95	92	97
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
94	93	102	120	126	144	153	155	150	155	149	147

Status for all statistics as of 31 December of each year.

Registration mark category G: Multi-engine aeroplanes below 2 t

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
245	252	261	261	261	264	245	233	219	207	208	205
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
199	212	224	230	232	241	242	243	239	240	228	229

Registration mark category I: Multi-engine aeroplanes from 2 up to 5.7 t

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
660	671	662	668	636	564	526	507	480	476	467	452
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
440	417	417	417	436	445	444	428	414	403	393	371

Registration mark category H: Helicopters

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
622	664	687	704	707	680	672	693	700	721	731	725
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
720	721	729	731	739	780	811	773	774	769	745	757

Registration mark category K: Powered sailplanes

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
1,828	1,931	2,016	2,086	2,163	2,224	2,323	2,380	2,413	2,434	2,494	2,533
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
2,584	2,664	2,766	2,824	2,948	3,022	3,081	3,122	3,185	3,263	3,357	3,403

Registration mark category L: Airships

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
3	2	2	3	3	3	3	3	3	5	5	6
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
4	4	4	4	4	3	4	3	5	3	3	3



Sailplanes

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
7,608	7,724	7,767	7,777	7,845	7,862	7,805	7,811	7,778	7,771	7,728	7,686
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
7,703	7,728	7,741	7,769	7,815	7,891	7,867	7,834	7,793	7,704	7,657	7,567

Registration mark category O: Balloons

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
727	932	1,068	1,132	1,213	1,277	1,321	1,382	1,443	1,474	1,400	1,362
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1,351	1,305	1,278	1,264	1,286	1,261	1,260	1,257	1,215	1,201	1,183	1,164

Status for all statistics as of 31 December of each year.

Division Administration

Development of staff in the Federal Aviation Office

LBA total

2012	2013	2014	2015
609	650	674	692

LBA Head Office total

2012	2013	2014	2015
428	452	467	472

Regional Offices total

2012	2013	2014	2015
181	198	207	220

Women

2012	2013	2014	2015
247	266	276	291

Men

2012	2013	2014	2015
362	384	398	401

Part-time

2012	2013	2014	2015
89	87	100	114

Trainees

2012	2013	2014	2015
8	7	6	6

Air passenger rights

Total number of complaints according to Regulation (EU) No 261/2004

2007	2008	2009	2010	2011	2012	2013	2014	2015
3,096	3,977	3,064	4,776	4,442	5,105	4,582	2,739	2,844

Complaints price transparency according to Regulation (EU) No 1008/2008

2011	2012	2013	2014	2015
82	138	69	69	38

Total number of complaints PRM according to Regulation (EU) No 1107/2006

2010	2011	2012	2013	2014	2015
14	14	11	25	12	15

Status for all statistics as of 31 December of each year.

