



# Annual Report

## 2012/2013

Safety is our objective. 

## **Imprint**

### **Editor**

Luftfahrt-Bundesamt LBA  
Hermann-Blenk-Straße 26  
38108 Braunschweig  
phone + 49 (0) 5 31 / 23 55 - 0  
fax + 49 (0) 5 31 / 23 55 - 90 99  
buergerinfo@lba.de  
info@lba.de

### **Editing**

Cornelia Cramer  
Press and Public Relations

### **Images**

Norbert Michalke: cover picture, p. 8, 9, 14/15, 16/17, 24/25,  
29, 30, 33, 35, 44, 47, 51, 52/53, 54, 57, 60/61, 62, 66, 70  
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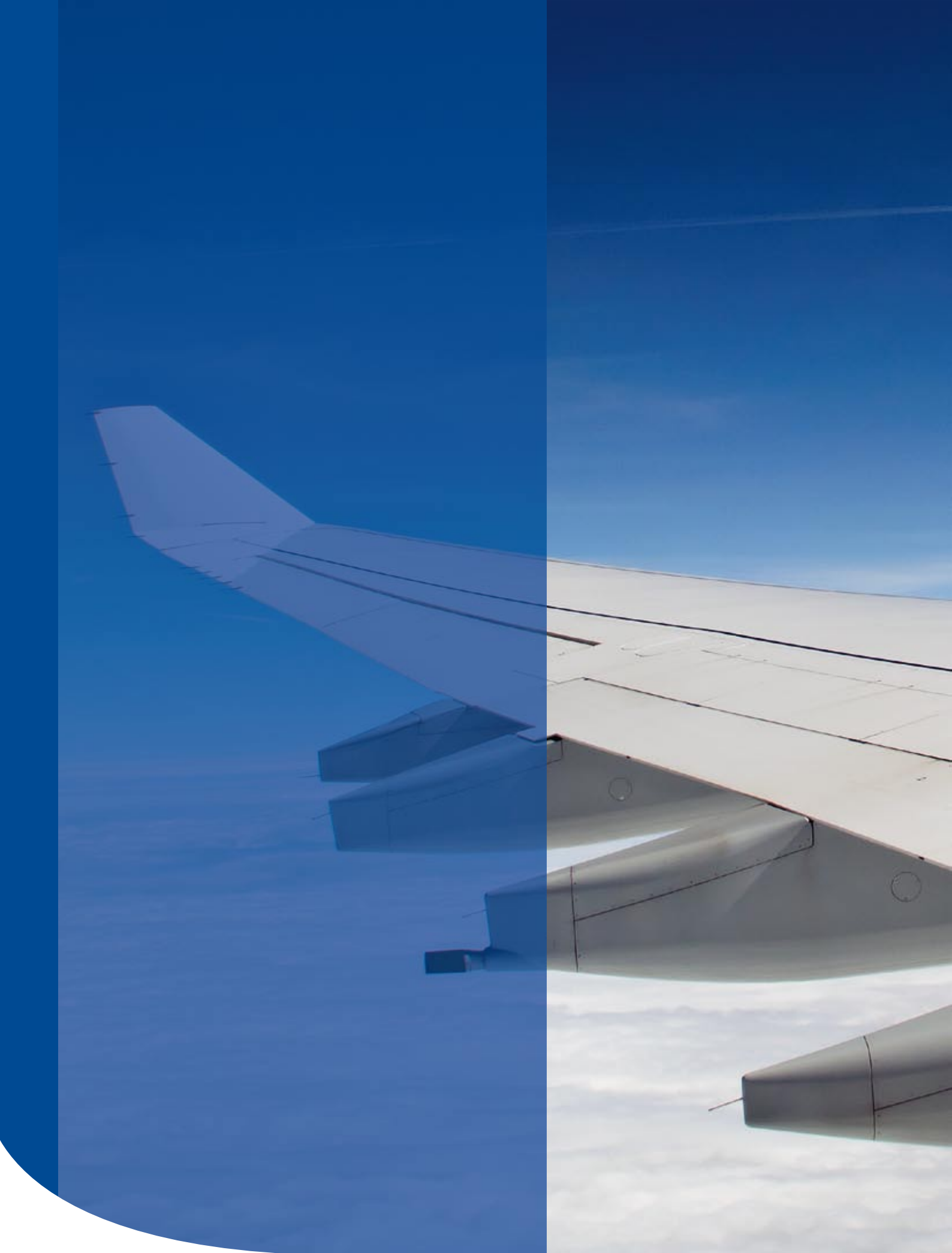
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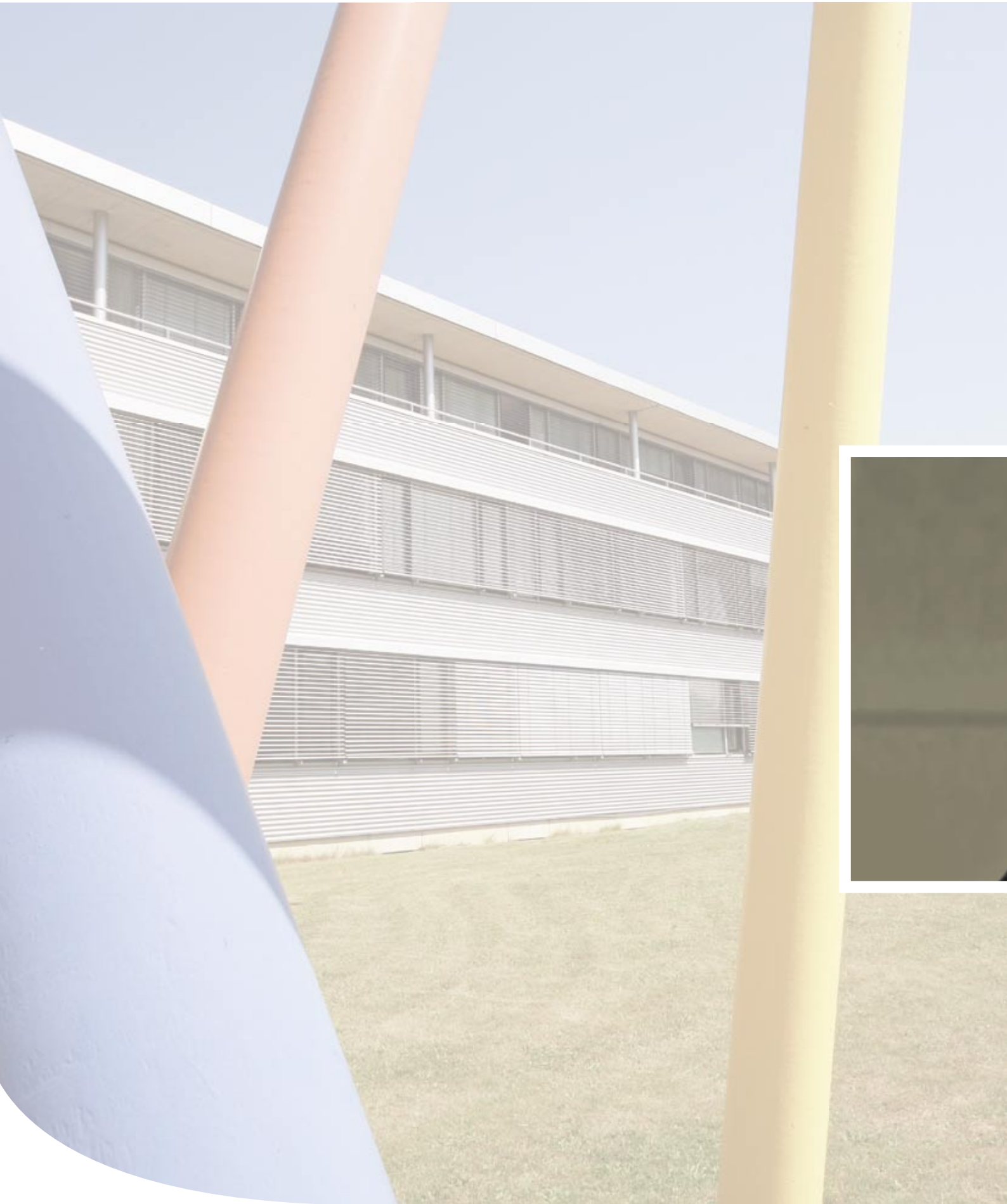
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2012/2013



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# Joining forces for safety

Foreword by Jörg Mendel,  
President of the Luftfahrt-Bundesamt



into increasingly new dimensions. Without an air traffic administration developing at the same time, flying in Germany and worldwide would not be as safe as it is today – on the occasion of the 60th anniversary of the foundation of the Luftfahrt-Bundesamt (LBA).

In Germany, it is the task of the Federal Ministry of Transport and Digital Infrastructure in cooperation with the Luftfahrt-Bundesamt to further maintain the high level of safety of the air traffic industry – and, where necessary, to further develop it in collaboration with our European and international partner authorities.

One hundred years ago, on 1 January 1914, the world celebrated the first commercial passenger flight. The flight of the “St. Petersburg-Tampa Airboat Line” from St. Petersburg to Tampa, Florida was a sensation causing great astonishment – today, the commercial transport of passengers and cargo is part of our mobile everyday life in a global world. The aeroplane connects the continents and the people living there. Air traffic has brought the world closer together.

Since the beginning of commercial air transport operations, aeroplane technology has ventured

into increasingly new dimensions. Without an air traffic administration developing at the same time, flying in Germany and worldwide would not be as safe as it is today – on the occasion of the 60th anniversary of the foundation of the Luftfahrt-Bundesamt (LBA).

In order to be able to entirely fulfil our main task even in the future, which is the highest possible aviation safety, we have continued to carry out our comprehensive review of the tasks and the detection of manpower requirements for all areas of the LBA in the past years. Both for the defence against dangers to public safety and order by air traffic as well as for the functioning of the total system ‘air traffic industry’, a functioning governmental oversight is absolutely necessary in Germany. The managerial and the other staff of the LBA make every effort to support this goal continually.



# Safety is our objective

## The Luftfahrt-Bundesamt

The Luftfahrt-Bundesamt (LBA) is divided into five Divisions: “Operations”, “Aviation Personnel”, “Airworthiness/Environmental Protection”, “Aviation Security” and “Administration”. The tasks are mainly centralized. Apart from that, six Regional Offices at the locations in Berlin, Düsseldorf, Frankfurt/Main, Hamburg, Munich and Stuttgart ensure an efficient accomplishment of tasks.

### President

The President of the Luftfahrt-Bundesamt directs the authority and represents the LBA at national and international level. Furthermore, he is responsible for the strategic planning and control. The “Staff Unit of the President” reports directly to the President. It is, among others, responsible for the strategic support of the President, for comprehensive national and international tasks, the preparation of regulations, the management system, the risk analysis as well as the emergency and crisis management and for press, media and general public relations work.

### Operations

The Division “Operations” is the competent Division for any questions concerning the operation of aircraft. Its essential task is the approval and oversight of German air carriers. Within the scope of this activity the assessment and supervision of the financial resources of air carriers as well as flight operational preconditions are carried out. Furthermore it is within the Division’s sphere of responsibility to grant entry permissions for foreign air carriers and to carry out ramp checks on foreign aircraft. Moreover, it is responsible for the collection, review and analysis of occurrence reports originating from aviation as well as for the approval of dangerous goods transports.

### Aviation Security

The Division “Aviation Security” is responsible for the approval, amendment and extension of aviation security plans 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 security, the LBA is responsible for the approval of regulated agents, the approval of known consignors, the approval of regulated suppliers for in-flight supplies as well as for 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 programmes, to approve instructors for aviation security training as well as to supervise aviation security training performed and to issue certificates of competency.

### Aviation Personnel

The Division “Aviation Personnel” bundles all the responsibilities that refer to aviation personnel involved in commercial operations. This includes among others the approval and oversight of training organisations for airmen, the qualification and approval of synthetic training devices, the check of preconditions and the admission to training for obtaining licences, theoretical and practical examinations for obtaining licences and ratings as well as the licensing of aviation personnel. Furthermore, the tasks comprise approval and oversight of the Aeromedical Centres and experts. In close







connection herewith stands the substantial participation in national and international bodies for the development of standards for training and testing of aviation personnel.

### **Airworthiness/Environmental Protection**

The Division “Airworthiness/Environmental Protection” is e.g. responsible for the approval and oversight of national design organisations as well as of production organisations, maintenance organisations and aeronautical workshops, Continuing Airworthiness Management Organisations (CAMO) as well as of training organisations for technical personnel. Furthermore, the Division is responsible for the supervision of the technical operation of air carriers, for the granting of licences and ratings for inspectors of aeronautical products and for certifying staff, for airworthiness review and for the Aircraft Continuing Airworthiness Monitoring (ACAM) of aircraft. It also oversees the German airports

associations charged with the performance of tasks according to the LuftVG (Air Navigation Act), publishes airworthiness directives and is responsible for the registration of aircraft. In addition to that, on its own responsibility or in order to support the European Aviation Safety Agency (EASA), the supervision of type investigations and type certifications as well as noise certification are carried out.

### **Administration**

The Division “Administration” performs the administrative tasks for the other Divisions and settles the typical administrative tasks of an authority. This includes e.g. human resources, budget and accounting, internal services as well as the provision of information technology. In addition, the Customer and Citizen Service Centre and tasks associated with the consumer protection in aviation, are also part of Division Z.



**President of the  
Luftfahrt-Bundesamt<sup>1</sup>**  
Jörg Mendel



**Division Z  
Administration**  
Fred Müller  
*Deputy:*  
Doris Thiele-Bark

**Department Z 1  
Organisation and Controlling Support**  
Detlef Jürgens

**Department Z 2  
Human Resources/  
Legal Affairs of Division Z**  
Doris Thiele-Bark

**Department Z 3  
Budget/Accounting/Internal Services**  
Judith Pätzold

**Department Z 4  
Information and Communication  
Technologies**  
Andreas Johannes

**Department Z 5  
Customer and Citizen Services/  
Complaint Body – Air Passenger Rights**  
Thomas Slaba



**Division T  
Airworthiness/Environmental Protection**  
Thomas Burlage  
*Deputy:*  
N. N.

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

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

**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 Cirksena

**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 Cirksena

**Regional Offices of the Luftfahrt-  
Bundesamt<sup>2</sup>**  
Berlin, Düsseldorf, Frankfurt,  
Hamburg, Munich, Stuttgart

**Office Air Navigation Services at the  
Luftfahrt-Bundesamt**  
Administrative and technical supervision  
executed by the Federal Ministry of  
Transport and Digital Infrastructure




**Staff Unit of the President**  
SBI  
Dirk Sajonz<sup>3</sup>  
*Deputy:*  
Cornelia Cramer

**Unit 1**  
**Comprehensive National and International Affairs**  
Dirk Sajonz<sup>3</sup>

**Unit 2**  
**Management System/Implementation State Safety Program (SSP)**  
Dr. Thomas von Borstel

**Unit 3**  
**Press and Public Relations/Project Coordination**  
Cornelia Cramer



**Division L**  
**Aviation Personnel**  
Udo Dehning  
*Deputy:*  
Eckhard Fegel



**Division S**  
**Aviation Security**  
Birgit Loga  
*Deputy:*  
Irina Ried

**Department L 1**  
**Training**  
Eckhard Fegel

**Department S 1**  
**Legal Affairs and Administrative Offences of Division S**  
Martina Kornath

**Department L 2**  
**Theoretical Examinations**  
Gerhard Boller

**Department S 2**  
**Aviation Security Training**  
Matthias Petersen

**Department L 3**  
**Skill Tests**  
(Sami Kadam)<sup>4</sup>

**Department S 3**  
**Approval of Regulated Agents**  
Xenia Ellebrecht

**Department L 4**  
**Licensing/Legal Affairs of Division L**  
Yvonne-Christine Schmidt

**Department S 4**  
**Approval of Known Consignors**  
Irina Ried

**Department L 5**  
**Aviation Medicine**  
Dr. Andreas Kirklies

**Department S 5**  
**Approval of Air Carrier Security Programmes and Regulated Suppliers**  
Marco Jentsch

**Department S 6**  
**Supervision**  
Dr. Marion Nikodem

<sup>1</sup> Deputies are the Heads of Divisions in the respective area of responsibility

<sup>2</sup> 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

<sup>3</sup> Head of the Staff Unit of the President is also Head of Unit 1

<sup>4</sup> in charge of the performance of the functions





# The way towards an efficient authority

## 60th anniversary of the Luftfahrt-Bundesamt

On 30 November 2014, the Luftfahrt-Bundesamt (LBA) will celebrate its 60th anniversary. The beginnings were modest, but in the course of the past six decades a modern and efficient aviation authority has developed. Holding more than 100 functions of inspection, approval and supervision, the Luftfahrt-Bundesamt ensures the highly technical and operational level of aviation in Germany.

In the early years of the authority, institutes for the inspection of aeronautical products, still organized under private law, were responsible for the performance of technical inspections, but already in 1968 there has been a change to a system, which delegates responsibility to especially approved organisations and requires at the same time the establishment of a quality assurance system together with an appropriate quality management, accompanied by the LBA's oversight by means of audits. The consequent implementation of this sophisticated philosophy at that time enabled the authority, while at the same time adapting and optimizing continuously its internal processes, to manage its tasks successfully and internationally accepted with the help of a minimum of personnel. This was possible despite the steadily growing air traffic, increasing requirements of safety and an accumulative public interest with regard to the LBA's work.

The foundation of the European Aviation Safety Agency in September 2003 in Cologne was likewise challenge and chance for the Luftfahrt-Bundesamt. There was a change of the competencies as well as of the performance of the tasks. Due to the national and European legislation, the range of tasks for the German authority



extended considerably not least because of the totally new competencies in the field of air cargo security. Meanwhile, about 700 highly qualified employees work in the Head Office of Braunschweig as well as in the six Regional Offices.

It will also be the LBA's goal in the future to actively enhance and shape the outline conditions for aviation in Germany. Even in the era of a globally acting air traffic industry and an increasing competition, the authority will make an important contribution to maintain safety, to ensure mobility, to further develop and network the traffic system 'aviation' as well as the consumer protection.



# Milestones in the LBA's history

## The most important steps

# 1954

In the Braunschweig Airport Head Office the Luftfahrt-Bundesamt (LBA) starts its work with 28 staff members.

# 1959

The LBA is assigned a new task: the examination of the technical and flight operational basics of the air carriers.

# 1968

With the new "Certification of Aeronautical Products Order" (LuftGerPO) the principle of delegation is introduced. As of this moment only approved organisations carry out technical inspections.





# 1990

Integration of the Governmental Inspectorate of Aviation of the former GDR into the LBA; setup of a sixth Regional Office of the LBA in Berlin-Schönefeld.

# 2003

As a result of the foundation of the European Aviation Safety Agency (EASA), there are new competencies and tasks.

# 2011

Setup of the Division S “Aviation Security”

# 2014

The LBA is celebrating the 60th anniversary of its foundation. Today, 650 staff members are working with the Head Office and six Regional Offices of the authority.





# 650

staff members are working for the LBA including 266 women, 198 staff members are working with the six Regional Offices at the locations in Berlin, Düsseldorf, Frankfurt/Main, Hamburg, Munich and Stuttgart.

# 21,462

aircraft were registered in Germany in 2013 including three airships.

# 2,079

flight operational occurrences were reported in 2013.



“Young female aerospace engineers are offered good prospects of career development and promotion.”

**Susanne Brechel,**  
Head of the Department T2







2013

Strategy and quality management – the Staff Unit of the President is the focal point of coordinating activities.



# Presentation

## The new Staff Unit of the President

As a result of an extensive review of the workflows within the LBA by a project group set up for this purpose in 2012, the President of the Luftfahrt-Bundesamt ordered a reorientation of the Staff Unit of the President with effect from 1 June 2013.

The Staff Unit of the President is divided into three units.



### Unit 1

Unit 1 results from the former Rulemaking Department of the LBA and is responsible for the preparation of national and international aviation regulations. The focus mainly lies on the coordination of the EASA consultation process for Notices of Proposed Amendments (NPAs) and on the support of the Federal Ministry of Transport and Digital Infrastructure during the negotiations of the EASA proposals within the scope of the comitology procedure of the EU Commission. A further important task is the adaptation of the national provisions to the EU regulations also with a view to those aircraft that are not within EASA's competency. Furthermore, the unit is the central contact for audits carried out by EASA and the International Civil Aviation Organisation

(ICAO). It provides the coordinator who organises the audits and coordinates the handling of the identified findings as well as the communication with EASA and the Federal Ministry of Transport and Digital Infrastructure.

The EU regulations are only valid in the language versions that apply in the relevant Member States. Therefore, the Luftfahrt-Bundesamt is committed to the preparation of these language versions, e.g. by drawing up glossaries, but also by carrying out the linguistic review of the language versions submitted by the EU Commission. In addition to that, the internal translation service provides any kind of internal and external communication.

The new aviation regulations of the EU do not only apply to aviation industry, but in particular to the aviation authorities. The so-called "Authority Requirements" now require the establishment of management systems in the aviation authorities. As to the content, these regulations are strongly guided by the requirements of a quality management system for the industry.

### Unit 2

According to this, by determining certain procedures and internal rules, the management system of an authority has to supervise and ensure the observance of the EU regulations. In order to implement these rules, Unit 2 will summarize the existing internal regulations in a manual. Furthermore, the existing internal procedural instructions and workflows are revised and





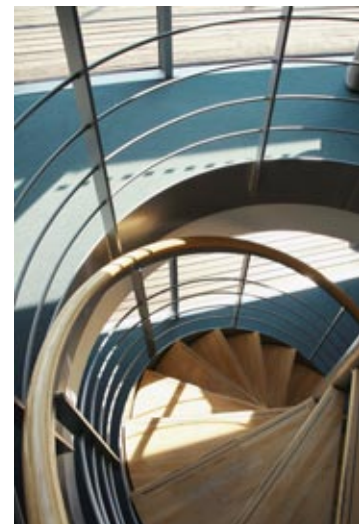
standardized. New conventions are to provide that a correspondent audit of the processes will be possible. The internal supervision together with a reporting system is ensured by a transparent audit system. A pool of experts, auditors of the relevant departments, is to ensure the internal supervision and the observance of the internal and external provisions, controlled by Unit 2. The Head of this Unit is therefore the Head of the management system and in this function he has to report to the President of the LBA.

According to the provisions of ICAO, too, the Member States are obliged to supervise air traffic safety continuously. Within the scope of the “State Safety Program (SSP)”, the states have to carry out appropriate analyses and to work out where hazards concentrate as well as to correct them by appropriate actions. SSP addresses to the whole aviation administration of an ICAO Member State.

The Luftfahrt-Bundesamt is working on this issue in order to contribute to the SSP. The implementation mainly takes place by taking into account the measures in the management system, as the EU regulations, too, require an analysis of the occurrences to be reported and of other dates such as reports originating from the SAFA programme.

### Unit 3

The new Unit 3 – Press and Public Relations / Project Coordination – essentially corresponds to the former Staff Unit, however, was charged with the performance of further tasks. Thus, Unit 3 is both responsible for the emergency and crisis management and for internal tasks such as the coordination of comprehensive projects and the coordination of internal auditing.





# Straightforward

## Corruption prevention in the LBA

For many years, the Luftfahrt-Bundesamt has bound itself to the subject corruption prevention. Officials and employees of the civil service are as a matter of principle not allowed to accept rewards and presents.

Therefore, by means of training and recurrent training, the whole staff must be sensitized to corruption risks. Especially important is the exemplary function of the superiors who are urged to point out regularly that the acceptance of rewards and presents is forbidden, interest conflicts are to be avoided and organizational measures must be taken to counteract the dangers. Workflows e.g. are organized in such a way that, at any time, decisions can be verified or are taken by several participants (redundant supervision).

Customers of the Luftfahrt-Bundesamt always have the right to a correct and prompt handling

of their matters within the legal scope and according to the relevant regulations. Even if, due to small presents, officials and employees do not come into conflict with their official duties, we would like to avoid the slightest behaviour that could reflect badly on the officials and employees and thus on the Luftfahrt-Bundesamt. Instead of a gift to express one's contentment or thanks, the officials and employees are equally pleased to receive a phone call or an email.

The contact person for corruption prevention supports all officials and employees of the Luftfahrt-Bundesamt. They are informed, advised



and trained by the contact person. Furthermore, the contact person pays attention to indications regarding corruption, evaluates them and makes proposals in order to take measures. The contact person informs the public with respect to service law and criminal law within the scope of prevention and is also the contact for the customers of the Luftfahrt-Bundesamt as well as advisor for the Head of the Office.

**INFORMATION**

**Further information**

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For further information and examples please see the **catalogue of questions and answers** of the Federal Ministry of the Interior with regard to the acceptance of rewards, presents and other advantages (gifts) published on the internet site of the LBA under the keyword 'corruption prevention'.

“The staff members of the LBA are pleased about a thank-you by phone or email.”



Whether German or foreign air carriers – the Division ‘Operations’ ensures safety.









# “We ensure a high level of safety in air traffic”

## An interview with Axel Losansky, Head of the Division ‘Operations’

The legal outline conditions for the approval and the oversight of air carriers have considerably changed in the past two years. An interview with Axel Losansky, Head of the Division ‘Operations’.

### **Are the national authorities such as the LBA in the future, too, responsible for the approval and oversight of air carriers?**

In the past two years, numerous EU regulations entered into force both having changed the existing EU legislation and superseded the national legislation. The implementation of the new legal outline conditions is a great challenge for aviation authorities and air carriers. It is important that approval and oversight of air carriers will be still incumbent on the national authorities such as the LBA.

### **Are the LBA and the German air carriers prepared for the implementation of the new operational regulations?**

The LBA prepared in good time for the implementation of the new operational regulations. In order to support and inform the air carriers, we published a ‘compliance list’ and a flyer. As of May 2014, audits will be carried out with the air carriers on the spot and will show whether the air carriers are prepared.

At the same time, we support the Federal Ministry of Transport and Digital Infrastructure as to the necessary amendments of national regulations such as the LuftBO (Aircraft Operations Order), the LuftVZO (Air Navigation

Certification Order) or the LuftKostV (Order of Costs of Aviation Administration).

### **Will there still be a scope of discretion for the LBA to take its decisions?**

Even in the future, there will be a certain scope of discretion, e.g. when implementing the Alternative Means of Compliance (AMC) and when applying article 14 para 4 of Regulation (EU) No 216/2008. Especially Regulation (EU) No 1008/2008 regulating approval and oversight of air carriers with regard to the economic aspect offers enough scope of discretion, which is, taking into account the difficult economic situation of many air carriers at present, necessary for an effective oversight carried out by the LBA. A limit, however, is the maintenance of the operational safety.

# European framework

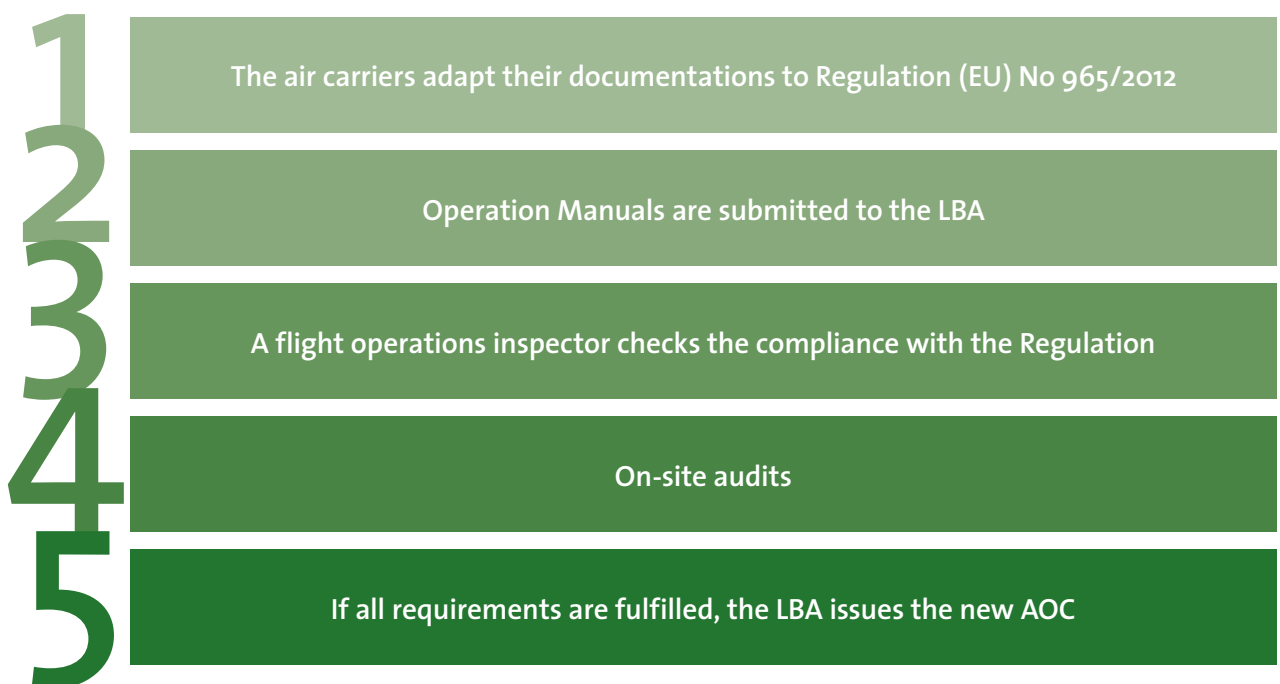
## The new operational regulations

On 28 October 2012, Regulation (EU) No 965/2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council entered into force. First the Regulation applies to the commercial transport of passengers, cargo and mail in aeroplanes and helicopters and is supplemented by five annexes.

As to the commercial operators (air carriers), in particular the Annexes III, IV and V of the Regulation are of importance. The Regulation replaces Regulation (EC) No 859/2008 (EU-OPS) regarding the operation of aeroplanes and JAR-OPS 3 German regarding helicopters. With the entry into force of Regulation (EU) No 800/2013 on 25 August 2013, the scope of application was

additionally extended by the non-commercial flight operation and the Regulation was supplemented by two further annexes: Annex VI (Part-NCC) for non-commercial air operations with complex motor-powered aircraft as well as Annex VII (Part-NCO) for non-commercial air operations with other-than-complex motor-powered aircraft.

### Implementation of the new regulations by the LBA with reference to the AOCs





### Information on the conversion of the Air Operator Certificate (AOC)

An Air Operator Certificate (AOC) for German air carriers pursuant to Regulation (EU) No 965/2012 can only be issued by the Luftfahrt-Bundesamt, in case the compliance with the Regulation was examined and confirmed by a flight operations inspector. For this purpose, the air carriers had to adapt their documentations (operations manual, procedures etc.) accordingly, first until 28 April 2014 or until a date agreed with the responsible flight operations inspector, and to submit the operations manual to the LBA for examination.

The successful adaptation of the documentation is followed by a conversion audit with the air carriers on the spot, during which the flight operation is checked with respect to the compliance of the preconditions. Audit scheduling is coordinated in time between the competent flight operations inspector and the air carriers. Only if

all findings have been closed, a new AOC will be issued. The sending of the new documents is carried out step by step, however, at the earliest one month prior to the applicability of the Regulation, i.e. as of 29 September 2014. A separate application for conversion is not required.

### Procedure for existing AOCs and new foundations

As of 28 April 2014, applications for revalidation of an existing AOC will be examined exclusively according to the new legal requirements. In case of a positive examination, an AOC for a limited period of two years is issued that, when complying with the requirements, will be converted into an unlimited AOC ex officio in October 2014.

As of 28 April 2014, applications for new foundations of air carriers as well will only be handled according to the requirements of the new EU Regulation.



### Further information

AOCs that were issued in accordance with the former **basic legislation** (Regulation (EC) No 859/2008 and JAR-OPS 3 German) and have not been converted according to the a.m. procedure, will become invalid on 29 October 2014.

### Transitional periods

Regarding the implementation of the Annexes I to V, the Federal Republic of Germany applied for a transitional period (opt-out) of two years towards the EU Commission and EASA, i.e. until 28 October 2014. As to the Annexes VI and VII, a transitional period of three years is valid, i.e. until 25 August 2016. The transitional periods are published in the Nachrichten für Luftfahrer (NfL I 34/13 and NfL I 217/13).

Within this period of time the comprehensive innovations and amendments of the Regulation in

the field of flight operation are to be implemented by the national competent aviation authorities – in Germany by the Luftfahrt-Bundesamt (LBA) and the Länder authorities – as well as by the air carriers concerned and the operators, respectively.

### Accompanying material

In addition to the annexes, EASA published substantial accompanying material (Acceptable Means of Compliance (AMC) and Guidance Material (GM)). These guidelines serve the purpose of a uniform application of the Regulation and include

information how individual regulations can be implemented in practice. The requirements included are not directly binding, however, when complying with the provisions, the conformity with the EU Regulation is automatically assumed.

Derogations from the AMC however mean an increased effort for the showing of compliance and cannot be considered during the conversion phase (until 28 October 2014). AMC and GM are exclusively available in English.

In addition to this, further rules were drawn up concerning special kinds of operations (Specialised Operations (Part-SPO), in the future Annex VII of Regulation (EU) No 965/2012), to which also belongs the field of aerial work as well as the commercial use of sailplanes and balloons and the performance of commercial sightseeing flights. Germany will make use of a transitional period of three years following the entry into force.

### Considerable changes for commercial operations

The most considerable change for the commercial air transport operation is that both the AOC and the special approvals are not any longer subject to any time limit. They remain valid as long as the operator complies with the relevant requirements of Regulation (EC) No 216/2008 and its implementing rules, Regulation (EU) No 965/2012, unless they are given back or revoked. The observance of the conditions is to be ensured by the continuous oversight carried out by the national aviation authorities.

Furthermore, every air carrier and NCC operator (e.g. corporate traffic) has to establish a management system in accordance with the requirements under ORO.GEN.200ff of the new Regulation. A great part of the requirements, however, can be covered by an existing Safety Management System (SMS), if any. There are also changes in the field of Special Approvals (SPA), in particular for operators of helicopters such as for commercial air traffic flights with the help of Night Vision Imaging Systems, NVIS, for commercial air

traffic flights with Helicopter Hoist Operations, HHO and for commercial air traffic flights for Helicopter Emergency Medical Service, HEMS. The special approvals for flights in airspaces with Performance-Based Navigation, PBN, for flights in airspaces with Minimum Navigation Performance Specifications, MNPS, for flights in airspaces with Reduced Vertical Separation Minima, RVSM, for flights with Low Visibility Operations, LVO and for flights with double-engine aeroplanes on Extended Range Operations, ETOPS, in commercial air traffic are already now issued with reference to the new legal Regulation.

It is also a new requirement that the Luftfahrt-Bundesamt has to be given notice of a wet-lease-out in advance. Operation manuals and procedures have to be adapted to the new Regulation. Due to the mentioned changes, all AOCs must be adapted to the new Regulation with respect to their content and must therefore be issued again.

### Changes for non-commercial operations

As of 26 August 2016, non-commercial operators of complex motor-powered aircraft (NCC) have to submit to the competent aviation authority a declaration on their ability and finances in order to fulfil their responsibilities associated with the operation of aircraft. The compliance with the applicable requirements is overseen by the aviation authority.



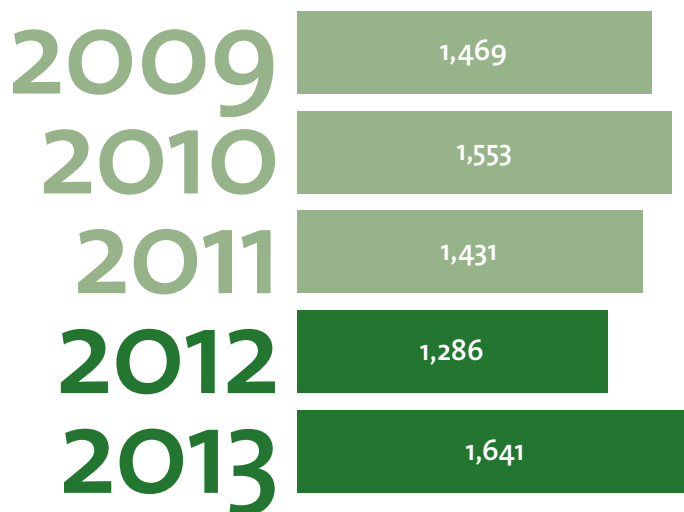


# New checks

## SAFA and SACA ramp checks at German airports

As to ramp checks on aircraft of foreign air carriers at German airports performed and organized by the Luftfahrt-Bundesamt, there will be also changes in the legal regulations to be considered.

### Ramp Checks



The legal basis for the check of aircraft of air carriers that are subject to the oversight of another Member State of the European Union or a third country, will be in the future the section "RAMP" of Annex II of the Regulation (EU) No 965/2012. The Directive 2004/36/EG dated 21 April 2004 on the safety of third-country

aircraft using Community airports which has been previously valid, will lose its validity as of 29 October 2014.

It is e.g. planned that, in case of ramp checks on foreign aircraft at the airports of the relevant Member States, the checking national authorities such as the LBA have to make a distinction in the future regarding the origin of the air carrier and thus according to the valid legal regulations to be applied.

#### Air carriers from EU Member States

In accordance with the envisaged procedure, aircraft of air carriers from an EU Member State must be checked in the future with a view to compliance of their technical and flight operational safety with the relevant EU regulations. These checks are to be designated "Safety Assessment of Community Aircraft" (SACA).

#### Air carriers from third countries

Aircraft of air carriers from third countries, however, will be furthermore audited on the basis of ICAO standards. These checks will still take place keeping the designation "Safety Assessment of Foreign Aircraft" (SAFA).





# Safety despite the crisis

## Economic development

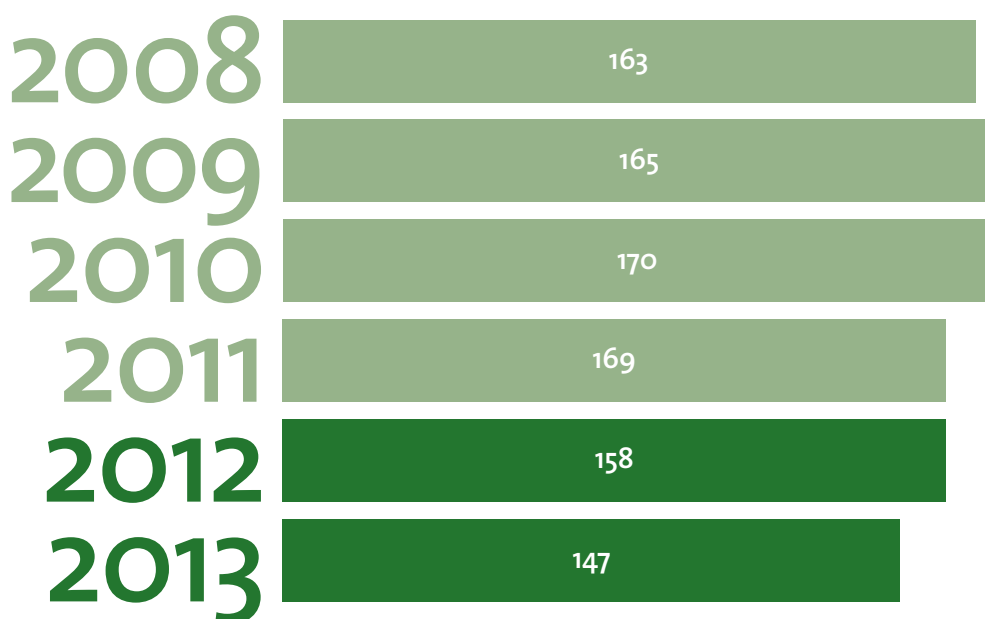
The continuous financial and economic crisis all over the world still has a negative impact on the German air traffic industry. Therefore, the Luftfahrt-Bundesamt continues its oversight very intensely with regard to the economic efficiency of the German air carriers.

In this connection and within the scope of its competency, the LBA accompanied in a constructive way the cost-cutting measures introduced by the air carriers and shortened partially, where necessary among the 150 air carriers overseen, its inspection intervals of up to monthly intervals.

Provided that, within the scope of intensified inspections, an air carrier could not any longer

comply with the financial preconditions according to Regulation (EC) 1008/2008, the suspension of the operating licence and of the AOC was ordered as ultima ratio. Thus, it was avoided that the lacking financial preconditions could have a negative impact on safety in the fields of flight operation and technical support.

Number of German air carriers approved by the LBA



# Law on Transport Services

## Quick help in case of emergency

Within the framework of public emergency prevention, the Law on Transport Services entered into force in 2004 in order to be able to provide urgently necessary transport services in case of natural disasters, particularly serious accidents and economic crises by which the provision with vital goods is interrupted. In special cases, the law allows traffic companies and traffic infrastructure companies to be obliged to different services such as the transport of goods and persons, the transfer of transport means or the use of the required traffic infrastructure. Ever since 11 September 2001 and taking into account the more and more frequent flood disasters, the public is aware of new dangers that cannot or can hardly be faced without being prepared. In the field of aviation, the Luftfahrt-Bundesamt is the competent authority via which, in the emergency case, services can be ordered from an air carrier. In order to fulfil this task, information on the possibilities of operation concerning the fleets of our air carriers is gathered in regular intervals. In this context, the following information is interesting: how many aircraft are available that allow a transport of lying patients, which is the maximum cargo transport capacity or is there any possibility of transporting external loads?

The information is collected, prepared and maintained taking into account data protection to be able to ensure immediate and competent help in case of emergency.

If there is an occurrence where the need for traffic services cannot be covered, cannot be covered in time or only with the help of



disproportionate means and if, depending on the occurrence, the Federal Government or the Federal Ministry of Transport and Digital Infrastructure states that the conditions for the application are fulfilled, the Law on Transport Services will apply. By means of a commitment of the LBA, the air carriers can be obliged to offer traffic services of up to three months or to transfer their means of transport.

Principally, they do nothing else than before: they just provide their transport capacities and the know-how to another principal, the recipient of services. Later, the obliged air carrier is paid a compensation for the traffic services provided.



Division with growing tasks – ‘Aviation Security’.











# “Aviation security is not possible without official measures”

## An interview with Birgit Loga, Head of the Division S

The transport of air cargo is subject to extensive security provisions. The Head of the Division S, Birgit Loga, reports on the official measures in the field of air cargo security.

### Known consignors meanwhile need an official approval. Has this proved successful? Or are there still too little known consignors?

As to the export-oriented air carrier, it is important that not only the own product meets the high quality standards, but also the services associated with it such as logistics and adherence to delivery dates. The status “known consignor” ensures on the one hand the quick and smooth handling of air cargo with regard to all levels of the transport chain and, at the same time, visible for any air carrier, it stands for a good implementation of the high level of requirements. In the opinion of the Luftfahrt-Bundesamt the seal of quality “known consignor” is under-represented in the industry.

### How many approvals for “known consignors” do exist in Germany compared to the European Member States?

Meanwhile, the Luftfahrt-Bundesamt has approved more than 2,000 “known consignors”. Compared to the other EU countries, this represents a considerable number. No other EU Member State has approved such a great number of “known consignors”. They all have less than 1,000 approvals.

### As of 1 July 2014, prior to a designation as “Air Cargo/Mail Carrier operating into the Union from a Third Country Airport” (ACC3), the air carriers have to pass a validation in the third country on site carried out by an EU aviation security validator. Have such EU aviation security validators already been approved?

Across Europe, a total of 37 EU aviation security validators have been approved. Currently 5 approvals have been issued by the Luftfahrt-Bundesamt. Further 38 applications for approval have been submitted to the Division S.

### Do you expect a continuous adaptation of legal regulations in the field of aviation security?

Especially in the field of the European legislation a continuous adaptation of legal standards is expected, in particular due to amending Regulations. Less often a change of the European legal situation is to be expected typically requiring the change of national standards as well.



# A current status

## Aviation security in Germany

Due to the establishment of the new Division S “Aviation Security” in July 2011, the Luftfahrt-Bundesamt gained an additional task to be mastered, the supervision of the safe supply chain concerning air cargo.

The establishment of the Division S has meanwhile advanced. At the end of the year 2011, the Division still counted 94 staff members, now the number has increased to 158 staff members (status 1 September 2013). The Division S has a decentralized organizational structure. Not only in the Head Office in Braunschweig, but also in all six Regional Offices of the Luftfahrt-Bundesamt in Hamburg, Berlin, Düsseldorf, Frankfurt, Stuttgart and Munich trained staff members are available as contact persons in the relevant region.

The new Division had to perform a balancing act between the organizational setup and the current approval procedure. In 2012/2013, the approval of known consignors was in the focus of Division S.

Apart from the numerous approvals issued as “known consignor”, the number of approvals of the regulated agents has also increased. Since the beginning of 2013, it has also been possible to obtain both the approval as known consignor and as regulated agent (double approval) for one location.

In the field of the approval of aviation security plans and regulated suppliers, the intense exchange among the authority and the air carriers is a central issue as to the performance of tasks of the new Division. Thus, e.g. by having established uncomplicated communication lines, by having designated one person who is responsible for the air carrier as well as by having intensified the personal contact, the positive exchange could have been considerably increased. This led immediately to an improved, practice-oriented implementation of aviation security standards and hence is a win-win situation.

### ACC<sub>3</sub>

As of 1 February 2012, the Division S has assumed a further task, the designation of air carriers as ACC<sub>3</sub>. Air cargo or mail carrier operating to a European Union airport from a third country airport for transfer, transit or unloading, are encouraged to be designated as “Air Cargo/ Mail Carrier operating into the Union from a Third Country Airport” (ACC<sub>3</sub>) by the competent authority. The goal of the designation is that cargo and mail transported from a third country into the Union is to be protected. The designated ACC<sub>3</sub> have to ensure that all cargo and mail

### Known consignors

The change of the European standards obliged the EU Member States to officially approve “known consignors”. All air carriers, which intend to obtain or to keep the status of the “**known consignor**” until the deadline of 28 April 2013, need an approval. If an air carrier does not have the status of the “known consignor”, air cargo is considered as not to be “**secure**”. In this case, the consignment concerned must be checked at the airport by a regulated agent.



consignments to be transported into the European Union are subject to controls.

### Determination of training contents

In the field of aviation security training, the Division has worked intensely on the determination of training contents. In cooperation with the Federal Ministry of the Interior and representatives of industrial associations, a design of a module system could be developed in a common “working group training” in order to implement the provisions of Regulation (EU) No 185/2010 at national level. Upon entering into force of the module system, approved instructors are encouraged to use the given modules in the future in order to establish their aviation security training programmes and to carry out their training in accordance with the prescribed contents. The previous procedure will be superseded by the introduction of the module system according to which all training programmes must be submitted to the Luftfahrt-Bundesamt for approval.



### Supervision of the safe supply chain

Although the Division is still in the process of being set up, numerous quality controls could have already been carried out in the field of the supervision of persons involved in the safe supply chain. Since 2013, the Department “Supervision” issues approvals for teams of explosion detection dogs that can be used as a reliable method of control in case of the handling of cargo and mail. Approvals for 23 teams of explosion detection dogs have already been issued.

### Approval of known consignors

The business year 2012/2013 was a caesura both for manufacturing and for trading companies. Their air cargo could only be circulated in a secure way by external methods of control or by the official approval for a known consignor. The interest in the status “known consignor” was considerably high particularly since a lot of companies observed the deadline 28 April 2013 for a smooth transition from a tolerated

certification to an official approval. This was a challenge for the Luftfahrt-Bundesamt. Several times, extensive roadshows dealing with this topic were hosted by the Luftfahrt-Bundesamt. In addition to that, 40,000 companies were contacted by mail and informed of the forthcoming changes, a helpline was set up to answer questions. Finally, due to the efforts made by all staff members of the Division S, it was possible that until 28 April 2013, a date important for the economy, approvals for known consignors were issued for 1,895 business premises.

The status of the officially approved known consignor offers an enormous planning certainty regarding air cargo consignment of the companies. Therefore, the importance of this approval as well as the advertising potential associated with it is in demand by the economy.

**2,374**

business premises obtained an approval as ‘known consignor’ in 2013.

Safety starts with the people – the Division ‘Aviation Personnel’ checks the high standards of training for commercial aviation personnel.













# “A permanent challenge”

## An interview with Udo Dehning, Head of the Division ‘Aviation Personnel’

The implementation of the new legal outline conditions for aviation personnel and their implementation in the LBA were the topics of conversation with Udo Dehning, Head of the Division ‘Aviation Personnel’.

### Is your Division prepared to manage the implementation of EU-FCL regarding personnel and organization?

The whole Division “Aviation Personnel” is concerned by the new EU-FCL (Flight Crew Licensing) regulations, from the responsibility for the training of airmen and theoretical examinations and skill tests, to aviation medicine and licensing. The preparations had to be managed without any additional personnel, as best as possible, parallel to the normal workload. In this context, we took care of various topics such as change and adaptations of the procedures and forms, adaptation of the EDP system, introduction of new workflows. Furthermore, we also offered lecture events and publications. Unfortunately, we did not fully succeed in informing all persons involved preventively as much as desired.

This was aggravated by the fact that, in the preliminary stages, a lot of questions related to the Regulation were not sufficiently recognizable and only prove necessary in practice. In addition to that, the federal structure of aviation administration in Germany has to be particularly taken into account. That means that considerable and continuous processes of coordination among the LBA, the Federal Ministry of Transport and Digital Infrastructure and the aviation authorities of the Länder are necessary.

The uncertainty of many applicants with respect to the handling of the new regulations that is still unusual, insufficient documents for application, a considerable increase of applications or the

introductory training of new staff members are some reasons why the handling times for applications are not satisfied. This will be improved only after the transition time.

### Are the authorities such as the LBA also in the future responsible for training and licences?

This question can be absolutely affirmed. The national authorities are still operational for their respective territory. In fact, EASA has e.g. become responsible for approval and oversight of training organizations in countries not belonging to the EU (third countries), the LBA, however, remains unrestrictedly responsible for its tasks in Germany. Thus, we will further build up our experience in the field of training of airmen.

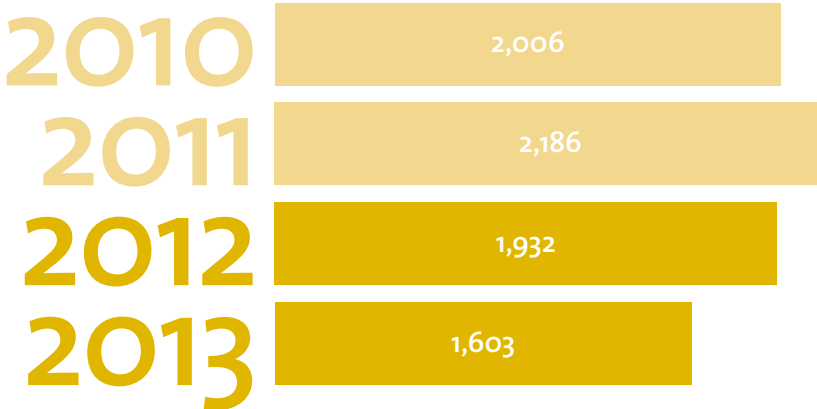
Especially in the field of MPL training, i.e. the acquisition of the Multi-Crew Pilot Licence MPL (A), we could consolidate the advantage of our experience in Germany.

The newly issued EU pilot licences in Germany refer to the European Union, but still clearly to the logo of the Federal Republic of Germany and show the LBA or the aviation authority of the Länder as the competent entity.

### Which scope of discretion is still left for the national authorities when approving the training and licensing of aviation personnel?

Basically it is evident that, for the first time, uniform European Regulations do exist. They have

Aviation personnel: skill tests



77

Flight Training Organisations were cared for by the LBA in 2013. All of them are approved according to JAR-FCL.

the claim to be applied by all European Member States in the same way and cannot be changed according to national requirements as it used to be. The detailed provisions of the EU Regulation, e.g. in Part-FCL, have a binding character and are therefore often designated as “hard law”.

Principally, pursuant to Regulation (EU) No 216/2008, there is the possibility of making temporary or permanent exemptions. This is, however, not an easy procedure. The Member States have to justify their applications for exemption in detail. Then EASA has to make an evaluation on the basis of stringent conditions. Due to this evaluation, the EU Commission finally decides, if exemptions are granted or not.

The wording of the regulations, however, is not absolutely clear or finally formulated. There is also the fact of imprecise translations into the respective binding national language. Thus, when interpreting the Regulation on the basis of the wording, now and then there may be a scope of discretion.

Of course, together with EASA and other European Member States, we make every effort to obtain a common understanding and a uniform interpretation of the Regulation in the preliminary stages of a decision. However, this is not always successful. Nevertheless, the

ambition to achieve a harmonized application of regulations is a permanent challenge.

In case of very serious issues, a political intervention of a Member State with the EU Commission can contribute to a clarification. A successful example is the initiative of the Federal Ministry of Transport and Digital Infrastructure to clarify the transport of passengers for money by owners of Private Pilot Licences (guest flights).

As the change of the binding rules (“hard law”) causes extraordinary charges on the one hand, the rules, however, are not to impede the dynamic development of the air traffic on the other hand, a lot of detailed regulations to formulate a requirement were described more flexible as “Acceptable Means of Compliance, AMCs”. They can be adapted with less extraordinary charges.

These AMCs are drawn up on EASA’s own responsibility. They serve the purpose of the uniform application of the Regulation and include information how the individual provisions of the Regulation are to be implemented in practice. As they do not have the legal character of the Regulation, they are also designated as “soft law”. With the observance of the AMCs, the compliance with the provision originating from the EU Regulation is automatically supposed.

However, there are also possibilities of derogating from AMCs. A systematic, principal and regular derogation from a special AMC requires an “Alternate Means of Compliance”, which needs an increased need of explanation and justification. Insofar, derogations should be restricted to individual and marginal cases, respectively. Of course, even in this case, the procedure is determined by firm guidelines.



# European Regulations related to air crew

## Introduction of EU-FCL

So far, the licensing regulations for aviation personnel under the designation JAR-FCL were national regulations of the European Member States, which could derogate from each other in detail. Since 8 April 2013, with the Regulation (EU) No 1178/2011 for the first time uniform European Regulations entered into force.

The EU Regulation was translated into German whereby this version is directly legally valid without the need of a national legislative process. The official title reads: Commission Regulation (EU) No 1178/2011 of 3 November 2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and the

Council. Among experts, the rules are known under the short name “Air Crew Regulation”.

The title already announces an amendment while referring to the ‘aircrew’. This does not only include the pilots (cockpit crew), but also the flight attendants (cabin crew). Apart from the Cover Regulation, which contains transition regulations as to the conversion of former

licences into the European system, the actual detailed provisions are included in the Annexes (Parts). These annexes have been developed in an addressee-oriented form. Thus, airmen are mainly interested in Annex I, known as Part-FCL. Many of the formerly known JAR-FCL regulations were transferred into this Annex.

In addition, there are further important Annexes: Annex IV Aviation Medicine (Part-MED), Annex V Qualification Of Cabin Crew Involved In Commercial Air Transport Operations (Part-CC), Annex VI Authority Requirements for Aircrew (Part-ARA) and Annex VII defining requirements for organisations such as training organisations (Part-ORA).

The result of the application of uniform European licensing regulations is obvious: an EU licence for pilots that is in accordance with the uniform European format issued by the competent authority.

The flight attendants, too, obtain for the first time a uniform European attestation in order to prove compliance with the acquired qualification.

Despite frequent disapproval of the persons concerned during the transitional period it may not be forgotten that, finally, this is an important milestone towards achieving a harmonization of the European aviation legislation.

### EU-FCL causes an increase of tasks

Beyond the introductory phase of Part-FCL, the LBA must prepare for an increase of tasks. Apart from an intensified cooperation and an exchange of information with other European aviation authorities and EASA, the LBA must additionally comply with the requirements regarding its oversight. The authority is e.g. not only responsible for the supervision of the inspectors it has certified, but also for the inspectors certified by other competent European authorities exercising their rights within the territory of Germany.

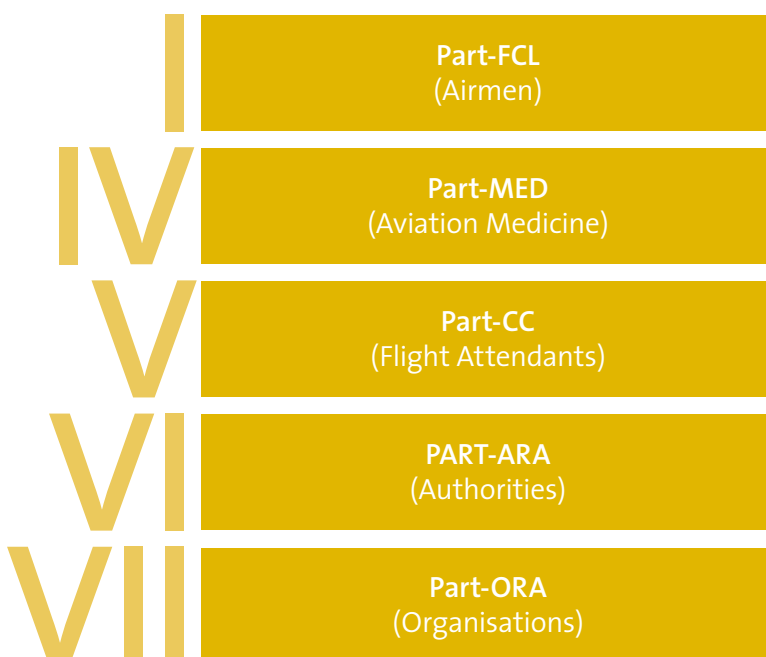
In the field of aviation medicine, the LBA is now exclusively responsible as the former tasks of the Länder authorities regarding medical fitness class 2 were legally transferred to the LBA.

In the forthcoming years – until 8 April 2018 at the latest – we are obliged to replace all licences according to JAR that we issued or recognized before the application of the new Regulation by new EU licences. Additionally, there are new facts for licensing such as the issue of test flight ratings.

### Rulemaking continues

EASA is developing a lot of rulemaking projects in working groups at the same time. A very important project is dedicated to the elimination of errors in terms of form and content which have been identified after publication of the Regulation now applicable. After its conclusion, the wording of the regulations is to be clearer in order to eliminate misunderstandings. The LBA is involved in continuous rulemaking.

## The most important annexes of the detailed regulations





Regulations include complex facts – that makes the work diversified.

Apart from these later improvements, there are also new specialist topics taken up by EASA. Especially pilots and associations of the general aviation are particularly interested in the developments and conclusions as to a simplified European training and structure of IFR. Furthermore, a project work intensely deals with the setup of learning objectives for the theory of airmen.

In addition, requirements for training, verification and experience of the “copilot qualified for relief during cruise flight” during extended range operations are developed.

Naturally, the regulations develop as a whole, thus, already now, adaptations for Part-MED, Part-ARA and Part-ORA are being prepared.

With the MPL training, a fundamental change of the training concept of airmen was introduced for the first time. Contrary to the former traditional training with specific minimum flight hours, the new concept is based on the competency-based approach to training. The competencies to be acquired by the student pilot must previously be defined very precisely and must be known in order to be able to verify the successful teaching during the training.

Step by step this concept is to cover all training courses for ratings and licences.

In this context, potential scenarios of threats (exterior influences, the so-called ‘threats’) or erroneous behaviour of the crew (self-induced influences, the so-called ‘errors’) are to be integrated at an early step into all training courses so that it is possible for airmen to react with adequate competency and risk management.

### Keeping pace with technology

Finally, it should be noted that the regulations for aviation personnel continuously have to keep up with the technical developments of aeronautical products. Therefore, regulations are to be developed that e.g. have to cope with the future operation of powered lift aircraft. It will be a special challenge to develop appropri-

ate requirements for the pilot-in-command of remotely piloted aircraft (RPAS Remotely Piloted Aircraft Systems).

These examples are to make clear that regulations indeed have to include complex facts. That is the reason why the development normally takes several years whereby an appropriate support by experts is necessary. People not involved in dealing with regulations may first assume that this is really boring, but for us it is just the contrary and in the future it will remain interesting and exciting for us.

The allocation of sufficient staff adequately qualified for the tasks to be performed will be of decisive importance.

# Safe Simulators

## Assessment of FSTDs is also for EASA

In order to maintain their skills, European pilots outside the EU can use one of the 350 flight simulators. Since 2012, the LBA has been carrying out inspections.



Outside the European Union, more than 350 Flight Simulation Training Devices (FSTD) can be at present used by pilots licensed in Europe for training or for the proof of compliance of acquired and maintained skills, respectively. The maintenance of an FSTD qualification requires a recurrent assessment by the competent authority carried out once a year. Pursuant to Regulation (EU) No 1178/2011, the European Aviation Safety Agency (EASA) is, among others, responsible for the FSTDs that are outside the territory of the Member States. In accordance with Regulation (EU) No 216/2008, the technical inspections can be carried out by EASA itself, by national aviation authorities or by qualified entities.

Due to an EASA tender in April 2011, the Luftfahrt-Bundesamt applied for the assumption of tasks in the field of FSTD and for this purpose had to show compliance with the organizational, personal and technical preconditions. Following the verification of the preconditions, the EASA contract could be signed on 27 March 2012 and entered into force on 8 April 2012. Since that date, the LBA has performed recurrent assessments of FSTDs on behalf of EASA. In the past two years, 47 projects were taken over in the United States, two further projects in Thailand on behalf of EASA. At present, two technical and four flight inspectors of the LBA are accredited for this function.



# Global requirements

## Proactive safety management

All competent overseeing authorities such as the LBA are now obliged to set up and administrate a certain management system for their entire areas to fulfil their obligations and perform the defined responsibilities.

At the same time this is also to comply with the global requirements of ICAO in accordance with a so-called ‘Safety Management System’ (SMS).

SMS is directly connected to a State Safety Program (SSP) being developed for the Federal Republic of Germany. This is to define the subordinated state safety level together with the respective safety targets for the total national air traffic system.

The main target is the development from a reactive to a proactive forward-looking safety management. Safety risks are already to be anticipated at an early stage and are to be estimated as to their risk potential in order to take appropriate compensation measures in a preventive way.

SMS is to be understood as a continuous process that, of course, also influences the management requirements for the overseeing authorities.

This systemic approach is reflected by the typical requirements for an integral management system of organisations in order to define, among others, clear competencies and responsibilities as well as guidelines and procedures.



To ensure that all aspects of technology are correct – the Division ‘Airworthiness/ Environmental Protection’ oversees design, production and maintenance organisations as well as aeronautical engineering.













# “Reorganization of the Aircraft Registration creates synergies”

An interview with Thomas Burlage, Head of the Division ‘Airworthiness/Environmental Protection’

In 2013, the ‘Aircraft Registration’ has been integrated into the Division ‘Airworthiness/Environmental Protection’. Thomas Burlage, Head of the Division ‘Airworthiness/Environmental Protection’ explains the synergy effects having resulted from this reorganization in the LBA.

## Why was the ‘Aircraft Registration’ 2013 integrated, as to the organizational aspect, into the Division ‘Airworthiness/Environmental Protection’?

The LuftVZO (Air Navigation Certification Order) makes already clear how close the aircraft registration is connected to the technical condition of the aircraft. The LuftVZO determines that “...the competent authority (...) certifies the aeronautical product by issuing a Certificate of Airworthiness.” The validity of this certificate and thus the aircraft registration is closely related to the measures and proofs of compliance for the continuing airworthiness.

The continuing airworthiness is comprehensively regulated by Regulation (EC) No 2042/2003. It does not only apply for (European) aircraft certified by EASA, but also for national aircraft (Annex II and state aircraft) on the civil German register according to the LuftGerPO (Certification of Aeronautical Products Order). For this purpose, the important processes are bundled in Division T, e.g. the approval of maintenance organisations and of Continuous Airworthiness Monitoring Organisations (CAMO), the approval of main-

tenance programmes for aircraft as well as the Aircraft Continued Airworthiness Monitoring (ACAM) inspections. Insofar, due to a lot of existing interfaces, it was a consequent decision to integrate the Department responsible for aircraft registration into the Division ‘Airworthiness/Environmental Protection’ of the LBA.

## Which synergies do you expect by the shifting of the ‘Aircraft Registration’ into the Division T?

Apart from the elimination of a hierarchical step in the ordinary course of business among the ‘Aircraft Registration’ and the other Departments of the Division T, I especially hope for a more effective process integration concerning the Departments depending from each other. As to the aircraft registration of an aircraft and its continuity, diverse information is required, from the data sheet for the aircraft and information on owner and operator to current information on the individual maintenance programme and the valid Airworthiness Review Certificate (ARC). Nowadays, this information is partly available in various data bases, partly still in paper form so that the responsible colleagues do not see

the necessary information or only partly with considerable delay. By means of an improved IT integration I expect in the medium term a remarkable discharge and reduction of stops in the workflows which finally will be to the benefit of the applicants.



**Is it right that more and more German private pilots have their aircraft registered in other EU Member States instead of Germany?**

This statement cannot be directly proved by pure statistics. In the past six years (2007–2013), the number of single-engine aircraft of less than 2 t of class E was about 6,700. It should be noted, however, that an increasing part of owners from other EU Member States, in particular Italy, Austria and Belgium have their aircraft registered in the Federal Republic of Germany and thus have ‘replaced’ some German operators that may perhaps have changed to registers in foreign countries of the EU.

A clearly visible increase of aircraft registrations, however, is to be recorded in the field of air sports, whereas in ‘traditional’ general aviation of class E it is rather stagnant. The reasons for this are certainly complex, first of all I would like to mention the costs for fuel that have risen sharply. However, I would not like to exclude that, with the Europeanization, more and more complex regulations contributed to this development.

**Do operators of German aircraft have to count with increasing fees for the registration of their aircraft?**

The fees for the aircraft registration are based on the LuftKostV (Order of Costs of Aviation Administration) decreed by the Federal Minister of Transport and Digital Infrastructure with the consent of the Federal Council. Compared to other European countries, the present valid fees are rather low, taking into account the cost-covering aspect, they would certainly be higher.

Regarding its notices of costs for the aircraft registration, the LBA is bound to the fees specified in the Regulation. As far as I know, there are no plans for an amending Regulation.









# Checked and certified

## Manifold challenges

Type certifications within the responsibility of the LBA are steadily increasing. In the past two years, the Division T recorded e.g. a noticeable increase of certification activities concerning historical aircraft.

Due to the retirement of staff members as well as due to the change of staff members now working with the European Aviation Safety Agency (EASA), new staff members had to be trained in the field of type certification and certification of individual aircraft. The commissioning work for EASA within the scope of the “Framework Service Contract” is still a great part of the volume of work, although it is noticeable that type investigations are increasingly handled in Cologne. Due to the

growth of activities concerning “Annex II”, i.e. of certification processes that are within the responsibility of the national aviation authorities, this is more than compensated.

Thus, the number of applications for the certification of historical aircraft has noticeably risen. The handling of these certification processes is particularly challenging. According to the aviation regulations, the certifying authority is granted

a wide scope of discretion with regard to the certification of individual aircraft, which must be used carefully. The balance must be kept between the maintenance of an original condition corresponding to the certification specifications of past decades and the claim of the level of safety that is customary in these days.

A further focus in the field of certification represent aircraft built of assembly kits and cared for by experts of the Oskar-Ursinus-Vereinigung (OUV). The self-construction of aircraft is still very popular and that is the reason why there is a continuous information exchange among LBA, applicants and experts on the occasion of the OUV meetings attended by staff members of the Division T.

Furthermore, activities referring to research aircraft are to be mentioned as well as special development projects that are also handled by the LBA: Each process is a singular one often dealing with total new developments or 'special measurement projects' for which there is no handling scheme regarding certification. These are very interesting tasks whereby, for the staff members of the Department, engineering has priority.

### Unmanned aerial systems

The separation between unmanned aerial systems and aircraft models in terms of the LuftVG (Air Navigation Act) is exclusively done according to the purpose of use. If the equipment is used for sports or spare-time activities, the rules on aircraft models are to be applied. Is the use, however, associated with a different purpose, in particular with a commercial purpose (e.g. taking of pictures for sale), then we talk of an unmanned aerial system (formerly: Unmanned Aerial System, UAS, according to today's ICAO definition: Remotely Piloted Aircraft System, RPAS), the operation of which, independent of its weight, must be approved in accordance with the LuftVO (Air Traffic Order) by the aviation authorities of the Länder.

The "Joint Federal Government/federal state principles for granting permission to fly

## The most important certification procedures

Historical aircraft

Aircraft built of assembly kits

Research aircraft and special development projects

unmanned aerial systems" are to ensure the uniform application of rules in Germany.

According to the current legal situation, i.e. pursuant to § 15a of the LuftVO (Air Traffic Order), the operation of unmanned aerial systems is forbidden, if it is outside the visual range of the aircraft model pilot or the total weight of the aircraft model is more than 25 kg. The operation is performed outside the visual range of the aircraft model pilot, if, without any special optical aids, the aeronautical product is not any longer visible or is not clearly visible.

Due to these restrictive rules which apply at present for the operation of "unmanned aerial systems", they are, according to the rules of the LuftVZO (Air Navigation Certification Order) still released from type certification and aircraft registration. In so far, the Luftfahrt-Bundesamt has not yet any competencies in this field.

Considering the rapidly increasing technical development, aviation authorities are certainly going to intensify their discussions as to the civil use of UAS in the forthcoming years at national, European and international level.

Staff, administration or budget – Division Z is responsible for the administrative tasks of the LBA.











# “Recruiting of staff is considerably stalling”

## An interview with Fred Müller, Head of the Division ‘Administration’

The Luftfahrt-Bundesamt is still urgently looking for specialists, in particular excess staff but also pilots and aerospace engineers. However, especially the recruiting of the so-called ‘excess staff’ is considerably stalling. A conversation with Fred Müller, Head of the Division ‘Administration’, on the outlook of human resources development in the LBA.

### Which are the difficulties the LBA has to face when recruiting staff, especially excess staff?

In the reporting period, due to the result of a detection of manpower requirements performed under the direction of the former Federal Ministry of Transport, Building and Urban Development, apart from 87 new permanent posts (can be filled without restrictions) and posts, further 241.5 permanent posts and posts were provided for the LBA in the field of security, further 116.5 permanent posts and posts in the field of safety that may, by budget memo, only be filled by excess staff of the Federal Government.

Whereas, in the year 2012, we succeeded in recruiting rapidly well-trained staff for administrative tasks in the field of ‘safety’ and ‘security’ and for cross-sectional tasks in the Division ‘Administration’ from the Federal Ministry of Defence as well as from Deutsche Bahn, but also from the successor companies to Deutsche Bundespost for a great part of these posts, recruiting of staff has been stalling considerably since the beginning of 2013.

### Why is it so difficult to recruit staff?

On the one hand, we receive no more applications from staff members of the Federal Armed Forces, from the Deutsche Bahn are not to be expected any applications, either. On the other hand, due to the rules specified in the budgetary management circular of the Federal Ministry of Finance, official civil servants of the successor companies to Deutsche Bundespost may not any longer be taken over concerning permanent posts of excess staff so that, as a result, staff members from the respective authorities/areas can hardly or not at all be recruited.

Should this situation not improve considerably, the necessary posts of a maximum of 234 of totally 358 permanent posts of excess staff and posts of excess staff that could not be filled until 31 December 2013 due to the reasons explained, must remain vacant in the future thus having a negative impact on the performance of tasks. Predictions cannot be made as to which extent the on-going common efforts of the LBA and the Federal Ministry of Transport and Digital Infrastructure can lead to an improvement of the situation.



# Family-friendly

## The LBA ensures a better reconciliation of work and family life

The Luftfahrt-Bundesamt should be regarded as a family-friendly employer. It is our target to create family-friendly working conditions for all staff members as attractive conditions and the binding of staff members are important aspects for us as employer.

The reconciliation of work and family life is an essential prerequisite for the LBA to keep its staff members motivated and efficient, which finally will be economically profitable.

There are already outline conditions to achieve this target, i.e. flexible working hours, diversified part-time working, alternate telework, working rooms for parents and children in the offices of the LBA as well as continuous efforts together with the other institutions in Braunschweig to realize and cover child care.

Flexible working hours mean more flexibility for our staff members. They can e.g. start later in the morning and stay longer or the other way round. There are a lot of possibilities of coordinating the working hours with the care of their children.

Part-time working is widespread – from the shortening of the daily, weekly or monthly working time to job sharing. The workload can be coordinated individually. The staff members working part-time benefit from the same assistance measures as their colleagues working full time.

Regarding the alternate telework many tasks can be carried out at home (home office). Our staff members work within the scope of the official possibilities according to the same intervals at home or in our office. They remain involved in operational processes and profit at the same time from more flexibility.

Staff members who care for relatives in their family are offered short-term or long-term solutions such as part-time working or telework or a care period of up to three years.

In any case, working rooms for parents and children are available for our staff members at the respective locations. If the children have to accompany their parents to work due to care problems, they can play or relax while the parents can work or take care of their children.

### Advantages for families

Flexible working hours

Widespread part-time working

Alternate telework

Working room for parents and children

Child care is ensured



INFORMATION

### Working room for parents and children

In case of need, the staff members of the LBA can use a working room for parents and children. This may be the case, if, spontaneously, **care problems** arise. The children can play or relax while their parents can work in the same room. This is a family-friendly solution by which the LBA supports the reconciliation of work and family life.

Furthermore, concerning child care, the Luftfahrt-Bundesamt would like to share the responsibility so that the reconciliation of work and family life could be still more successful. Therefore, we recently concluded our extensive query on child care. Under the direction of the neighbored

research airport the local authorities and companies identified the need of child care of their staff members. In the near future, there will be considerations together with the municipal authorities of Braunschweig how this need can be covered effectively.



# Cost-free support of flight passengers

## Customer-friendly new conciliation process

In 2013, the Federal Government agreed with the aviation industry to set up a customer-friendly conciliation process in and for Germany as of 1 November 2013 and to establish a conciliation body with the Federal Office of Justice especially founded for this purpose.

Within the scope of the enforcement of the obligations mentioned in the “Denied Boarding Regulation” (Regulation (EC) No 261/2004) regarding compensation, support and care, this process offers the possibility for the passenger

to be able to make use of the new conciliation body, even if there is no agreement of the air carrier concerned. This new conciliation body is available with the Federal Office of Justice, in addition to the already existing “Conciliation





In the future, the LBA will be able to concentrate much more on the provision of information regarding air passenger rights.

Body for Public Transport – söp” (conciliation body exclusively for air carriers organized as a member on a voluntary basis).

Due to the setup of this conciliation process, the passenger can make use of a cost-free support while enforcing his claims. The extension of the passenger’s possibilities also influences the way of working of the Luftfahrt-Bundesamt as National Enforcement Body – NEB) because it must be assumed that passengers exclusively interested in the enforcement of their civil claims will (at least mainly) not address to the Luftfahrt-Bundesamt in the future, but will have recourse to the new conciliation process. This will enable the Luftfahrt-Bundesamt to focus its work as National Enforcement Body on the tasks to be carried out by the NEBs within the scope of the enforcement of the “Denied Boarding Regulation”. This is in the first place providing of information dealing with air passenger rights – both referring to the “Denied Boarding Regulation” and to “Regulation (EC) No 1107/2006 of the European Parliament and of the Council of 5 July 2006 concerning the rights

of disabled persons and persons with reduced mobility when travelling by air” as well as to the “Regulation of price transparency” (Regulation (EC) No 1008/2008). Furthermore, it is increasingly possible to oversee the air carriers at the commercial airports when complying with their obligations.

Finally, as National Enforcement Body, the LBA will be able to pursue cases where there is a suspicion of systematic infringements of the aforementioned consumer protection regulations in a more improved way and is able to examine in particular the imposing of considerable fines, if the factual requirements exist. This was not possible in the past in view of the enormous workload resulting from the flood of passenger complaints that primarily aimed at supporting the complainants to enforce their civil claims specified in the “Denied Boarding Regulation”.

# How to find us

## Luftfahrt-Bundesamt

Hermann-Blenk-Straße 26  
38108 Braunschweig  
phone + 49 (0) 5 31 / 23 55 - 0  
fax + 49 (0) 5 31 / 23 55 - 90 99

## Luftfahrt-Bundesamt – Regional Office Hamburg –

Röntgenstraße 24  
22335 Hamburg  
phone + 49 (0) 5 31 / 23 55 - 83 09  
fax + 49 (0) 5 31 / 23 55 - 83 99

## Luftfahrt-Bundesamt – Regional Office Berlin –

Jeanette-Wolff-Straße 11  
12355 Berlin  
phone + 49 (0) 5 31 / 23 55 - 80 09  
fax + 49 (0) 5 31 / 23 55 - 80 99

## Luftfahrt-Bundesamt – Regional Office Düsseldorf –

Heltorfer Straße 6  
40472 Düsseldorf  
phone + 49 (0) 5 31 / 23 55 - 81 10  
fax + 49 (0) 5 31 / 23 55 - 81 99

## Luftfahrt-Bundesamt – Regional Office Frankfurt –

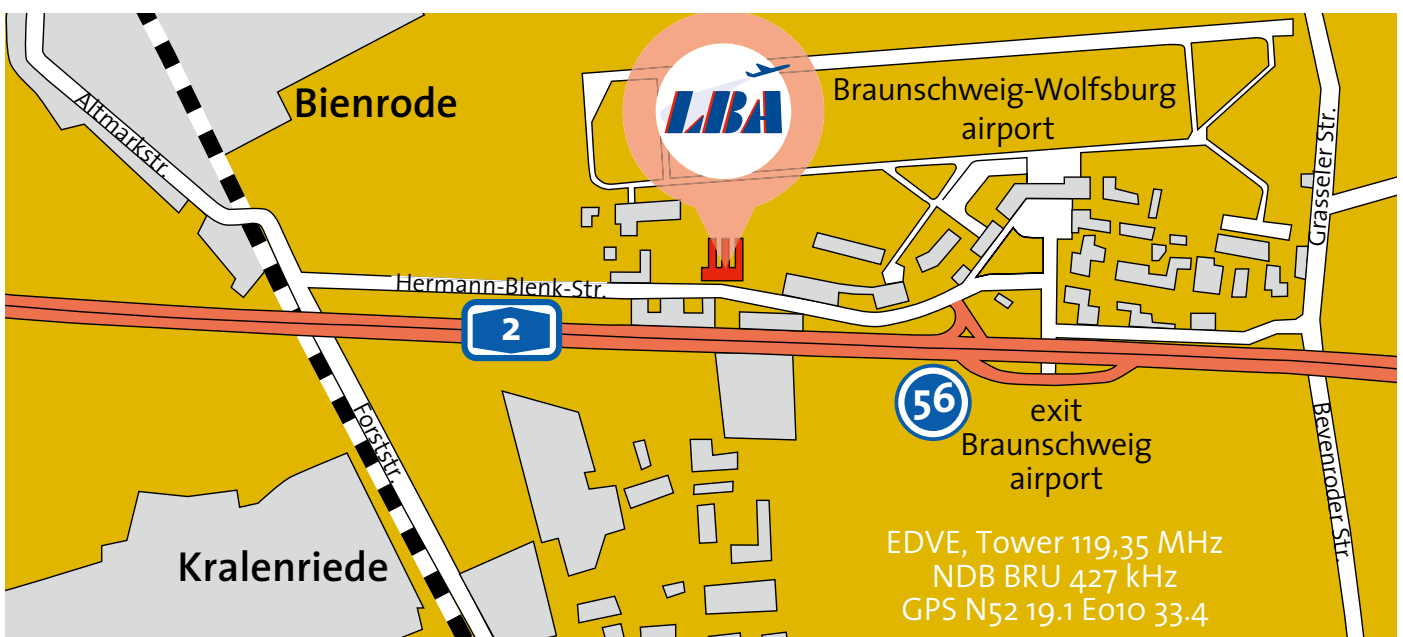
Kelsterbacher Straße 23  
65479 Raunheim  
phone + 49 (0) 5 31 / 23 55 - 82 07  
fax + 49 (0) 5 31 / 23 55 - 82 99

## Luftfahrt-Bundesamt – Regional Office Stuttgart –

Airport Business Center 1  
Gottlieb-Manz-Strasse 12  
70794 Filderstadt  
phone + 49 (0) 5 31 / 23 55 - 85 50  
fax + 49 (0) 5 31 / 23 55 - 85 99

## Luftfahrt-Bundesamt – Regional Office Munich –

Airport FJS, cargo building  
Module C (3rd floor)  
85356 Munich  
phone + 49 (0) 5 31 / 23 55 - 84 10  
fax + 49 (0) 5 31 / 23 55 - 84 99









# Statistics 2012/2013

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# Division Operations

## Number of German air carriers approved by the LBA

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
37	44	42	45	44	46	50	54	61	182	160	145
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
133	120	119	153	170	171	163	165	170	169	158	147

## Flight operational occurrence reports

### Occurrence reports (total)

2009	2010	2011	2012	2013
1,081	1,497	1,568	1,886	2,079

### Laser attacks on German aircraft

2009	2010	2011	2012	2013
36	273	279	342	322

### Bird strike

2009	2010	2011	2012	2013
38	39	56	91	107

### Occurrences dealing with the smell of oil<sup>1</sup>

2009	2010	2011	2012	2013
3 <sup>1</sup>	18 <sup>1</sup>	39 <sup>1</sup>	50 <sup>1</sup>	68

### Engine failure

2009	2010	2011	2012	2013
38	34	38	18	16

### Turbulences

2009	2010	2011	2012	2013
15	27	21	53	43

<sup>1</sup> 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.

<sup>2</sup> Since 2006, air carriers and airports additionally report all dangerous goods incidents/accidents to the LBA where items were taken out of the luggage.



## Foreign air carriers

### Number of foreign air carriers

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
925	953	1,002	1,037	1,044	1,140	1,147	1,252	1,299	1,280	1,306

### Traffic rights granted for foreign air carriers

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
14,829	15,024	10,540	8,567	8,679	8,796	6,593	6,550	6,090	4,953	4,955

### Traffic rights refused for foreign air carriers

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1,618	2,078	2,226	2,063	1,836	1,692	1,426	1,115	887	852	991

## Ramp Checks

2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1,058	991	1,426	1,401	1,364	842	1,188	1,469	1,553	1,431	1,286	1,641

## Dangerous goods incidents/accidents

2003	2004	2005	2006 <sup>2</sup>	2007	2008	2009	2010	2011	2012	2013
1,360	1,385	1,149	5,231	11,641	20,851	37,510	80,399	74,094	88,007	73,085

# Division Aviation Security

## Air cargo

### Approved regulated agents

2011	2012	2013
688	778	1,792

### Officially approved known consignors

2011	2012	2013
44	846	2,374

### Approved ACC3 locations

2011	2012	2013
0	0	1,500

### Approved EU aviation security validators

2011	2012	2013
0	0	23

### Approved regulated suppliers including approved business premises

2011	2012	2013
52	23	4

## Screeners

### Training programmes approved in the relevant year to be recorded

2011	2012	2013
114	254	466

### Number of examinations for screeners

2011	2012	2013
556	676	1,116

## Approved Air Carrier Security Programmes

2011	2012	2013
450	105	116

## Supervision

### Supervision air carriers

2012	2013
1,334	1,338

### Supervision regulated agents

2012	2013
812	1,644

### Supervision known consignors

2012	2013
91	267

### Supervision regulated suppliers

2012	2013
126	167

### Supervision other entities

2012	2013
16	77

<sup>3</sup> Since 2003 only Flight Training Organisations have been considered which were approved according to JAR-FCL.

<sup>4</sup> As of 2012 devices out of Europe have not been taken into account.

# Division Aviation Personnel

## Flight Training Organisations approved by the LBA

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
23	26	26	24	25	26	25	28	33	65	64	66
2002	2003 <sup>3</sup>	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
62	53	74	90	95	84	86	86	83	84	79	77

## Flight Simulation Training Devices (FSTD)

### Simulators<sup>4</sup>

2005	2006	2007	2008	2009	2010	2011	2012	2013
57	67	62	66	70	71	74	55	76

### Flight and Navigation Procedures Trainer (FNPT)/Flight Training Devices (FTD)<sup>4</sup>

2005	2006	2007	2008	2009	2010	2011	2012	2013
44	43	49	64	66	63	58	55	59

## Trend of theoretical examinations (total)

2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
3,747	3,477	2,245	1,461	1,266	1,420	2,229	1,952	1,745	1,741	1,683	1,509

## Trend of skill tests (total)

2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
3,026	2,716	1,739	1,588	1,598	1,674	1,785	1,897	2,006	2,186	1,932	1,603

## Total number of licenses of aviation personnel with the LBA

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
8,461	9,809	10,801	10,053	10,340	10,425	10,894	11,435	10,418	16,457	15,826	16,378
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
17,032	16,279	16,885	16,690	16,788	17,093	17,439	17,531	17,942	19,080	20,297	20,357

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



**Aviation medicine**

**Number of Aeromedical Centres (AMC)**

2008	2009	2010	2011	2012	2013
4	5	5	5	7	9

**Aeromedical Examiners class 1 within the competency of the Luftfahrt-Bundesamt**

2008	2009	2010	2011	2012	2013
186	176	176	196	208	213

**Aeromedical Examiners class 2 within the competency of the Luftfahrt-Bundesamt (as of 08/2013)**

2008	2009	2010	2011	2012	2013
-	-	-	-	-	238

<sup>5</sup> Since 2006 the Luftfahrt-Bundesamt has only been responsible for the approval of national design organisations. All other design organisations are approved by EASA.

# Division Airworthiness/Environmental Protection

## Organisations

### Production organisations approved by the LBA

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
121	120	126	118	123	123	135	126	126	114	110	126
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
132	137	139	139	144	150	149	151	151	153	153	152

### Maintenance organisations approved by the LBA

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
366	377	427	433	504	527	507	481	461	473	437	425
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
437	433	465	465	436	430	501	593	593	522	512	465

### Design organisations approved by the LBA

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
45	48	45	41	36	44	44	43	45	44	37	35
2002	2003	2004	2005	2006 <sup>5</sup>	2007	2008	2009	2010	2011	2012	2013
43	47	76	76	15	10	23	24	24	26	26	15

### CAMOs approved with the air carriers by the LBA

2009	2010	2011	2012	2013
203	203	194	166	166

### Other CAMOs approved by the LBA

2008	2009	2010	2011	2012	2013
47	136	136	152	152	153

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

## Technical staff

### Training organisations Part-147 approved by the LBA

2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
12	9	22	31	32	34	35	36	37	37	37	35

### Ratings for certifying staff according to Part-66

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
430	1,033	3,629	5,740	5,524	7,021	11,186	13,131	14,185	14,678	13,202	19,505	20,032

### Ratings for inspectors of aeronautical products

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
3,099	3,337	3,402	3,545	3,535	3,533	3,678	3,551	3,621	3,634	3,620	3,636
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
3,490	3,125	2,592	2,485	2,828	1,849	3,229	3,359	3,415	4,430	4,255	3,480

## Total number of registered aircraft

### Aircraft

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
16,608	18,009	19,025	19,820	20,303	20,579	20,829	20,777	20,795	20,890	20,844	20,859
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
20,714	20,610	20,613	20,707	20,865	21,017	21,327	21,570	21,703	21,603	21,546	21,462

### Registration mark category A: Aeroplanes above 20 t

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
306	354	394	431	435	440	460	466	493	527	572	612
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
619	653	619	651	663	702	734	757	772	770	767	758



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

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
30	36	46	44	40	41	39	40	44	51	54	60
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
55	54	55	54	56	51	45	43	40	38	30	34

**Registration mark category C: Aeroplanes from 5.7 up to 14 t**

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
96	129	135	125	131	127	121	115	130	158	176	191
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
184	179	172	176	181	200	224	231	228	236	217	199

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

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
6,010	6,360	6,718	6,863	7,056	7,161	7,188	7,208	7,121	7,034	6,919	6,813
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
6,731	6,658	6,670	6,682	6,704	6,705	6,738	6,752	6,801	6,744	6,757	6,733

**Registration mark category F: Single-engine aeroplanes from 2 up to 5.7 t**

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
19	35	53	143	147	143	143	77	82	85	90	95
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
92	97	94	93	102	120	126	144	153	155	150	155

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

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

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
219	230	245	252	261	261	261	264	245	233	219	207
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
208	205	199	212	224	230	232	241	242	243	239	240

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

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
537	615	660	671	662	668	636	564	526	507	480	476
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
467	452	440	417	417	417	436	445	444	428	414	403

**Registration mark category H: Helicopters**

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
468	531	622	664	687	704	707	680	672	693	700	721
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
731	725	720	721	729	731	739	780	811	773	774	769

**Registration mark category K: Powered sailplanes**

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
1,473	1,638	1,828	1,931	2,016	2,086	2,163	2,224	2,323	2,380	2,413	2,434
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
2,494	2,533	2,584	2,664	2,766	2,824	2,948	3,022	3,081	3,122	3,185	3,263

**Registration mark category L: Airships**

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
3	3	3	2	2	3	3	3	3	3	3	5
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
5	6	4	4	4	4	4	3	4	3	5	3

**Sailplanes**

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
6,961	7,465	7,608	7,724	7,767	7,777	7,845	7,862	7,805	7,811	7,778	7,771
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
7,728	7,686	7,703	7,728	7,741	7,769	7,815	7,891	7,867	7,834	7,793	7,704

**Registration mark category O: Balloons**

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
506	601	727	932	1,068	1,132	1,213	1,277	1,321	1,382	1,443	1,474
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1,400	1,362	1,351	1,305	1,278	1,264	1,286	1,261	1,260	1,257	1,215	1,201

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



# Division Administration

## Development of staff in the Luftfahrt-Bundesamt

### LBA total

2010	2011	2012	2013
520	547	609	650

### LBA Head Office total

2010	2011	2012	2013
397	400	428	452

### Regional Offices total

2010	2011	2012	2013
123	147	181	198

### Women

2010	2011	2012	2013
202	219	247	266

### Men

2010	2011	2012	2013
318	328	362	384

### Part-time

2010	2011	2012	2013
67	75	89	87

### Trainees

2010	2011	2012	2013
10	10	8	7

## Air passenger rights

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

2005	2006	2007	2008	2009	2010	2011	2012	2013
1,609	2,079	3,096	3,977	3,064	4,776	4,442	5,105	4,582

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

2009	2010	2011	2012	2013	total
54	64	82	138	69	407

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

2008	2009	2010	2011	2012	2013	total
13	24	14	14	11	25	101

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



