

Liberté Égalité Fraternité





#### **Contents**

## Highlights Aircrews Assessing and improving safety Airworthiness and air operations Resources management **Airports** and air navigation European cooperation and safety regulations Security

**Environment** and sustainable development Interregional departments Organisational flow chart

### **Foreword**

As the waves of the COVID-19 pandemic subsided, air traffic gradually recovered in 2021, despite a precarious outlook that is prone to changes in the health crisis, including border openings and closures. DSAC is still adapting its efforts, and is supporting the return to normal operations as well as the end of the various derogations granted at the peak of the health crisis.

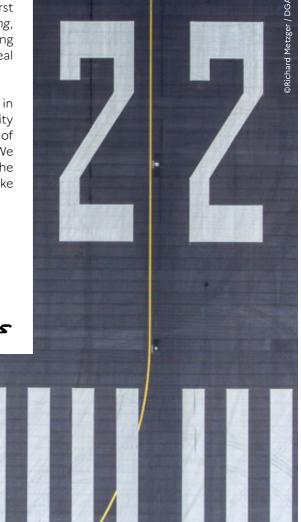
It was in this context that the **DSAC 2025** strategic plan was finalised and published, aiming to adapt the Oversight Authority's mission to current needs: ecological transition, innovation, performance, etc. These are all areas that must be developed to support the evolution of civil aviation, with a high level of safety and security.

Among the many developments in 2021 will be the sweeping changes concerning drones, with the application of European regulations replacing the existing national rules. We should also mention the regulatory work on the cyber security of civil aviation operators, an area of increasing focus: we need to streamline the requirements, support operators and then ensure oversight. Moreover, with the first two French companies authorised to introduce *Evidence Based Training*, and several others in the pipeline, the field of continuous crew training is also transforming towards greater efficiency and adaptation to real risk.

Lastly, many of you took part in the satisfaction survey we ran in 2021. Expectations are high, but the value of the Oversight Authority in driving forward regulatory compliance and, above all, the level of safety and security, is acknowledged, as is the expertise of our staff. We are honoured and bound by these good results. They are primarily the result of the work of the women and men of DSAC, whom I would like to thank for their dedication and professionalism.



Patrick Cipriani French Civil Aviation Safety Director





#### DSAC 2025, a new strategic plan

With the aviation landscape shaped by ongoing uncertainty about the impact of the health crisis and the challenges of the ecological transition, DSAC has followed the strategic approach it began in 2015.

The context makes it even more pressing to chart a course for the coming years and to share the directions that DSAC is taking, both as the national authority overseeing aviation safety and security and as a conduit for the DGAC's regulatory action in the regions.

Thanks to efforts made throughout 2021, DSAC 2025 was drafted with five priorities in mind: safety/security, ecological transition, performance, inclusion in the aviation industry and territories.

Building on the previous plan,

DSAC 2025 consolidates the mission, ambition and values of DSAC and affirms its primary role as guarantor of a high level of aviation safety and security. DSAC 2025 aims to make DSAC even more central to the changing aviation world, to facilitate the use of innovative technologies, in particular to address the challenges of the ecological transition, and to help operators better deal with cybersecurity and safety risks.

In total, there are 31 operational guidelines, divided between the different themes, which have been identified and are to be translated into practical actions, while remaining mindful of the needs of economic stakeholders, those of the various DGCA departments and the expectations of DSAC employees.

#### Cybersecurity: helping operators deal with risk

The digitalisation of business activities and the growing interconnection of IT systems have created fertile ground for the spread of cyber attacks. The air transport sector is not immune to this threat, and the European authorities have reacted individually by drafting regulations to ensure that the ecosystem is equipped with the means to protect, detect and respond to this threat.



The proliferation of resulting regulations and the relative novelty of the cybersecurity issue make it difficult for some operators to comply with these requirements. In keeping with its role of authority and support, DSAC has therefore set itself two

- Streamline the requirements through a single system to facilitate enforcement and monitoring;
- · Support operators by proposing a pragmatic approach to increasing cyber maturity, so as to gradually improve the entire ecosystem.

This undertaking has resulted in the development of the "Cadre de Conformité Cyber France" (3CF), which lays down a set of provisions ensuring compliance with the cyber regulations applicable to the sector, for those operators that decide to use it. The document also gives operators a roadmap to help them achieve full compliance with the various regulations, starting from their own level of initial maturity.

The 3CF, published on 3 September 2021, was drawn up with the help of volunteer operators and in collaboration with the Fédération Nationale de l'Aviation et de ses Métiers (FNAM) and the Union des Aéroports Françaises et Francophones Associés (UAF&FA).

In this context, DSAC plays an active role in the work of the Conseil de Cybersécurité pour le Transport Aérien (CCTA), which aims to establish and apply a strategy to meet the challenges of cybersecurity. In particular, DSAC is involved in the technical regulatory committee to coordinate the position of the industry, operators and government authorities on European and international regulatory issues.



#### **Entry into force** of the European regulation on drones

2021 saw the entry into force of the European regulation on unmanned aircraft systems (UAS), which replaces national regulations. This marks the end of the distinction between recreational model aviation, experiments and special activities.

Operations are now divided into three categories: Open for lowrisk recreational and professional activities, **Specific** for more complex operations (moderate risk), and **Certified** for high-risk operations.

Several measures are set out in the European regulations to support this transition:

- UAS marketed before 2023, but without a class designation as provided for by European regulations, may still be operated under conditions similar to those of the Open category until the end of 2023;
- In the Specific category operators may still fly under the conditions of the national standard scenarios S-1, S-2, S-3 until the end of 2025, pending the entry into force of the two European scenarios STS-01 and STS-02, which has been postponed to 2024.

As part of this regulatory transition, DSAC has taken the following actions:

- The introduction of an online registration module for UAS operators. As of end 2021, 47,366 users had registered;
- to include new regulatory requirements (including notification of certain Open category flights);

- Putting the telepilot training and theoretical examination online for subcategories OPEN.A1 and A3. As of end 2021, 8,338 people had passed this exam;
- The publication of a guide on how to introduce the SORA safety study method for operations in the Specific category requiring an operating licence;
- Publication of an FAQ, based on the questions collected on the forum set up at the end of 2020 to support the transition;
- Participation in conferences (UAV Show) and webinars presenting regulatory developments;
- A simplified method of obtaining the certificate of remote pilot competency who fulfil the conditions for obtaining this new title by equivalence of their national qualifications.

In 2021, DSAC issued 133 operational authorisations in accordance with European regulations (Specific category).

Lastly, with regard to drones, DSAC is actively contributing to international (RPAS Panel, JARUS) and European (EASA, NAARIC, ECAC) work to assist in the implementation of these new requirements and to allow the development of new uses. In particular, it helped to develop a project for a new version of the SORA risk analysis method, extending the quantitative approach to risk management.

Regulatory developments also prompted DSAC to prepare legislative and regulatory texts relating to drone market surveillance and the notification of drone compliance assessment bodies.



## Symposium "Runway incursions: how to collectively manage safety?"

The 16th annual DSAC Aviation Safety Symposium was held on 2 December 2021. It featured feedback on safety events, future technologies to avoid ground collisions, adaptation of procedures, etc.

Nearly 300 people attended, either on site or remotely.

Manufacturers, airlines, air navigation, airports, etc. the entire aviation community was represented.

The recording of the symposium, as well as all the educational resources (posters, videos, summary document, etc.) developed for this event, are available on the website of the Ministère de la Transition Ecologique<sup>2</sup>.



## Helping to organise long-distance medical evacuations

Since the beginning of 2021, DSAC has been supporting the response to the COVID-19 pandemic by examining exemption requests for evacuations of patients suffering from COVID-19 on long-haul flights and treated in intensive care, which implied unapproved cabin layouts, associated with a significant amount of oxygen cylinders carried on board. After analysis of the risk reduction measures, the first such waiver was issued in March 2021 to evacuate 4 patients from Reunion to mainland France on a single flight.

As of the summer and given the rapid deterioration of the situation in the West Indies, DSAC took a gradual approach and successively issued several waivers allowing a large number of patients to be transported between Pointe-à-Pitre or Fort-de-France and mainland France throughout August and September. This paved the way for 11 A350 flights with up to 12 stretchers and 18 medical oxygen cylinders to evacuate 118 patients from the West Indies, relieving local hospital pressure. These measures were also applied during a mission to Papeete between 15 and 19 September, with an A350 transporting 8 patients on stretchers to Orly with a stopover in Pointe-à-Pitre.

## Developing an aeronautical industry in the Indian Ocean

Developing the French Indian Ocean aviation sector, comprising Réunion, Mayotte and the French Southern and Antarctic Lands, has been part of the 2025 national air transport strategy since 2019. This is reflected in the creation of the Aérotech-Ol association.

This association was ramped up in 2021. With the support of DSAC, it supports projects that promote the industry and thereby contribute to the resilience of the aerospace system.

Despite the challenging health and economic context, it hosted the Aeroplace forum in early October 2021, in Mayotte and Reunion. The forum was an opportunity to promote new collaborations between business lines and economic stakeholders, and to open up to other sectors, etc. The 2021 aerospace roadmap, a tool for co-construction of the sector bringing together a hundred or so local players, was published to mark the occasion.

#### **Innovation**

DSAC has played an active role in setting up the Agence pour l'Innovation dans les Transports (AIT). It was instrumental in the selection of innovative projects as part of the **Propulse** call for tender, with two ulimately chosen in sustainable air transport.



Objectif Sécurité has been DSAC's safety promotion label since May 2021. It brings together all the publications intended to provide the aviation community with useful and necessary information, with a view to continuously improving aviation safety.

By using and analysing safety data from all sources (incidents reported by operators, investigation reports, media, etc.), it aims to improve collective awareness of safety issues and thereby help develop a shared safety culture.

La Veille Sécurité, TARMAC, Les REX, Bulletin Sécurité, SAFAER, Symposiums... publications and and events that deal with all operational areas, and that can be subscribed to<sup>3</sup> according to interests.

## Setting up the Evidence Based Training approach

Evidence Based Training (EBT) introduces a new paradigm, a global approach to aircrew training where the traditional model of standard exercises and checks is replaced by prior assessment followed by training tailored to the individual pilot, with a view to improving their skills. EBT takes into account global safety data and the specific features of the airline's operations (type of approach, recurrent events, etc.).

Based on the concepts of CBTA (Competency Based Training and Assessment), EBT enhances the crew's ability to deal with adverse situations, threats and unforeseen events with the aim of significantly improving flight safety.

The rules of operation for an EBT programme allow flexibility for the aircraft operator but also greater autonomy in the areas of crew training and practice.

In 2021, DSAC authorised the switchover to EBT for Air France and Transavia. The review of these first cases has helped to refine the review procedures and ways of supporting the airlines.

In particular, DSAC allowed the automation of the pilot qualification extension process by adapting its licence management system.

The transition to EBT requires three and a half years of experience in running an intermediate regime, the *mixed* EBT. Several French companies aim to switch to this system in 2022: Hop!, Air Tahiti, Air Caraïbes Atlantique.

All the information required to set up an EBT programme is available on METEOR<sup>4</sup>, the exchange platform between DSAC and the operators.

#### Results of the 2021 operator satisfaction survey

From 20 July to 30 November 2021, DSAC ran a satisfaction survey of the organisations it supervises in the field of safety to learn how to improve and better meet expectations.

The lessons learned from the 630 responses across all areas will help us to improve our response to the needs of the sector.

The expertise and professionalism of DSAC inspectors are acknowledged. Audits are deemed useful, not only to check regulatory compliance but also to help improve safety. This feedback supports the recognition of DSAC as a leading authority within the European system.

The health crisis raised certain expectations of DSAC. Providing support as locally as possible, sharing with operators, cross-sectoral collaboration, understanding the realities of the jobs supervised, focusing on real safety issues, knowing how to explain, clarify and simplify in line with European standards and without unnecessary complexity: these are all areas in which DSAC is determined to make progress over the next few years, particularly in its working methods and in the training of its inspectors.

Improving the service provided must entail increased and appropriate digitisation of the tools and exchange processes between DSAC and its operators. The METEOR platform, although not perfect, has been a first step forward in terms of audits, but there is still much progress to be made in terms of other measures and processing times.

Finding information quickly, reaching a contact person, being informed of deadlines and progress of a request: there are many expectations and DSAC has already begun a project in the field of flight personnel.

The requirements have been taken into account in the development of DSAC 2025 strategic plan. A detailed analysis and action plan is also being developed.





Nearly 59,000 notifications populated the Eccairs database with new events, about 25% less than in 2019, but this decrease is less significant than the decline in traffic, reflecting a further strengthening of the notification culture. However, 2021 was an opportunity to prepare developments such as the consolidation of actions following notifications involving several functions (e.g. maintenance, operations, design), the notification of drones, and even to consider convergence with safety events. In addition, MEAS has devoted much of its attention to to preparing the successor to the Eccairs database, and has been working on the topic of risk classification in the context of major European work. Lastly, the incident notification page on the ministry's website and the corresponding guide have been significantly updated, especially by outlining practical uses of notifications.

In the course of 2021, many initiatives to promote safety were introduced, in particular consolidation of our publications under the same Target **Safety banner**, with simplified registration procedures<sup>7</sup>, and regular publication of the Rex Hélico, reporting on events arising from the notifications.

The forums for discussion with operators have been enhanced by a new network dedicated to training as well as a superstructure, the "network of networks", which makes it possible to bring a new transversal approach to interactions, with a better pooling of the resources that inform the discussions of the various networks and working groups.

Several Safety Bulletins were published<sup>8</sup> in the course of 2021 ( sling loads, helmet use in helicopters, preventing blockage of anemometric probes, prevention of interference due to 5G telecommunications, hosting of helicopters by non-aviation staff, air events).

In terms of light aviation promoting a culture of safety remains a key focus. The goal is to encourage the reporting of incidents and to promote the notion of a just culture by producing videos that can be accessed on the light aviation safety portal<sup>9</sup>. There are several clips online that look at carrying lithium batteries (particularly in microlights and helicopters), as well as a video on continued flight using poor quality visual references.

As in previous years, the sharing of experience in the field of safety management / SSP was an important issue, both at the level of international exchanges by presenting various aspects of our missions in relation to SSP to numerous countries (Brazil, United Arab Emirates, Thailand, United Kingdom, South-East Asian countries grouped within COSCAP, etc.), multidisciplinary exchange groups (Institut et Fondation pour une Culture de Sécurité Industrielle, Institut Radioprotection et Sûreté Nucléaire, Institut Maîtrise de Risques, etc.), and at the level of partners such as the Aviation Légère de l'Armée de Terre, or groups of magistrates in vocational training.

In 2021, this effort to improve staff skills was stepped up with the introduction of structured training for safety analysts, benefiting some twenty DGAC specialists. Finally, as every year, DSAC has played an active role in the National Civil Aviation School (École nationale de l'aviation civile - ENAC) master's in safety management – a favourite of foreign students – by presenting the French experience as part of the safety management at state level component of the master's.

The Safety Assessment and Improvement Task Force (Mission évaluation et amélioration de la sécurité -MEAS) is tasked with collecting and using information relating to safety, coordinating its analysis and proposing improvements that can be inferred from this, particularly as part of the implementation of the state safety programme (SSP).



There were several highlights of MEAS' work throughout 2021. At the beginning of the year, a study was published on the risks linked to low activity caused by the pandemic, in which DSAC examined in detail a sample of notifications of safety events and feedback from operators on the risks identified, the specific threats of which were mapped and analysed specifically for this period. This study<sup>5</sup> was updated in the middle of the year during a webinar<sup>6</sup> held on 7 July and experience was shared at European level both in the authorities' own working groups and during the cycle of open safety week conferences organised by EASA.

<sup>5</sup> https://www.ecologie.gouv.fr/sites/default/files/Evaluation\_des\_risques\_pendant\_la\_periode\_faible\_activite\_2020.pdf

#### CASH

A meeting of all CASH (Collaborative Aerodrome Safety Highlights) stakeholders took place on 10 December 2021 aiming to inform commercial and general aviation pilots about the main threats associated with an airfield. This meeting highlighted the breadth of collaborative approaches to safety. Currently, ten aerodromes have a CASH sheet and five more are considering joining the initiative. This model, stemming from a national commitment, is of interest to other countries that could adopt a similar format.

9 https://securitedesvols.aero/

<sup>6</sup> https://www.youtube.com/watch?v=7dS7rCkNSF4 7 https://www.ecologie.gouv.fr/objectif-securite 8 https://www.ecologie.gouv.fr/info-securite-dgac



The Resource Management Directorate, which became the Resources and Skills Directorate in 2022, prepares and implements DSAC's human resources and financial, material and IT management policy. This contributes directly to the quality of service provided to operators and users, in liaison with the **DGAC's General Secretariat.** It is also tasked with collecting fees for services rendered by the State for the safety and security of civil aviation.

During 2021 and the ongoing difficult health context, the professionalism of the resource teams at national level was once again demonstrated in supporting DSAC staff in their supervisory duties.

The year was also largely devoted to preparing the new support functions organisation within the DGAC, which led to the transfer of staff in charge of these support functions in the inter-regional directorates to the interregional secretariats (SIR) created on 1 January 2022 and to preparing the structure of the new "resources and skills" directorate, which succeeded the "resources management" directorate on the same date.

The responsive approach of the national skills service has proven its effectiveness: the network of resource managers in the regions has been central to preparing the introduction of the SIR.

#### Human resources, training and skills management

Extensive efforts were required by the teams in 2021 to support the transition to the SIR, to build relationships within the new organisation and to ensure that the management of DSAC resources could be carried out effectively.

The COVID-19 health crisis continued to affect the running of the departments and teleworking was implemented under the most optimal conditions possible.

From an HR management point of view, 2021 was also an opportunity to continue considering how to introduce tools and methods to improve staff management.

#### Staff:

Between 31/12/2020 and 31/12/2021, DSAC headcount stabilised, from 1,088 to 1,084.

	ADMCV	ATTAE	ASAAC	ASSI	INFI	ADAAC	IPEF	EQUIP	ICNA	IEEAC	IESSA	TSEEAC	PNT	OUV	AC 84-16	Total
DSAC/EC	2	18	25			32	17	6	3	58		58	9	4	36	268
DSAC-AG	1	5	9	1		17			1	7	1	19	1	19	1	82
DSAC-CE		4	3	1	1	7	1		1	9		38	3	5	5	78
DSAC-N		9	19	1	2	18	2	4		15		71	8		13	162
DSAC-NE		4	5	2		10	1			6		39	2	4	2	75
DSAC-O	1	5	9	1	1	12	1		4	11		48	2	4	3	102
DSAC-OI		5	4	1		8	2			3		12		11		46
DSAC-S		4	8	2	2	12	1			9	1	32	4	6	4	85
DSAC-SE	1	6	15	1	2	12	2		1	16		40	2	3	6	107
DSAC-SO		2	13	1	2	9	1	1	3	10	2	25	3	4	3	79
Total	5	62	110	11	10	137	28	11	13	144	4	382	34	60	73	1 084

#### **Oversight licences**

As of 31 December 2021, **540** DSAC agents were in possession of a valid oversight licence, for a total of **875** qualifications.

Qualifications by domain		.NA		NO	PN	SUR	ENV	
	Aerodromes	Air Navigation	Aircrafts	Air Operations	Aircrews	Security	Environment	Total
Inspector or Ramp inspector	33	27	1	79	58	60	13	271
Senior inspector or Senior Ramp inspector or Auditor	202	57	1	119	59	39	15	492
Head of audit mission or Contact person	24	11	14	29	18	11	5	112
Total	259	95	16	227	135	110	33	875

#### **RQS and ATREEA licences**

In 2021, DSAC has enabled its agents to maintain high levels of skill in all areas of oversight, notably through technical, piloting, English and management training.

95 new agents assigned to DSAC have followed the Common Core training corresponding to the first base of knowledge required to obtain the various licences, in accordance with the procedures of each technical area of DSAC.

In particular, the first safety training courses for the qualifying stage of the new Regulation, Quality and Safety degree took place in Q4 2021.

A new training course was also developed in collaboration with ENAC to respond to the reorganisation of the various qualifications in the Airfields sector.

The first training session has been scheduled for February 2022 at ENAC.

On December 31, 2021, the situation is as follows:

Qualifications Land Use Planning, Economic Regulation and Airspace.						
	Land Use Planning	Economic regulation	Airspace	Total		
Specialist	14	9	16	39		
Senior specialist	16	13	12	41		
Contact person	4	3	2	9		
Total	34	25	30	89		

Qualifications Regulation,	Quality and Safety			
	Technical safety regulations	Quality	Safety	Total
Technical safety regulator				
or Internal Auditor or Safety analyst	0	3	3	6
Senior Technical Safety Regulate or Senior Internal Auditor	or 7	3	7	17
or Senior Safety Analyst				
Head of Internal Audit or Contact person	5	3	3	11
In training	0	1	0	1
Total	12	10	13	35

#### **Budget**

Financial resources available to DSAC in 2021 (excluding payroll)						
Commitment appropriations Payment credits						
Day-to-day operations	21,43 M€	21,46 M€				
Capital operations	7,82 M€	6,14 M€				
T . 1 (4) 00 05 MC(0) 07 00 MC						

#### Total (1) 29.25 M€(2) 27.60 M€

(1) LFI (24.01 M€) – LFR (1.53 M€) + Product attribution/FDC (open) + deferrals = 4.37 M€ + deferrals AENE/T5 = 2.40 M€ (2) LFI (24.01 M€) – LFR (1.53 M€) + Product attribution/FDC (open) + deferrals = 4.41 M€ + deferrals budget appropriations = 0.71€

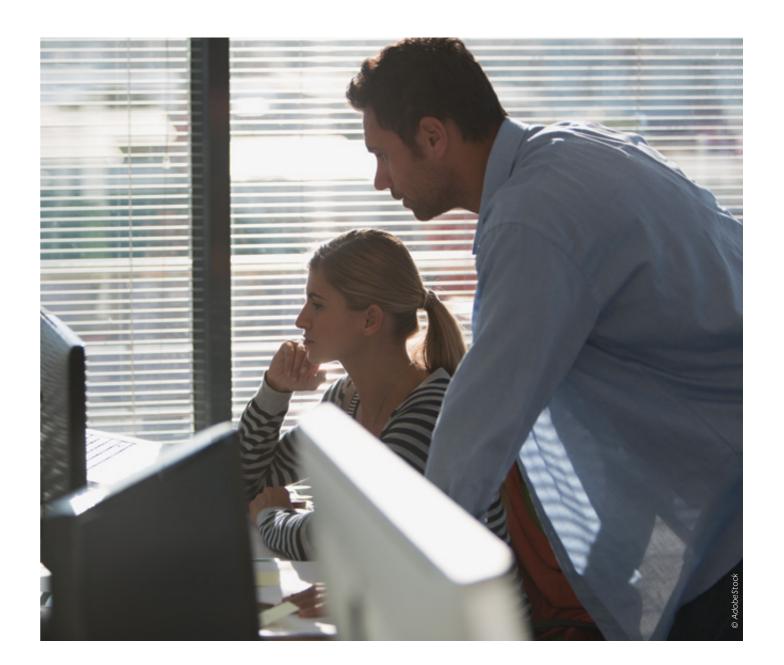
#### Fees

2021 fee income increased significantly, particularly for aircraft operators and cargo security, due to the adjustment of 2020 fee payments (health crisis) and the partial recovery of the civil aviation sector. The amount collected in 2021 represents, in relation to the estimated fees due, an overall rate of 159% or 121% excluding the adjustment of payments in 2020. Invoicing for oversight and certification fees ( RSC) issued during the year was 118% of the initial forecast.

Work to reformulate the decree and order pertaining to oversight and certification fees was initiated in 2020; consultations on the topic continued in 2021.

Oversight and certification fees			
	Fees due in 2021 (€)*	Certificates issued as at 31/12/2021 (€)**	Cash receipts 2021 (€)**
Aircraft operator fees	7,330,552	9,116,385	14,360,581
Aerodrome operator safety and security fees	5,680,000	7,781,295	9,043,331
Carrier aviation security fees	1,290,000	746,535	1,455,394
Aircrew training organisation fees	350,000	451,674	485,526
Exam fees	1,400,000	1 481,837	1,485,462
Civil aviation personnel fees	850,000	688,343	688,453
Training programme fees	3,000	2,400	2,400
Flight instructor qualification fees	450,000	431,546	530,032
Aircraft rescue and firefighting equipment fees	0	0	0
Security device fees	550,000	483,076	489,750
Fitness to fly fees	120,000	153,140	153,140
Expert assessment fees	0	0	0
Total Oversight and Certification Fees 2021	18,023,552	21,336,231	28,694,069

<sup>\*</sup>Total amount (anticipated RSC fees) estimated by the Budget directorate for 2021



<sup>\*\*</sup> Provisional position as of 20 January 2022



DSAC plays an essential role in the regulatory guidelines and developments concerning aviation safety, at national, European and international levels. This activity is organised and led by the technical directorate for European cooperation and safety regulations (DSAC/ERS).

At European level, **20** NPA (notices of proposed amendement) consultations by EASA were processed in 2021, and **5** Opinions published. This is in addition to the responses to the 10 ICAO state letters proposing changes to its standards and recommended practices.

The ongoing health crisis meant that certain exemptions had to be maintained, but these remained marginal, as France was fully in line with the approach promoted by ICAO to return to normal operating conditions from spring 2021.

At the legislative level, DSAC has introduced six articles into Law 2021-1308 of 8 October 2021 on various provisions for adapting to European Union law in the field of transport, environment, economy and finance, enabling national law to be adapted to developments in European aviation safety regulations. These provisions relate in particular to the age limits of flight crews in public air transport, the transport of dangerous goods

by air and the recording of offences by certain officials authorised to carry out ground and on-board control missions. They also enable the Government to adopt by decree provisions relating to alcohol and psychoactive substance testing for flight crews, the introduction of a declaration system in the field of aviation safety and the entry into force of Regulation 2018/1139.

Law 2014-288 of 5 March 2014 on professional training, employment and social democracy and Law 2018-771 of 5 September 2018 on the freedom to choose one's professional future profoundly transformed the professional certification system.

As a result, DSAC proceeded to the registration of the certifications relating to the professions of the personnel within its scope in the specific France Compétences directory.

Lastly, 2021 saw the achievement of an important milestone in the codification of the regulatory section of the current Civil Aviation Code in the Transport Code, with the submission of the first six books to the High Commission for Codification on 15 June 2021.

## Aircraft and aviation operations

Design and production of general aviation aircraft

In 2021, EASA continued its work on simplifying the airworthiness system (design and production) for small aircraft operated in general aviation, in line with the GA Roadmap 2.0, launched in Vienna at the end of 2018. As a result, the future Part 21 Light regulation was the subject of an Opinion at the end of 2021 and adopted in Q1 2022. DSAC played an active part in reviewing this work to ensure that the rules were proportionate to the safety issues at stake.

#### Flying displays

2021 saw the completion of work on revising the regulation of air events after a year largely devoted to interministerial consultations. As such, the decree of 4 April 1996 on air events has been replaced by the decree of 10 November 2021.

This new regulation aims to further



improve the safety of these events and will apply from spring 2022. This new decree was accompanied by the publication of regulated administrative forms and their instructions, as well as a guide to facilitate the regulatory transition.

#### State aviation

Decree 2021-1589 of 8 December 2021 amending Decree 2013-367, which is the result of joint work by DSAC and the Ministry of the Armed Forces, was published. It aims to better manage civilian aircraft leased and used by the Ministry of the Armed Forces or the National Gendarmerie. This decree makes it possible for these aircraft to retain military status even when flown by a civilian crew for training flights, or in certain cases for ferry and maintenance flights.

To supplement this decree, and in coordination with the Ministry of the Armed Forces, DSAC included provisions in the order of 21 December 2021 relating to aircraft airworthiness documents, making it possible to clarify the roles between DSAC and the Direction Générale de l'Armement (DGA) for the issuance of airworthiness documents for aircraft flying on behalf of the Ministry of Armed Forces as part of a contract concluded with the State.

#### Civil aviation staff

Microlight theoretical knowledge examinations

In 2021, DSAC changed the regulations relating to the microlight pilot licence (ULM) examinations to allow the delegation of the organisation of the theoretical examination to entities outside DGAC.

#### Recognition of national military titles

Following close collaboration with the Ministry of the Armed Forces, the military credit report order, which allows for the recognition of military pilots' qualifications, skills and experience for the granting of certain civilian qualifications, has been amended to take into account developments in the European Aircrew Regulation, as well as the training conditions for military pilots.

### Recognition of qualifications from selected third countries

In 2021, following the UK's exit from the European Union and the entry into force on 18 May 2021 of the provisions of the bilateral agreement on aviation safety between the European Union and the United States, DSAC continued to develop special provisions relating to the application of flight crews holding a licence or rating issued by these third countries, for a licence or equivalent *PART-FCL* rating.

### Future developments in Aircrew Regulation

In 2021, DSAC continued its involvement in the numerous regulatory tasks and consultations of EASA to develop the *Aircrew* Regulation, in particular work related to updating the regulatory framework for instructors, developing proportionate requirements better suited to general aviation, provisions for light aircraft with electrical propulsion and updating the requirements for flight training simulators.

#### **Airport safety**

New system for assessing and reporting runway surface condition (GRF - global reporting format)

The European regulation on the assessment and reporting of runway surface condition came into force on 12 August 2021. The French order of 9 June 2021 on inspections of the movement area of an aerodrome and the assessment and reporting of runway surface conditions, which sets out equivalent provisions for aerodromes subject to national regulations, was published on 13 June 2021. This is the culmination of extensive consultation with aerodrome operators, the DSNA and the relevant entities of the Ministry of the Armed Forces.

## Participation in the development of ICAO standards and recommended practices and European regulations

In 2021, DSAC took part in the work of the ICAO ground handling task force, developing standards and recommendations in the field of ground handling. This workgroup finalised draft standards and recommendations amendements in several annexess and the PANS-ADR, which will be considered by the ICAO Aerodrome Panel. At the end of the year, the obstacle limitation surfaces task force, to which an expert from STAC participated, presented its draft revision of the standards and recommendations establishing the rules for the design and use of clearance surfaces around aerodromes.

At European level, DSAC took part in the work on defining a new regulatory framework for ground handling, which resumed in 2021 after a hiatus due to the health crisis. Lastly, DSAC is involved in the ongoing regulatory work regarding certification and production of safety-related aerodrome equipment, as well as in the provision of digitised aeronautical data.

### Update of national airport security regulations

In July 2021, the working group on aircraft rescue and firefighting services (services de sauvetage et de lutte contre l'incendie des aéronefs SSLIA) presented its conclusions and published its report. A webinar organised by DSAC and the Union des Aéroports Français et Francophones Associés brought together aerodrome operators to present these conclusions. The work continues with the drafting of the texts, with the aim of a consultation during 2022.

Work on overhauling the national airport safety regulatory framework continued in 2021. Diagnosis and analysis of the differences between European and national airport security regulations was completed in late summer 2021. Proposals for working orientations have been drawn up and put out for internal consultation within DSAC, with a view to setting up working groups of DGAC experts in 2022 to define the future technical requirements of the new reference system.



## Drones and strategic emerging projects

#### **Drones**

The European regulation on unmanned aircraft (UAS) came into force in 2021 and replaces the national regulation. DSAC has taken numerous actions to support this major change, as detailed in the highlights of this report.

### New Urban Air Mobility (UAM), VTOL aircraft

In 2021, DSAC continued its work at national, European and international level in innovative fields, particularly with regard to electric or hybrid flying taxis, known as VTOL (vertical take-off and landing).

In the Paris region, DSAC staff took part in the technical and regulatory studies conducted to enable deployment of urban air mobility (UAM) for the Paris Olympic Games in 2024.

DSAC experts were called upon to make the first VTOL flight possible during the Paris Air Show in June and to create the first infrastructure dedicated to the arrival of VTOLs at the Pontoise-Cormeilles airfield. This vertiport was inaugurated by the Minister of Transport in November 2021.



At European level, DSAC is heavily involved in the work led by EASA on VTOLs, which continued in 2021. The work covers all the regulatory texts required for VTOL operations to become possible in 2024, from the training of future pilots and remote pilots to the designation of vertiports and the certification of machines and operators. DSAC specialists participate in all working groups.

#### **Airships**

Several airship projects are being developed in Europe. In France, the Flying Whales large helium airship project is intended for use in public transport of heavy loads (wind turbine blades, logs, etc.) and specialised activities with a low environmental impact.

A suitable regulatory framework needs to be developed to ensure that these aircraft can be operated safely in Europe. This framework will have to cover all the planned activities (passenger transport, freight transport inside or outside the airships, aerial advertising flights, etc.).

In order to carry out this work, EASA has asked for input from willing national authorities. DSAC is in charge of the work related to crews (FCL) and continuous airworthiness (CAW), while the air operations part (OPS) is delegated to the German authority. The two authorities work closely together to ensure consistency. European manufacturers, grouped in the Airship Manufacturers Group, are also actively involved in this work.

To support the development of the

Flying Whales programme at both European and national level, DSAC has set up a network of airship contacts.





The role of DSAC's Technical Directorate for Aircrews (DSAC/PN) is to certify and provide oversight of the skills and competences of aircrews. It facilitates national safety policy in this area and contributes to regulatory developments prepared by EASA.

This directorate is responsible for supervising the training of professional technical and commercial flight crews and private pilots, organising theoretical and practical examinations and issuing certificates, as well as approving those doctors who can issue the relevant competences. Thanks to its pilot assessors and inspectors, it also brings technical expertise that is essential to both domestic aviation operations and the



#### **Modernising practices**

To improve efficiency and performance for users, DSAC has embarked on a programme to modernise the sector.

The first phase was to launch a project to make it easier for PNs to deal with the authority. This project should be finalised in 2022, in particular with the launch of a new PN Portal. The first version of this portal will make it easier to find information and to carry out and follow the procedures required by the regulations online.

#### Training and flight simulation facilities

Despite health-related restrictions and travel difficulties in 2021, DSAC continued ensuring oversight of activities for ATOs, DTOs, cabin crew training organisations and FSTD operators. It continued to adapt its working methods by running audits, checks on training standards, and FSTD qualification, both on site and by videoconference.

DSAC helped to set up training courses in line with the new European requirements in terms of training objectives and assessment of knowledge, skills and attitudes associated with ATPL, MPL, CPL and instrument rating training (known as "100 KSA").

#### **Examinations**

In 2021, the delegation of the theoretical exams for non-professional pilots' licences materialised with the delegation of the theoretical examinations for gliders and microlights to the French Gliding Federation and the French Microlight Federation respectively. Work has also begun with the French aeronautical federation and the French aerostation federation and should be completed in 2022.

The OCEANE examination management and organisation app was subject to significant computer security reinforcement in 2021 which should improve its operation. Aeronautical theory examinations remained possible during the health crisis. In 2021, regulatory changes

Number of flight crew training organisations re	gistered on 31/12/2021
Approved organisations (ATOs)	168
Declared Training Organisations (DTOs)	775

Num	ber of cabin crew training organisations approve	ed on 31/12/2021
CCA		11

Assessments and audits of operators of simulation resources in 2021					
Aeroplane flight simulators (FFS)	78, of which 25 abroad				
Helicopter flight simulators (FFS)	5, of which 1 abroad				
Aeroplane flight trainers (FTD)	5				
Helicopter flight trainers (FTD)	3				
Aeroplane Flight and Navigation Procedure Traine	ers (FNPT) 51				
Helicopter Flight and Navigation Procedure Train	ners (FNPT) 2				
Basic Instrument Training Systems (BITD)	0				
Audits of FSTD operators	35				

related to new private (IULM, ULM) and professional theory exams were incorporated<sup>10</sup>.

Despite the repercussions and constraints of the COVID-19 crisis, theory exams remained at a fairly high level overall, but with major disparities. The fall in air traffic and difficulties encountered by airlines resulted in a significant decline in Airline Transport Pilot Certificates (-17%), Commercial Airline Pilots (-54%) and CCAs (-28%). Conversely, the number of theory certificates issued for non-professional pilot exams increased. The number of

remote pilot exams has soared, with certificates issued increasing by more than 57%...

Theoretical certificates issued in 2021					
Professional Aircrews					
ATPL(A)	783				
ATPL(H) / IFR	20				
ATPL(H) / VFR	3				
Aeroplane CPL	6				
CPL Helicopter	64				
RI	76				
EIR/CB	38				
CCA	1,005				
Skydiver	26				
Non-professional aircrews					
PPL (A) PART FCL	2,353				
PPL (H) PART FCL	124				
LAPL (A)	137				
LAPL (H)	1				
Microlight	1,529				
Commuter aircraft (Avion de Transport Régional - IULM)	480				
Remote pilots UAS/CATT	6,223				
Commuter aircraft (Avion de Transport Régional - BPL)	13				

Number of professional navigation practical examinations in 2021				
Commercial pilot - aeroplane	768			
Airline transport pilot - aeroplane ATPL(A)	150			
Commercial pilot - helicopter CPL(H)	74			
Airline transport pilot - helicopter ATPL(H)	11			
Aeroplane IR	739			
IR Helicopter	46			
Commercial skydiver	37			

## Number of language proficiency certificates issued or extended (FCL 055) in 2021

	Level 4	Level 5	Level 6	Failure
GROUND-based exam. – FCL.055B VFR				
(initial and extension)	91	116	37	21
GROUND-based exam. – FCL.055D (IFR)	96	133	8	13
GROUND-based exam. – Ext. FCL.055 D	240	668	27	12
FLIGHT exam. – Ext. FCL.055 D	78	373	-	0



#### Aircrew medical fitness

2021 saw a confirmed upturn in activity for aeromedical centres and medical officers, although many of the latter missed their approval extension deadlines, resulting in a significant increase in the number of renewal applications.

To guarantee the ongoing training of aeromedical examiners, the medical division set up two distance learning courses which enabled a large number of approved doctors to be brought up to standard (415 approved courses in 2021).

At the same time, the UK's official exit from the European Union has significantly increased the number of transfers of flight crew files to

Decisions taken by the medical branch

Total

and from the UK, the home of many companies employing French nationals, and has made them more complex to process. The UK is now treated like any other third country. However, since the end of 2021, there have been an increasing number of file transfers from France to other States whose operators want the licence and sometimes the medical certificate to be the same as the State of aircraft registration.

Some aeromedical centre audits were postponed due to health measures. However, the remote audit procedure implemented by the Medical Department in 2017 for class 2 aeromedical examiners

1,071

537

(non-professional flight attendants and cabin crew) helped maintain satisfactory activity in this regard. The number of files reviewed by the medical division remained roughly equivalent to that of 2020.

Finally, the development of Archimed, a tool to computerise files processed by the medical division, was finally able to make tangible progress with the development of detailed specifications, which should allow for a production launch in 2022.

#### Licences

DSAC supported the transition to evidence based training (EBT). In particular, SIGEBEL (the computerised system for managing aircrew certificates and licences) has been adapted to allow automatic and

continuous data transfer with the computer systems of companies with an approved EBT programme. The upgrade of SIGEBEL also covers the input of extensions via the external SIGEBEL Ext portal by the TRE examiners appointed as EBT managers and the registered TRI EBTs.

DSAC has established and applied the mechanism relating to the new European requirements introducing the Basic Instrument Rating (BIR) on 8 September 2021, organising the transition between the existing FN/IR and IR/CB ratings and the BIR.

Moreover, the implementation of the bilateral BASA agreement between the European Union and the USA on licensing since 1 January 2022 allows DSAC to issue a European PPL licence and associated qualifications to private pilots holding a US licence by conversion.

Number of professional pilot licences issued in	2021
Commercial pilot - Aeroplane CPL(A)	808
Airline transport pilot - aeroplane ATPL(A)	193
Multi-crew pilot - aeroplane MPL(A)	0
Commercial pilot - helicopter CPL(H)	82
Airline transport pilot - helicopter ATPL(H)	12
Commercial skydiver	40

Number of non-professional pilot licences issued in 2021			
Light aircraft pilot licence (aeroplane) LAPL(A)	294		
Light aircraft pilot licence (helicopter) LAPL(H)	2		
Private pilot licence (aeroplane) PPL(A)	1,936		
Private pilot licence (helicopter) PPL(H)	107		
Microlight pilot	1,795		
SPL	7 FCL + 1,298 SFCL		
Glider	7		
BPL	1 FCL + 621 BFCL		
Free balloon	2		

Number of instrument flight qualifications issued in 2021			
Aeroplane IR	1,703		
IR Helicopter	44		
CB-IR	65 SE CB-IR(A) + 13 ME CB-IR(A)		
Commuter aircraft (Avion de Transport Régional - EIR)	1		
FN/IR	44		
Commuter aircraft (Avion de Transport Régional - BIR)	15		



# Valid licences and qualifications as of 31/12/2021Professional pilots (licences with validity end-date)Commercial pilot - aeroplane5,612Airline transport pilot - aeroplane7,656Multi-crew pilot - aeroplane MPL(A)6Commercial pilot - helicopter1,262Airline Transport Pilot - helicopter259Skydiver315

Valid licences and qualifications as of 31/12/2021 Non-professional pilots (licences with validity end-date)		
Basic pilot BB aircraft	4,133	
Light aircraft pilot - aeroplane LAPL(A)	3,201	
Light aircraft pilot - helicopter LAPL(H)	6	
Private pilot licence (aeroplane) PPL(A)	22,386	
Private pilot licence (helicopter) PPL(H)	1,109	
SPL	6,597 FCL + 2,178 SFCL	
Free balloon	34	
BPL	59 FCL + 850 BFCL	

## Activity of the medical branch and the Civil Aviation Medical Council (Conseil médical de l'aéronautique civile - CAMC) in 2021

Definitive incapacity and causality assessment reco	ords handled
by the CAMC	200
Transfer of medical records between auth	orition in 2021
Transfer of medical records between auth	orities in 2021
Intra-European transfers	380
Extra-European transfers	35
FAA Authentifications	122

## AIRCREW EXPERT APPRAISALS

#### Update on DSAC controller pilots

The aircraft and helicopter control pilots in the PN Technical Department all have extensive experience in air transport, training and management. By examining airline operating and training procedures and participating in audits, they provide expertise to all DGCA departments, particularly regarding AIRCREW and AIROPS and specific operational requirements.

The pilot controllers are all TRI instructors and TRE examiners experienced in air transport on a variety of aircraft. They are Flight Operations Inspector (FOI) as well as I-TREs from the administration, and are assigned to airlines to maintain their skills and licences and to acquire new type ratings.

Real-life in-flight, simulator and ground checks, supervision of air operators and organisations providing multi-pilot training, etc. The pilot controllers are key to the supervisory role of DSAC, for the benefit of flight safety.





Some supervisory actions scheduled for early 2021 had to be postponed, but the overall control volume was maintained by carrying out additional supervisory checks.

Breakdown of supervisory checks 2021:

#### **Aircraft**

27
50
52
129
25
41
46
37
149

#### Helicopters

Number of checks planned	
CTL SOL	9
CTL SIM	23
CTL VOL	16
Total	18
Number of checks made	
CTL SOL	8
CTL SOL	8 17
CTL SOL CTL SIM	
CTL SOL CTL SIM CTL VOL	17

ATO MPA checks	
Planned	20
Made	17

TRE/SFE MPA checks	
Planned	11
Made	7

The FOIs assist the DGAC departments by providing expert opinions and technical advice (700 expert opinions for the year 2021) in a variety of fields for:

- The preparation of various DSAC guides such as the training guides for aeroplane and helicopter crews (GFE-A and GFE-H);
- approval of aircrew training programmes;
- Involvement in various working groups on safety improvement;
- Support to air navigation services regarding the feasibility for pilots of procedures.

They take part and collaborate,
• in the setting up of EBT for

- operators;
- Various EASA audits and working groups including RMT.0194 Core Instructor Training;
- The process of launching new companies or integrating a new type of aircraft in cooperation with the OCV and the relevant DSAC-IR;
- Actions to assess competencies (instructors, MP examiners);
- Oversight and supervision activities for all types of PN examinations conducted by the TRE/SFE/SE.

They develop the TRE/SFE MPA, SE MPA, Part-FCL MPA scenario guides and provide initial and recurrent training for experienced multi-pilot examiners (Senior Examiner – SE MPA).

DSAC's expertise is based on its network of pilot inspectors at central and regional levels. The skills of these pilots are constantly being adapted to developments in French air transport.





The "Airworthiness and Operations" Technical Directorate (DSAC/NO) is responsible for developing, implementing and leading safety policy in terms of:

- technical approvals and oversight of airlines, aerial work contractors and other organisations operating aircraft operations in general aviation, including professional operators of remotely piloted aircraft;
- technical approvals and oversight of production organisations, continuing airworthiness management organisations, maintenance organisations and staff involved in these fields;
- certification, continuing airworthiness and conditions of use of aircraft, including remotely piloted aircraft.

The NO technical directorate carries out its activity in accordance with international, European and national standards and assists EASA when these tasks fall within its scope.

Issuance and oversight of production, maintenance, continuing airworthiness management approvals, and issuance of aircraft maintenance licences, is carried out by OSAC, a private company subsidiary of the APAVE group, through an authorisation issued by DSAC.

## Changes concerning French airlines: the end of the exemption period of the first COVID crisis and many new projects

The beginning of 2021 allowed French airlines to finalise their crew training deadlines with an end to the derogatory situations on 31 March 2021.

The beginning of the recovery in early 2021 led DSAC to be called upon to examine many new requests from airlines or new air sectors, with growth in the operators' fleet lists. New aircraft types have been listed in the companies' fleets, in particular the A220 with the two leading French operators of this aircraft.

Several regulatory changes affecting airlines came into force in 2021: in February, the European Germanwings regulation on the prevention of psychoactive substance use, psychological assessment and the implementation of support programmes for flight crews:

in August, the Global reporting format (GRF) regulation aimed at harmonising the reporting of runway surface conditions and improving the methods for calculating take-off and landing performance. In light of these changes, DSAC carried on supporting operators s by publishing guides and organising dedicated seminars. DSAC has also adapted its organisation so that it can monitor the implementation of these new provisions adequately and in proportion to the risk.

With respect to the new GRF requirements, a trial was conducted at some French airports with the assistance of the technical operations controllers, to assess the compliance and the uniform application of these new provisions among European operators.

In the field of transport of dangerous goods by air, Competency Based Training (CBT) was introduced in 2019 as an alternative to training based on staff categories. These two approaches will cease to co-exist on 31 December 2022 and CBT will become the only training option. DSAC has published guidance material to give aircraft operators a clear idea, and support the implementation of CBT. This guide presents the philosophy, describes and illustrates the different concepts behind this approach which, although new to the transport of dangerous goods, is already used in other areas. It also incorporates the findings of a European working group to which DSAC made a major contribution. As part of this support approach, DSAC has developed a tool to help create training plans, supplemented by a dedicated application, the CBTool.

Lastly, in 2021, DSAC approved a new technical crew training system for two operators: EBT (Evidence Based Training).

EBT makes it possible for public transport operators to run an alternative, evidence-based training programme. It offers flexibility by allowing the content of the training programmes to be adapted to the overall and individual performance of the pilots. Other operators are in the process of adopting this alternative system, which remains an option provided by the regulations.

## A strong commitment to supporting innovation

DSAC has been keeping on its involvement that began several years ago in supporting the use of electronic flight bags (EFB), the development of capabilities related to *Performance Based Navigation* (notably RNP-AR approaches), and the introduction of (*Enhanced Flight Vision System* or EFVS).

As 5G is gradually deployed in France and in other countries, DSAC has used its expertise in on-board aircraft systems to assist the DGAC in its analyses at national, European and international level, to determine the impact of 5G on the on-board operating systems and to raise awareness among air operators.

## Oversight of registered operators

DSAC has continued to oversee registered operators: commercial specialised operations, specialised operations, on-commercial operations with complex motor-powered aircraft, commercial operations of balloons or gliders.

DSAC has focused on a risk-based approach, taking into account the nature of the activities supervised, as well as the performance of the safety management and compliance monitoring systems. At the same time, it has continued to support the industry in assimilating the applicable regulations.

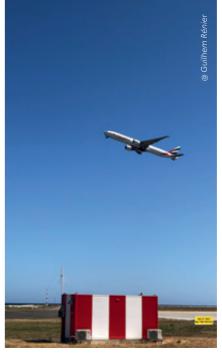
## Drone operation: initial authorisations and oversight

The european regulation on drones entered into force on 31 December 2020, and was first applied in 2021. DSAC has adjusted its organisation to process all of these requests in a timely manner and to ensure the continuous oversight of over 10,000 registered UAS operators to date.

The introduction of the European regulation requires an operational authorisation to be issued for any activity carried out under conditions other than the Open category and the standard scenarios of the Specific category. 133 authorisations were issued in 2021 to cover complex and innovative operations, such as:

- urban or suburban logistics;
- E-VTOL demonstrations (future "air taxis");
- large-scale network supervision operations (gas, railways, electricity, communications);
- site surveillance by automatic drones;
- production of light shows by swarms of drones.

Some operations required operators to obtain a *Design Verification Report* (DVR) from EASA for certain equipment. DSAC is working with the Agency to define conditions for certifying the safety level of these equipment and to facilitate the granting of DVRs.



programmes for flight crews;

The first Light UAS Operator Certificate (LUC) was issued in July 2021. If specific conditions are met, this certificate allows the operator to authorise their own operations without prior declaration or authorisation. DSAC reviewed the operator's procedures and proposed operational concepts, each of which was the subject of a SORA safety study setting out the technical and operational requirements. It then audited its safety management system.

#### **DSAC** support for the development of innovative, electric or carbon-free aviation

Experiments with innovative electric or hybrid powered aircraft, including vertical take-off and landing (VTOL) aircraft, have recently increased in number. DSAC supports manufacturers or inventors by issuing the necessary flight authorisations to conduct these experimental flights, to guarantee an adequate level of safety for the people on board and third parties overflown.

For the first time in many years, a new French manufacturer was granted an aircraft production licence by OSAC in the field of light aviation in 2021.

As soon as the first electric aircraft was certified by EASA in 2020, DSAC started to define a derogation framework suited to the use of this aircraft for non-commercial operations, in particular training flights in aeroclubs. DSAC has thus published three derogations<sup>11</sup> to the European regulations concerning respectively pilot qualification, the airworthiness management framework and operating conditions. These exemptions are valid until end 2022. In the meantime, DSAC continues to take an active part in the discussions on the inclusion of new engines, particularly electric ones, in the European regulations. In conjunction with EASA, DSAC is also studying the conditions under which electrically powered aircraft could be operated in commercial air transport conditions.

#### Partnership agreement with EASA

DSAC and its subcontractor OSAC, together with its partner DGA, carry out certain activities on behalf of EASA as part of their partnership agreement.

This agreement covers expertise in aircraft certification, certification of design, production and airworthiness monitoring organisations, assessment of flight simulators, certification of air navigation service providers and systems. Its scope was extended in 2021 to include the certification of air transport operators. DSAC was thereby able to carry out several audits and controls on behalf of EASA on operators for which the latter has become the competent authority.

In 2021, activities carried out by DSAC and its subcontractor OSAC under the partnership agreement amounted to more than 19,000 hours of expertise (743 hours more than in 2020).

#### Helping to finalise the CAMO/CAO transition

In 2021, DSAC and OSAC continued to focus on managing the transition following the publication of Regulation (EU) 2019/1383, which significantly changes the regulatory framework for continuing airworthiness. This regulation introduced new appendices, including the ML and CAO sections, offering simplifications for the continuing airworthiness of light general aviation aircraft, and includes the replacement of the current M/F and M/G approvals with new CAMO and CAO approvals, for a transitional period ending on 24 March 2022. DSAC and OSAC have supported the change through their supervision, and actions to inform and support users.

Lastly, as OSAC's authorisation will end on 31 December 2022, DSAC has started the tender process to select the holder for the following mandate period.

#### **Airworthiness**

Fleet registered in France on 31/12/2021: 13,907

#### Aircraft holding a valid airworthiness certificate (CDN) on 31/12/2021

AG	7,113
TAC	1,001
Total	8,114

#### Airworthiness documents issued as of 31/12/2021

CDN	411	CNRA	41
CDNS	4	CNRAC	27
R-CDN	6	CDNR	3
CNSK	10	Noise certificates	492

Permits to fly\*: 828, of which 783 issued by DSAC and 45 issued by OSAC

\*Invalid airworthiness certificate, foreign permit to fly validation or aircraft in the process of obtaining a certificate of airworthiness.

#### Microlights identification certificates valid on 31/12/2021: 16,548

#### **Unmanned aerial vehicles** Airworthiness documents issued in 2021 Type design certificate 40 Special authorisations

#### Production

#### Production organisations under French oversight on 31/12/2021

Part 21G	192 + 10 foreign organisations		
	overseen o	on behalf of EASA	
Part 21F			3

#### Transport aircraft manufactured in 2021 Airbus (Toulouse, Hamburg\*\*, Mobile\*\*and Tianjin\*\* sites) 561 ATR 33 30 **Dassault Aviation**

#### General aircraft manufactured in 2021 Aérophile SA 2

Robin Aircraft	15
Ballons Chaize	18
DAHER-Socata	48
Issoire Aviation	1

Civilian helicopters produced in 2021			
Airbus Helicopters	115		
Guimbal	15		

#### Aircraft aviation operations

#### Air operator certificates on 31/12/2021

Aeroplane under European AIROPS rules	61
Helicopter under European AIROPS rules	37
Aircraft and Helicopter under European AIROPS rules	1
Aeroplane under national rules	1
Helicopter under national rules	2

Declared operators of non-commercial complex aircraft (NCC) as of 31/12/2021: 77

Declared operators of specialised operations (SPO) as of 31/12/2021:179

Balloon operators as of 31/12/2021: 180 Oversight actions on operators holding Air Operator

Certificates (AOCs), 2021 234

Operator support meetings held in 2021: 9,103

#### Airline Flight checks 175

Training checks 108 of which 46 by

Simulator training checks

pilot ground supervisors (FOI), 56 by air operations inspectors

137

9 carried out on training

Ground checks for aircraft operations	
Total number of control checks in 2021	1,763
of which French company checks (SANA inspections)	494
of which foreign company checks (SAFA/SACA inspections)	1,269

#### Unmanned aircraft used by professional operators as of 19/01/2022

Operators referenced	11,203
Drones referenced	21,805

Oversight actions on unmanned aircraft operators in 2021

#### Oversight of maintenance workshops and continuous airworthiness management organisations

#### Approvals on 31/12/2021

Part 145	282 + 109 French organisations overseen on behalf of EASA
FAR 145 approvals overseen on behalf of the US FAA	115
CAR 145 approvals overseen on behalf of the Canadian TCC	CA 75
RBAC 145 approvals overseen on behalf of the Brazilian ANA	C 6
Part M sub-part G (commercial air carrier or heav	y aircraft) 8
CAMO* part	121

<sup>\*</sup> New type of approval introduced by Regulation (EU) 2019/1383 amending Regulation (EU) No 1321/2014, eventually replacing Part M Subpart G approvals

#### Oversight of maintenance and continuous airworthiness management in general aviation

#### Approvals on 31/12/2021 Part M sub-part G 17 Part M sub-part F 21 Equivalent part M sub-part F, known as "F Prime" (Annex I) 10 Part-CAO\* 124 Equivalent Part CAO, known as "CAO prime" (Annex I) 42 Aircraft Maintenance Units (Unités d'entretien aéronefs - UEA) (Annex I) 12

#### Oversight of training for maintenance staff

Approvals and licences on 31/12/2021		
Part 147 (training schools)	37 French organisations + 39 foreign organisations overseen on behalf of EASA	
Part 66 (mechanics' licences)	8,487 valid licences of which 2,792 issued in 2021 of which 676 first-time issues	

25

for commercial aircrews 11 https://www.ecologie.gouv.fr/aeronefs-motorisation-electrique

<sup>\*</sup> Activities in Hamburg, Mobile and in Tianjin do not fall under the oversight subcontracted by EASA to DGAC

<sup>\*</sup>New type of approval introduced by Regulation (EU) 2019/1383 amending Regulation (EU) No 1321/2014, eventually replacing Part M Subpart F and Part M Subpart G approvals not replaced by a CAMO



The airports and air navigation Technical Directorate (DSAC/ANA) is responsible for certifying and overseeing air navigation service providers, training organisations for air navigation personnel and aerodrome operators.

It develops, applies and leads the safety policy in these fields, as well as in the field of aptitude and competence of air navigation personnel and technical approvals of systems and equipment which contribute to these services.

The ANA technical directorate carries out its work in accordance with international, European and national standards. It also provides technical expertise to the DTA for the development of national and international regulations in the field of air navigation and airspace, and to the EASA for European regulations in its fields of expertise

#### Certification and continuous oversight of aerodromes

In accordance with French regulatory texts and European regulations, DSAC performs certification and oversight of aerodrome and heliport operators.

Aerodromes are mainly approved or certified according to their size. Heliports are subject to ministerial or prefectural orders and are inspected before entry into service. All of these sites are subject to continuous oversight for compliance with national and European provisions, based on:

- · regulatory audits and oversight covering the design, operations and organisation of the aerodrome. More than 500 were performed in 2021 despite the COVID crisis, in compliance with health measures;
- Review over 700 changes reported by operators;

· as well as the study of safety-related events reported by operators, with the intention of identifying and responding to potential safety

The certification process predominantly concerns aerodromes with more than 10,000 commercial passengers per year. Approximately ten overseas community aerodromes, with traffic ranging from 10,000 to 30,000 commercial passengers per year, are in the process of being certified in accordance with national regulations. The Tours aerodrome operator obtained its certificate under European regulations following its transfer from the military to the civil domain, and the European certification of the Agen aerodrome was terminated due to the decline in its traffic.

Aerodromes and heliports

The health crisis forced aerodrome operators to adapt their operating procedures throughout 2021. DSAC has provided them with support so that they can continue to ensure the highest safety levels despite the unprecedented circumstances. By collaborating with professional organisations and EASA, particular changes in this respect have been adaptations to oversight, putting in place exemption procedures and publishing guides.

Furthermore, work is continuing on the implementation of ongoing changes to the regulatory provisions, both in respect of changes that have been proposed and should therefore be anticipated to the greatest possible extent, and for changes that came into force during the year. These

included the following tasks in 2021: · Preparations for the oversight of

• Publication of a guide drafted jointly by the UAF&FA, the Ministry of the Interior and the Ministry of Transport, aimed at helping operators with a European certificate to carry out exercises to test their emergency plans;

aerodromes that are exempted of

European certificate (those with

levels of commercial traffic lower

than 10,000 passengers per year). A guide describing how these

aerodromes must meet the basic

requirements of the EU regulation

has been published;

- Publication of a guide to facilitate change management for operators with a European certificate;
- Supporting the entry into force of the GRF on 12 August 2021.

Airports with EU certification	53	
Aerodromes exempt from EU certification	64	
Aerodrome with national certification	15 (Overseas)	
Aerodromes open to public air traffic and for restricted use 498		
Heliports	317	

Approved approaches	
Cat II and cat III ILS precision approaches	29
Cat I ILS precision approaches	120

#### Certification and continuous oversight of air navigation service providers

In compliance with European regulations, DSAC, acting in its capacity as a national oversight authority, provides the certification and oversight of:

- · Air traffic service providers (ATS), including ATC service providers which provide air navigation control services and AFIS which provide the aerodrome flight and alert information service.
- Flexible airspace management (ASM/ FUA) service providers.
- The air traffic flow management service provider (ATFM).
- The aeronautical information service provider (AIS).
- · Communication, navigation and surveillance (CNS) service providers.
- The air navigation weather service provider (MET).
- Service providers of flight procedure design (FPDs), in accordance with Regulation (EU) 2020/469, amending the ATM/ANS IR Regulation, applicable from 27 January 2022. A strong effort has been made by DSAC to assist the applicant service providers concerned to prepare their FPD certificate application file, and to examine these files.



	ber of certified air navigation service providers, and name(s) where applicable as of 31/12/2021
MET	Météo-France
ATS, AIS, CNS, ATFM et ASM	DSNA (including 79 aerodromes controlled in metropolitan France, Indian Ocean, French West Indies,
	French Guiana and Saint-Pierre-et-Miquelon). DSNA is the only aviation information and traffic flow management provider.
ATS, CNS and ASM	1 military provider: CFA (Commandement des forces aériennes)
ATS and CNS	1 military provider: COMALAT (commandement de l'aviation légère de l'armée de terre) 2 civilian providers in the overseas local authorities: SNA/PF, SNA/NC
ATS and ASM	1 military provider: DGA-EV (direction générale de l'armement / essais en vol)
CNS	1 civilian provider: Hemeria services 1 military provider: DIRISI (Direction interarmées des réseaux d'infrastructure et des systèmes d'informations de la défense)
AFIS and CNS	2 service providers in overseas communities: SEAC/WF, DAC/PF (on more than 20 French Polynesian aerodromes)
ATS	1 military provider: ALAVIA (commandement de la force de l'aéronautique navale)
AFIS	72 certified providers (64 in metropolitan France, 3 in overseas departments and 5 in overseas communities (COM: STP/ WF, ADT, province des îles, province sud, province nord
FPD	CGX AERO

These service providers are overseen in conjunction with DSAC-IRs, the DGAC's overseas oversight services and the French military air traffic directorate (Direction de la circulation aérienne militaire - DIRCAM), which oversees defence service providers offering services to general air traffic.

Once certified, the air navigation service providers are subject to continuous oversight based on:

 Audits or compliance monitoring meetings: All operational areas of each provider shall be audited on an oversight cycle (2-year cycle in the standard case, which can be extended or shortened depending on the risks identified in the providers in the context of the riskbased oversight).

The compliance monitoring meetings supplement this to ensure regular contact with providers. In 2021, 64 audits and 69 compliance monitoring meetings were organised by DSAC and entities acting on its behalf.

- Change oversight: 56 approvals delivered after review of submitted changes in 2021.
- Safety event monitoring, events are notified and analysed by the service provider. DSAC may need to request additional information.
- Safety performance monitoring: in particular, by following up on the safety performance indicators imposed by the European Commission, together with the national indicators.

- Monitoring of the European Interoperability Regulation: This regulation aims to foster the development of a consistent and interoperable European air traffic management network. Within this framework, the European Commission publishes interoperability regulations concerning technical systems and/ or the operating procedures for these systems.
- Monitoring of project management organisations, the competencies of design organisations and instrument flight procedures.

Under Regulation (EU) 2020/469, several DSAC approvals are also required for DSNA and military providers from 27 January 2022 with regard to low visibility aerodrome operations, radio coverage of French territory, parallel runway operations and aircraft separation standards.

In 2021, the Commission's implementation regulation (EU) 2021/664 of 22 April 2021 on a regulatory framework for U-space was published, effective from 26 January 2023. This regulation establishes the principles for the certification and oversight of U-space service providers (network identification, geovigilance, UAS flight request, traffic information, weather information and compliance monitoring services), as well as common information service providers disseminating static and dynamic data to enable the provision of U-space services for the purpose of unmanned aircraft traffic management In collaboration with the DTA and the DSNA, DSAC has therefore started to examine the

conditions for the implementation of this regulation by its directorates.

Finally, note that EASA carried out an ATM/ANS standardisation inspection of DSAC in October 2021, during which it reviewed DSAC's actions, particularly in the areas of aeronautical information, change management and ATCO oversight.

## Air navigation staff skills oversight

In accordance with European regulations, DSAC, acting as the national supervisory authority, is responsible for approving and overseeing civil and military training organisations and for approving all air traffic controller training documentation (ATCO). It issues, extends and renews ATCO licences.

It also ensures that the initial training of air traffic safety electronics technicians (ATSEP) complies with the requirements of the PERS part of Regulation (EU) 2017/373 ( Appendix XIII) and issues initial licences to the ATSEP of the DSNA in accordance with the ruling of 11 September 2014.

This oversight of training organisations continued in 2021 in compliance with health restrictions. As such, out of 11 planned audits, one had to be carried out remotely (SNA Antilles-Guyane) and one postponed to 2022 (SNA New Caledonia).

In addition to the audits initially planned in the oversight programme, the École du Personnel Navigant Essai Réception (EPNER) was audited as part of its certification as an ATCO initial

training organisation.

As part of the oversight of the initial training of ATSEP, the PNA unit audited the training provided by ENAC and together with DIRCAM, in accordance with DSAC/DIRCAM protocole, audited the ATSEP training school in Rochefort (EFSOAA).

In application of the decree of 16 July 2007 relating to AFIS qualifications, DSAC also organises the initial AFIS assessments and issues certificates of success. It also appoints and monitors the competency of AFIS assessors who are involved in local assessments for AFIS qualifications. Much work was done in 2021 on updating the AFIS Order, which should be completed in H1 2022.

2021 also saw the integration of new DGA-EV units into the ATCO licensing and training process under regulation 2015/340 (IR ATCO).

In 2021, the PNA unit also continued its contribution to EASA regarding the future developments of Regulation 2015/340, through its involvement in RMT.0668.

In addition, the air traffic controllers' medical assessor, who is the preferred spokesperson for the aeromedical centres and class 3 doctors (AME) he approves and supervises, has also intervened in instances of referrals provided for under Regulation (EU) 2015/340 (IR ATCO) concerning the medical fitness of air traffic controllers.

Licensing activities		
New ATCO licences issued	129	
New trainee ATCO licences issued	236	
ATCO licence documents	4,549	
New ATSEP licences	48	

Activities undertaken by ATCO training organisat	ions	
Audits of ATCO training organisations	11 of 13	
ATCO training document approvals	423	
Change monitoring within the training framework	21	

ATCO medical fitness activities	
Cases handled by DSAC assessment doctor (referrals)	160
Number of class 3 approvals issued or renewed	13
Audits of AMEs or AeMCs	8

AFIS training activities		
Local assessments (appointment of assessors)	22	
Initial assessments	48 (29 passes)	
Training derogations	7	

## Air navigation systems and equipment

Air navigation service providers must notify the national supervisory authority of all changes affecting their operational system.

In the context of reviewing changes, the RBO (*Risk Based Oversight*) method is now fully operational and allows review decisions to be based upon specific and proven criteria. When DSAC has to examine a change on the basis of the RBO, it must assess the safety study developed by the provider. The latter's approval is a prerequisite for implementing the change.

Follow-up of changes	
Changes subject to a review decision in 2021	26
Changes under review as of 31/12/2021	61
Approved changes following review in 2021	56

In 2021, DSNA made the first changes to its operational system with safety rationale based on its new methodology developed to meet the requirements of the new executive regulation (EU) 2017/373. This methodology was approved last year and is still in the process of being assimilated by both the DSNA and DSAC. It may well require adjustments in the medium term to improve efficiency and confidence in its implementation. Methodology workshops were held throughout 2021 in conjunction with the DSNA and with the methodological support of the STAC. These workshops covered different aspects ranging from the structure of the safety rationale to

how technical systems are expected to perform. This work will continue in 2022.

Furthermore, oversight of software safety assurance remains an important activity and one in which DSAC (with the support of the STAC) must continue to provide support to service providers.

DSAC also continued its oversight of the design of IFR procedures in 2021.



Ensuring the compliance and effectiveness of the security measures implemented by the various air transport stakeholders is an essential mission to protect civil aviation from acts of unlawful interference. This is the role of the security technical directorate (DSAC/SUR) and the 120 or so DSAC agents working in this area.

#### Management of the health crisis in terms of security

DSAC continued to support security operators to help them cope with fluctuations in activity, aerodrome or terminal closures, and the impact of lockdowns and health measures.

#### **Temporary measures**

DSAC contacted operators to extend

certain temporary measures from 2020 to 2021 due to the health crisis (conditions for the resumption of security operations after a suspension of activity; conditions for the temporary use of videoconferencing for certain training courses; reduction in the annual quantitative objectives for performance tests in operational situations to be carried out by airport operators).

DSAC continued to analyse the impact of the crisis until September

- · Ensuring that certifications for security instructors and security officers continue to remain valid;
- On the initial and periodic training of security instructors and officers;
- · On ensuring that security oversight licences continue to remain valid and on obtaining these licences.

DSAC identified a number of accompanying measures to be put in place regarding the resumption of training courses and instructor certification panels, in addition to measures to be implemented that will ensure there is no interruption to the validity of licences for oversight inspectors, and to train new inspectors as quickly as possible.

#### Adaptations to security procedures

Taking into account the health regulations imposed by the Government, where possible DSAC maintained procedures relating to passenger security checks at airports and the equipement concept of operation under the health regulations, while also ensuring compliance with appropriate security regulation.

It also kept its recommendations on maintenance following prolonged non-use of the various security equipment, to prepare as well as possible for their return to operation.

#### Adaptation of oversight plans

DSAC has adapted its oversight plans according to the operators and notably taking into account their approval deadlines, European regulatory obligations, the results obtained by the operators during inspections prior to the lockdown and the way they monitor their findings.

#### Upgrading oversight to enhance security effectiveness

In 2018, DSAC began an open debate on its missions, actions, methods and organisation to further strengthen the effectiveness of the security system and to anticipate risks in the best way possible. These discussions led to the establishment in 2019 of 5 working groups; these brought together all the public partners involved in security, as well as companies and security stakeholders. The focus of these working groups was: DSAC guides; security management systems and risk-based oversight; recruitment, training and certification of security officers; interfaces between security officers and equipment; the report and analysis of security incidents.

This work was continued and consolidated in 2021, with close involvement of stakeholders in the collective debate despite the health crisis..

Work continues on the reform of

requirements for instructors and security officers with some early tangible results:

- A letter of intent to hire prior to the training of security officers has been introduced;
- An operational performance evaluation system for the recertification of security officers has been developed in collaboration with the industry. It has been running since 1 November
- Instructors' courses are now based on "competency modules" and "rules of use", which were developed by ENAC and DSAC, and handed over to instructors in November 2021, for implementation on 1 January 2022.

Many ways in which the interface between security officers and equipment could be improved have been identified.

Conditions were specified for implementing a system used for reporting and analysing security events (choice of tool, determination of contributors, defining a taxonomy of events to be reported, model of the future system).

This work also led to the continuation, in 2021, of a new oversight initiative launched in 2020, which involves inspecting security instructors while they are performing their training duties. This new action will be developed over the forthcoming

Regulations require major airports to implement operational performance testing (TPSO). The methodology of these tests has been reviewed and simplified to facilitate implementation and encourage deployment.

#### **DSAC** and its partners oversee all air transport stakeholders who are required to implement security measures

DSAC carries out a number of oversight actions (inspections, audits or tests in operational situations), which are related to the issue or renewal of an approval or certification, or which are intended to assess the effective implementation of security measures by operators.

To carry out its mission, DSAC also relies on the relevant government departments (border police, air transport gendarmerie and customs), which extend its action by performing targeted inspections aimed at assessing the implementation of a specific measure by the stakeholders, as well as tests in operational situations. DSAC also relies on the national civil aviation school (Ecole nationale de l'aviation civile - ENAC) for the certification and training of security officers. It relies on the civil aviation technical service (Service technique de l'aviation civile - STAC) for the certification and oversight of equipment deployed at airports.

Monitoring methods were reviewed in 2021 on some points to improve efficiency (simplification of inspection reports, review of the methodology of targeted inspections). These improvements were implemented on 1 January 2022.

Finally, it relies on independent

validators.

30 31 recruitment, certification and training

#### Number of inspectors and auditors working in security:

- 78 inspectors (o/w 77 DSAC and 1 ENAC)
- 62 auditors (o/w 26 DSAC, 4 ENAC, 7 exterior, 17 GTA and 8 PAF)
- 83 targeted inspectors (52 GTA, 31 PAF)
- 78 cargo inspectors (57 GTA, 21 Customs)

## Number of entities holding security certification or approval issued by DSAC on 31/12/2021

Aerodrome operators	58	
Air operators (French airlines)	17	
Sites of regulated agents (cargo companies)	474	
Known consignor sites (cargo companies)	159	
Regulated suppliers (on-board supply companies)	72	
ACC3 designations (air cargo or mail carrier operating into the Union from a third country airport – airlines carrying cargo originating in non-EU countries)	227	
RA3 designations		
(Third country regulated agent – agent habilité d'un pays tiers)	66	
Canine teams certified by STAC	196	

## Number of inspections for the purposes of issuing or renewing an approval for companies implementing security measures in 2021

Aerodrome operators	9
Air operators	4
Sites for regulated agents or known consignors	91
Known consignors	27
Regulated suppliers	25
ACC3	11
RA3	13



Inspections of canine teams (explosive detection dogs) carried out in 2021: 93

Ongoing visits to known consignors by independent assessors, in 2021: 142

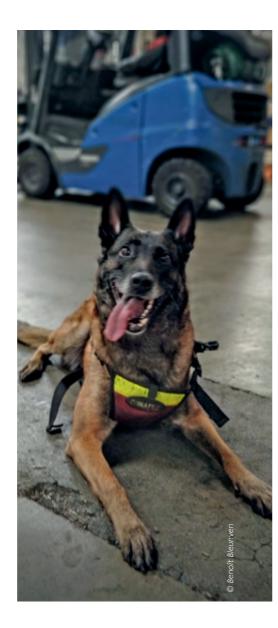
#### Airport security audits in 2021: 11

These audits ensure that there is full compliance with the security rules and provide an on-the-ground assessment of relations between the various stakeholders. They are supplemented by inspections of the effective performance of security equipment of the airports concerned, which is implemented by STAC on behalf of DSAC.

Inspections of instructors as they taught in 2021: 2

#### Inspections and tests carried out by the respective government agencies

In 2021, the air transport gendarmerie (GTA, Gendarmerie des transports aériens) and the border police (Police aux frontières - PAF) carried out **445** targeted inspections and **3,005** operational tests (**1,515** tests carried out by the GTA and **1,490** tests carried out by the PAF).



## **European Commission inspections**

The European Commission regularly carries out inspections amongst EU Member States to ensure that aviation security measures are implemented uniformly and in accordance with regulation. In 2021, it carried out an inspection by the relevant safety authority, i.e. DGAC. DSAC prepares, supports and follows up on these inspections in collaboration with DTA.

## Securing information systems

In 2021, the security of an IT system of DGAC's General Secretariat was also audited.





The oversight of compliance with environmental rules by all air operators is the responsibility of DSAC's interregional directorates, liaising with the air transport directorate (Direction du transport aérien - DTA) and, where necessary, with the air navigation services directorate (DSNA).

Environmental maps and plans for aerodromes, including draft noise exposure plans (PEB), noise pollution plans (PGS) and environmental noise prevention plans (plans de prévention du bruit dans l'environnement - PPBE) are at the heart of DSAC-IR activity. This data is used for local consultation, which takes the form of involvement in environmental advisory committees (CCE) and consultative committees to assist local residents (CCAR), as well as monitoring environmental charters and codes of conduct. This mechanism is completed by the handling of environmental violations and residents' complaints.

## Aviation activity compatible with environmental and public interests

DSAC contributes actively, in the regions and more particularly around big airports, to greater consideration of the challenges of sustainable development in the domestic aviation sector, while at the same time fostering local consultation. Its key areas of intervention relate particularly to platform-based consultation, whether concerning commercial or light aviation, the oversight of players' application of environmental regulations and consideration of urban planning issues concerning airports and means of air transport.

## Local consultation, a field mission to contact elected officials, residents and users

In 2021, DSAC participated in 47 environmental advisory committees of airports in particularly environmentally sensitive locations, as well as in the working groups formed under their aegis (environmental charter monitoring committees, topic-centred meetings). DSAC-IRs have been made responsible for providing objective elements relating to each airfield (traffic statistics, analyses and oversight actions, regulatory lighting etc.), including supporting stakeholders in reconciliating aviation activity with respect for residents.

DSAC-IRs also participate in the residents' support and advisory committees (Commissions consultatives d'aide aux riverains - CCAR), which are responsible for studying case reports on soundproofing help for homes located in the areas defined by the noise pollution plans (plans de gêne sonore - PGS).

Residents are also concerned about other harmful effects generated by airports, such as air pollutants and greenhouse gases, water management and pollution, and road traffic.

## Ensuring compliance with environmental regulations

The most significant airports and heliports in France in terms of traffic and disturbances are subject to environmental restriction orders with the aim of reducing the noise pollution associated with their operations. Breaches of these rules are systematically identified by DSAC sworn agents and transmitted to the Airport Nuisance Control Authority (Autorité de contrôle des nuisances aéroportuaires - ACNUSA). Operators run the risk of being fined up to €40,000.

In parallel with handling violations, the DGAC continues to take preventive actions with operators to further reduce the number of offences.

The increased use of the SIMBAD computer tool for managing non-compliance in 2021 has confirmed its value in harmonising working methods and the content of files, improving efficiency and traceability and making documents produced by the DSAC-IR more reliable.

Airports and heliports subject to environmental restriction orders as of 31/12/2021: 16

Formal statements written up for noncompliance with restrictions in 2021: 290

## Urban planning, another strand of sustainable development

In order to preserve flight safety and limit the disturbances suffered by residents, it is necessary to impose constraints on urbanisation, following studies on a case-by-case basis to ensure the appropriateness of each decision.

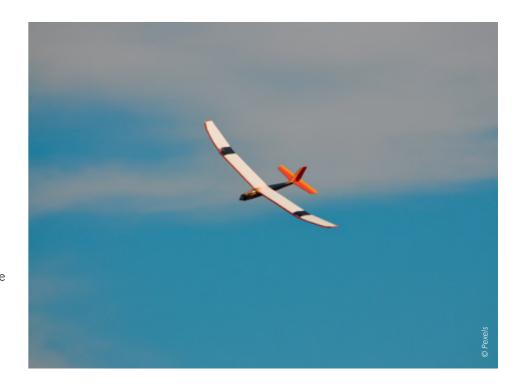
Around airports, DSAC is working to update noise exposure plans (Plans d'exposition au bruit - PEB): more than 200 aerodromes, therefore, are now equipped with such plans, or are currently undergoing creation or revision procedures.

Near aerodromes or around means of air transport, DSAC-IRs are researching sometimes innovative solutions to reconcile local development issues with air safety and have to produce recommendations in a wide range of consultations. The National Airport Engineering Service (Service national d'ingénierie aéroportuaire - SNIA) is from now on the single point of entry for DGAC urban planning files.

DSAC-IRs will continue to be used to contribute to complex projects for which their expertise and knowledge in the field remain key.

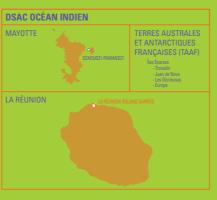
## Helping airlines implement environmentally beneficial projects

In light of the Climate and Resilience Act of 28 August 2021, initiatives by aviation stakeholders are proliferating on subjects such as green aircraft, green airports, decarbonisation, biodiversity, etc. DSAC-IR is facilitating environmentally friendly operations as part of its oversight or regulatory activities (fleet improvement operations, trajectory optimisation, Airport Carbon Accreditation of platforms, etc.).











## Interregional directorates

## The regional view and liaison with the national service

The French civil aviation safety directorate (DSAC) consists of a central level, located in Paris, and nine interregional directorates, known as DSAC-IRs, across metropolitan France, the overseas departments and the communities of Saint-Martin and Saint-Barthélemy.

Subject to powers at central level, the interregional directorates are responsible for taking such actions, measures and decisions as are required with respect to persons and organisations or systems or equipment, in matters of safety and security. In liaison with the central level, they prepare and implement their budget, prepare and provide invoices for services rendered by the State for the safety and security of civil aviation

and take care of purchasing. They are responsible for the individual management of their directorate's agents and contribute to the development and implementation of the training plan.

The activities mentioned are undertaken using either the relevant DSAC-IR's own resources or resources available within the central level or even within other DSAC-IRs, according to the methods and procedures defined by the corresponding central level directorate.

DSAC-IRs are responsible for taking all actions, measures and decisions required in respect of public or private natural or legal persons who are subject to the requirements of European and national texts covering economic and financial monitoring, safety, security and the environment for such actions, measures and decisions as fall within the remit of the zone prefects, regional prefects, departmental prefects

or DTA according to the methods and procedures defined by these administrative authorities.

DSAC-IRs inform the corresponding administrative decisions or take them when they are delegated to them.

DSAC-IRs participate in DTA actions in matters of airspace and relationships with users thereof.

DSAC Nord has been responsible more specifically for maintaining the record of aircraft registrations and flight programme approvals.



## DSAC French West Indies French Guiana

Director: Thierry Buttin Headquarters: Martinique-Aimé Césaire Airport



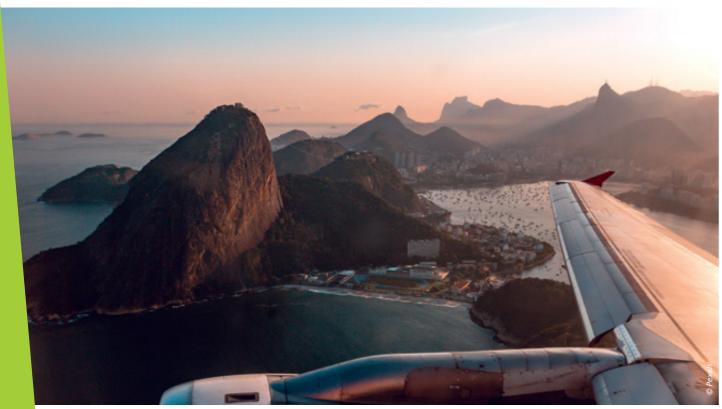
Once again, 2021 was characterised by the management of the health crisis: flight restrictions between the French West Indies and French Guiana due to the Brazilian variant, extension of the health pass to air transport to and from the French West Indies and French Guiana, Hippocampe operations for the evacuation of COVID patients to metropolitan France to relieve emergency services in the French overseas territories, alternating lockdowns and curfews in Guadeloupe, French Guyana and Martinique.

DSAC-AG was able once again to rise to the challenges posed by these events, thanks to all the agents, who I would like to thank warmly.

Despite the circumstances, traffic began to recover in 2021, after the low point of 2020, as we regained 64% of the 2019 traffic on the Metropolitan France/Antilles-Guyana route, with a very good end to the year, with traffic very close to that of 2019. It is heartening to note that as soon as the restrictions were eased, demand for transport to and from the Antilles-Guyana was restored. A slight caveat on regional connections in the Caribbean, which have suffered greatly and have yet to recover.

In 2021, DSAC-AG returned to nearnormal activity in terms of oversight of these operators and thereby helped them to resume their activities and traffic. In French Guiana, DSAC- AG authorised the opening of a new aerodrome, Camopi, to public air traffic and helped set up new public service obligations for domestic services in French Guiana.

Finally, 2021 was an opportunity to focus on the environmental action of DSAC-AG: making the vehicle fleet greener, rolling out selective sorting in Martinique, improving the energy efficiency of our buildings. There is no shortage of ideas to take matters further and support our operators in the energy transition.





#### Figures for 2021

#### **Aerodromes**

Number of platforms

- 9 aerodromes open to public air traffic, o/w 7 commercial aerodromes
- 7 aerodromes approved for restricted use
- **16** microlight platforms
- **3** heliports

Aerodrome safety

- 7 certified aerodrome operators
- **16** approved runways
- 1 SGS audit
- **4** control checks relating to aerodrome approval conditions and operational procedures (CHEA)
- 4 OR audits
- 4 OPS/INFRA audits
- **10** PAC follow-up actions
- 2 aerodromes equipped with a PEB currently being revised

#### Air navigation

2 AFIS audits

#### Security

- security approvals renewed in 2020: 1 qualified agent,
   known shippers, 0 qualified provider
   of on-board supplies, 2 airfield operators
- 7 operational security committee meetings (comité opérationnel de sûreté COS) 2 at Martinique Aimé Césaire, 3 at Pointe-à-Pitre Le Raizet,
   1 at Cayenne-Félix Éboué, 1 at Saint Martin Grand Case
- 1 security commission in Saint Martin Grand Case
- 1 CLS in Saint Martin Grand Case
- Oversight inspections (13 authorised officers with GTA) 4 air transport companies, 2 authorised suppliers of onboard supplies, 2 aerodrome operators, 1 known shipper

#### **Public transport oversight**

- 5 air operators: 4 aeroplane and 1 helicopter company
- 23 oversight events including 3 oversight review meetings plus participation in 5 oversight acts of the CAIRE company directed by DSAC/N
- **69** airworthiness control checks: **23** SAFA, **45** SANA, **1** SACA

#### General aviation

- 226 aerial work companies (including 210 drone operators):43 in French Guiana, 86 in Martinique, 97 in Guadeloupe
- approved training organisations (ATO) and 13 declared training organisations (DTO): 4 DTOs in Martinique, 8 DTOs + 2 ATOs in Guadeloupe, 1 DTO in French Guiana
- 845 administrative actions for licences, performed in 2021

#### **Economic regulations**

There are no more approved ground handlers in the French West Indies in 2021 following the regulatory change (2M pax threshold)

- **3** air carrier operating licences
- 11 Public Service Obligation lines (Obligations de services publique PSO)

### DSAC Centre-East

Director: Muriel Preux
Headquarters: Lyon-Saint Exupéry Airport





After the shock of 2020, the outbreak of COVID and its major consequences on the aviation industry, 2021 has thrown us into a cyclical crisis. The successive periods of hope and growth, followed by periods of hardship and retrenchment, have had an even greater impact than in 2020 on the morale of all, but also on the health and resilience of economic stakeholders.

DSAC-CE continued its major effort to adapt its organisation and operation and to optimise its means and resources in 2020. Yet it is above all thanks to the dedication and commitment of its staff, and their ability to cope with unexpected events, that it has been able to carry out all its duties.

The context proved to be particularly demanding given the difficulties encountered by certain operators and users with vast numbers of requests of all kinds (approvals, CTAs, notification of changes, specific authorisations, qualifications, declarations of new activities, management of exemptions and return to normal, etc.) or the many requests for innovations (electric aircraft, airships, innovative flying machines).

Apart from oversight, DSAC-CE's role is to provide each operator with the best possible support. This involves the aerodromes accommodating the two regional development routes, which have suffered particularly badly over the past two years, with a total stoppage and then a tentative resumption of traffic at Aurillac and Le Puy. This also applies to the Vinci group, which is constantly optimising and adjusting its operations to adapt to the very wide variations in traffic at the five

commercial airports it operates (Lyon Saint-Exupéry, Lyon-Bron, Chambéry, Grenoble and Clermont-Ferrand). Border closures, restrictions, the proliferation of health measures and their frequent changes, as well as the use of reduced working hours, which has weakened both the operators' services and service providers, are all ongoing challenges to which DSAC has responded alongside the operators, with the support of the prefectures and the various State services. Lastly, it meant ensuring a safe handover between Edeis and Vinci to run Annecy airport, right in the middle of the winter season, on 1 January 2022. DSAC-CE also paid particular attention to the hospital helipads, which were in great demand during this period, and hosted a highly regarded seminar for

Some regional companies, whether aeroplanes or helicopters, have weathered the crisis quite well thanks to steady business aviation, medical evacuations, aerial work and mountain rescue. Market requirements and European regulations mean that some operators are growing, albeit experiencing the difficulties associated with this change in scale, while others are showing weakness. It is therefore essential to remain vigilant at all times in oversight activities.

The resumption of activity in 2021 has been a real challenge for the aircrew licensing departments, which have had to respond to the massive demand from pilots. The situation is improving slowly. However, the solution will eventually require a computerised system of exchange between services and users in order to make these processes smoother.

Lastly, the crisis has exacerbated some of the trends of recent years. Aviation bashing has worsened, the

environmental concerns of local residents about airport annoyances (no longer just noise) are increasing, with in some cases the possible support of elected representatives, tempted to sacrifice aerodromes in favour of developing business zones, agricultural areas or green spaces.

DSAC-CE has an advisory role in this respect, while respecting the right of public owners to use land, and putting into perspective the shortand medium-term contributions of aerodromes to communities. Therefore, after Sallanches in 2020, it is now the Oyonnax aerodrome (Ain) that is threatened with closure at the end of 2023. The land at Saint-Rambertd'Albon (Isère) could be threatened by a quarry extension project. Other local authorities may follow suit. To safeguard the aviation and light aviation sector, DSAC-CE is seeking the support of the flying clubs and is encouraging them to increase their outreach to the local population, to use the airfields in a reasonable and responsible manner and to consider the use of electric aircraft. Although not all have heeded the message yet, some flying clubs are starting to take this approach.

The challenge is even greater in the Alpine region, in particular the Mont Blanc region, a remarkable site which attracts both light aviation and tourists as well as transport and aerial work companies for whom it represents a major business activity. The environmental sensitivity of local residents and mountaineers, supported by influential environmental organisations and elected officials, requires special measures. After the closure of the first high altitude area near the summit of Mont Blanc, and new seasonal regulations for flying over the summit of Europe, the associations now want to regulate flying over the

entire mountain range. DSAC-CE is involved in a consultation process to reconcile these expectations with the maintenance of economic and tourist aviation activity.

DSAC-CE must now act in the context of recurrent COVID episodes, the economic fragility of the aviation sector, but also dynamic innovations in the world of aviation and a major change in social awareness. It is therefore more than ever the task of the supervisory authority to serve the public, its safety and its environment, but also to support the changing dynamics of the aviation sector.



#### Figures for 2021

#### Aerodromes

#### Number of platforms

- **37** aerodromes open to public air traffic, o/w **11** commercial aerodromes
- **19** aerodromes approved for restricted use (2 closures in 2020)
- 21 aerodromes for private use
- **115** microlight platforms
- 56 heliports (5 closures in 2020)
- **46** helipads
- **5** floatplane strips
- **5** mountain airports
- 31 mountain airstrips (1 closure in 2020)
- **53** permanent balloon platforms

#### Aerodrome safety

- 5 certified aerodrome operators EU
- **16** approved runways
- **36** new runways
- 8 OR national audits outside of DSAC-CE
- 15 control checks relating to approval conditions and aerodrome operation procedures (CHEA)
- 12 audits/control checks of certified aerodromes
- 14 control checks relating to technical specifications for heliports
- 1 approval of PSAs by ministerial order (a total of 32 aerodromes have a PSA)

#### Environment

- **30** PEB in force + Geneva to current standards
- 1 aerodrome with a PGS
- 7 meetings of the environmental advisory committee (CCE) and 1 meeting of the Geneva environmental consultation committee

#### Air navigation

- **5** AFIS audits and 3 follow-up meetings
- **33** changes notified by AFIS providers, including 6 overseen by DSAC-CE
- 2 CCRAGALS meetings (regional advisory committee for general aviation and light and sporting aviation)

#### Security

- security approvals issued or renewed: 2 aerodrome operators (out of 5 approvals), 3 authorised agents representing 3 sites (out of 51 approved sites),
   authorised suppliers (out of 3 approvals),
   from known shippers (out of 9 approvals)
- operational security committee meetings (comité opérationnel de sûreté COS)
- **6** security committees

#### **Public transport oversight**

- **54** air operators: **9** aeroplane, **9** helicopter and **36** balloon companies
- 23 audits
- **28** inspections
- 228 airworthiness control checks: 148 SAFA, 80 SANA

#### General aviation

- 1540 aerial work companies: 9 aeroplane SPO, 8 SPO helico, 1 aeroplane SPO and helico, 20 microlights, 1 502 drone operators, 19 microlights, 1 317 drone operators
- **9** companies operating complex motorised aircraft (NCC)
- **27** air displays including two major ones
- **21** approved training organisations (ATOs)
- **4,451** administrative actions taken for licences
- **31** infringement case files processed
- **22** audits and inspections

#### **Economic regulations**

- **64** approvals of ground handling service providers, including **6** case files processed (new, extensions, renewals) in 2021
- **2** PSO lines (Aurillac and Le Puy)
- **39** air carrier operating licences including 7 issued in 2021

## **DSAC** North

Director: **Richard Thummel** Headquarters: **Athis-Mons and Roissy** 





# A sharp rise in environmental expectations in another year significantly affected by the impact of the health crisis

The need for the aviation sector and the DGCA to respond to society's environmental and climate change expectations is also reflected in the regions. A prominent example of this was the voluntary public consultation conducted by Lille Aéroport SAS on the Lille-Lesquin modernisation project in 2021, and the environmental assessment conducted at the time covered a wide range of topics. The Council of State gave an important opinion on a draft decree aimed at introducing the possibility of a limited exemption from the Beauvais curfew and DSAC Nord has started to revise this draft text taking into account the decision of the high administrative court. In another domain, that of light and general aviation, the environmental situation around the Toussus-le-Noble aerodrome is still the focus of close attention, and a comprehensive action plan was implemented in spring 2021.

The economic context remained difficult for operators during the year, but there were also signs of recovery and confidence in the future. Traffic at airports within DSAC Nord scope at the end of the year ranged from 35% (Roissy) to more than 50% (Orly, Beauvais, Lille) of that of 2019, but December ended at between 60 and 87%.



Companies such as Airlec, Corsair, French Bee and Transavia have grown or modernised their fleets and plans for a new company are being studied by our departments. As was the case the previous year, the health sector played a major role in DSAC's work. This is the case with innovative projects to support operators in obtaining derogations for special evacuation operations, such as Operation Hippocampe. It also applies to more traditional activities: 2021 saw the construction of the Fontainebleau hospital helipad and the major renovation of those at the Pitié Salpêtrière hospital in Paris and the Abbeville university hospital.

The very unusual circumstances have not distracted the operators or DSAC North from the requirement for safety assurance. Typical examples are the approval of the *Evidence Based Training* approach for the vocational training of Transavia crews, the launch of a similar project at Hop! or the enhanced oversight of the risks associated with bird strike risk at an airport like Orly.

In terms of airport security, the year featured work on perimeter protection and two national audits at Orly and Roissy.

2021 also saw the emergence of teleworking as a mainstream practice and not just for crisis management. This represented a genuine upheaval in the organisation of work, made easier by the extensive modernisation of collaborative tools throughout the DGAC. We are learning how to deal with its peculiarities, to benefit from its advantages and to watch out for the associated risks. After an adjustment period, the commitment of DSAC staff has enabled us to maintain a good collective performance and a high level of quality in our oversight and user service tasks, whether for aircraft registration, approval of flight programmes or the issue of aeronautical documents.

#### Figures for 2021

#### Aerodromes

Number of platforms

- **44** aerodromes open to public air traffic o/w 13 commercial aerodromes
- 7 aerodromes approved for restricted use, including 1 military
- 16 aerodromes for private use
- 53 microlight platforms
- **47** heliports
- **78** helipads
- **18** permanent balloon platforms
- **139** model aeroplane zones

#### Aerodrome safety

- **5** EU-certified aerodrome operators
- 50 change files approved
- **46** aerodromes with approved runways of which **5** within the EASA scope but exempt from EU certification
- **9** audits o/w **4** national organisation audits SGS (notably Paris-Charles de Gaulle and Paris Orly)
- 11 control checks relating to aerodrome approval conditions and operational procedures (CHEA)
- 13 helipad inspections, including an expert report for DIRCAM
- **3** reopenings of helipads following renovation and **2** initial-start-ups

#### **Environment**

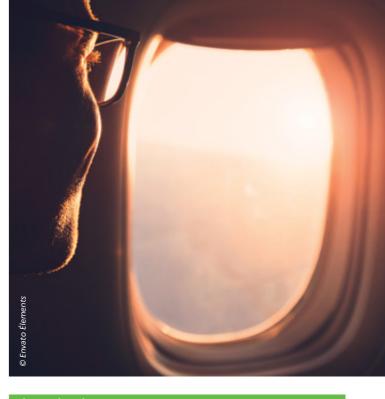
- 27 aerodromes equipped with PEB
- **6** PEB currently being revised.
- 12 meetings of the environmental advisory committee (CCE)
- 77 environmental complaints processed

#### **Urban planning**

- **38** notices for building permits (and prior declarations, development permits [Permis d'aménager PA), planning permissions [Certificat d'urbanisme -CU])
- 15 PSA currently being revised.
- 140 complex obstruction notices
- 28 temporary authorisations to enter restricted airspace issued for construction site installations, after a safety study
- **147** wind farm projects and building permits
- 4 opinions on solar projects

#### **Environmental Breaches**

- non-compliance with environmental restrictions, including: 20 non-compliance with APU operating conditions,
   non-compliance with time restrictions on departing turbojet aircraft at LBG, 1 non-compliance with runway turnaround authorisation periods at Pontoise, 52 Chapter 3s with a cumulative margin of less than 10 EPNdB (Roissy),
   non-compliances with CDG night COHOR slots, 40 VPE exits (of which 28 for Roissy and 12 for Orly), 9 non-compliances with environmental restrictions at Toussus-le-Noble airport
- **347** cases of non-compliance investigated on behalf of ACNUSA



#### Air navigation

- 4 AFIS audits in DSAC North
- **6** AFIS audits outside DSAC North region
- 5 DSNA audits
- 2 CCRAGALS meetings (regional advisory committee for general aviation and light and sporting aviation)
- **10** permanent airspace case files
- **63** temporary airspace case files via Regional Management Committees (Comités Régionaux de Gestion CRG)
- **35** files for the creation of a prefectural temporary exclusion zone
- **264** specific activity cases (balloon release, fireworks, lantern release, laser, etc.)
- 5 reviews of DSNA changes
- 8 instrument procedures (case file examination)

#### Security

Number of security operators overseen by DSAC North

- **5** aerodrome operators
- **68** foreign air carrier companies
- **8** French air carrier companies
- **86** regulated agents at **140** sites
- **26** regulated suppliers
- **36** known consignors at **46** sites
- **0** inspection by the European Commission
- 3 meetings of the operational security committee (COS)
- **18** security committees
- 17 meetings of the local security network (Orly specific)
- **144** oversight actions, including **47** issuances of approvals or renewals

#### Public transport oversight

- **21** air operators: 19 aeroplane, 2 helicopter and **14** balloon companies
- **70** CAT aeroplane audits, **2** CAT helicopter
- 557 airworthiness control checks: 257 SAFA, 208 SACA, 92 SANA

#### General aviation

- **2,613** aerial work companies (including 2,564 drone operators, 49 Appendix I and microlights)
- **228** training organisations (activities in all segments: aeroplane, glider, helicopter, balloons)
- **79** training organisation oversight actions
- 8 air displays including: 2 small, 2 medium, 4 large
- 147 overflight derogations issued 81 Île-de-France (o/w 46 high-risk activities) and 66 HDF (o/w 6high-risk activities)
- **117** Toussus derogations (auto info)
- 17,328 actions performed for cabin crew licences
- **825** microlight case files (Registration card, Registration Form, Aircraft, Parking Licence [CI, FI, LSA])
- **68** flight crew breaches processed (o/w **9** HDFN and **6** HDFS)
- 2 disciplinary committees held
- 31 AIR OPS operators (of which 14 SPO, 17 NCC)
- 2 high risk operators (HR)
- **19** MEL approvals
- 79 inspections (including 14 NCC/SPO and 65 drones)
- 17 derogations and specific authorisations for drone operators
- 7 provisional creations, 1 change and 2 terminations of model aircraft activity (until transfer of tasks to NA)
- **91** releases of sky lanterns
- **9** firework shows
- 28 Prefectural TIAs (until transfer of tasks to NA)
- **70** NOTAMs on obstructions (cranes, beaconing failure)
- **152** NOTAM all types combined
- **34** aircraft accidents of which **19** aeroplanes, **13** microlights, **1** glider, **1** helicopter
- 17 victims in air accidents, of which: 13 dead and 4 injured

#### **Economic regulations**

- **434** ground handler approvals, of which **83** were issued or renewed or renewed, applications centralised on the simplified procedures system, distributed at national level
- **18** air carrier operating licences monitored, including **2** new licences issued in 2021 and **2** licences fully reviewed in 2021

#### Aircraft registrations

16,000 aircraft registered in France

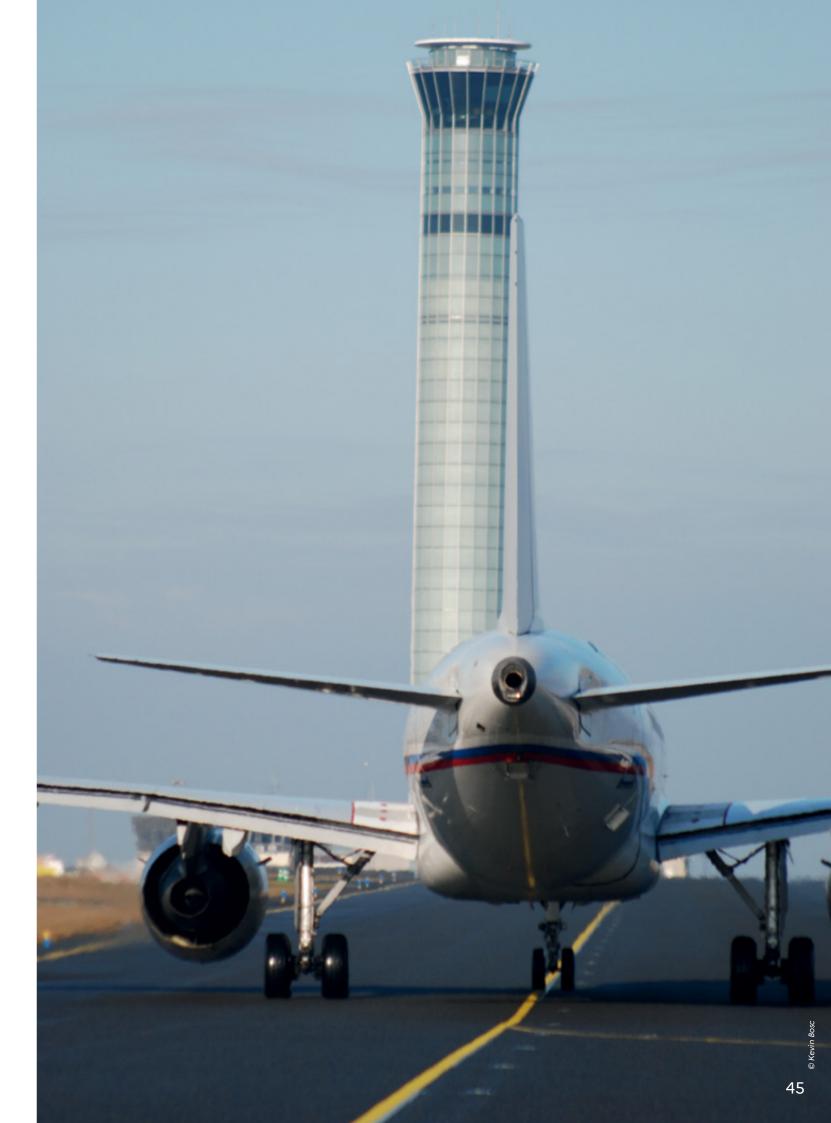
Number of entries on the register in 2020 2,067

	•
of which registrations	392
of which ownership transfers	879
of which de-registered	253
of which rentals	163
of which rental de-registrations	101
of which mortgages	183
of which mortgage write-offs	95
of which seizures	1

#### Air transport authorisations

- 120 scheduled foreign airline programmes approved in March 2021 and 120 in October 2021
- **20** French foreign airline programmes approved in March 2021 and **1** in October 2020





## DSAC North-East

Director: Emmanuel Jacquemin
Headquarters: Strasbourg-Entzheim Airport



Although the health crisis continued to have a major impact in 2021, the staff of DSAC Nord-Est, like those of all DSAC departments, continued to professionally support operators and stakeholders in our regions, to maintain and guarantee an optimal level of safety and security, and to implement public policies relating to civil aviation.

For example, given the growing demand for a sustainable ecological transition, in the first half of the year we were able to carry out the public consultation process on the longawaited draft of a new ministerial order restricting the operation of the Basel-Mulhouse aerodrome in France, but also in Switzerland and Germany, given the aerodrome's special location The new order, published in August 2021, came into force on 1 February 2022.

Although there was a gradual increase in optimism among stakeholders in 2021, and business forecasts are much better in 2022 than there were last year, several of our airports have had to consider their medium- and long-term development strategy, which

is complex by nature. The challenge is to prepare as well as possible for structural changes in air transport, particularly given the requirements of the ecological transition, and ways to restore the balance sheets, especially as some of them will have to undertake a significant maintenance programme in the short term, to bring them up to standard or even to adapt their capacity. DSAC-NE is required to contribute through its tasks and the public policies it implements.

DSAC-NE must also take into account the changes in the DGCA and adapt its actions to the specific features of its area. In this respect, 2021 saw significant progress on a number of internal management issues. Therefore, the reorganisation came into effect on 1 January 2022, aiming to improve the management of professional skills and to take into account the pooling of support functions in the new Secrétariat Interrégional Est (SIR Est) of the DGAC's general secretariat. Similarly, contracts for the major refurbishment of the head office, carried out as part of the recovery

plan, were awarded for a total of over 5 million euros. In H2 2023, the new building will make it possible to house all the teams in a single location with the highest standards of comfort and energy performance.

In our professions, as in society as a whole, in a fast moving environment, but one that is also fraught with uncertainty, we will have to continue planning and looking for 'the way forward', and this is a fine challenge for the staff of DSAC-NE.



#### Figures for 2021

#### Aerodromes

Number of platforms

- **63** aerodromes open to public air traffic including **17** commercial aerodromes
- 17 aerodromes approved for restricted use
- **53** aerodromes for private use
- 166 microlight platforms
- **40** heliports
- 21 helipads
- 2 hydrobases (of which 1 aeroplane and 1 microlight)
- 2 hydrosurfaces
- 2 mountain airstrips
- **130** permanent balloon platforms
- 221 model aeroplane zones

#### Aerodrome safety

- **5** EU-certified aerodrome operators
- 26 aerodromes with runways approved by decision
- 17 controls relating to the conditions of approval and operating procedures for aerodromes (CHEA)
- 6 RFFS / SPPA control checks
- 7 heliport control checks
- **5** certified EU oversight audits of aerodromes
- **0** PSA approved out of **63** aerodromes with a PSA and **71** that should be granted one.

#### Environment

- 25 aerodromes with PEBs (of 29 awaiting a PEB)
- 1 protocol signed at the end of 2019 for Strasbourg-Entzheim airport
- 1 aerodrome with a PGS
- 1 meeting of the residents' support and advisory committee (CCAR)
- 1 operating restriction order
- 2 meetings of the environmental advisory committee (CCE)

#### Air navigation

- **13** AFIS organisations
- **13** AFIS oversight meetings
- 4 AFIS audits outside DSAC-NE region
- 20 audit assignments (AFIS or national)
- **35** qualified AFIS agents, 15 qualifications issued
- **39** reviews of AFIS changes
- **19** aerodromes with IFR procedures, an approved IFR helicopter approach procedure
- 2 CCRAGALS meetings
- 2 CRG meetings
- 2 meetings with the national forest park organisation
- 378 cases of creation, modification, removal of airspace and location of light and sporting activities, on a permanent or temporary basis, including 199 NOTAM requests
- **318** permanent leisure activities (19 parachuting activities, 48 aerobatics, 221 aeromodelling, 26 winching, 4 special activities (permanent drone activities)



#### Security

Security approvals issued or renewed: **0** aerodrome operators (out of **5** approvals), **14** authorised agent sites (out of **87** approvals), **2** of authorised suppliers (out of **3** approvals), **1** known shipper (out of **16** approvals)

- **15** meetings of the operational security committee (COS)
- 2 security committees

#### Public transport oversight

**6** air operators:

**3** Aircraft companies, **3** helicopter companies, **38** operators with registered commercial activity

**20** audits in 202

**84** airworthiness control checks in 2021: **22** SAFA, **46** SACA, **16** SANA

#### General aviation

**1,122** aerial work companies (including **1,064** drone operators)

**8** NCC operators

Air displays in 2021: **18** went ahead, **7** were cancelled, **1** refused (deadline missed)

- 14 small (o/w 7 model aircraft) 8 medium-sized
- 3 large (26 events scheduled for the year)
- **12** approved training organisations
- 129 declared training organisations
- 4,789 licences and qualifications issued in 2020
  - 12 infringement case files processed
  - **0** disciplinary committee held

#### **Economic regulations**

- **91** approvals of ground handling service providers (o/w 14 issued in 2021)
- 3 (current) PSO lines
- **24** air carrier operating licence (0 licence re-examination in 2021)

### **DSAC Indian Ocean**

Director: Jonathan Gilad Headquarters: La Réunion-Roland Garros Airport





2021 was a year dominated by the resurgence of the health crisis caused by the COVID-19 pandemic in the Indian Ocean region, particularly in Reunion and Mayotte, but also in neighbouring countries. Given this context, traffic recovery was greatly constrained by the imposition of travel restrictions and health checks on passengers. Even though the vaccine rollout gradually eased restrictions on flights to France, they were tightened on regional international flights. Even though their family lives have been affected by health measures, DSAC-OI agents have unceasingly supported air transport and general aviation operators in Reunion and Mayotte, over and above their oversight duties, by ensuring that they comply with safety and security regulations as well as monitoring innovative projects promoting biodiversity and reducing the noise impact of aviation activities in the interests of sustainable development

for aviation activities.

The opening of an OCEANE examination centre in Mayotte confirms DSAC's determination to draw closer to users by leveraging its regional network. As far as light aviation is concerned, the prevention of illegal public transport remains a priority and DSAC-OI is committed to countering the proliferation of private pilot helicopter flights, circumventing the cost-sharing principle, which poses a safety problem and represents unfair competition with carriers. For example, in 2021, two pilots were sanctioned by the disciplinary committee of DSAC-OI after a long investigation by the air transport police.

The licensed aerodromes of Reunion and Mayotte have restored just over 50% of their 2019 traffic levels, well below their growth expectations. In this context, DSAC-OI has sought to strengthen operators' SGSs and to

with in close cooperation with the operators and entities concerned. Due to the sharp increase in light aviation over the past five years, complaints from local residents about the noise from the many aircraft flying overhead have increased significantly. In response, DSAC-OI is supporting innovative efforts with recommended VFR trajectory projects to limit noise

From an economic point of view, the health crisis has severely affected Air Austral, with a steep decline in its regional network. The company maintained its services between Paris, Reunion and Mayotte by using mainly long-haul aircraft (Boeing 777-300ER and 787-8) and by adapting its operations (transport of freight in the cabin). The introduction of Airbus A220s to renew the short/medium-haul fleet has enabled regional traffic to gradually resume with more suitable

support them, especially Pierrefonds airport, where regular commercial aircraft. traffic only resumed in December 2021. DSAC-OI is working alongside the DTA DSAC-OI has actively contributed to on all the preliminary stages required guaranteeing a high level of security to build a long runway in Mayotte at the aerodromes within its purview. within the best possible timeframe. The DTA installed a project manager In terms of safety, the intensive use of helipads on Reunion Island to open in Mayotte in 2021, demonstrating up the Cirque de Mafate has caused the DGAC's determination to be specific problems which are dealt closely involved with the population of Mayotte. DSAC-OI and its delegation in Mayotte provide constant support to the project manager to help carry out an infrastructure project that is essential for opening up Mayotte.

I took up my duties as head of DSAC-OI on 1 January 2022, and I feel proud and glad to take on these new responsibilities alongside passionate and committed men and women, who work in sometimes difficult conditions, in island territories where the air sector plays a crucial role in accessibility and economic development. Being based in the heart of Réunion and Mayotte is a major asset for our strategy of being close to users and to all parts of the aviation system. I know that I can count on the dedication and professionalism of the entire Interregional Division to continue rising to the challenges of the aviation sector in the Indian Ocean region.

#### Figures for 2021

#### Aerodromes

#### **Number of platforms**

- **3** aerodromes open to all commercial CAP (subject to tax)
- 4 aerodromes approved for restricted use
- 6 microlight platforms
- 6 heliports (of which 1 in private use)
- **19** helipads
- 8 model aeroplane zones

#### Land use and property management

1 SCG approved at La Réunion-Roland Garros airport

#### Aerodrome safety

- **3** certified aerodrome operators
- 4 approved runways / approvals pending
- helipad control check (commissioning audit)
- **7** airport audits

#### **Environment**

- 2 aerodromes equipped with PEBs
- 1 signed environmental charter (Regional Natural Park, PNR)
- 2 meetings of the environmental advisory committee (CCE)

#### Air navigation

#### Air navigation

- 1 security audit of a DSAC/OI airport
- **0** involvements in an AFIS audit outside DSAC-OI territory

#### **Airspace**

- 1 air activity locations created
- **0** air activity locations removed
- **0** activity created with the agreement of the regional airspace management committees (CRG)

#### Security

- 7 safety approvals initial or renewed in 2021: 1 authorised agent site, 1 authorised supplier site, 1 aerodrome operator site, **4** known shippers
- 1 vulnerability assessment on the city side of Dzaoudzi-Pamandzi airport



#### Public transport oversight

- 8 air transport companies, including 2 aircraft and 6 helicopters (+ 1 aircraft CTA being considered for 2022)
- 17 audits, inspections, checks en 2021
- 51 airworthiness control checks in 2021: 17 SAFA, 2 SACA, 32 SANA

#### General aviation

**200** aerial work companies (including 187 in drones)

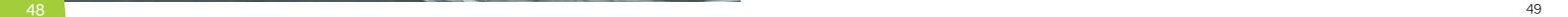
Missions to flying clubs: 15 oversight actions

Air displays in 2020: 1 small – 0 medium

- **8** declared training organisations
- 370 management actions on licences carried out, 35 examination actions carried out
- 7 infringement case files processed
- 2 disciplinary committees held
- 556 theory examinations passed on the OCEANE portal; o/w 6 in Mayotte)

#### **Economic regulations**

- **0** ground handling assistant approval (traffic < 2Mpax)
- 6 air carrier operating licences (2 issued: licence Récif Hélicoptère licence, Air Mafate Service licence)
- **2** OCOECO (La Réunion-Roland Garros, Dzaoudzi-Pamandzi)
- 4 airport project oversight committees (SA ARRG, EDEIS Mayotte airport)



## DSAC West

Director: Emmanuelle Blanc Headquarters: Brest-Bretagne Airport



## Resumption of aviation activities and culmination of strategic projects in the West

After supporting the aviation industry in overcoming the crisis in 2020 and supporting several strategic works, there was a measure of recovery and development for the aviation industry, in 2021 with the completion of several anticipated projects.

This increased activity has resulted in:

- many drone operating companies entering the
- market (300 more in 2021); • new balloon platforms (20 more in
- a phased resumption of aircraft technical inspections (60 more in

And still many management acts on pilot licences (almost 7,700).

Some important projects have been finalised at regional level.
Tours airport was the first military airport to be devolved to a local authority in accordance with the NOTRe law, on schedule and after extensive preparatory work including the certification of the new civilian operator.



A number of important milestones have been reached in the redevelopment of Nantes Atlantique airport:

- Publication of the airport's PPBE;
- Publication of the "curfew" order for enforcement in April 2022 (between midnight and 6am);
- implementation of resale assistance schemes and the right to vacate property;
- analysis of the "dual approach" scenario for flights arriving over Nantes, using one axis or the other depending on the weather conditions;
- participation, alongside the government departments concerned, in public meetings open to all citizens.

The staff of DSAC West have endeavoured to ensure their continued presence with operators (airports, airlines, ground handling companies, flight schools, AFIS organisations) to catch up on the delays incurred during the health crisis throughout 2021. They are keenly aware of the environmental and economic issues at stake in our four regions, and approach aviation activities and their impacts with a clear sense of professionalism and respect for our partners.

#### Figures for 2021

#### Aerodromes

#### **Number of platforms**

- 67 aerodromes open to public air traffic including27 commercial aerodromes
- 14 aerodromes approved for restricted use (including 1 mixed commercial)
- **83** aerodromes for private use (**16** notices given in 2021)
- **190** microlight platforms (**16** notices issued in 2021)
- **85** permanent heliports/helipads (1 notice given in 2021)
- 17 temporary helipads
- 2 floatplane bases
- **281** permanent balloon platforms (**25** notices issued in 2020)
- 5 temporary balloon platforms

#### Aerodrome safety

- aerodromes overseen: 9 EU certified, 18 European exempt,53 under national regulation, 47 helipads under national regulation
- audits performed: 4 audits on aerodrome organisation,
  26 audits of aerodrome infrastructure and operations,
  audits of fire and animal hazard services at aerodromes,
  audits of helipad infrastructure, operations and services
- 80 case files on changes processed: 22 subject to approval, 58 not subject to approval,
- **68** PSAs approved by ministerial order, (**30** case files being developed or revised)
- **846** complex SNIA consultations including **129** PSA derogations
- **159** requests for NOTAMs beaconing failure

#### Environment

- 28 civil aerodromes equipped with a PEB (9 in the process of being compiled)
- 7 environmental charters signed (1 signed in 2021)
- 0 codes of good conduct signed in 2021
- 1 aerodrome equipped with a PGS (being revised)
- 1 operating restriction order
- **6** meetings of environmental advisory committees (CCE)

#### Air navigation

- 21 AFIS bodies
- 11 AFIS audits and 11 follow-up visits
- 2 CCRAGALS meetings

Permanent activities: **36** files reviewed by CCRAGALS Temporary civil activities: **25** ZITs, 28 ZRTs, **265** leisure activities (aerobatics, paragliding, skydiving, etc.)

Temporary military activities: response to 50 consultations

Participation in **16** AFIS audits , **4** DSNA audits

Approval of **4** IFR procedures

#### Security

102 security approvals issued or renewed: 2 aerodrome operator (out of 10 approvals), 1 air carrier (on 1 approval), and, as managing authority: 12 approved agent sites (out of 54 approvals), 1 approved supplier (out of 2 approvals), 12 registered shippers (out of 36 approvals)

- 1 security audits of a DSAC-O airport
- 0 local security committee (CLS) meeting
- 7 meetings of the operational security committee (COS)
- **3** security committees

#### Public transport oversight

- 11 air operators: 5 aeroplane companies and 6 helicopter companies
- 43 balloon companies
- 30 audits and 24 meetings in 2021
- **181** airworthiness control checks in 2021: **42** SAFA, **85** SANA, **54** SANA

#### Aerial work and general aviation

- **2,194** aerial work companies (including **2,109** drone operators)
  - 13 companies operating complex aircraft (NCC)

Air displays: 9 - small, 9 - medium, 9 - large

- 12 training bodies approved (11 ATO, 1 IULM) and 150 declared (DTO)
- **7,696** administrative actions for licences performed
- 26 infringement case files processed
- 1 disciplinary committee held

#### **Economic regulations**

- **62** approvals of ground handling assistants (**12** issued or renewed in 2021)
- 2 OSP lines (1 with and 1 without state subsidy)
- 10 air carrier operationg licences
- (**0** suspension and **1** withdrawal in 2021)
- **25** balloon transport operating licences



## **DSAC** South

Director: **Nicolas Dubois**Headquarters: **Toulouse-Blagnac Airport** 



# A tricky year in terms of running DSAC Sud, but work in support of a weakened sector carried out with commitment and competence

The year's achievements were driven by an ongoing commitment to supporting operators.

Three certified aerodrome operators in Occitania (Carcassonne, Castres and Tarbes) have reported difficulties in applying the provisions of the European regulation relating to longitudinal runway slopes and those relating to transverse runway slopes. The conditions to be met in order to implement special conditions are being determined (rationale, context, risk identification and management, etc.). These enforcement difficulties could affect other aerodromes at national level.

DSAC also helps aerodrome operators with security, to apply the temporary measures resulting from the postponement of the EDS 3 deployment deadlines decided by the European Commission following the health crisis, as well as for internal reorganisations.

Airbus Transport International has a fleet of 5 Beluga STs, used to transport aircraft sections and wings between the factories where they are produced and the assembly sites. These Beluga STs are being replaced by larger Beluga XLs for this activity. Three Beluga XL are already in service, 2 to 3 more will be added by 2025. As was seen in 2021, DSAC Sud expects to see a rise in professional pilot examinations, which will consolidate Blagnac's status as



the leading centre in France for these tests.

Coordination with the airfield operator at Francazal is being enhanced and a monitoring committee has been set up, bringing together the state services, Toulouse-Métropole, the operator SETFA and various partners. Part of the platform is intended to support designers of the city of tomorrow, its uses and its mobility systems, from an intermodal perspective. This development and testing facility will have two main ambitions: reducing congestion and decarbonising the region.

The devolution of Nîmes Garons is ongoing and should be completed by 2022: so far, only Nîmes-Métropole has expressed an interest in taking over the airport.

Relations with certain local residents' associations remain tense, and the search for a balance in Blagnac continues, involving the various government departments, elected officials, professionals and associations. The environmental noise prevention plan for Blagnac should be submitted for public consultation in the spring of 2022, when an impact study using the balanced approach will be undertaken. The noise exposure plan in Montpellier will be revised and a charter of good conduct in Perpignan was unanimously voted by the CCE in November 2021. The DGCA must live up to high expectations in its role as ambassador of the ecological transition. DSAC Sud is also involved in international cooperation actions on behalf of the DGCA, via the DTA or FRACS (support for the Haitian authority), on behalf of the European Union via the TAIEX programme (cooperation with the Albanian authorities) and on behalf of EASA (participation in EASA working groups in the field of dangerous goods).

#### Figures for 2021

#### Aerodromes

- **36** open to public air traffic including **9** commercial aerodromes (subject to tax)
- 17 aerodromes approved for restricted use
- **103** aerodromes for private use
- **158** microlight platforms
- 22 Helicopter emergency medical service (Service médical d'urgence par hélicoptère SMUH) heliports
- 3 SMUH helipads with public assistance
- **11** heliports
- **39** permanent helipads with public assistance
- **5** floatplane strips (microlight)
- **26** mountain airstrips
- **87** permanent balloon platforms

#### French Aeronautical Constraints Plan

- **35** aerodromes equipped with a PSA
- **15** PSAs under revision

#### Air carrier licences

- **2** prefectural air carrier licences (Licence de transporteur aérien LTA) (2 aeroplane, 10 balloon, 2 helicopter)
- 2 LTAs have been fully checked

#### Airport regulation

933 case files processed, including:
158 relating to prefectural platforms (private A/D, helipads, Ulm platforms, balloon platforms), 137 relating to temporary or permanent obstacles, 63 relating to temporary or permanent aviation information, 97 relating to town planning (buildings, wind turbines, solar panels),
137 relating to aviation clearance restrictions, 23 relating to air carrier licences

#### **Safety**

#### Air navigation

- 9 PSNA AFIS certificates
- 4 AFIS audits in Occitania
- 6 AFIS audits outside DSAC-S region
- 2 DSNA audits (Météo France, SNA AG)
- 1 DIR PF and SNA PF document review
- 3 notified changes reviewed
- 2 safety event follow-up
- **6** IFR procedures approved or in preparation
- 19 AFIS agent qualifications attributed or renewed
- **18** files prepared for an aviation frequency request

#### Airports

- **9** Aerodrome operators holding an airport safety certificate at European standard
- **159** approved runways
- actions to monitor certified aerodromes (follow-up audits in all areas and meetings with the manager in charge)
- **3** certificate conversion follow-up audits outside DSAC-S
- 10 control checks relating to aerodrome approval conditions and operational procedures and aerodrome operational procedures (CHEA) including 1 check relating to the OPS SERV field (RFFS-SPPA)
- 5 heliport control checks (21 heliports being overseen)
- 127 changes notified, of which 14 have been approved
- aerodrome fire service approvals, heads of operations and SSLIA managers

#### Airspace

- 407 case files on temporary changes to airspace (+11% / 2020)
- 26 case files on permanent changes to airspace (-260% / 2020)
- 9 case files on drone-specific activities (-50% / 2020)
- **2** CCRAGALS meetings (regional advisory committee for general aviation and light and sporting aviation)
- 4 attendances at CRGs (South-West and South-East)

#### Security

- 9 Security operators whose security approval is managed by DSAC South:
  - **9** aerodrome operators (**2** approvals renewed in 2021), **1** operator approved as a licensed supplier, **9** companies licensed as regulated agents representing a total of **41** establishments (**4** approvals renewed or modified in 2021), **9** entities approved as registered shippers (**4** approvals renewed or modified in 2021)
- **6** security consultation meetings (COS) were held by DSAC-S in 2021.

#### Public transport oversight

4 air operators holding a CTA, of which:3 aeroplanes, 1 helicopter

Application for the issuance of a CTA from an SPO operator, under consideration

**14** declared balloon operators

Local oversight actions in 2021:

9 oversight actions (audits and inspections) and 4 oversight reviews

DSAC/PN/EPN or OCV oversight actions: 8

89 airworthiness control checks in 2021: 20 SAFA, 33 SACA, 36 SANA

CONSONIDATE DIAGNAC 5 STATUS AS

#### **General aviation**

#### Non-commercial operators (NCC)

5 NCC operators (non commercial complex):6 MEL approvals and 2 RVSM approval

#### Specialised use

- 21 SPO (specialised operations) operators: 31 LME approvals and 0 RVSM approval
- **1,678** aerial work companies (including **1,604** in drones)
- 10 Particular activity manuals/amendments processed
- **145** exemptions/authorisations processed
- **55** drone operator oversight actions (document checks or checks on actual operational activities)
- **25 hrs** of flight as a DSAC South drone operator (**4** small **2** large)

#### Airworthiness of microlights

**521** microlight documents issued and **120** renewals made

#### **Training organisations**

- 106 training organisations 94 DTO, 6 ATO, 6 IULM
- 24 oversight actions

#### **Aircrews**

- **7,061** air licences and qualifications issued
  - 7 infringement case files processed

#### Theoretical examinations

- 77 days of professional pilot aeroplane tests, i.e **4,650** tests taken by candidates
- **45** days of leisure pilot tests, i.e. **2,620** tests passed by applicants
- **6** days of tests for cabin crew members, i.e. **70** tests taken by the candidates

#### **Economic regulations**

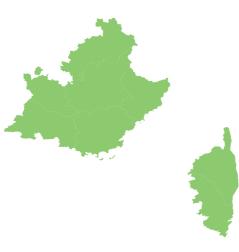
- **25** approvals of ground handling service providers issued or renewed
- **3** PSO lines



## DSAC South-East

Director: **Yves Tatibouet**Headquarters: **Aix-en-Provence** 





In 2021, we resumed our oversight activities at a steady level and partly adapted our methods by working remotely and using document control. Thanks to the commitment and professionalism of DSAC Sud-Est staff, the oversight plan was carried out as close as possible to our initial forecasts in all our areas of expertise, demonstrating the strong dedication of the air transport industry to maintaining a high level of safety and security.

The year saw the approval in October 2021 of the "RNP AR APCH" approach procedure at Ajaccio, an innovative precision procedure that reduces the safety risks associated with the

aerodrome's topography. On the Côte d'Azur, the third Formula 1 Grand Prix of Le Castellet once again called on our expert teams to ensure that the aerodrome next to the circuit was operated in complete safety.

In terms of government, to help implement the interministerial "intrusion" circular of April 2021, the security division provided all its expertise and oversight skills to the team assembled around the Marseille police prefect.

The first theory exam sessions for private pilots began in Ajaccio in the OCEANE room as part of our outreach activities.

As a continuation of 2021, in 2022 DSAC-SE will play its full role in dealing with numerous environmental and noise issues throughout the country, from the Alpes-Maritimes to the Bouches-du-Rhône and the whole of Corsica.



#### Figures for 2021

#### Aerodromes

- 23 aerodromes open to public air traffic including **9** commercial aerodromes
- 11 aerodromes approved for restricted use
- 4 aerodromes for private use
- **42** microlight platforms
- 28 heliports
- 70 helipads of which 51 in the sea
- 1 floatplane base
- **6** floatplane strips
- **20** mountain airstrips
- 8 permanent balloon platforms
- 2 glider areas
- **64** model aeroplane areas or sites

#### Environment

- 22 aerodromes equipped with PEBs
- 1 PEB currently being revised.
- 4 environmental charters signed
- 7 codes of good conduct in force
- 2 aerodromes equipped with a PGS
- 2 meetings of the environmental advisory committee (CCE with CCAR locals
- **4** operating restriction orders
- **5** meetings of environmental advisory committees (CCE)

#### Safety

#### Air navigation

- 2 AFIS audits
- 2 CCRAGALS meetings (regional advisory committee for general aviation and light and sporting aviation)
- **8** approvals of new IFR procedures
- **3** AFIS follow-up meetings
- **93** aviation information acts (NOTAM, SUP AIP, ZRT, ZIT)
- **164** opinions issued following consultation on the use of airspace

#### **Airports**

- 11 aerodromes subject to European regulations o/w 7 certified aerodrome operators
- 23 Conversion follow-up or change follow-up meetings with certified operators
- **53** approvals of infrastructure or organisational changes at certified aerodromes
- 1 approval update
- 1 post-conversion audits
- 2 visual aids and aerodrome electrical systems audits
- 4 organisation oversight audit
- 4 change oversight audits (EISA)
- 11 OPS/INFRA audits
- 11 heliport inspections
- **9** RFFS and wildlife hazard management checks
- 21 PSAs approved
- 12 PSAs being developed or revised

#### Security

- security approvals initial or renewed in 2021:
  6 regulated agents (out of 19 approvals) as DSAC in charge, 4 regulated suppliers (out of 15 approvals) as DSAC manager, 0 aerodrome operator (out of 8 approvals) as DSAC manager, 0 air operator (out of 1 approval) as DSAC in charge, 0 known consignor (out of 7 approvals) as DSAC in charge
- on-site inspections including:
  23 regulated agents, 11 airlines, 12 dog teams,
  3 aerodrome operators, 3 airside occupants, 5 regulated suppliers
- **32** meetings of the operational security committee (COS)
- 1 local security committee (CLS) meeting
- **4** security committees

#### Public transport oversight

- 19 air transport operators o/w 4 aircraft, 6 helicopters,1 plane/helicopter, 8 baloons
- **28** oversight actions
- **360** ramp checks: **94** SAFA, **202** SACA, **64** SANA

#### **General aviation**

- **73** aerial work operators
- **1,208** drone operators subject to oversight
- Air displays in 2021: **5** large, **2** small
- **6,096** management actions for licences in 2021
- Approved training organisations:
  - **87**, o/w **72** DTO declared, **11** ATO certified and **4** IULM training schools
  - 10 infringement case files processed
  - 1 disciplinary committee held

#### **Economic regulations**

- **208** approvals of ground handling service providers, of which **47** issued or renewed in 2021
- **12** PSO lines (all relating to Corsica)
- **14** air carrier operating licences

### DSAC South-West

Director: **Gervais Gaudière**Headquarters: **Bordeaux-Mérignac Airport** 



Although some freedom will have been regained in 2021 compared to 2020, the pandemic continued. It will have profoundly affected people's personal lives, their work and especially the aviation community as a whole.

Despite frequent and significant changes during the year, the South-West DSAC teams continued to carry out their duties in the Nouvelle Aquitaine region. They once again demonstrated the necessary individual and collective flexibility and motivation to get through this uncertain period in the best possible conditions. The many achievements of DSAC-SW teams this year are evidence of this success. DSAC-SO teams supported all the stakeholders in the New Aquitaine aviation ecosystem during this special year. Expectations of the supervised entities in the region for support from the DGCA are justifiably high to help them through the current troubled period. The teams are working to meet these needs within their means and in accordance with their professional prerogatives. The bankruptcy of the Airways College flight school in Agen demonstrated the potential vulnerability of the economic stakeholders in our sector.

> Society's expectations about controlling the footprint of air travel are growing. Significant work has been carried out on the platforms to take into account and address the expectations of the local population. For example, work in Bordeaux concerning night flights has identified the factors that cause discomfort to local residents. There are many interventions on smaller platforms to enable air users and local residents to live together constructively. The promotion of biodiversity within and around airfields continues, with, for example, the signing this year of the agreement between the Aéro



The Nouvelle-Aquitaine region is a region of dense general aviation. DSAC-SW teams take part in the events of this lively and passionate community, culminating this year in the success of the World Gliding Championships in Guéret in August.



Lastly, the Nouvelle-Aquitaine region has a dense and dynamic aerospace industry, a breeding ground for constant innovation. The industrial ecosystem of the Nouvelle-Aquitaine region was further strengthened this year with the inauguration of the Elixir Aviation plant in La Rochelle. DSAC-SW supports manufacturers in their projects, such as the Flying Whales airship project and the first flight of the Falcon 6X. The regional drone ecosystem got back together, three years after its last event, for the UAV Show, the leading European trade fair for drones, to which DSAC-SW and DP Drone teams contributed significantly.

#### Figures for 2021

#### Aerodromes

#### Number of platforms

- **50** aerodromes open to public air traffic, of which 13 commercial aerodromes
- 8 aerodromes approved for restricted use
- **69** aerodromes for private use
- **162** microlight platforms
- 63 heliports (8 of which are state-owned)
- **44** helipads
- 1 floatplane base (Biscarrosse)
- **14** floatplane strips
- **117** permanent balloon platforms
- **98** model aeroplane zones

#### Land use and property management

- PSA under review (Angoulême, Bergerac, Biarritz, Bordeaux-Mérignac, Bordeaux-Yvrac, Jonzac, La Rochelle, Marennes, Niort, Pau, Périgueux, Ribérac)
- **64** PSA waivers for mobile or fixed obstacles
- 1 SCG in progress at Bordeaux airport
- amendment published (the 4th) for the concession to operate Bordeaux airport in order to incorporate changes related to the tramway link between the station and the airport

#### Aerodrome safety

- 8 certified aerodrome operators EU
- 172 contacts with aerodrome operators

#### **Environment**

- **57** aerodromes with a PEB (as well as **5** aerodromes assigned to defence)
- **3** environmental charters signed (Pau, Arcachon, Itxassou)
- 1 signed code of good conduct
- 1 parachuting protocol
- 1 skydiving protocol
- 1 aerodrome with a PGS
- 6 meetings of the environmental advisory committee (CCE)
- 1 follow-up committee on Rafale fighter aircraft conversion flights for Qatari and Indian pilots
- **68** complaints analysed
- **37** fines processed
- 46 DIM (misconduct investigation file)
- 1 user committee
- 1 charter monitoring committee CSB and PPBE for Bordeaux-Mérignac

#### Air navigation

- 6 AFIS audits
- **8** follow-up meetings

Participation in 6 DSNA audits, 2 Météo France audits

Participation in **11** AFIS audits outside DSAC-SW region

2 CCRAGALS meetings + 2 CRG meetings

#### Approval of **10** IFR procedures

- 2 change management procedure approvals for a PSNA AFIS
- 3 change management procedure approvals for a DSNA
- 4 air safety awareness meetings (Angoulême, Royan, Arcachon, Saucats)
- 254 NOTAM processed
- **356** authorisations for balloon and illuminated lantern releases

#### Security

- security approvals issued or renewed:
   aerodrome operator, 1 authorised officer (out of 9 approvals), 1 known consignor (out of 7 approvals)
- **6** meetings of the operational security committee (COS)
- 1 CLS
- 5 security COPIL, 2 security commissions

#### Public transport oversight

- 4 public airlines holding an AOC:2 aircraft and 2 helicopters (also SPO)
- **24** balloon operators carrying passengers
- 11 CAT audits or inspections o/w 6 balloons + 2 CAT monitoring reviews with the responsible manager
- 73 operational control checks:13 SAFA, 37 SACA, 23 SANA

Helicopter checks on new sites (Biscarrosse aerodrome and Bayonne CHU helipad)

#### Aerial work and general aviation

- **1,199** aerial work companies (o/w 24 Part SPO, **572** stopped 91 with MAP and **1,118** drone operators)
- **10** SPO audits
- **26** documentary checks on drones and 11 **11** checks on actual operations

#### **Non-commercial operators**

5 NCC operators, 1 audit

#### **Administrative authorisations**

- **156** technical opinions (or delegated prefectoral rulings) on "low-level overflight authorisations", including **30** for so-called "high-risk" operations
- **9** "low-flying" authorisations
- 10 "night flight drone exemption" (scenarios S2 and S3)

#### 2021 air displays:

- 21 technical opinions issued
- **5** controlled large-scale events

World Gliding Championship in Guéret

#### Aircrew

#### Training organisations

- 120 active training organisations: 97 DTO, 18 ATO, 5 IULM
- 59 oversight actions for ATO/DTO/IULM
- **2** information sessions for glider DTOs

#### Licence

**4,225** actions performed for cabin crew licences

#### **Theoretical examinations**

- **19** professional pilot sessions (2,031 applicants)
- **54** recreational pilot sessions (2,453 applicants)
- **8** cabin crew sessions (131 applicants)

#### Airworthiness of microlights

**583** ULM documents (CI-LSA)

#### **SSP Light Aviation Activity**

- 150 CRESAG processed (121 aircraft, 19 gliders, 9 ULM,1 helicopter, 0 balloon)
  - 2 DSAC-SNA meetings (CRESAG and FNE monitoring)
- 1 disciplinary committee
- 14 violation cases investigated

#### **Economic regulations**

- 5 approvals of ground handling service providers issued or renewed
- **4** OSP lines underway (Brive-Orly; La Rochelle-Poitiers-Lyon; Limoges-Orly; Limoges-Lyon)
- **5** air carrier operating licences
- 6 COCOECO (La Rochelle, Pau, Bergerac, Bordeaux, Limoges, Biarritz)



## Organisational chart - May 2022















INTERREGIONAL DIRECTORATES





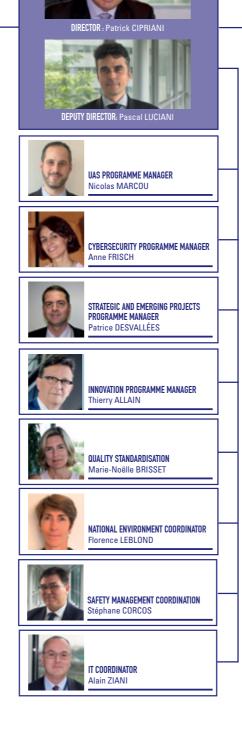








**CENTRAL LEVEL** 





Publication director:
Patrick Cipriani, Director of Civil Aviation Safety

Coordination:

Sylvain de Buyser, technical advisor in charge of communications and public relations

DSAC would like to thank everyone for their contribution to the creation of this report.

Graphic design: BBCréa

**Printing:** Repro SG Farman

Dépôt légal: ISSN 2553-8969 (online) / 2553-5811 (print) Legal submission: ISSN 2553-9000 (online) - 2553-582X (print)

