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Dassault Aviation & the environment



DASSAULT AVIATION

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THE GLOBAL COMPACT

Dassault Aviation signed the United Nations' Global Compact in 2003, recognizing our responsibility and commitment to the environment.

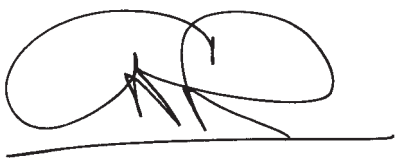
This report illustrates the gradual integration of the Global Compact's principles in our corporate strategy, culture and individual actions, focusing on three main areas:

- the current environmental performance of our Falcon jets, which employ high-tech design and production processes to give us a competitive advantage in fuel consumption, comfort and operating performance.

- building solid foundations for the future, in particular through the Clean Sky and SESAR programs.

- significant improvements by our industrial facilities in terms of consumption of raw materials, the use of solvents and management of industrial risks.

You will see in the following pages that Dassault Aviation does not just talk about the environment, but applies concrete actions that generate tangible results.



Charles Edelstenne
Chairman and Chief Executive Officer

Dassault Aviation, a privately owned international company operating in more than 70 countries, is a major player in civil and military aviation.

Structured to adapt production capacity to market cycles, Dassault Aviation works with and supports a broad network of high-tech companies in France, the rest of Europe, the United States and many other countries around the world.

Dassault Aviation designs **complex airborne systems** and offers proven **expertise in key strategic technologies**. Our design and engineering departments are recognized for their excellence, and call on a **multidisciplinary optimization approach**, plus a very flexible production organization.

We offer our customers a broad range of expertise, from design to operation, driven by the **cross-fertilization** of our civil and military businesses, and supported by solid corporate values.

Dassault Aviation pioneered a global **industrial revolution** through the full-fledged application of product lifecycle management (PLM) methods.

The only company in Europe capable of **assuming prime responsibility for complex airborne systems**.

The **only company in the world** to design and manufacture both **combat and business aircraft**.

A **world leader** in high-end **business aircraft**.

Part of the European research project **Clean Sky**, designed to **reduce the environmental footprint of aircraft**.

Flagship products: **Mirage**, **Rafale**, **Falcon**, **nEURon**.

Signed the **UN's Global Compact** in 2003.

Employees: more than **12,000** - 10 facilities in France, 3 in the United States

More than **7,900 aircraft delivered** since 1947, with over 3,400 still in service

Jet engine test range at Mérignac.

The ground test zone at Mérignac will help meet production objectives, while also improving work and safety conditions and reducing environmental impact.

Dassault Aviation's environmental policy

Environmental issues in aviation

The aviation industry has pledged its participation in the collective effort to protect our environment, particularly given the forecasts for exceptional air traffic growth, with the number of airplanes expected to double between 2000 and 2020, from 18,000 to 36,000. The Advisory Council for Aeronautics Research in Europe (Acare), bringing together all European stakeholders, has set some very ambitious goals in this arena: cutting noise and CO_2 emissions in half, and reducing of nitrogen oxide (NO_x) emissions five-fold. In addition, it aims to reduce the environmental footprint generated by aircraft production and at end of life.

The lifecycle of an aircraft can be divided into four main phases:

- Design and development, culminating in the certification of the aircraft.
- Production, resulting in aircraft ready for delivery.
- Operation, in which the aircraft delivers the expected service, namely carrying passengers and/or freight.
- End-of-life, involving the retirement from service and elimination of the aircraft through recycling, reuse, or, at worst, storage of the constituent components.

Each of these phases has a certain environmental impact:

- Consumption of raw materials, including water, fuel and energy.
- Production of gaseous, liquid or solid releases, as well as disturbances such as noise.

However, the aviation sector actually has a comparatively minor environmental impact, since it accounts for only 2 to 3% of our total production of carbon dioxide (CO_2). For the aviation industry, the environmental problem should be considered in light of the technological progress made in the last forty years. Over this period, new technologies have considerably improved engine efficiency, thus reducing fuel consumption and with it CO_2 emissions, by about 70%. Technological progress has also led to the design of lighter structures, and a 90% decrease in perceived noise. The need for longer range, especially on business aircraft which have more limited fuel capacity, demands a very rigorous approach to aerodynamics, weight budgets and fuel consumption.

By combining technological advances on engines, fuels and airfoils, the future generation of "green" aircraft should be able to meet Acare's objectives, especially when operating in a more efficiently organized airspace.

Dassault Aviation and the environment

Dassault Aviation's commitment to environmental protection has kept pace with general awareness of this issue. In 2003 Dassault Aviation signed the United Nation's Global Compact. We were awarded general ISO 14001 certification in 2007, bolstering our overall approach by integrating environmental aspects in aircraft design, while deploying an improvement plan for production processes. The Grenelle Environment Forum in January 2008 confirmed the decisions made and stimulated further work.

Dassault Aviation meets all regulatory requirements stipulated by relevant authorities, in particular France's defense procurement agency DGA and the civil aviation directorate DGAC. Environmental aspects are therefore integrated right from the design stage.

Dassault Aviation is a partner in various European research programs as well. We coordinate the eco-design technology demonstrator in the vast Clean Sky research program, and we are participating in SESAR (air traffic management) and Alpha-BIRD (alternative fuels). Along with these European programs, Dassault Aviation, with the support of DGAC, is carrying out more specific research concerning our smaller airplanes, designed to reduce structural weight and increase the aerodynamic efficiency of new products. We are also participating in Solar Impulse, a solar aircraft project initiated by Bertrand Piccard of Switzerland.

In line with ISO 14001 certification, all of our operations comply with the following principles:

- compliance with environmental regulations;
- prevention of pollution and technology accidents;
- continuous improvement in the environmental performance of our sites.

Our current priorities are to:

- Pursue our eco-design efforts, especially through our participation in the European program Clean Sky.
- Bolster efforts to develop materials and processes with less environmental impact.
- Consolidate our environmental initiative in military support services, and extend it to civil aircraft.
- Set up the procedures needed to comply with the new regulation REACH (Registration, Evaluation, Authorization and Restriction of Chemicals).
- Pursue environmental risk management actions at our sites.
- Maintain efforts to limit the environmental impact of production facilities (consumption, waste, releases, pollution).
- Promote the integration of environmental protection measures by our subcontractors.
- Continue to develop communications on environmental issues.

Falcon 900LX.

Falcon business jets are recognized as the most fuel-efficient planes in their class, and low fuel consumption also means fewer polluting emissions.

Environmental initiatives

Eco-design and the aircraft lifecycle

The environmental performance of an aircraft has to be considered throughout its lifecycle. Dassault Aviation reflects this holistic vision by designing increasingly environmentally-friendly products, from development to end of life, based on the use of renewable materials, longer aerostructure lifetimes, "green" production processes, etc.

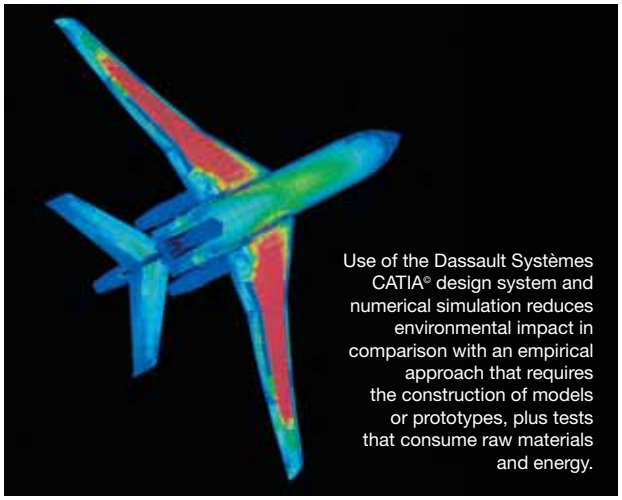
Upcoming laws will spur changes in processes, materials and even the way we manufacture aircraft. Today, it is obvious that manufacturers will have to conduct research on eco-design, and in general develop products based on "ecolonomic" criteria, especially within the scope of the Clean Sky program. Ecolonomics will become a major factor in assessing the performance of a product.

Environmental impact will soon be extended to include military aircraft.

The environmental benefits of high technology

Falcon business jets are recognized as the most fuel-efficient airplanes in their class, with 30% lower fuel consumption for a given level of performance and comfort. This lower fuel consumption naturally means fewer releases of carbon and therefore less pollution. In this case, the financial interests of manufacturers and customers are aligned with environmental interests.

Our fuel consumption advantage is due to more advanced technologies, which are in turn a result of continuous investment in research & development. It has always been very important for Dassault Aviation to carve out a position at the forefront of innovation in structural design and aerodynamics, as well as the development of powerful tools to integrate these elements in high-performance airplanes. The tools used to design sophisticated fighter jets are also used for business jets.



Use of the Dassault Systèmes CATIA© design system and numerical simulation reduces environmental impact in comparison with an empirical approach that requires the construction of models or prototypes, plus tests that consume raw materials and energy.

This technology leadership applies to various areas that have a direct impact on performance:

- During the initial design phase for a new aircraft, Dassault Aviation applies an optimization approach, based on overall tradeoffs, which is more costly during development than a conventional conservative approach because it involves more risks. However, in the end it delivers Falcon jets that are significantly smaller for a given level of comfort and performance, which means lower fuel consumption.
- Because of our expertise in integrated digital flight control, Dassault Aviation develops "intelligent" flight control systems that optimize flight management, saving time and energy to lower fuel consumption.
- The external shape and wing airfoils of Falcon jets are optimized to reduce aerodynamic drag to a minimum. Moving surfaces such as ailerons, flaps, slats, etc. also help optimize an aircraft's aerodynamic characteristics when it is flying at low or high speeds. Current studies are investigating a high-efficiency "intelligent" wing, with large aspect ratio and/or variable camber, including new-generation control surfaces.
- Minimizing the weight of structures and systems is of course a permanent goal for any aircraft. Possible solutions being explored include the optimized use of composite materials, reducing the number of fasteners and lightening internal fixtures, for example eliminating hydraulics in the trend towards "more electric" aircraft.
- Choosing engines with lower bypass ratios, since they offer smaller diameter nacelles to improve aerodynamic performance.

There is also a downside to these lower-bypass-ratio engines of course, namely more noise. To counteract this effect, Dassault Aviation is seeking to reduce the ground acoustic footprint of its business aircraft by reducing noise at the source. For instance, we are working closely with engine manufacturers to achieve significant decreases in engine noise, by improving the bypass system and using advanced acoustic protection systems in the nacelles surrounding jet engines.

Design feedback

Following the development of the Falcon 7X, Dassault Aviation launched a specific initiative to integrate environmental aspects in the new aircraft development process. The main steps in this initiative are as follows:

- Summarizing the requirements and constraints concerning current or desired environmental impact.
- Establishing a report on the environmental performance of the Falcon 7X in relation to its requirements and constraints.
- Drawing up recommendations for future Falcon jets, based on the performance of the Falcon 7X and expected changes in requirements and constraints.

The initiative resulted in a list of 11 recommendations. Following analysis and possible adjustments, these recommendations will be incorporated in the design and development process for upcoming Falcon jets.

The development and certification of any new aircraft also implies an environmental impact, because of manufacturing and, above all, the required tests.
Dassault Aviation has long been an intensive user of digital modeling. On one hand, this reduces development cost and time; on the other, it reduces the environmental impact of an empirical approach that demands a number of models or prototypes, plus tests that require raw materials, energy, fuel, etc. The intensive use of the Dassault Systèmes CATIA® CAD-CAM system, plus numerical modeling applications in all areas of engineering (aerodynamics, mechanical, electrical, etc.), are an integral part of this "virtual aircraft" approach.

For the next generation of aircraft, more accurate simulations of pollution and noise impact are being used right from the preliminary design stage. Design methods are becoming increasingly multidisciplinary to optimize aircraft design as an integrated whole, including aerodynamics, structure, noise and emissions.

Clean Sky

Dassault Aviation is participating in Clean Sky, a European Joint Technology Initiative (JTI) that was launched in Brussels on February 5, 2008. The goal of Clean Sky is to reconcile the requirements of sustainable development and international traffic growth – a major challenge for both the European Union and its aviation industry.

With an overall budget of 1.6 billion euros, the Clean Sky research initiative is designed to develop and test the technologies needed for the "green" aircraft that will enter service towards 2020, along with an environmentally-friendlier air transport industry.

Clean Sky is a vast public-private partnership, encompassing some 86 organizations in 16 countries, with 54 manufacturers, including all leading European aviation players (AgustaWestland, Airbus, Dassault Aviation, EADS CASA, Eurocopter, Fraunhofer Institute, Liebherr, Rolls-Royce, Saab, Safran, Thales, etc.), plus 15 research centers and 17 universities.
The program kicked off in 2008 and will last seven years, with tests of the first demonstrators in 2013-2014. Clean Sky is organized around six Integrated Technology Demonstrators (ITD), leading to the construction of ground or flight demonstrators: Smart Fixed-Wing Aircraft (SFWA), Green Regional Aircraft, Green Rotorcraft, Sustainable and Green Engines, Green Systems for Operation, Eco-Design.

Dassault Aviation is representing the business aviation sector within Clean Sky. It plays a major role alongside Airbus in the Smart Fixed-Wing Aircraft demonstrator, working on the future wing design and reducing the engines' acoustic footprint on the ground.

Along with the Fraunhofer Institute, a German research organization, Dassault Aviation is also responsible for the Eco-Design ITD. This demonstrator has two main objectives: to reduce environmental impact during aircraft production and at end of life, and to develop cleaner onboard energy systems (the "all electric" aircraft, reducing onboard energy consumption).

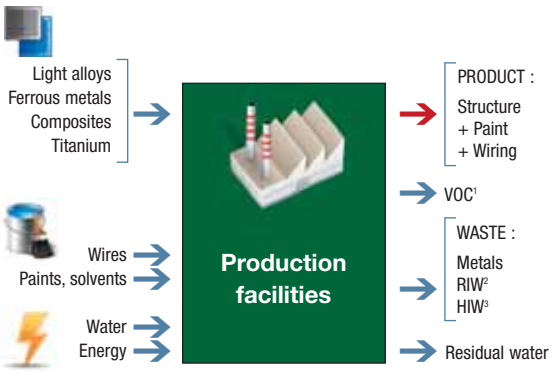
Like the other aircraft manufacturers, Dassault Aviation will help analyze the gains generated by Clean Sky, within the scope of the Technology Evaluator using simulated air traffic scenarios. The environmental performance of conceptual virtual aircraft, combining the technologies under study in all Integrated Technology Demonstrators, will be compared to the performance of current aircraft, to provide an overall assessment of the expected benefits of Clean Sky towards 2020.
Clean Sky aims to validate certain technological concepts using demonstrators, contributing to a 30% reduction in CO_2 emissions. At the same time, it is expected to contribute to half of the noise reduction objective.
In all cases, Clean Sky will account for a significant and structural part of Dassault Aviation's civil aviation Research & Technology efforts in the period 2010-2015.
It will be a critical building block in developing technologies and validating potential concepts for Falcon business jets that will take to the skies starting in about 2017.

Production

Environmental impact

Aircraft production is the most complex part of the lifecycle in terms of environmental impact. It starts with the mining of raw materials and ends with the final assembly of the airplane and final product tests before delivery to the customer.
Production can be broken down into thousands of elementary operations, with an environmental impact that is either negative (consumption of energy, raw materials, etc.) or positive (recycling of metal chips, for instance).

Production inflow and waste generated during airframe manufacturing



[1] VOC = Volatile Organic Compounds
[2] RIW = Routine Industrial Waste (paper, cardboard, plastic, etc.)
[3] HIW = Hazardous Industrial Waste (solvents, dirty rags, oil, etc.)

Activities at Dassault Aviation plants include surface preparation and treatment (using degreasing products, or acids and bases for chemical baths), painting and mechanical processes. Ground and flight tests are carried out at various sites, mainly Istres and Mérignac. Dassault Aviation is working on improvements to its environmental performance during the production process.
All sites were certified to ISO 14001 from 2003 to 2005, and in 2007 the company as a whole received this certification.

We also work closely with our suppliers:

- Our general terms and conditions for purchase include clauses stipulating environmental protection and preventing the risk of environmental impact.
- The performance of industrial subcontractors that may have an impact on the environment is assessed using an environmental questionnaire. Environmental performance is also one of the criteria used in selecting these subcontractors, who are actively

Falcon 7X.
On this plane's landing gear, the high-strength steels with conventional surface treatment have been replaced by steels enabling the use of surface treatments without heavy metals (cadmium and chrome).

encouraged to earn ISO 14001 certification or its equivalent.

- In more concrete terms, here are some of our achievements in environmental protection:
- Lower consumption of natural resources.
- More effective risk management at industrial facilities.
- Virtually total elimination of chlorinated solvents at production sites.
- Qualification of a civil aircraft paint with low solvent content and without chrome VI.
- Integration of the REACH regulation as a major factor in our environmental initiative.

A network of environmental managers

In 2001, already focused on improving environmental practices, Dassault Aviation launched measures to improve our performance in the production process.
We have deployed all resources needed to implement our environmental policy. For example, each production or administrative facility has named an environmental manager, working with correspondents in the field.

Hall Lindbergh in Mérignac.
Between 2003 and 2005,
all facilities were certified to ISO 14001.

Dassault Aviation environmental managers are responsible for the following:

- Apply an environmental management system in line with the ISO 14001 standard.
- Monitor and analyze regulatory requirements applicable to his or her facility.
- Monitor and identify environmental aspects, and determine their degree of impact.
- Control, manage and simulate dangerous situations.
- Propose and implement environmental plans to reduce impact, non-conformities and environmental risks.
- Establish and revise environmental objectives.
- Foster good environmental practices and provide relevant information on site, and with suppliers, subcontractors and service providers.

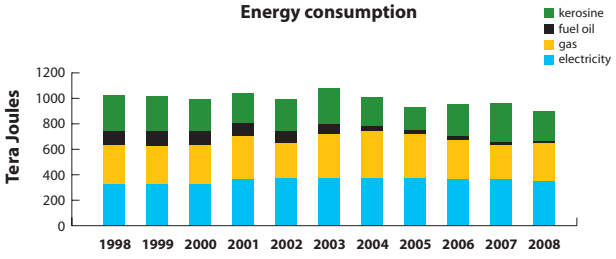
Environmental performance at our plants

Preserving natural resources

Energy consumption

In addition to the jet fuel used for flight testing, Dassault Aviation makes use of gas (46%), electricity (55%) and liquid fuels (1%) to meet its energy needs. These activities generate releases of carbon dioxide (CO_2), sulfur dioxide (SO_2) and nitrogen oxide (NO_x).

There is a trend in energy consumption towards "cleaner" energies, resulting in a decrease in NO_x releases and the virtual disappearance of SO_2 releases, except for those produced in flight.



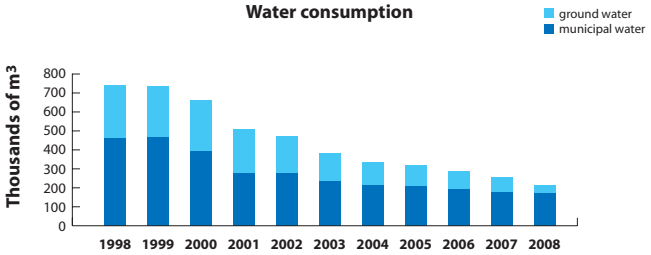
Shipment of aerostructures

The transportation of structural parts between the manufacturing and assembly sites consumes both time and energy.

Various improvements are occasionally implemented. For instance, a special trailer was designed and built for the Falcon 7X, to transport both fuselage sections in a single trip, instead of one at a time.

Water consumption

The water used at our plants comes from both the municipal network and groundwater pumping. It is used in production (primarily surface treatment), food services, watering green areas and restrooms. Dassault Aviation facilities have significantly decreased water consumption through more efficient management.



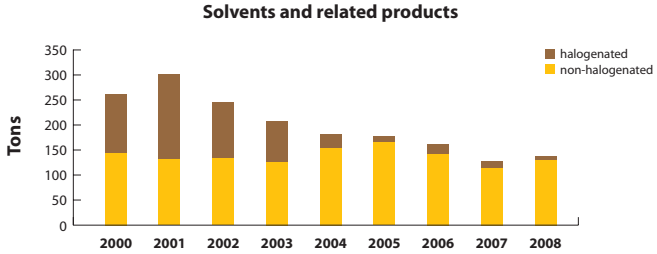
Reducting polluting emissions

Releases of volatile organic compounds

Dassault Aviation plants release volatile organic compounds (VOC) used for degreasing processes and painting, in channeled (via ducts) or diffuse (into the atmosphere) fashion. These emissions have been reduced by about 50% since 2000. Furthermore, the share of halogenated solvents has also been significantly reduced.

Because of upcoming restrictions on the use of substances containing metal, such as chrome, we have already developed the use of a chromate-free external and low VOC paint as part of the Falcon 7X program.

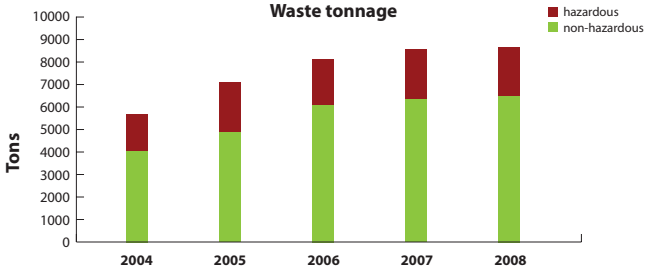
We have also undertaken work on replacing internal structural protective paints with water-soluble paints with low VOC content.



Waste

Dassault Aviation plants produce two main types of waste: routine industrial wastes, such as paper, cardboard, metals, etc., and hazardous industrial waste, such as oil, metallic hydroxide sludge, solvents, soiled packaging, etc.

Since 2005, the amount of waste has increased because of the increase in Falcon production. Metallic waste, accounting for about 44% of the total tonnage, is recycled.



Preventing accidental pollution

The main releases of industrial wastewater come from surface treatment activities. To prevent the release of toxic metals into the environment, and to make sure they comply with regulations, all production facilities concerned are fitted with detoxification stations.

Dassault Aviation plants have set up hydrocarbon separators and liquid waste disposal zones to prevent any pollution resulting from waste disposal accidents or fires, and they have also installed containment basins for water used in fire-fighting.

In 2006, a prefectoral decree mandated an impact analysis at the Biarritz-Anglet plant due to past pollution of the groundwater (chrome and halogenated solvents), plus a study of its treatment. The company therefore carried out an assessment of the potential risks due to this pollution. It set up a treatment process in compliance with a prefectoral degree issued in June 2007. The treatment and monitoring installation was designed and commissioned in early December 2007, and has since proven effective in groundwater pollution cleanup.

Little Rock painting facility.

Dassault Aviation anticipated new regulations by developing a chromate-free external paint with low VOC content.

Argenteuil production line.

The plant set up selective waste sorting in 2004 using a three-bin system. It now has 40 waste sorting stations and continues to deploy more. Waste is sorted into two main types: routine industrial waste (RIW), such as paper, cardboard, metals, etc., and hazardous industrial waste (HIW), such as oil, metallic hydroxide sludge, solvents, soiled packaging, etc.

Climb at cruise speed.

Right from takeoff, if an airplane constantly flies at cruise speed, it can cut fuel consumption, and therefore carbon emissions, by up to 5%.

Looking ahead

Dassault Aviation supports the 2020 objectives established by the Advisory Council for Aeronautics Research in Europe (Acare). All stakeholders have agreed that it is necessary to reduce both CO_2 emissions and perceived ground noise by 50%; the latter figure corresponds to a 20 decibel decrease in all takeoff and landing operations.

SESAR, a European research program geared to future air travel

Both Europe and the United States have launched major programs to modernize air traffic management, named SESAR and NextGen, respectively, and keep pace with fast growing traffic. These programs have a very positive ecological impact as well, because improving operations by optimizing routes and flightpaths will obviously help reduce both emissions and noise.

The improvements in air traffic management (ATM) will help reduce CO_2 emissions by about 10% based on air traffic solutions developed within the scope of the Sesar program.
SESAR (Single European Sky ATM Research) is based on the wide-spread application of modern satellite navigation systems to support more precise approach and takeoff procedures, which will help cut noise and save fuel.

As a representative of the European Business Aviation Association (EBAA), Dassault Aviation is supporting certain proposals to reduce environmental impact within the scope of SESAR:

- climb at cruise speed

During the takeoff phase, the aircraft continuously flies at cruise speed, where aerodynamics and engines function most efficiently. This could decrease fuel consumption, and therefore emissions, by up to 5% ;

- continuous descent

A continuous descent from the beginning of the descent phase to touchdown, instead of using a stair-step flightpath. This method will improve ecological performance and above all reduce perceived ground noise ;

- specific approach procedures

The development of specific approach procedures is being considered to reduce perceived noise on the ground. Because of the performance offered by business aircraft, especially steep slope approaches, they could pioneer the development of these more ecological approaches.

Alfa-BIRD, an alternative fuels project

With fuel prices steadily rising and given the impact of fossil fuels on climate change, the air transport industry has to consider alternatives to the use of conventional jet fuel. However, the application of biofuels and synthetic fuels is a major challenge, given the conditions of use and severe restrictions involved.
Dassault Aviation, which already designs very fuel-efficient airplanes, supports this effort by participating in several dedicated studies.
For instance, the general aim of the European project Alfa-BIRD is the technical development and economic assessment of alternative fuels for aviation. It covers a number of areas, including:

- study of possible alternative fuels for use in aviation;
- chemical analysis of the "best" fuel;
- improved formulation of biofuels;
- new injection systems;
- modeling of injection and combustion;
- compatibility with aircraft fuel systems;
- production of new fuels.

The participants in this program represent all disciplines. Alongside a dozen research organizations are the producers of fuels (Shell, Sasol), engines (Snecma, Rolls-Royce) and aircraft (Airbus, Dassault Aviation and Avio Spa).
Dassault Aviation represents the business aircraft segment, and is focusing on "compatibility with fuel systems".

Alfa-BIRD is a four-year project, and was chosen in the first call for projects in the 7th European R&D Framework Program.

Artist's impression of a future Falcon.
Environmental concerns are already an integral part of the design and development of next-generation business aircraft.

HISAC

HISAC, the Environmentally Friendly High Speed Aircraft program, is a first step in evaluating the feasibility of a small supersonic aircraft, without compromising on upcoming environmental standards: not only pollution, but also noise and the sonic boom.
This project was selected by the European Commission as part of the 6th R&D Framework Program in September 2004, and launched in the first quarter of 2005. HISAC includes 37 partners from 13 countries.

Dassault Aviation is in charge of coordinating all partners in the program. We were chosen for two main reasons:

- Technological expertise, experience, and world-class research in supersonic flight, concerning both combat and business aircraft.
- Ability to coordinate strategic international partnerships, such as the nEUROn combat drone program, for which Dassault Aviation is prime contractor.

These capabilities are key to determining feasible performance specifications. Addressing pollution issues means we have to work on engine fuel consumption, and therefore accelerate the efforts already made by leading engine manufacturers. However, the sonic boom and noise during takeoff are less familiar, and there is still much to be done in these two critical areas.

HISAC is keeping all options open in its search for solutions. It has therefore opted for a multidisciplinary optimization approach, with three teams - Dassault Aviation, Sukhoi and Alenia - working on three different aircraft configurations.

HISAC will culminate in a feasibility study that should lead to an industrial program, provided that the identified critical technologies are accessible. At this point, they could probably be shared with American partners, who are currently working on similar projects.

CONCLUSION

Dassault Aviation is fully committed to improving the environmental performance of the air transport industry, as defined by the Grenelle Environment Forum and targeted by all stakeholders in France and throughout Europe. Various actions have been under way for several years, and future paths to progress are being defined.

"A beautiful airplane flies beautifully." This well-known saying of Marcel Dassault was in fact ahead of its time, ecologically speaking. Dassault Aviation has always set itself apart by seeking maximum efficiency in designing its latest airplanes. Because of their aerodynamic qualities induced by harmonious shapes, Falcon business jets are lighter, more compact and more efficient, giving them the lowest fuel consumption in their class. Reduced fuel consumption translates into lower emissions, and customers are increasingly sensitive to this feature.

One reason for this distinctive difference is Dassault Aviation's long experience in designing and building combat aircraft. It was always very important for Dassault Aviation to be at the cutting edge of structural and aerodynamic design, as well as developing the tools that make these factors an integral part of any high-performance aircraft.

Dassault Aviation has long been an intensive user of digital modeling. On one hand, this reduces development cost and time; on the other, it reduces the environmental impact of an empirical approach that demands a number of models or prototypes, plus tests that require raw materials, energy, fuel, etc. The intensive use of numerical modeling tools in all areas of engineering (aerodynamics, mechanical, electrical, etc.) is an integral part of this "virtual aircraft" approach.

Dassault Aviation focuses on improving the environmental performance of its production facilities. Between 2003 and 2005 all sites were certified ISO 14001. A network of environmental correspondents supports plant management to apply recommendations, analyses and action plans in the field. Virtually all Dassault Aviation personnel plus staff from outside service providers who work on these sites, in activities with an environmental impact, are very aware of these issues and their importance.

The European research project Clean Sky, partly funded by the company itself, seeks to accelerate the development of the breakthrough technologies needed to build a truly "green" aircraft in the next ten or fifteen years. As the representative of the business aviation market in Clean Sky, Dassault Aviation is taking a significant role alongside Airbus in the design of new wings and fuselage configurations, in order to reduce the aircraft's acoustic footprint. With the Fraunhofer research institute of Germany, Dassault Aviation is also co-director of the eco-design initiative, dedicated to reducing environmental impact during production, maintenance and at end-of-life, and to "clean" onboard energy systems (the "all electric" aircraft). Dassault Aviation will also help analyze the gains generated by Clean Sky for business aircraft, within the scope of the Technology Evaluator using simulated air traffic scenarios.

For Dassault Aviation, environmental protection is a true global challenge, requiring a collective effort. In the near future, Dassault Aviation will pursue and develop its actions so that both operations and products help protect our planet for the generations to come.

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