

# A350 XWB

## Delivered on time



 **AEROLIA**  
BETTER FASTER GREENER

NOSE KIT  
A350  
N° 01

figure  
**220**  
recruitments  
in 2011

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# Bravo and Thank you!

Hello,

The end of this summer has been marked by the key step that the delivery of the first A350 XWB nose fuselage represents both for Aerolia and its customer Airbus.

We were chosen because of our skills with nose fuselages for all the aircraft in the Airbus family, as well as with their forward fuselage sections; however, despite our solid reputation we nevertheless had to "convert the try" in our new Aerolia organisation...

This fuselage subassembly - the emblematic bearer of our know-how with metallic and composite materials - stands here in front of us today, the illustration of what a team can do when everyone works together focused on the same objective.

Conceived by our Design Office, the three component parts of this nose fuselage constitute major assets for us - assets that were made possible by the skills of our Aerolia teams and our international partners on this programme.

And it is these assets that make the difference on the market.

Our magazine will come back to this important step shortly, but I could not open this issue without saluting here the work of the team and the excellence of the functions involved, from Engineering to Production, Programmes to Purchasing, not to mention all the staff in our Directorates.

Indeed, it is this team work that has allowed us to:

- make these double-curve windshield frames, these nine mechanically milled panels and install nearly 12,000 rivets in the metallic Section 11.
- provide appropriate solutions for the very stringent fatigue requirements relative to our Section 12 composite subassemblies and the lower shell alike.



The ceremony held on 21 September in Méaulte provided the opportunity to mark this important milestone and map out this Programme's ambitious perspectives with the forthcoming delivery of the static test airframe.

To conclude, I would like to invite you all to read the articles in this issue dedicated to innovation. They illustrate how important it is for us - both on the individual and collective levels - to anticipate our Customers' needs.

Together, let's harness our ambitions to achieve our goals.

Thank you and Bravo, each and every one of you.

  
 Christian Cornille  
 CEO of Aerolia

Our expertise

# At the cutting edge of innovation

R&T (Research & Technology) is key for Aerolia. Being recognised as a Super Tier One supplier on the aerostructures market depends on our capacity not only to accompany our customers regarding the technologies of the future, but also to propose innovative solutions to them.

## A trans-functional organisation



The Operations and Strategy R&T teams in front of a flexible assembly prototype cell.

The Design Office and Operations work hand in hand on innovative projects through their respective R&T entities. It is not possible to dissociate considerations regarding the product, its materials and design principles

from those relative to the industrial tool in terms of processes and technologies. For each subject there is an associated multi-functional team from these two Directorates and the responsibility falls to one or the other, according

to the type of project. *“If the technological breakthrough targets materials,”* explained Pierre Magnin, Head of R&T in the Design Office, *“the Project Leader would be chosen from the Design Office engineers. If the innovation concerns the assembly process then the Project Leader would be a specialist in robotics developments from Operations.”*

Furthermore, it is the responsibility of the Strategy Directorate to ensure that the projects decided are in line with the themes of Aerolia’s strategy: eco-design (for greener products), weight reduction, lower design and certification costs, cockpit ergonomics. *“Strategy is also responsible for defining and controlling budgets, finding financing and developing and finalising partnerships”*, added Jean-Noël Dewas, Head of R&T in the Strategy Directorate.

## Significant ramp-up

*“R&T at Aerolia is developing fast – from €2.2 million in 2010, the R&T budget has increased to 3.4 million this year and should more than double in 2012.*

*The teams have been reinforced too, with nearly 40 people at Toulouse, Saint-Nazaire and Méaulte. Recruitment is continuing at a sustained pace, taking care to keep a good balance between internal and external resources.”*

## Networking

The effectiveness of an industrial company’s R&T initiative is closely linked to its capacity to create privileged links with academic and industrial partners, and to develop collaborative projects with them.

While EADS IW (Innovation Works) is a privileged partner associated by a convention, Aerolia is working to develop a wider network of

partners. For example, Aerolia is involved in the Toulouse and Nantes IRTs (Technological Research Institutes), specialised respectively in innovative materials, and composite, metallic and hybrid assembly processes.

Created by the State within the framework of the *“Grand Emprunt”* (big loan), the mission of the IRTs is to federate skills and

resources between industry, SMEs and university laboratories.

*“So”* added Claude Castillon, Aerolia’s Head of Industrial Policy, *“The Technocampus technological platform in Nantes and the Industrielab platform in Méaulte (to open in 2014) will provide facilities and industrial resources that we do not have today.”*

## Key projects for the aeronautical industry

Aerolia’s two strategic lines of action in the area of R&T consist in accompanying our historical customer, Airbus, and winning new customers by proposing innovative and competitive solutions.

*“It takes time to set up a project involving a financial participation from public institutions,”* explained Pierre Magnin, *“it can easily take a year between the first ideas, negotiations with partners, obtaining a competitiveness cluster label for the project (from Aerospace Valley in Midi Pyrénées & Aquitaine or EMC2 in Pays de la Loire) and finally the green light from the institutions that provide the funding.”* Generally, accomplishing a project is a medium-term affair, that’s to say between two and four years.

Aerolia is a stakeholder in two major aeronautical R&T programmes co-financed by the French State. In the framework



The Engineering R&T team.

of CORAC (Council for Civil Aeronautical Research) Aerolia is leader for the *“composite landing gear compartment”* demonstrator, in which Latécoère and Daher-Socata are partners and will be co-leader with Airbus in 2013 for the future *“all composite nose fuselage”* demonstrator.

The second project, called OFFSET (Optimized Front Fuselage Structure with Enhanced Technology), concerns

the Business Jet and Regional Aircraft segments with a diameter less than 4m and is preparing Aerolia’s future in the assembly of metallic nose fuselage sections. It integrates an original fuselage panel cutting method and new technologies organised around flexible automated units.

Aerolia is also conducting more confidential research projects, completely financed out of its own funds or in cooperation with other industrial groups.

## Committed to the future

As summed up by Claude Castillon, *“the innovations developed will have an impact on our industrial landscape. As our R&T initiative is an integral part of our Industrial Policy – just like our investments and site optimisation plans – it must be relevant: tomorrow’s jobs depend on it!”*

# Dassault Aviation - Aerolia First Design Cooperation

Just one year ago, in November 2010, the first engineer from the Aerolia Design Office joined the engineering plateau for the new Dassault Aviation Falcon project. A symbolic step that marked the beginning of a productive experience for both companies.

It was with excitement and a certain curiosity in November 2010 that Dassault Aviation, one of the world leaders in business and military aircraft, and Aerolia, French No. 1 in fuselage assembly aerostructures, began a privileged design engineering relationship.

*"After contacts during Aerolia's first 18 months of existence, we knew each other well and saw that to proceed further and to build a relationship of mutual trust required a practical collaboration"* indicated Dominique Salliot, VP Head of Programmes and Sales.

The natural choice of subject was the nose fuselage, where Aerolia's expertise was very interesting and also permitted easy integration in Dassault Aviation's prestigious Design Office.

*"This collaboration is a marvellous opportunity to explore new ways of working*



Stéphane Vidal (in the centre) and Anthony Labonne (5<sup>th</sup> from the left) have been working alongside the Dassault Aviation design teams at Saint-Cloud, since November 2010.

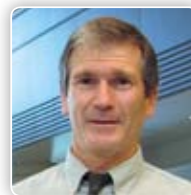
*and discuss work methods and we are very pleased to offer our services to perfect our mutual skills in aerostructures design."*

It was therefore at Saint-Cloud, where system design and development activities are found, that Stéphane Vidal, Design Officer, joined the plateau for the Dassault Aviation new business aircraft programme.

Stéphane Vidal : *"This project is for me an excellent opportunity to fulfil a desire – to work alongside*

*one of the leading figures in the French aviation industry. And this first year spent in the company has proved that I made the right decision. I would like to thank all the teams for their welcome and for the responsibilities I have been given."*

This first positive experience has expanded the cooperation project. Last June Anthony Labonne, R&T Designer, also joined the plateau and by December there will be 1 or 2 additional "Aerolians" at Saint-Cloud.



Laurent Barnier, Head of Airframe Engineering Department at Dassault Aviation, kindly answered some questions for Aerolia Magazine.

**How do you see the collaboration between Dassault Aviation and Aerolia on this design engineering project?**

*Since November 2010, Aerolia has played an important part in the design progress made in our new business jet programme and we are very satisfied with the contribution of Stéphane Vidal, who I would like to thank sincerely for all his work. Aerolia and Dassault Aviation share a very high level of design culture and this cooperation is the driver of a mutual enrichment for two major actors of the French aeronautical industry.*

**At the end of the year, two additional Aerolians will be joining you at Saint-Cloud. Can you tell us more about this?**

*At Dassault Aviation we have made the choice to develop skills in small teams and for this reason we think it would be a shame to let a skill such as Stéphane's work alone. This adventure is a real success for both of us and so we have decided to empower a work group of Aerolia engineers with the design of a nose fuselage subassembly.*

# First project crosses the finishing line

The "Develop the Management System" group has just closed the first Aerolia 2012 project according to plan. Overview with the project's Sponsor, Philippe Marre – Corporate Secretary, VP Head of Strategy & Communication.



*"En savoir +" is a leaflet recalling all tools and training sessions developed for managers.*

**How do you think this initiative will continue over time?**

*First of all, continuing means making sure that the project is functioning properly. That's why we have developed indicators to measure the degree with which the managers have made this project their own, and its results.*

*Indeed it is important that the "management community" should be perceived as a coherent team that contributes to satisfying not only all our staff, but also our customers and shareholders.*

**How is the closure of this project being materialised?**

*From the Team Leader to the Director, this work has been the fruit of a multi-department, multi-function, multi-mission and multi-site association. The broad range of participants in this group has made it possible for us to bring this project to a close on time, the aim being to provide the means for streamlining management practices.*

*Tools and training courses – organised around four topics – are being proposed to all the managers. Furthermore, they are presented in our new "En savoir +" brochure which has been issued at this time.*

*Besides this initiative, we are also working on an awareness-raising campaign aiming to present the content of the available material in detail, and mark the closing of the project.*

*This responsible attitude is quite simply essential if we are to meet Aerolia's strategic and financial targets, and thus contribute to the efficient running of the company.*

*The managers must now make it their responsibility to see that the best possible use is made of the proposed formative tools and training courses.*

**What benefits do you think this project will bring?**

*Based on personal development, "Develop the Management System" aims to place Aerolia in the best situation for ensuring collective success. A corporate culture adopted and shared by all will be a key factor contributing to the future successes of our company.*

Special Paris Air Show

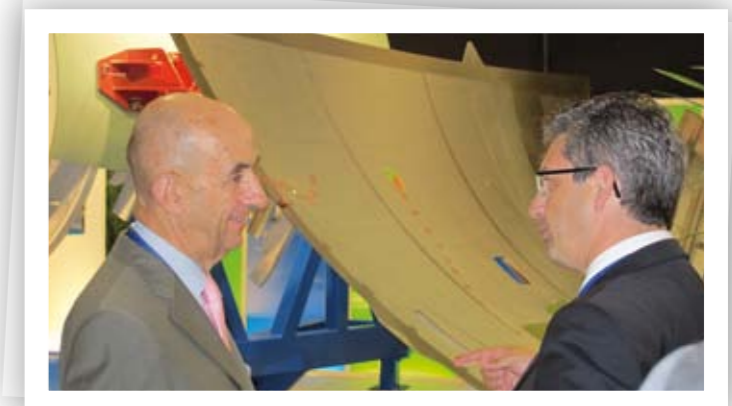
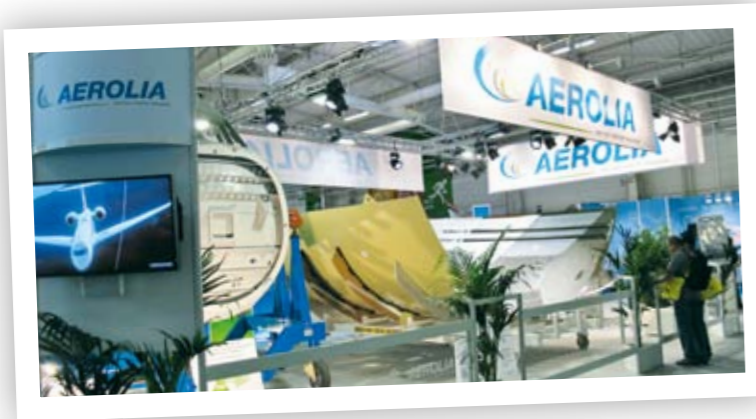
# 20 to 26 June 2011, Memories, Memories...

Aerolia's know-how in the area of design and production is now acknowledged by all the players in the world of aeronautics, as the success of its stand goes to show at the time of its second participation in the Paris Airshow at Le Bourget. Photo report...

A nod and wink from the Lycée Potez in Méaulte in front of the Aerolia stand.



Gathered around the mock-up, the eight partners in the Tunisian Aeronautics Park signed a long-term partnership contract with Aerolia.



Louis Gallois, EADS CEO, meeting with Christian Cornille, Aerolia CEO.



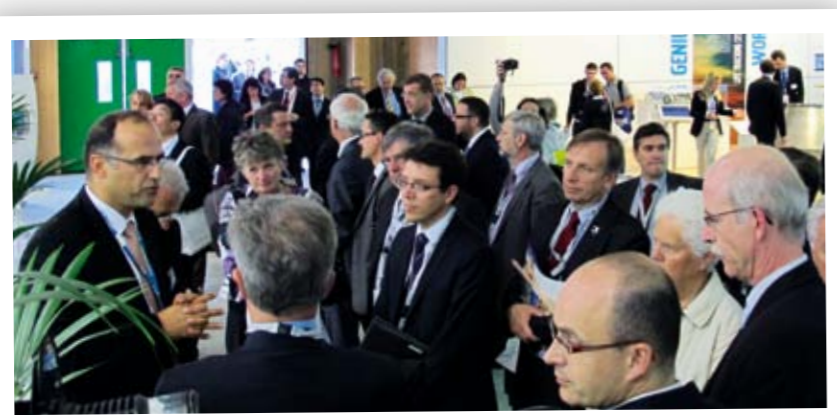
Nathalie Kosciusko-Morizet, Minister of Ecology, Sustainable Development, Transport and Housing visiting the stand.



The President of the Picardie Regional Council, Claude Gewerc accompanied by Christian Cornille, Aerolia's CEO



Martin Malvy, President of the Midi-Pyrénées Regional Council visiting the stand.



The officials from Pays de la Loire and the EMC2 Pole visited Aerolia stand.



Dominique Salliot, VP Head of Programmes and Sales, and Christian Cornille met a large number of commercial prospects during an evening on the Seine.



Business life

# Re-thinking the Design Office processes

In mid-March 2011, Aerolia embarked on a far-reaching project aiming to overhaul the Design Office's processes. This initiative is presented and explained below by Juergen Koehler, Head of Design Quality; François Combes, Head of the Quality-Safety-Environment Management System; and Philippe Stoltz, VP Head of Engineering.

**What exactly do you mean by re-thinking the Design Office processes?**

**Philippe Stoltz :** As the result of the subsidiarisation of Airbus' nose fuselage activities, Aerolia has inherited a complete system of engineering processes. So, with this initiative, the challenge for us is simple: we must re-design the way it works to adapt it to the company's size and ambitions.

**What was the departure point for this initiative?**

**François Combes :** In 2010, Aerolia chose to entrust its EN9100 and ISO 14001 certifications to AFNOR Certification, which set the company a new challenge: the in-depth improvement of all its processes, in particular those at the Design Office.

**Philippe Stoltz :** In March 2011, the Design Office therefore launched its first projects. And the teams have been working hard since then to create a way of functioning suited to the company's size and its strategy of commercial diversification.



65 people joined together in a team work.

**In the six months since you launched this initiative, what results have you obtained?**

**Juergen Koehler :** Our first success is above all the way we have worked as a team! Around a joint, shared approach, there have been no less than 65 people involved in the Design Office, Operations, Procurement and Quality who have strived to draw up a new map of our technical processes.

This is organised around four key themes:

1. Developing new concepts and technologies
2. Designing, defining and industrialising an aerostructure or a systems installation
3. Certification Support
4. Qualifying materials and processes

We have also made the most of our experience to reduce the amount of documentation by nearly 90 %. Out of the 251 procedural documents that existed when Aerolia was set up, we only have 26 today. The company now has a sufficient level of documentation, which will make it easier for the teams to appropriate, learn and master it.

**And what about the future?**

**François Combes :** Spurred on by Christian Cornille, Aerolia's CEO, the Design Office teams are setting about obtaining Design Organisation Approval (DOA) working directly with EASA. This DOA will enrich our palette of skills, and help us to win new contracts.

Business life

# A few words from an expat

After having spent nine years at Procurement – which saw him rise to the Head of Aerolia General Purchasing – Thomas D'halluin, aged 31, has decided to take the leap and embark on an international career. He is now in charge of the Quality & Supply Chain Support team in Asia (China and Korea).



Thomas d'Halluin during the inauguration of AVIC CCAC industrial park.

**Aerolia Magazine : What satisfactions have you had and what difficulties have you been faced with?**

**Thomas d'Halluin :** After just a few months' expatriation, it's still a bit early to review the situation but the satisfaction with having got over the unsettling hurdle of the first few weeks and quickly being able to get to grips with the subjects and challenges of the moment are what satisfy me most.

Life in Asia is the reflection of its growth. Take the millions of people all motivated by a desire to contribute to growth, add an impressive dose of discipline and a great capacity for hard work, all bathed in a meticulous organisation, masked by a permanent sense of agitation and disorder. Welcome to Asia !

The cultural gap makes it difficult – but exciting – to work collaboratively. The barriers are high, and sometimes exhausting, so day by day you have to put yourself into question, fly in the face of accepted ideas, accept our differences and develop your ability to listen. A great lesson for life, whether personal or professional.

The distance, from every angle, is of course the main difficulty.

**Aerolia Magazine : What message do you have for anyone keen to move abroad?**

**Thomas d'Halluin :** It's often when you move outside your comfort zone and change your habits that the essential things spring to mind. In that sense, expatriation is extremely revealing and can provide a unique lifetime experience.

If it's something you really want deep down, and you can feel the support of the people around you, then don't hesitate a moment: place your skills and courage at the service of the international challenges that Aerolia has to offer!

**Aerolia Magazine: What does your new mission consist of exactly?**

**Thomas d'Halluin :** Our role is to see that Aerolia controls its Asian supply chain on a day-to-day basis, anticipates any disruptions related to the distance, whether geographical or cultural, and remains at the vanguard of its major international challenges. Management of our heritage also allows us to build the future, particularly with the A350, and with Korea, a new land of cooperation for Aerolia.

**Aerolia Magazine : What is at stake for Aerolia?**

**Thomas d'Halluin :** To allow Aerolia to fulfil its 2020 vision, it is essential that it should extend its credibility and foundations beyond its original boundaries. Taking up this challenge, particularly concerning Asia, by demonstrating the qualities of an enterprising, agile and high-performance Aerolia on the industrial and economic levels, that's what lies at the heart of my motivation.

# An eco-responsible attitude

“Greener”, one of the 3 pillars of our corporate culture (Better, Faster, Greener) is not just a marketing term. Aerolia fully endorses the aviation community’s growing interest in environmental matters. To further increase our personnel’s awareness, the Méaulte, Saint-Nazaire and Toulouse establishments organised an “Environment Day” on June 16<sup>th</sup>.



About the importance of waste sorting.

This Environment Day – aimed at both personnel and subcontractors – was first and foremost an opportunity to publicise the concrete actions already carried out by Aerolia in this domain. Employees were offered guided tours of waste collection sites and presentations of various projects aimed at saving water and energy, and reducing the amount of waste disposed of in the atmosphere and water.

The objective was to promote a genuine commitment to maintaining good practices, because environmental protection depends on the involvement of each individual. Collective actions, however small, and the daily efforts of individuals, will enable us to improve our overall effectiveness.

The messages conveyed throughout the day go far beyond the framework of the company itself. The aim was to reinforce each individual’s commitment to environmental protection, via various media such as films and photo exhibitions (Brière, sustainable

development), and to demonstrate that an environmentally responsible lifestyle is not simply about imposing constraints. What is good for the environment can also be good for your finances, as visitors to the ADEME stands learned, when offered advice on how to reduce their energy bills.

More generally, an environmentally responsible approach generates an improvement in our quality of life. This is the message underlying the eco-responsible meals served in the company restaurants during the Environment Day, as well as the other activities on offer: sampling and sales of organic produce, stands promoting bikes, electric cars and dry-cleaning for cars, etc. Several surveys were also conducted throughout the day.

Finally, the many employees who responded favourably to the invitation of the Environment department were offered the chance to win a range of prizes, by taking part in tombolas and quizzes.