



## IN MEMORY OF JEAN DÉLERY 60 years of service to aerodynamics



**RÉPUBLIQUE  
FRANÇAISE**

*Liberté  
Égalité  
Fraternité*

**ONERA**

THE FRENCH AEROSPACE LAB

**3AF**

Association Aéronautique  
et Astronautique de France

1982

**QUATRE PRIX  
de L'ACADEMIE DES SCIENCES  
DECERNES à des INGENIEURS  
de L'OFFICE**



M. Jean Délerly (OA) a reçu le prix "Montyon" pour l'ensemble de ses travaux sur les écoulements décollés turbulents.

Jean Délerly had been awarded the Monthion Prize from the Academy of Sciences for his entire body of work on turbulent detached flows. He was Knight of the National Order of Merit, Knight of the Palmes Académiques, emeritus director of research at ONERA, emeritus member of 3AF, and Associate Fellow of the American Institute of Aeronautics and Astronautics (AIAA) after receiving the prestigious Aerodynamics Award from the AIAA in 2004.

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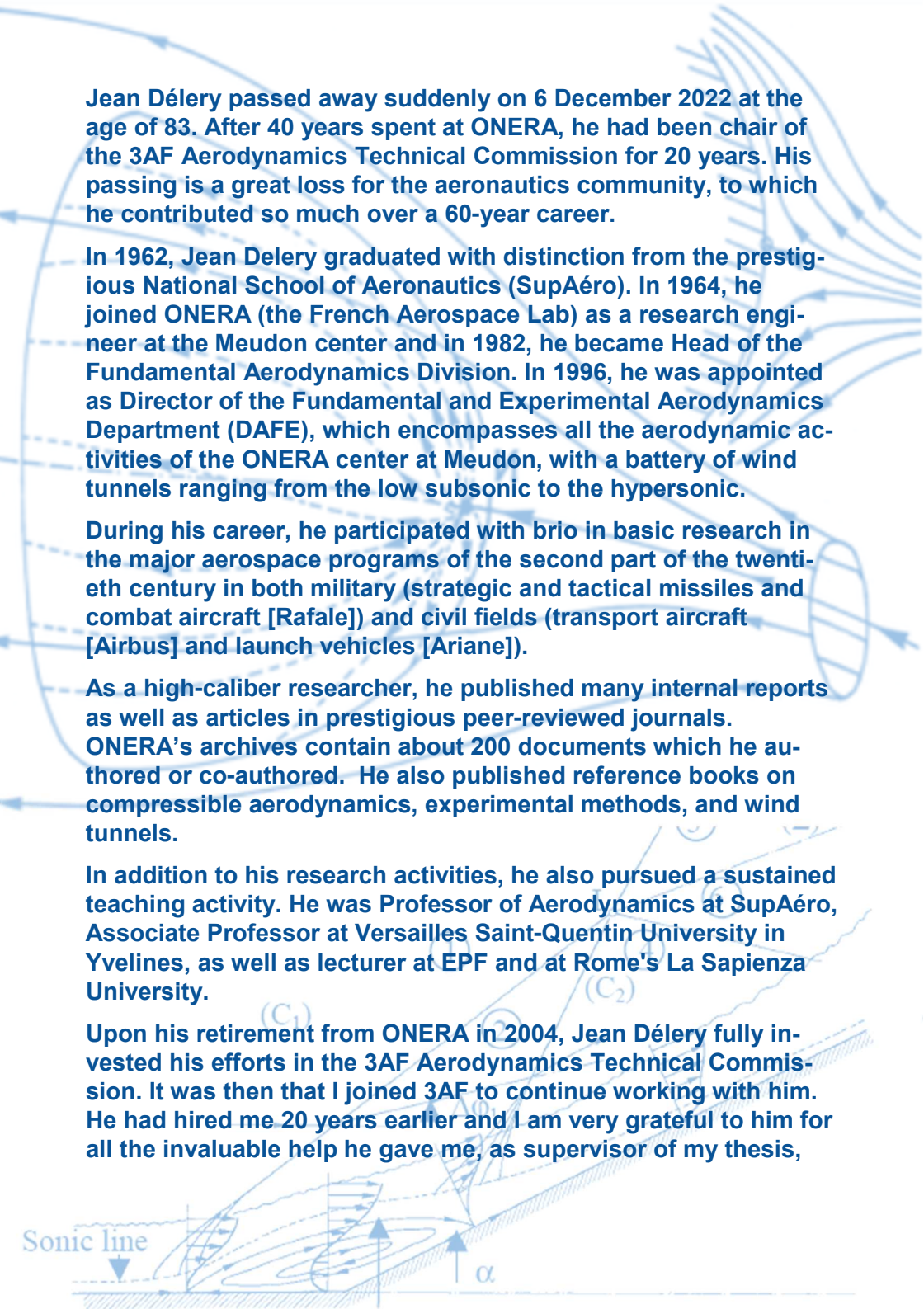
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 INTERACTION/INTERACTION CHOC COUCHE LIMTE  
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C. Quélin, D. Nicout, J. Déleroy, M. Berger et R. Benay

LE LIMITE TURBU  
 METROLOGIE/ECOULEMENT





Jean Délerly passed away suddenly on 6 December 2022 at the age of 83. After 40 years spent at ONERA, he had been chair of the 3AF Aerodynamics Technical Commission for 20 years. His passing is a great loss for the aeronautics community, to which he contributed so much over a 60-year career.

In 1962, Jean Delery graduated with distinction from the prestigious National School of Aeronautics (SupAéro). In 1964, he joined ONERA (the French Aerospace Lab) as a research engineer at the Meudon center and in 1982, he became Head of the Fundamental Aerodynamics Division. In 1996, he was appointed as Director of the Fundamental and Experimental Aerodynamics Department (DAFE), which encompasses all the aerodynamic activities of the ONERA center at Meudon, with a battery of wind tunnels ranging from the low subsonic to the hypersonic.

During his career, he participated with brio in basic research in the major aerospace programs of the second part of the twentieth century in both military (strategic and tactical missiles and combat aircraft [Rafale]) and civil fields (transport aircraft [Airbus] and launch vehicles [Ariane]).

As a high-caliber researcher, he published many internal reports as well as articles in prestigious peer-reviewed journals. ONERA's archives contain about 200 documents which he authored or co-authored. He also published reference books on compressible aerodynamics, experimental methods, and wind tunnels.

In addition to his research activities, he also pursued a sustained teaching activity. He was Professor of Aerodynamics at SupAéro, Associate Professor at Versailles Saint-Quentin University in Yvelines, as well as lecturer at EPF and at Rome's La Sapienza University.

Upon his retirement from ONERA in 2004, Jean Délerly fully invested his efforts in the 3AF Aerodynamics Technical Commission. It was then that I joined 3AF to continue working with him. He had hired me 20 years earlier and I am very grateful to him for all the invaluable help he gave me, as supervisor of my thesis,



Sonic line

$\alpha$



since this was a man who was always passionate about passing on his knowledge.

Later, in 2003, Jean suggested that I take over as Associate Professor at Versailles Saint-Quentin-en-Yvelines University. He then handed over to me with great generosity all the teaching materials he had prepared with the thoroughness and attention to detail that was his trademark. Jean really did have an innate desire to pass on knowledge and was always keen to promote teaching aspirations within his department. His many scientific works are also testament to his tireless activity in training young people in aerodynamics.

Thanks to his energy, the annual symposium of Applied Aerodynamics became a major international symposium, with more and more participants each year. He had managed to attract more than 70 French and foreign personalities to the committee. Although not everyone came along every time, the quarterly meetings of the committee were a lively affair due to the large number of participants. His authoritarian facade concealed a great deal of kindness towards everyone, and nobody could fail to see it. His guidelines were always followed because they were thoughtful and constructive.

For more than 10 years, Jean took part diligently in the work of the editorial committee for the 3AF Letter, critically reviewing all the articles proposed, for both form and content. He was considered by his committee colleagues to be an outstanding reviewer. For their part, the authors were delighted with the suggestions he made, as these always helped to improve their contributions. He was also recognized by scientific publishers and carried out numerous expert appraisals for prestigious journals.

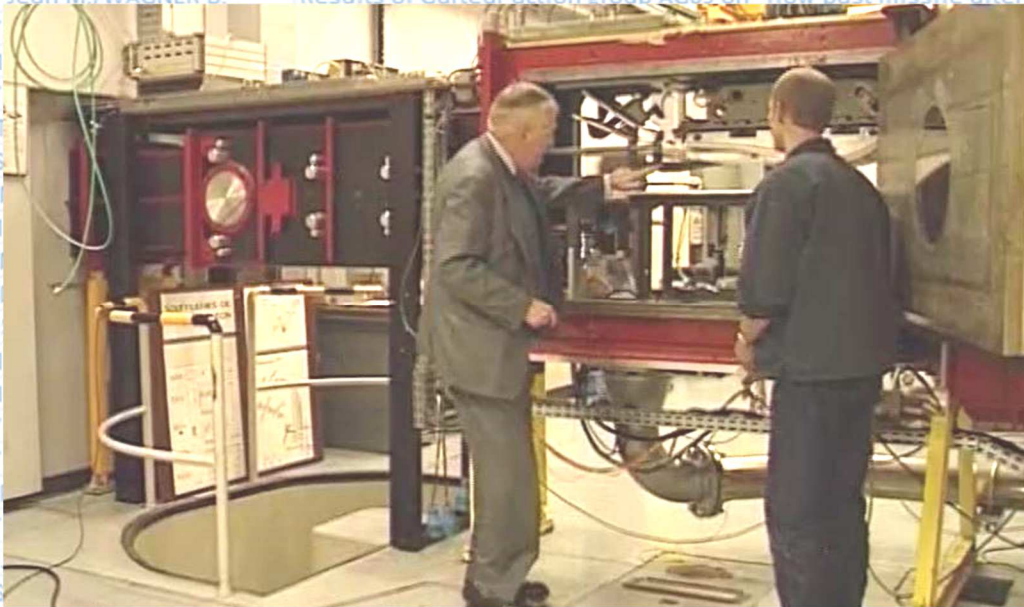
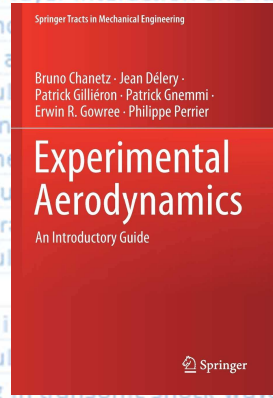
Jean will be sadly missed by all his family and friends.

**Bruno Chanetz**  
President of Alumni-ONERA, former president of the 3AF  
High Scientific Council and of the 3AF Letter editorial board

subsonic layer

sonic line

viscous sub layer



DÉLERLY Jean M./CAMBIER L. Prédiction des écoulements au culot de missiles ou de projectile: Etat des lieux

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REIJASSE P./BENAY Richard/DÉLERLY Jean M. Culot de missiles ou de projectile: Etat des lieux

CHANETZ Bruno/DÉLERLY Jean M. Enturbulés sur un ellipsoïde

DÉLERLY Jean M. Shock-wave/turbulent boundary-layer interaction and its control.

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DÉLERLY Jean M. CONFIDENTIEL INDUSTRIE. Propriétés physiques des interactions

DÉLERLY Jean M./WAGNER B. Results of Garteur action group AG09 on "flow past missile afterbody"

DÉLERLY Jean M. Investigation of the flow past the ARIANE 5 launcher afterbody.

COÛT M. Aspects of vortex breakdown

DÉLERLY Jean M. Investigation of the flow past the ARIANE 5 launcher afterbody.

CHANETZ Bruno/Modélisation des écoulements tridimensionnels

REIJASSE P./BENAY Richard/DÉLERLY Jean M. Prédiction des écoulements au culot de missiles ou de projectile: Etat des lieux

MOLTO M. Culot de missiles ou de projectile: Etat des lieux

COÛT M. Ecoulements tourbillonnaires effectués

MOLTO M. Enturbulés sur un ellipsoïde

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REIJASSE P./DÉLERLY Jean M. Investigation of the flow past the ARIANE 5 launcher afterbody.

DÉLERLY Jean M. Aspects of vortex breakdown









**Michel Scheller, former president of ONERA  
and honorary president of 3AF**

"It is hard to talk about Jean without mentioning his great qualities, qualities that we would like to see more widely shared. Jean, an expert of world renown, was a model of simplicity, modernity, and kindness, as well as expressing the humanity found in great people. Jean was a paragon of loyalty, especially in the way he dedicated so much time to young people. His teaching was appreciated by everyone. After leaving the company, which the retirement age forced him to do, Jean continued to work (voluntarily but with a passion) for the learned society, 3AF. Jean radiated warmth, the warmth-heartedness of those for whom it comes naturally - and when you met Jean you were meeting a learned person - to pursue but one ambition: to be of service."

## **Some testimonials from former PhD students trained at ONERA**

*"I had the privilege of having him as my thesis director, in short he taught me how to become an aerodynamics engineer. But, above all, it is his human qualities that I will remember him for."*

**Alexis Bourgoing, ARIANEGROUP**

*"I was lucky enough to cross his path in Meudon. He has engraved his name in the world of aerodynamics. "*

**Benjamin Deveaux, EUROCFD**

*What I will remember of him is an exceptional teacher, only too happy to pass on what he knew to young people, and an older gentleman who addressed me as a peer, and whose sense of humor I appreciated."*

**Bruno Mangin-Birrer, DASSAULT AVIATION**

*"I will cherish a pleasant memory of a good person and a leading scientist who remained accessible to everyone."*

**Florent Renac, ONERA**

*"I had the great good fortune of being alongside Jean Délerly for most of my career at ONERA. Jean provided his expert advice to the entire world of aeronautics and aerospace with exceptional pedagogy. For several generations of aerodynamicists, he was one of our best teachers and advisors."*

**Philippe Reijasse, ONERA**

*"Jean Délerly had a huge impact on my life and changed the course of my fate significantly. Thanks to his warm welcome at ONERA and his encouragement to pursue a PhD at Paris VI, he opened the door for me to opportunities that I could never have imagined coming my way."*

**Tony Mitchell, ex-US AIR FORCE**





DÉLÉRY Jean M./BUR Reynald MITCHELL A./DÉLÉRY Jean M. The physics of shock wave/boundary layer interaction control : las Research into vortex breakdown control.

BOUSQUET JEAN-MARC/TOUSSANT An in-depth code validation operation for 3D turbomachinery flow BOUSQUET J.M./TOUSSANT C./DÉLÉRY Jean M. An in-depth code validation operation for 3D turbomachinery flow



BENAY RICHARD/CHANETZ Bruno/DÉLÉRY Jean M./BOUV CONFIDENTIEL ATAC. Synthesis report of the 1st ATAC workshop. ARNAL D./DÉLÉRY Jean M. Laminar-turbulent transition and shock wave/boundary layer inter

CHANETZ Bruno/DÉLÉRY Jean M. Experimental aspects of code validation in supersonic flows.



CHANETZ Bruno/DÉLÉRY Jean M./C Aérologie Spectral Issue on Aerodynamics of Rotating Bodies CHANETZ Bruno/DÉLÉRY Jean M./C Aérodynamique expérimentale : souffleries et méthodes de mesu CHANETZ Bruno/DÉLÉRY Jean M./C Experimental Aerodynamics: An Introductory Guide



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