

Next RAeS Toulouse Branch - 26th Gordon Corps Lecture at 18:00 on Tuesday 23rd January 2018 - "Wings in Orbit" - presented by Professor Claude NICOLLIER, ESA Astronaut, - in the Symposium room Airbus, 1 rond point Maurice Bellonte, Blagnac

De : Hugh Dibley <Chairman@RAeS-Toulouse.org>

A : Zveguint <Zveguint@aol.com>

Date : Lu, 8 Jan 2018 19:21

***All continue to be welcome - members & non-members of RAeS
but***

As seating capacity limited all participants must register:

Online via: <http://goo.gl/WbiktV> or if firewalls restrict via Register@RAeS-Toulouse.org

(You can check your registration in the list at <http://goo.gl/DdeyVJ>)

for the

**for The 26th Gordon Corps Lecture of the
Royal Aeronautical Society Toulouse Branch
at 18:00 on Tuesday the 23rd January 2018
“Wings in Orbit”**



presented by

Professor Claude NICOLLIER *

ESA Astronaut, École Polytechnique, Fédérale de Lausanne

at 18:00 on Tuesday 23rd January 2018

in the Symposium Room, B01 Airbus SAS/Entrance Bellonte, Blagnac

Links for [RAeS Toulouse Branch info & previous lecture media](#) and this season's [lecture programme](#)

[Link to download/view Poster for this lecture](#) or from: www.Dibley.eu.com

[Link to photo of the RAeS Toulouse Branch Founding Committee 1991 – 27 Years Ago](#)

Happy New Year/Bonne Année/Gutes Neues Jahr/Feliz Año Nuevo/Gott nytt år - we hope you had a good holiday break.

Our RAeS Toulouse Branch Annual Named Lecture in memory of our first Chairman Gordon Corps is held in January on the subject of aviation safety or flight testing - see background below**.

Recent speakers have been Peter Chandler and Gordon McConnell Airbus A350 Flight Test Programme, Andrew Warner, Chief Test Pilot Airbus Helicopters, Rolls-Royce Test Pilots Phill O'Dell and Mark Lewis and David Owens, Airbus Training Policy.

Claude Nicollier, ESA Astronaut had kindly agreed to give a lecture this year about safety aspects of the Space Shuttle and the International Space Station including the difficulties of operating a winged spacecraft.

Claude, whose bio is below*, has the experience of four Shuttle missions as an ESA astronaut in the nineties, including two repair missions of the Hubble Space Telescope. He was detached by ESA to the Johnson Space Center in Houston for 25 years and was the first non-American Mission Specialist to be assigned as a Shuttle crewmember in 1992. He describes his lecture as follows:

“The idea of the Space Shuttle as a reusable winged spacecraft for access to LEO (Low Earth Orbit) came already in the US at the end of the Apollo program. The goal was to replace all expendable launchers with a unique vehicle for frequent access to space at a low cost. Although the spaceplane was extremely capable and flexible in its utilization, the original goal was not met, or at least the low cost access to LEO was never realized. In addition, the program was darkened by two major accidents: Challenger in 1986 and Columbia in 2003. On the bright side, the Shuttle

offered opportunity to live and work in space for 355 different astronauts coming from 16 different nations, and this in 135 flights. It also made possible the Hubble Space Telescope and International Space Station programs which were, in their own way, very challenging and successful. One other very positive aspect of this program is that it allowed the human spaceflight community, and predominantly NASA, to understand well what it means to efficiently and safely operate a complex winged spacecraft in LEO – much more difficult than anticipated!"

As the Corps' family has done over the years, Gordon's son Nick will be coming with his wife Helen to continue the strong link with his father.

Please come at **18:00 on Tuesday 23rd January** when Claude Nicollier will explain the complex safety aspects of a vehicle which spent most of its time in space and then returned to land back on earth as a glider/deadstick aeroplane, gathering massive experience and data usable future projects.

Hugh Dibley, FRAeS
Chairman RAeS Toulouse Branch
Mobiles: +33 6 03 85 28 82, +44 7969 087 873

*** Claude Nicollier** has been for 30 years a European Space Agency (ESA) astronaut of Swiss nationality. He graduated from the University of Lausanne in 1970 (Bachelor of Science in physics) and the University of Geneva in 1975 (Master of Science in astrophysics). He also graduated as a Swiss Air Force pilot in 1966, an airline pilot in 1974 (flew DC-9s for Swissair 1974-1976), and a test pilot in 1988 (Empire Test Pilot's School, Boscombe Down, United Kingdom).

He was a member of the first group of ESA astronauts selected in 1978. He then joined a new group of NASA astronauts in 1980 for Space Shuttle training at the Johnson Space Center, Houston, Texas, where he was stationed until September 2005. During his assignment in Houston, he also maintained an active duty status within the Swiss Air Force with a rank as Captain, flying Hawker Hunter and Northrop F-5E "Tiger" aircraft until the end of 2004. He has logged more than 6600 flight hours, 4500 of which in jet aircraft.

He retired from ESA in 2007, and is currently a member of the Swiss Space Center and honorary professor at the Swiss Federal Institute of Technology in Lausanne or EPFL (Ecole Polytechnique Fédérale de Lausanne) where he teaches a course on "Space Mission Design and Operations". He also provides assistance to students on various space related projects.

Claude Nicollier has been a crewmember on four Space Shuttle flights, STS-46 in 1992 (EURECA deployment and first test of a Tethered Satellite System or TSS), STS-61 in 1993 (first servicing mission of the Hubble Space Telescope), STS-75 in 1996 (second flight of TSS, and USMP-3 microgravity investigations), and STS-103 in 1999 (third servicing mission of the Hubble Space Telescope). He has logged more than 1000 hours in space, including a spacewalk of more than 8 hours duration to install new equipment on the Hubble Space Telescope on STS-103. He is a recipient of Honorary Doctorates from EPFL, and the Universities of Geneva and Basel.

***Background to our Annual Named Lecture:**

Gordon Corps was instrumental in forming the Toulouse Branch in 1991 and was our first chairman. Amongst flight testing many aircraft, Gordon was the UK CAA Test Pilot involved in the certification of Concorde before joining Airbus where he played a central role in developing the Fly By Wire control system on the test A300 leading to the A320.

After Gordon died when in mountains at high altitude investigating an A300B4 accident in Nepal, the Gordon Corps Lecture was instituted in his honour in 1992 on the themes of aviation safety and flight testing, so this lecture marks the 26th anniversary of the start of the Gordon Corps lecture.

In order for us to confirm that the maximum 90 seats in the Airbus Symposium room will not be exceeded **everyone** intending to come to the lecture **including Airbus badge holders MUST REGISTER online at <http://goo.gl/WbikTv> and if you do NOT hold an Airbus Security Pass GIVING ACCESS TO AIRBUS CAMPUS 1, BLAGNAC select that you NEED a Temporary Airbus Pass***. (The list for temporary Airbus passes is made up in the evening two days before the lecture, so requests for Airbus passes received after 18:00 will not be actioned and entry through Airbus Security for the lecture may not be possible.) You must bring a photo Identity Document which Security will exchange for a temporary pass while you are on Airbus' premises. If you are unable to register online, please email Register@RAeS-Toulouse.org and state if you require a temporary Airbus pass. (Airbus IT blocks access to the Google, but registration can be made using an email provider outside Airbus.)

You can confirm if you are registered and listed for an Airbus Temporary if necessary by clicking on <http://goo.gl/DdevVj> to view the current list of registrants. If your name is not in the list, please re-register and if still unsuccessful advise Register@RAeS-Toulouse.org.

**Most Airbus sub-contractors passes will not give access to Airbus Campus 1.*

For attendees under 18 years old, Airbus requires information on an Airbus form giving their Name and Date of Birth together with the name of the Airbus employee who will always accompany them during their time in Airbus to visit the Symposium room. Please download this form from RAeS-Toulouse.org or request one from Register@RAeS-Toulouse.org and when completed return it to Register@RAeS-Toulouse.org

Please advise Dinner@RAeS-Toulouse.org or call/text +33 6 03 85 28 82 if you wish to join us for dinner after the lecture at le Esprit du Sud Ouest, 84, rue de Bordebasse, Zone Aéroportuaire Nord, 321700 Blagnac, price approximately 35 euro including wine - www.LEspritduSudOuest.com