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Verein Deutscher Ingenieure
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Arbeitskreis Luft- und Raumfahrt

Invitation to an RAeS lecture in cooperation with the DGLR and VDI

Corporate Jet Cabin Evolution

David Velupillai, Marketing Director,
Airbus Corporate Jets



Lecture
followed by discussion

Entry free !
No registration required !

Date: Thursday, 1 September 2016, 18:00

Location: ZAL TechCenter

Hein-Sass-Weg 22, 21129 Hamburg



Zentrum
für Angewandte
Luftfahrtforschung

Airbus markets corporate jets derived from all of the aircraft in its modern family, giving customers a comprehensive spread of sizes and ranges to suit their needs. Corporate jet customers are essentially big companies, billionaires and governments. They are most interested in two things - the ability to fly the mission and the cabin – unlike in the airliner world, where it is all about economics. So what customers get in the cabin – in terms of cross-section and floorspace – is of great interest, because it directly affects the lifestyle that they can take into the sky. Available cabin space and furnishing have evolved over time, with today's corporate jets delivering a much larger and more sophisticated environment than early jetliners. Airbus' ACJ320 Family has the widest and tallest cabin of any business jet, while being similar in size externally. So it is well placed to deliver more of the comfort, space and freedom of movement that customers want, including offices and lounges, conference and dining areas, bedrooms and bathrooms. For customers that want even more comfort, capacity and capability, Airbus offers VIP versions of its widebodies, which have the added benefit of delivering “nonstop to the world” range.

David Velupillai is a Marketing Director at Airbus Corporate Jets, and currently markets and communicates on everything from ACJ318 to ACJ380. He has a BSc in Aeronautical Engineering from Bristol University, worked in the design office of Hawker Siddeley Aviation, Hatfield, and was a Technical Editor of Flight International magazine. A 30 year veteran of Airbus, he worked for many years in Airbus press relations in Toulouse, sharing in, and communicating on, the birth and evolution of all Airbus aircraft.

Edited version of original presentation

Download from
<http://hamburg.dglr.de>
www.raes-hamburg.de

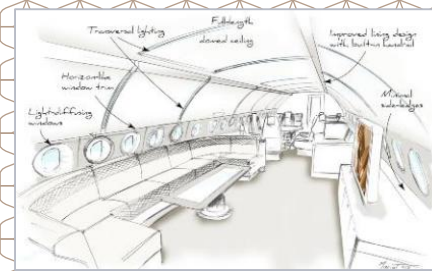


Airbus Corporate Jets
David Velupillai, Marketing Director

Corporate jet cabin evolution

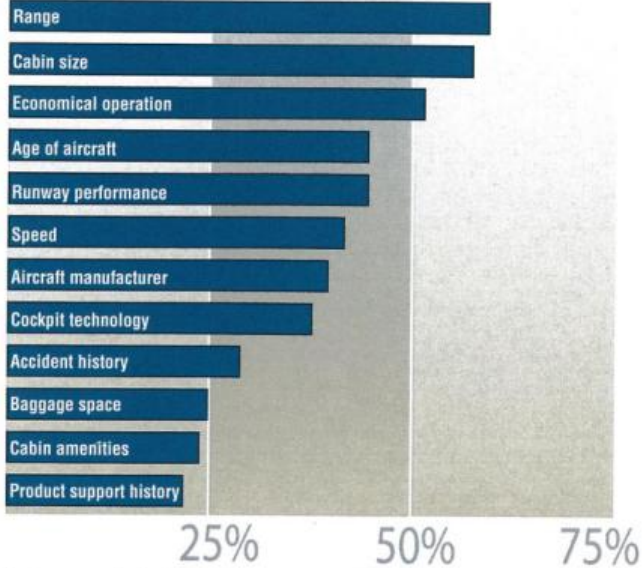
Space travel on another plane

September 2016

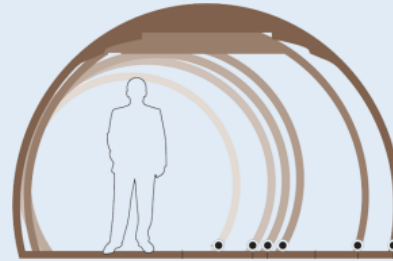


Range and cabin are especially important to corporate jet customers

MOST IMPORTANT AIRCRAFT FEATURES



Readers were asked to indicate five most important features.



ACJ

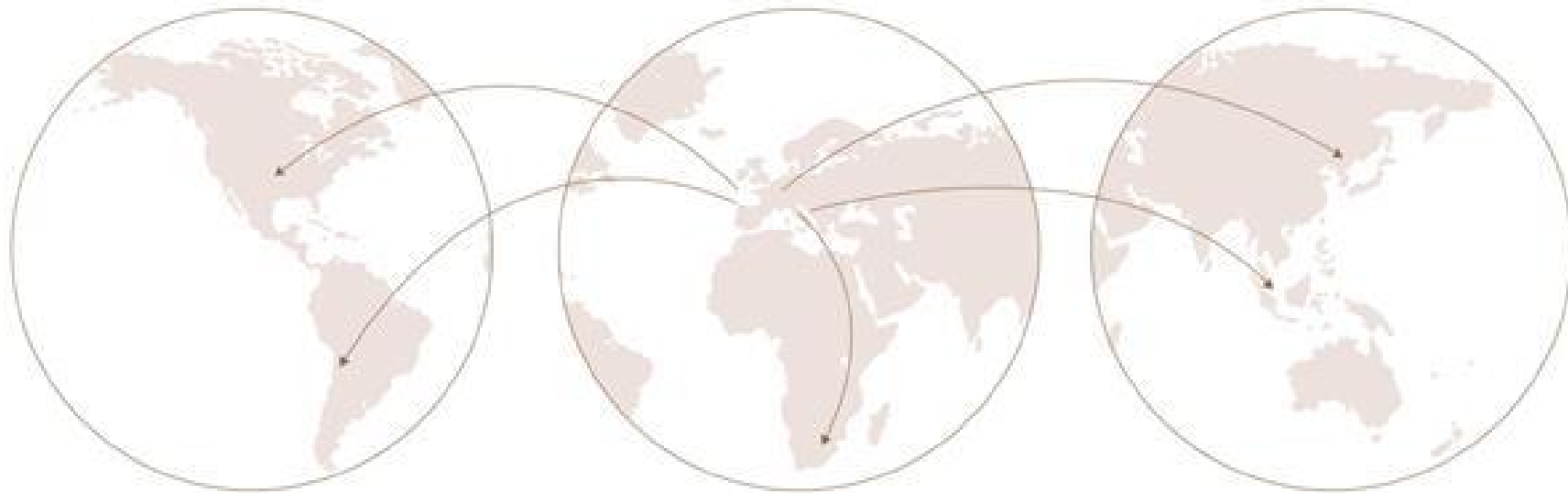


Bizjet features

Having comfort and being in control are key

Source *Business Jet Traveler*, October/November 2011

Customers want intercontinental range



Customers want to give wings to their lifestyle



Companies may want to fly their customers and business partners



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Individual customers might want to travel with family and friends



Governments often want to fly large delegations with senior advisers and support staff



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Corporate jet customers are companies, individuals and governments

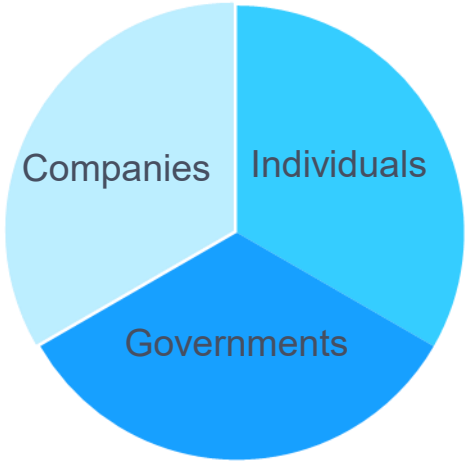
Companies



Individuals



Governments



180+ ACJs in service

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Customers want practical cabins, rather than exotic ones



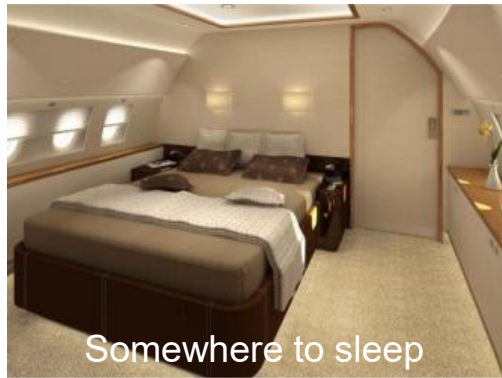
Somewhere to work



Somewhere to eat



Somewhere to relax



Somewhere to sleep



Somewhere to wash

Customers want to buy modern products that are good investments



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ACJ

 AIRBUS

Reliability is especially important to corporate jet customers

Airbus corporate jets are flying on every continent, including Antarctica ...



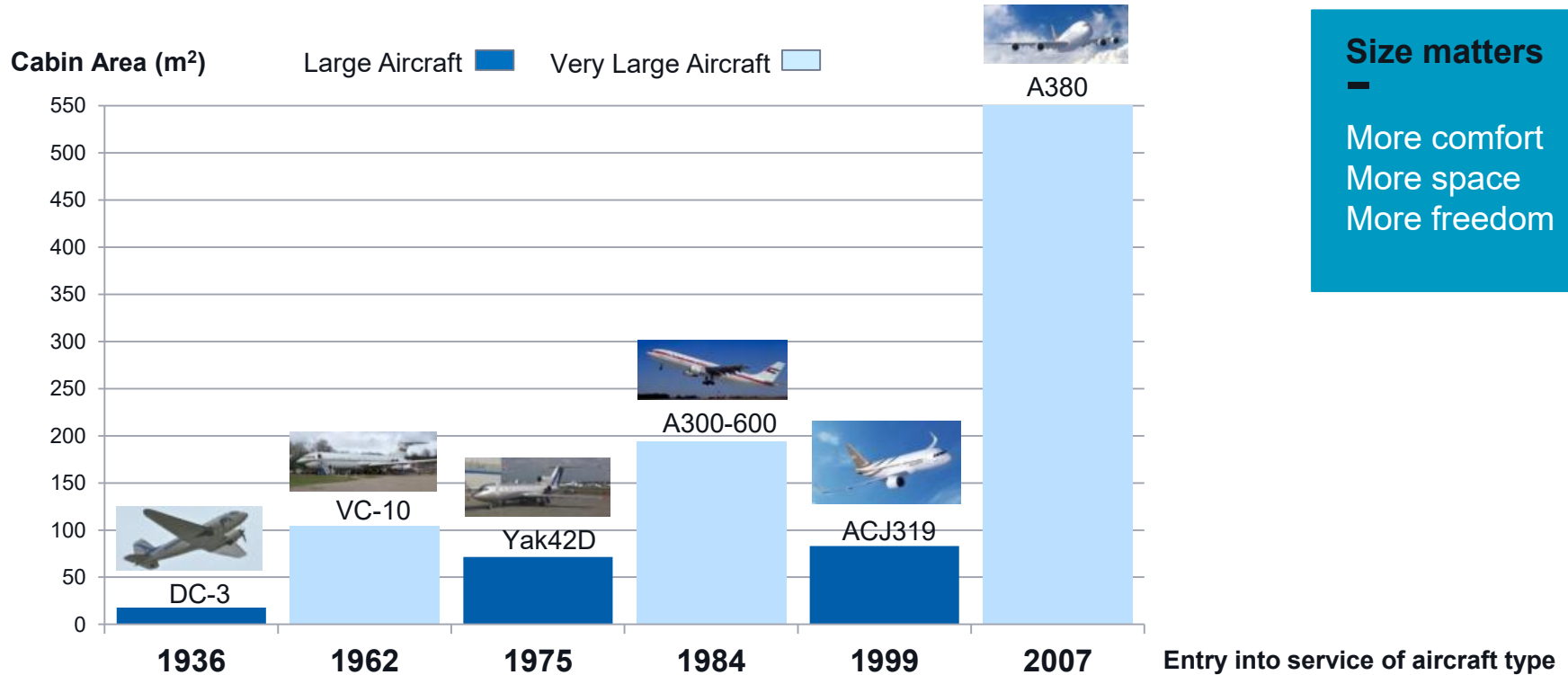
... their airliner heritage means they are designed to fly reliably many times a day

Skytraders Airbus ACJ319 on sea-ice runway at McMurdo Sound

How cabins have evolved



Corporate aircraft cabins have got bigger



Douglas' DC-3 led corporate cabins in the 1930s



Vickers' VC-10 brought new standards of jet comfort in the 1960s



* Visible at Brooklands Museum, Weybridge, London

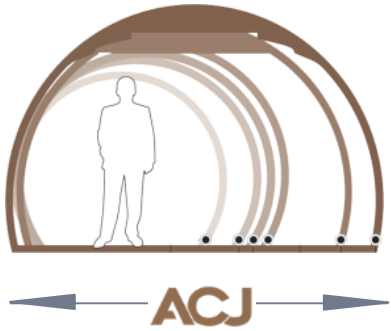
Russia's Yak 42D entered service in the 1970s



Airbus' A300-600 brought widebody corporate jet comfort in the 1980s



Airbus' ACJ320 Family introduced the widest and tallest corporate jet cabins in the 1990s



Cabin designed by Alberto Pinto

Airbus ACJ380 offers the ultimate in comfort and space



551 m²/5,930 ft² floorspace

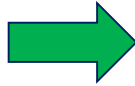


What Airbus corporate jets offer

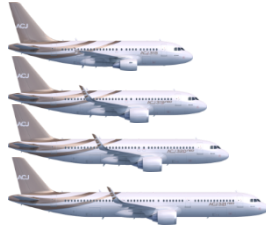


Airbus corporate jets come from the world's most modern aircraft family

Airbus Single-Aisle



Airbus ACJ320 Family



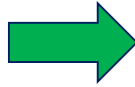
Airbus ACJ318

Airbus ACJ319

Airbus ACJ320

Airbus ACJ321

Airbus Widebodies



Airbus VIP Widebodies



Airbus ACJ330

Airbus ACJ340

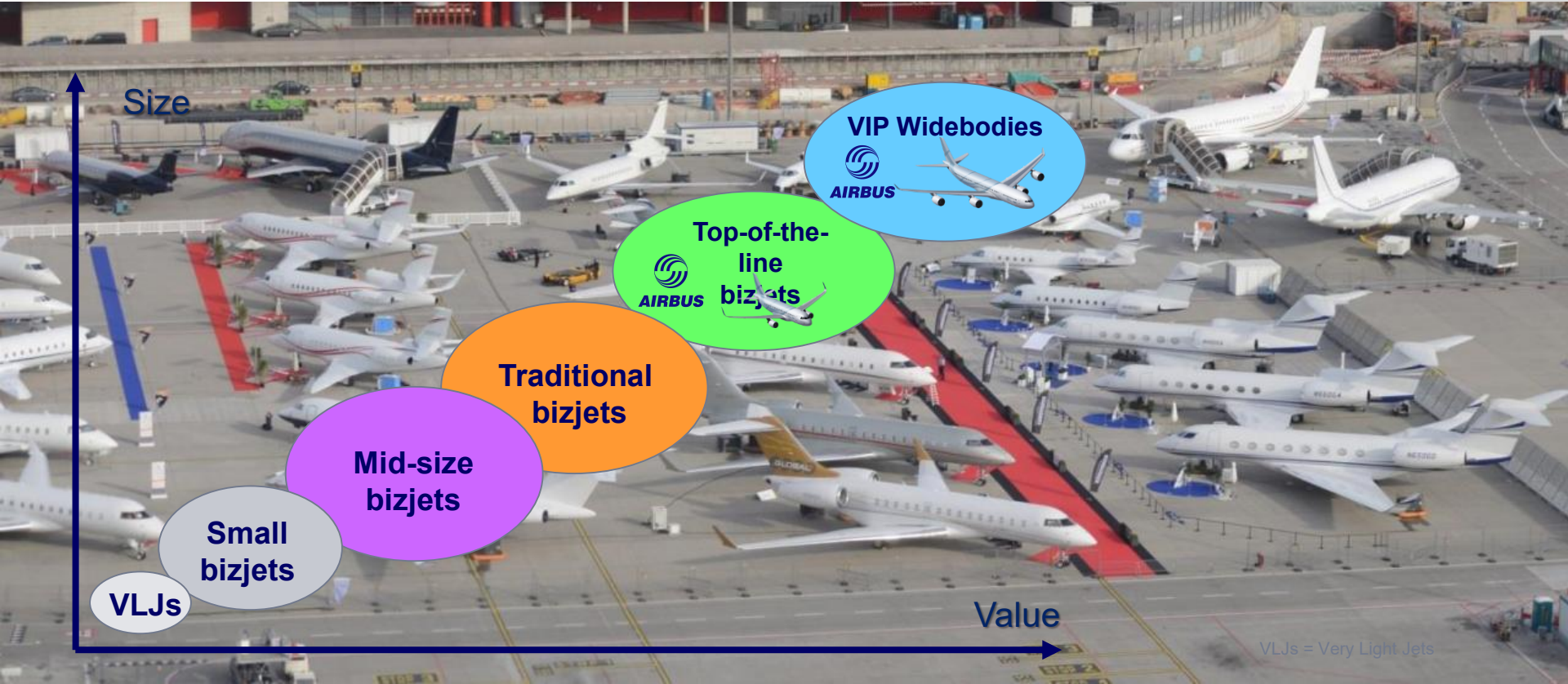
Airbus ACJ350

Airbus ACJ380

Heritage

Airbus corporate jets deliver more. By design.

Airbus corporate jets are the new top-end of the market



Airbus only competes at the top end of the market

Airbus



Boeing



Bombardier



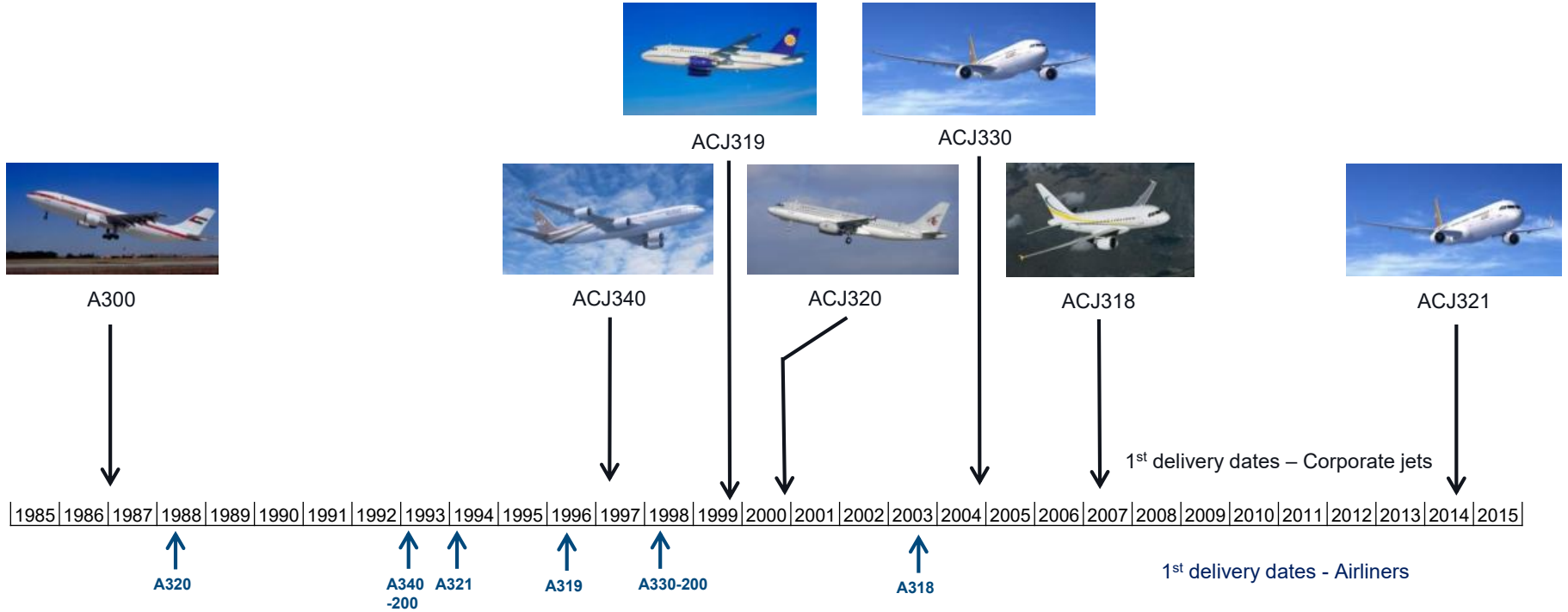
Gulfstream



Embraer

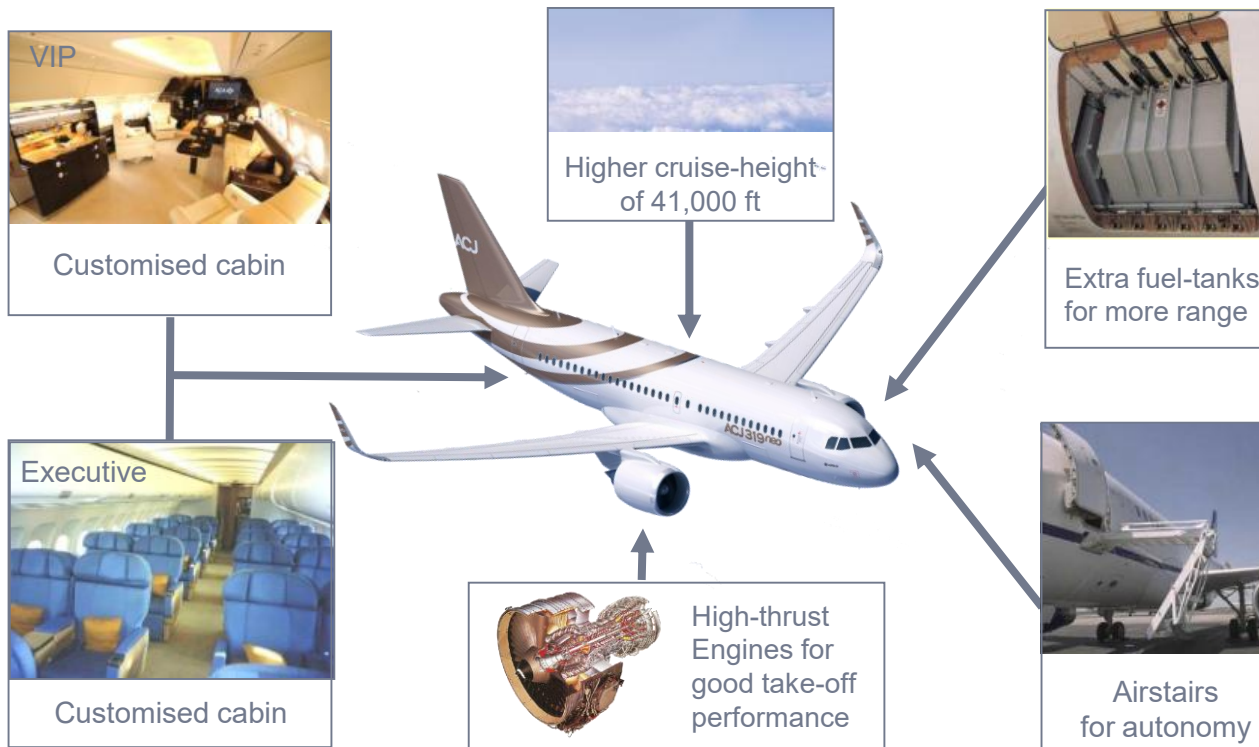


Airbus corporate jets have evolved into a complete family



Airbus corporate jet delivery dates are for outfitted versions

Customised cabin & other features adapt Airbus ACJ320 Family for corporate jet role



More features

-
- Flying farther.
- Flying higher.
- Greater autonomy.

ACJ320 Family = ACJ318, ACJ319, ACJ320 & ACJ321






Extra fuel-tanks in cargo-holds give Airbus corporate jets intercontinental range



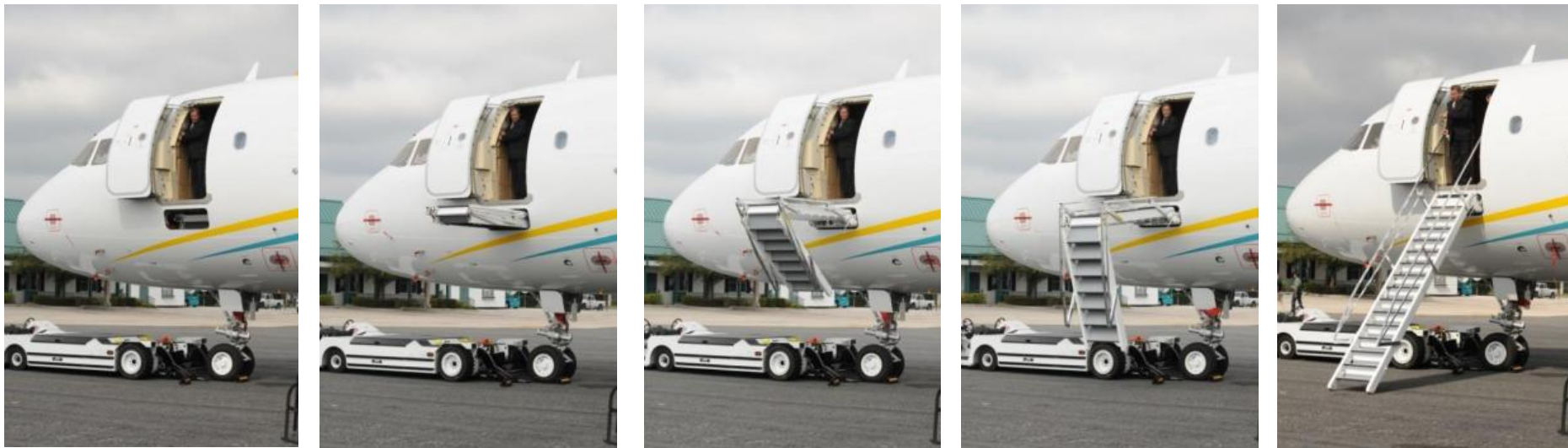
Most operators fly with 3 or 4 additional centre tanks (ACTs)

Airbus' additional centre tanks (ACTs) are easy to fit and use



-  Easily fitted & removed via outward-opening doors
-  Automatic in normal operation
-  Tanks emptied by cabin air-pressure
-  Bladder inside tanks ensures double-walled containment
-  Designed & certificated by Airbus

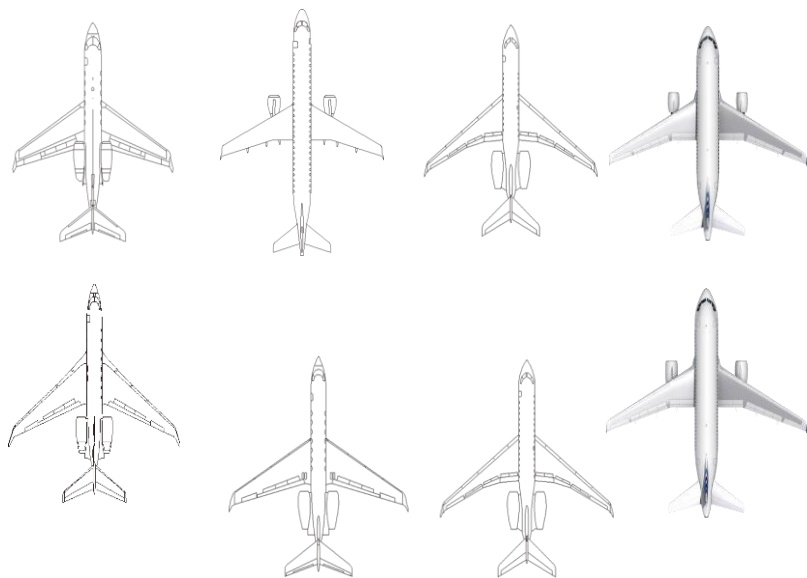
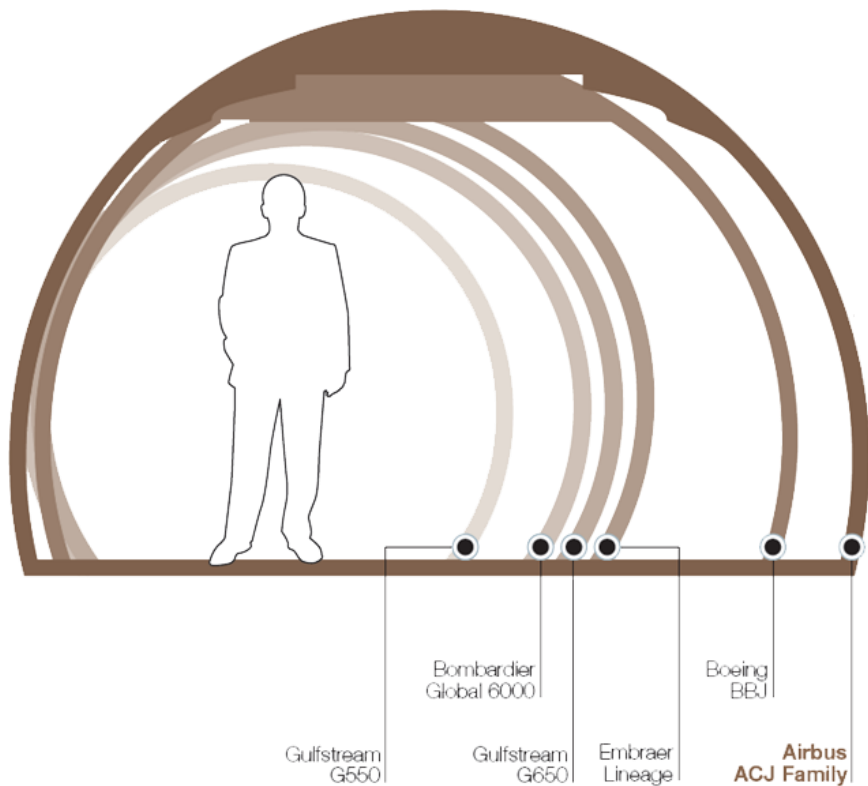
Airbus ACJ320 Family features airstairs for airport autonomy



Airstairs can be operated from inside and outside* the aircraft

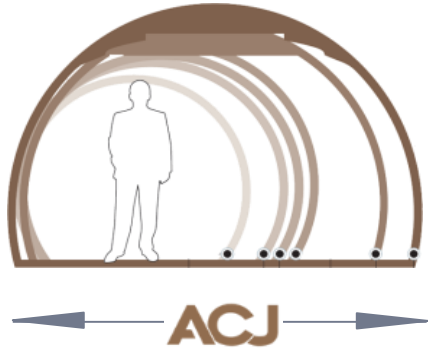
* Via control-panel in nose landing-gear bay

Airbus ACJ320 Family's wider & taller cabins give customers more lifestyle in the sky...



...while being similar in size externally

Airbus ACJ320 Family's wider cabin enables unique features



Circular tables & a passage alongside

Domed ceilings

Good-sized rooms & a proper corridor

Airbus corporate jet cabins can be customised to suit companies



Cabin completed by ACJC workforce in its EADS Sogerma role



Airbus corporate jets can be tailored to suit individuals



Airbus ACJ320 Family cabins can be customised for governments



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Airbus' Phoenix cabin-concept is customised to suit Asian preferences

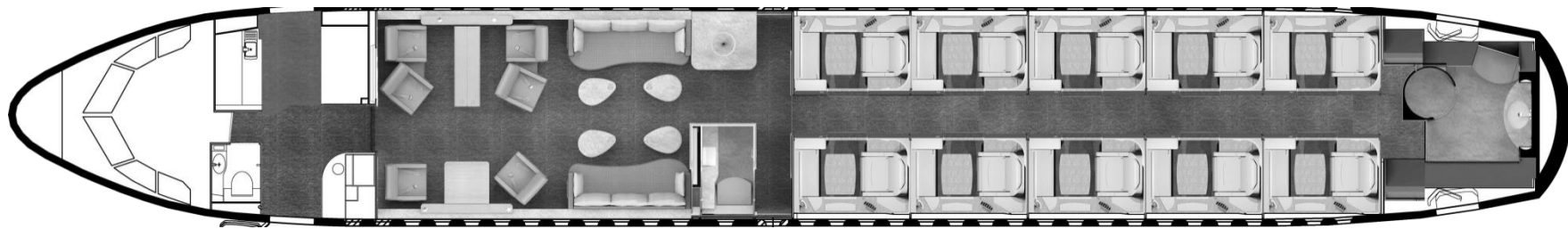


Cabins with neutral colours, such as beige, are popular, because they are easier to re-sell



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Emirates Executive's Airbus ACJ319 is first business-jet with mini-suites



Social area



Mini-suites



Cabin designed by Jacques Pierrejean

Airbus recently* launched ACJneo Family, extending its role into the future



Best cabin



More range

More comfort



More baggage



Better efficiency



* May 2015

6 ACJneo firm orders

2 x ACJ319neo
4 x ACJ320neo



Undisclosed



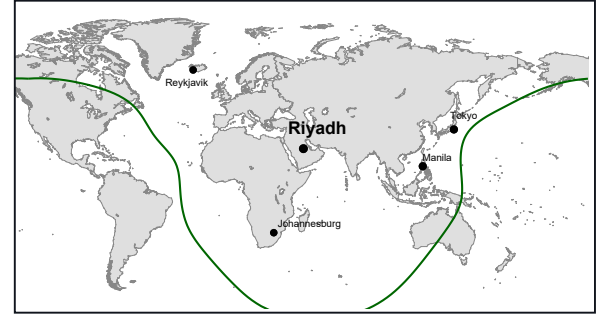
VIP widebodies allow customers to fly more people to more places



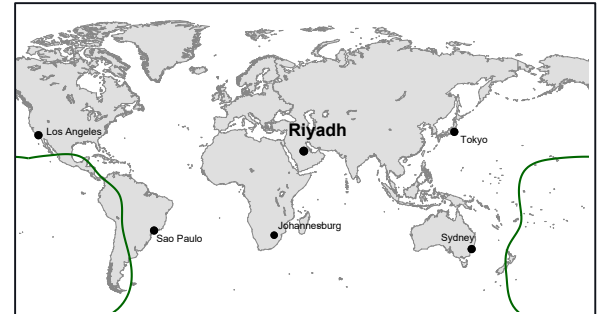
ACJ320 Family



Airbus VIP widebody



Intercontinental range



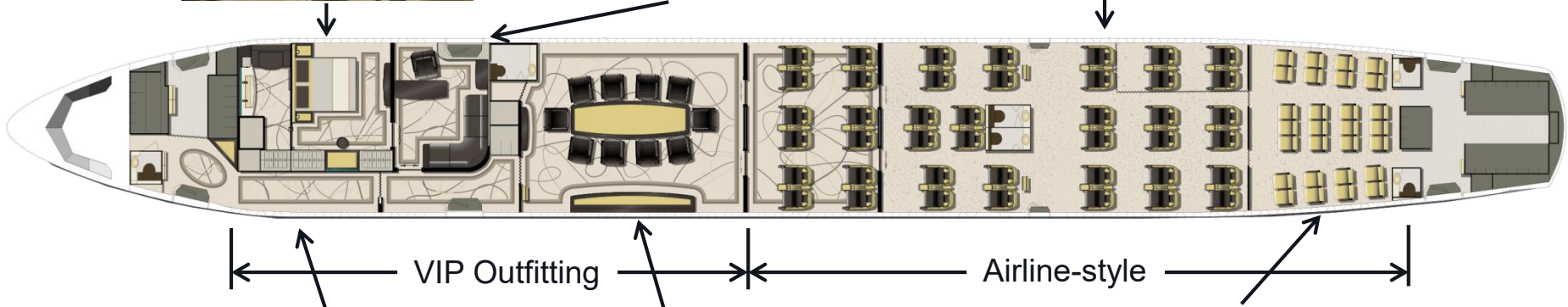
“Nonstop to the world” range

Airbus VIP widebodies fly nonstop to the world



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Airbus ACJ330 Summit seats VIPs, advisors, guests and support staff



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Airbus ACJ330 Summit delivers spacious conference area



Space matters

Conducive
conferencing

Airbus ACJ330 Summit provides a good private office



Space matters

Productive privacy

Customers have a wide choice of Airbus-approved cabin outfitters



Cabins guaranteed

Airbus is only top-end manufacturer with extensive experience in turnkey cabin-outfitting

More than 180 Airbus corporate jets are in service

180+

Customers
Widespread customer and operator base



180+ ACJs = 130+ Airbus ACJ320 Family + 50+ Government & VIP Airbus widebodies

Airbus support helps customers to get the best out of their aircraft



6 Training Centres



5 Spares Centres

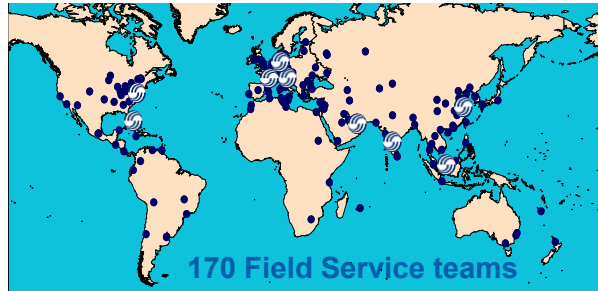


Technical Advice
24 hr/day, 7 days/week

99.9 % operational reliability



Single point-of-contact - C4you



Low-utilization maintenance

Reliability & Support

Delivered around the world, around the clock

5   +
Customers & Operators

Airbus customers also benefit from services tailored to corporate jet operator needs



Airbus corporate jet customer care centre (C4you)



C4you hotline

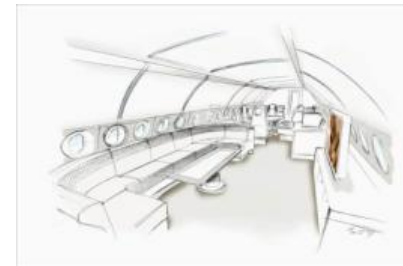
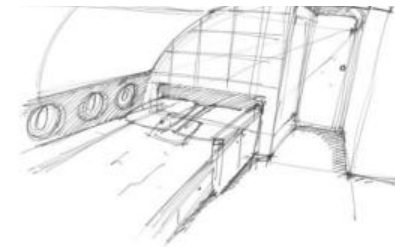
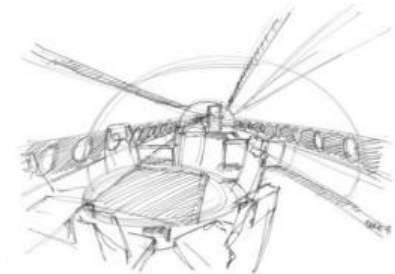


Low-utilisation maintenance programme



Dedicated customer-support directors

Where cabins are going



Trend toward larger cabins continues

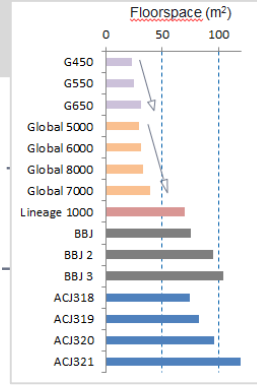
Airbus Corporate Jets

Boeing

Bombardier

Embraer

Gulfstream

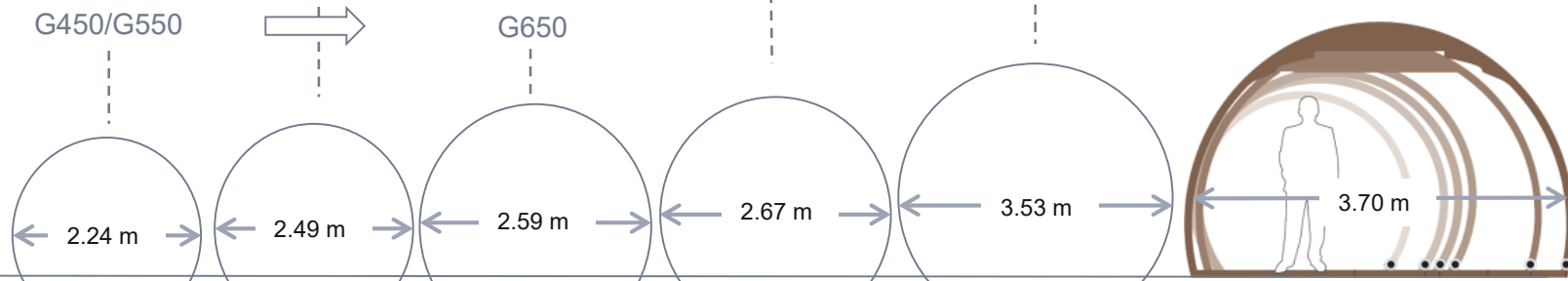


Global 5000
Global 6000
Global 7000
Global 8000

Lineage 1000

BBJ Max 8

ACJ319neo
ACJ320neo



Busy people value simplicity as well as choice

Sophistication



ACJ319 Elite



ACJ319 Elegance



Any approved
outfitter

Fully customised

Cost + time to complete

Airbus ACJ319 Elite's pre-defined cabin offers simplest and fastest solution ...



Baseline

Option*

* With bedroom

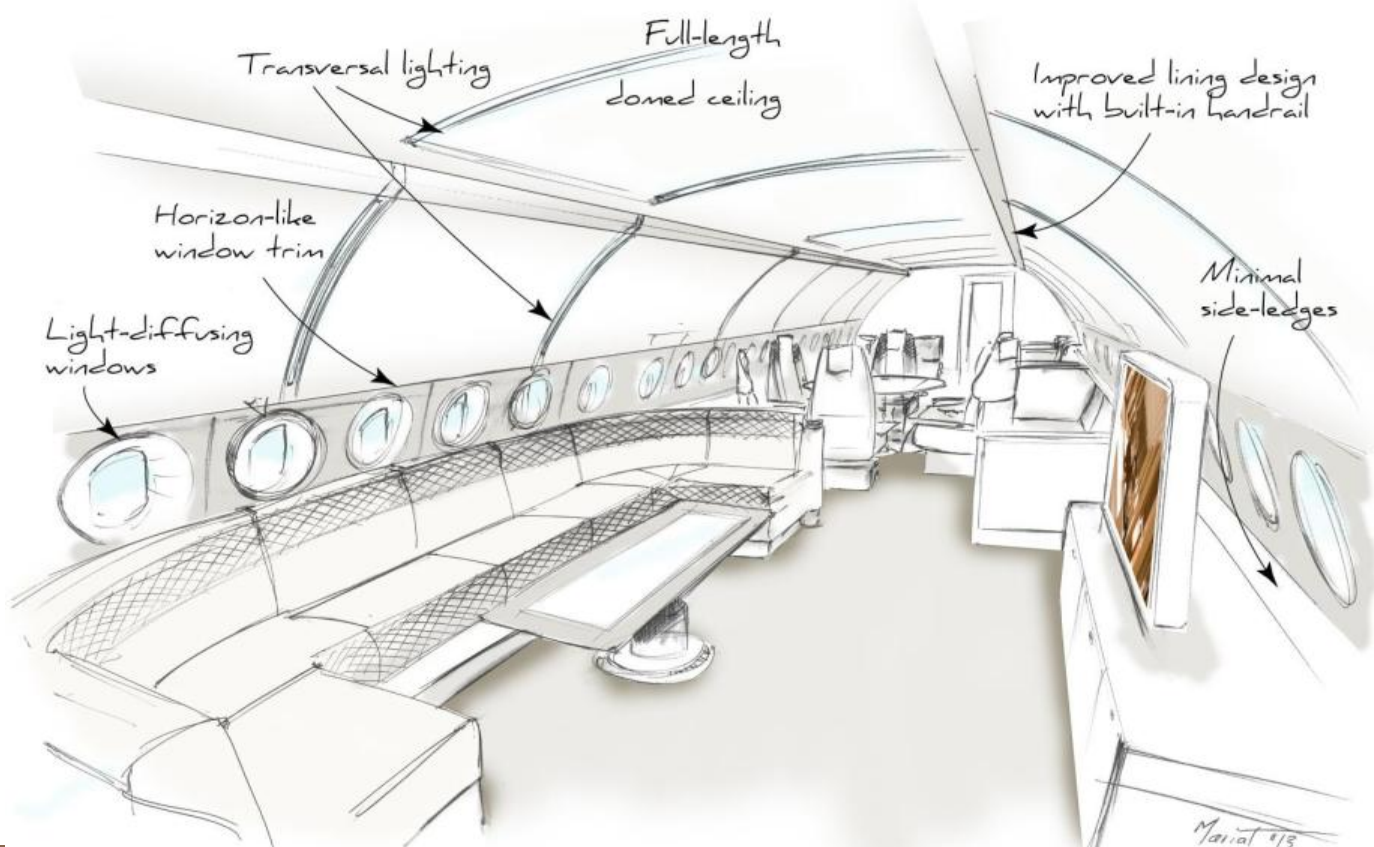
... customers have choice of colours and options

Airbus ACJ319 Elegance offers simplicity, speed and savings via modular approach



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Airbus ACJ319 Elegance pioneers new cabin features



Space matters

- More purity
- More light
- More freedom



New materials, such as carbonfibre, are helping to reduce weight



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ACJ350^{XWB} is 1st Airbus aircraft with carbonfibre fuselage skin & frames

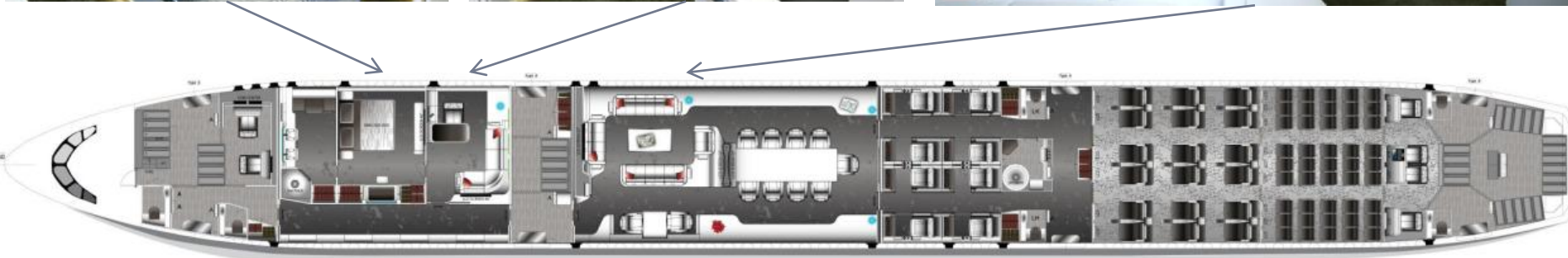


Easyfit concept

Peace of mind
outfitting via
pre-installed
attachments



ACJ350^{XWB} is the newest VIP widebody on the market



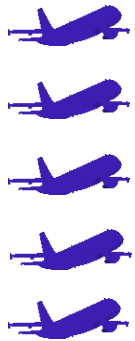
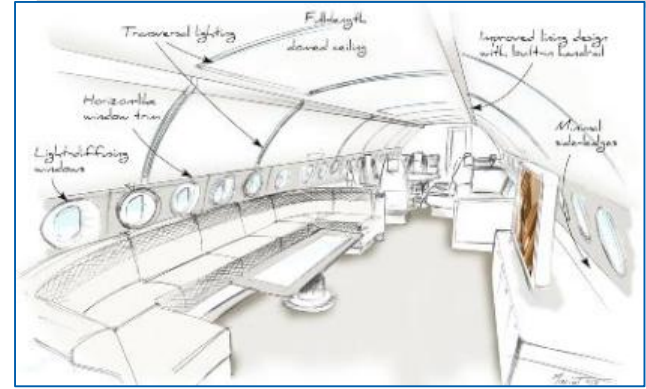
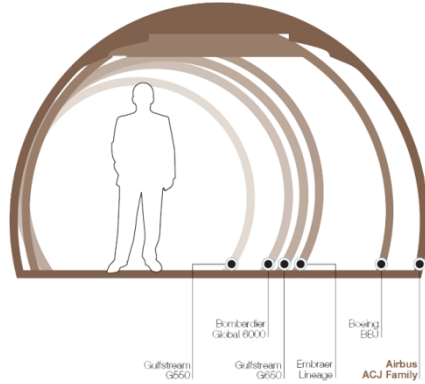
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Conclusions



- Corporate jet customers value cabins highly
- Business jet cabins are getting bigger & better
- Airbus is leading the way in corporate jet cabins
- Reliability & support are vital for corporate jet customers
- New technologies are enabling modular cabins in large jets

Appendices

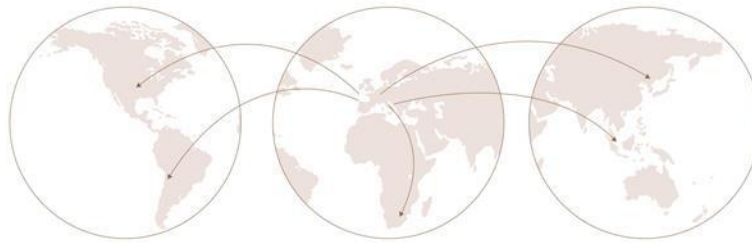
Airbus Corporate Jets today



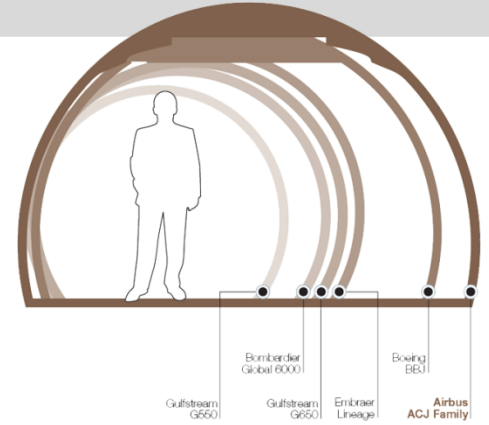
Most modern aircraft family



More than 180 aircraft in service



Intercontinental range

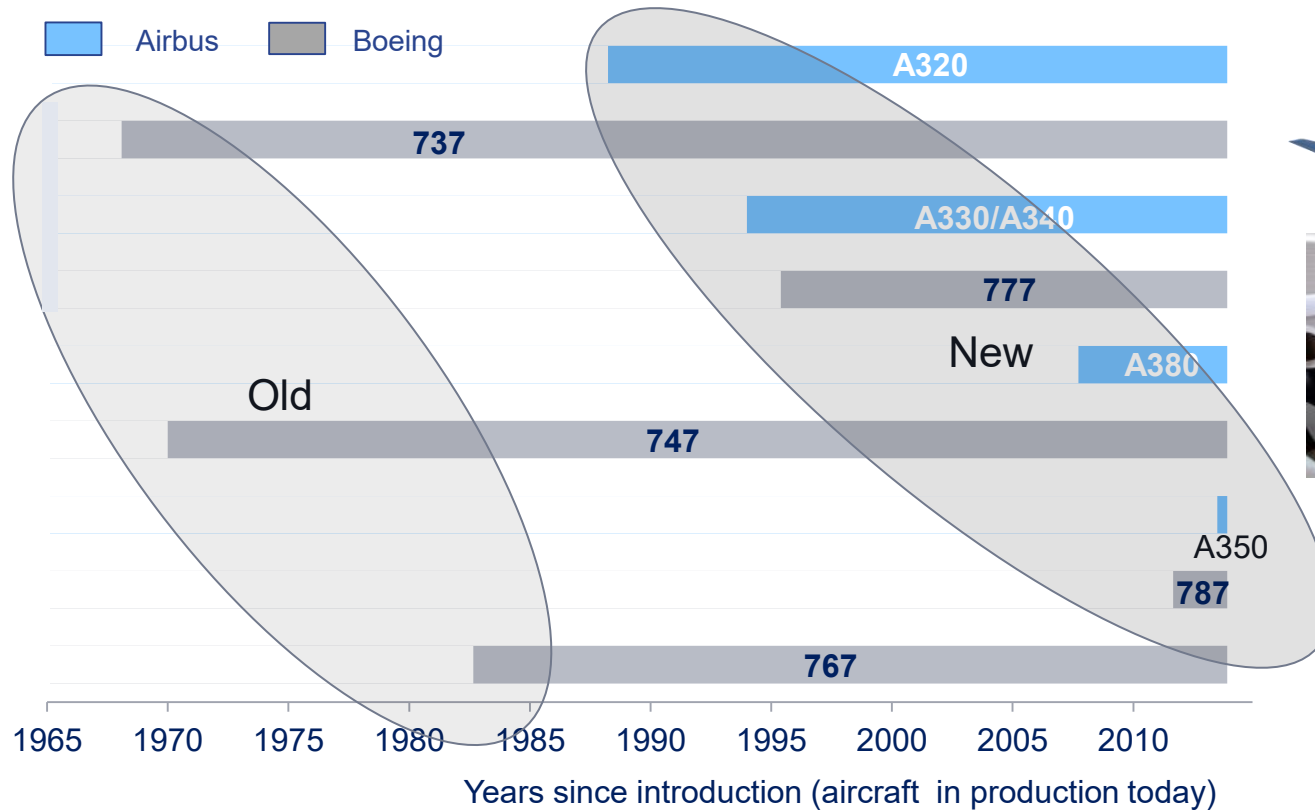


Widest and tallest cabin of any bizjet, while being similar in external size

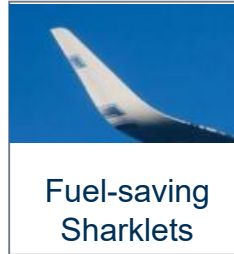
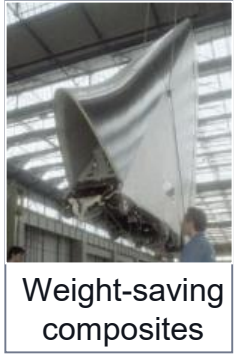


Flying on all continents, including Antarctica

Customers want to buy a modern aircraft that will be a good investment



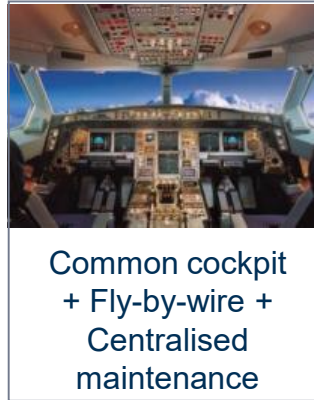
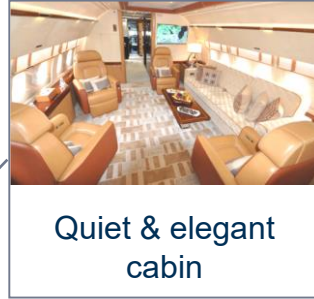
Airbus corporate jets' modern designs bring many benefits



Advanced Fuel-saving aerodynamics



Efficient engines



More modern
—
More efficient.
Less weight.
More commonality.

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More than 15 Airbus corporate jets are flying with VVIP charter operators



UK



Middle East



Europe & Mideast



Germany



China



Switzerland



Austria



Switzerland



Austria



Portugal



Australia

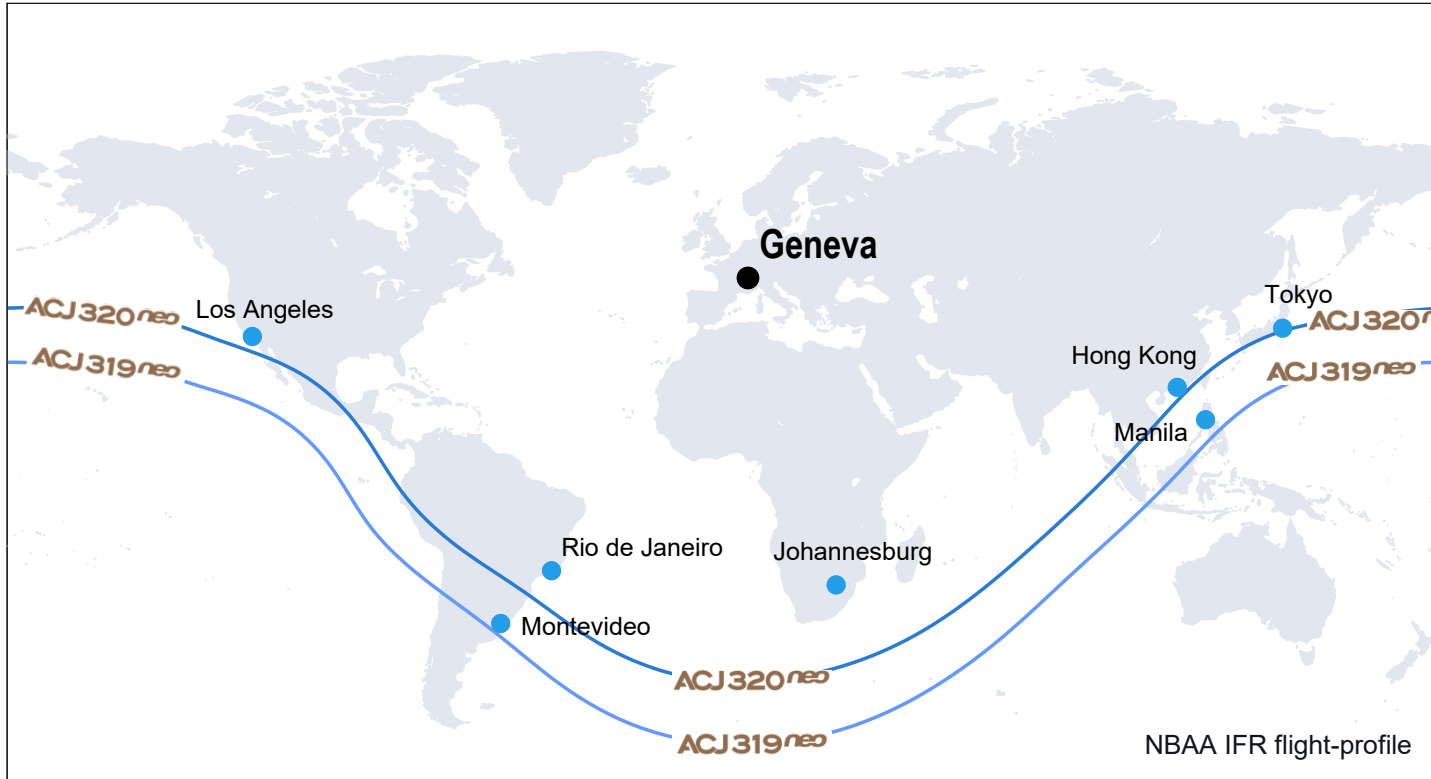


Austria



UAE

Airbus ACJ319neo & ACJ320neo have even better* intercontinental range



ACJ319neo

8 pax 6,750 nm/12,500 km

ACJ320neo

25 pax 6,000 nm/11,100 km

* cf ACJ319 & ACJ320

Airbus corporate jets are young at heart



1 st Airbus corporate jet delivery, an A300-600 (Middle East)	Late 1980s
Airbus ACJ319 go-ahead	Jun 1997
Airbus ACJ319 First flight	May 1999
1 st Airbus ACJ319 delivery (Al Kharafi/Twinjet)	Nov 1999
1 st Airbus ACJ320 Prestige delivery (Qatar)	Dec 2000
Airbus ACJ318 Launch	Nov 2005
1 st Airbus ACJ318 delivery (Comlux)	May 2007
Creation of Airbus Corporate Jet Centre (ACJC)	July 2007
1 st Airbus ACJ321 delivery (Comlux)	Aug 2014

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