HOW BUSINESS FLIES
SAFRAN IS AN INTERNATIONAL HIGH-TECHNOLOGY GROUP, OPERATING IN THE AIRCRAFT PROPULSION AND EQUIPMENT, SPACE AND DEFENSE MARKETS. SAFRAN’S GLOBAL PRESENCE ENHANCES ITS COMPETITIVENESS AND ALLOWS THE GROUP TO BUILD INDUSTRIAL AND COMMERCIAL RELATIONS WITH THE WORLD’S LEADING PRIME CONTRACTORS AND OPERATORS, WHILE PROVIDING FAST, LOCAL SERVICE TO CUSTOMERS EVERYWHERE. WORKING ALONE OR IN PARTNERSHIP, SAFRAN HOLDS WORLD OR EUROPEAN LEADERSHIP POSITIONS IN ITS CORE MARKETS.

IN FEBRUARY 2018, SAFRAN TOOK CONTROL OF ZODIAC AEROSPACE, SIGNIFICANTLY EXPANDING ITS AIRCRAFT EQUIPMENT ACTIVITIES. TOGETHER WITH ZODIAC AEROSPACE, SAFRAN HAS MORE THAN 91,000 EMPLOYEES AND WOULD HAVE AROUND €21 BILLION IN ADJUSTED REVENUE (PRO FORMA 2016).

SAFRAN OVERVIEW

 more than
91,000
EMPLOYEES
WORLDWIDE

#1 WORLDWIDE AEROSPACE:

• ENGINES FOR SINGLE-AISLE COMMERCIAL JETS (in partnership with GE)
• HELICOPTER TURBINE ENGINES
• SEATS FOR COMMERCIAL AIRPLANES(2)
• LANDING GEAR
• WHEELS AND CARBON BRAKES(3)
• AIRCRAFT WIRING SYSTEMS
• HELICOPTER FLIGHT CONTROLS
• MECHANICAL POWER TRANSMISSIONS(3)
• NACELLE SYSTEMS FOR BUSINESS JETS

#1 Excluding Zodiac Aerospace.
(2) Economy class seats for twin-aisle jets.
(3) Mainline commercial jets with more than 100 seats.

8% OF SALES INVESTED IN R&D

Safran applies a strategy based on innovation and continuous improvement in competitiveness, working closely with our suppliers and partners to address today’s economic, societal and environmental challenges.
SAFRAN IN BUSINESS AVIATION
FROM NOSE-TO-TAIL

WITH DECADES OF EXPERIENCE IN AVIATION,
SAFRAN MASTERS THE TECHNOLOGIES THAT MAKE AIRCRAFT
OF ALL SIZES FLY— FROM LARGE AIRLINERS TO HELICOPTERS
AND BUSINESS JETS.

GREEN INNOVATION
By investing in integrated propulsion systems, more electric aircraft, and operational fuel efficiency (software and consulting), Safran meets the market’s current and evolving requirements in terms of reliability and environmental standards.

AN UNMATCHED OFFERING FOR BUSINESS AVIATION
Business jet manufacturers can rely on Safran for their equipment needs ranging from engines, nacelles, thrust reversers, power transmissions, auxiliary power units, electrical power management systems, to landing gear, wheels, brakes, navigation systems, flight monitoring solutions and flight controls.

CUSTOMER SUPPORT GUARANTEED
Safran has a global customer service network that provides after-sales and customer support, as well as maintenance, repair and overhaul services for its business aviation customers.

Commercial Aircraft Engines: Silvercrest®
(including FADEC engine control units)

Assistant Power Unit
Power Transmission
Cabin Interiors
Galley
Complete Nacelles
Electrical Systems
Fly-by-Wire Flight Control Systems
Fluid and Water & Waste Management

Avionics Systems
(including cockpit controls and cockpit & lighting systems)

Braking and Landing Systems
Seats (crew and passengers)

Safety Systems (rafts, life vests, slides)

Control Systems (including cabin controls and fans)

Ancillary Power Unit

Fly-by-Wire Flight Control Systems
Fluid and Water & Waste Management

Oxygen Systems (crew and passengers)

SAFRAN
IN BUSINESS AVIATION
FROM NOSE-TO-TAIL

With decades of experience in aviation, Safran masters the technologies that make aircraft of all sizes fly—from large airliners to helicopters and business jets.

Green Innovation
By investing in integrated propulsion systems, more electric aircraft, and operational fuel efficiency (software and consulting), Safran meets the market’s current and evolving requirements in terms of reliability and environmental standards.

An unmatched offering for business aviation
Business jet manufacturers can rely on Safran for their equipment needs ranging from engines, nacelles, thrust reversers, power transmissions, auxiliary power units, electrical power management systems, to landing gear, wheels, brakes, navigation systems, flight monitoring solutions and flight controls.

Customer support guaranteed
Safran has a global customer service network that provides after-sales and customer support, as well as maintenance, repair and overhaul services for its business aviation customers.
PROPULSION SYSTEMS
POWERING BUSINESS JETS

SAFRAN PROVIDES BUSINESS AIRCRAFT MANUFACTURERS WITH ENGINES AND NACELLES SEPARATELY OR AS AN INTEGRATED PROPULSION SYSTEM.

ENGINES
Our technological excellence results from decades of experience as an engine manufacturer. We cover the entire lifecycle of business jet engines from design, development and testing, to production, sales and support.

NACELLES
Safran develops engine nacelles that are lighter, quieter and smarter, thanks to a high proportion of composite material or metal alloys. We cover all components including air inlet, fan cowl, thrust reverser, exhaust and EBU (Engine Build Up).

INTEGRATED PROPULSION SOLUTIONS
With these combined capabilities, Safran is pioneering a new generation of integrated propulsion systems for business jets with enhanced performance, reliability, cost-effectiveness and environmental-friendliness.

SILVERCREST®
HIGHER, FASTER, FARTHER
Safran is developing Silvercrest®, an integrated propulsion system designed for long-range, large-cabin business jets in the super-midsize category.

NACELLE CUSTOMERS:
• Bombardier
• Dassault Aviation
• Embraer
• Gulfstream
• Textron Aviation

#1 WORLDWIDE IN ENGINES
for single-aisle commercial jets (in partnership with GE)

#1 WORLDWIDE FOR NACELLES
on top-of-the-line business jets

110 YEARS OF AIRCRAFT ENGINE EXPERTISE

FUEL CONSUMPTION AND CO2 EMISSIONS
15% LOWER than current engines

NOISE UP TO 20 EPNdB
under Chapter 4
and already meeting
the upcoming Chapter 14

ON CONDITION MAINTENANCE
ForeVision™ real-time monitoring system

NACELLE CUSTOMERS:
• Bombardier
• Dassault Aviation
• Embraer
• Gulfstream
• Textron Aviation

SILVERCREST® CUSTOMERS:
• Textron Aviation
INTEGRATED SOLUTIONS AND SERVICES

ALL ONBOARD ELECTRICAL FUNCTIONS
As a recognized expert in aircraft electrical systems, Safran covers all onboard electrical functions, including generation, distribution, conversion, electrical wiring interconnection systems, load management, systems integration, filtration, and ventilation.

“A MORE ELECTRIC” AIRCRAFT
We are fully committed to developing electrical aircraft systems and equipment to meet the economic and environmental challenges facing our customers. Our consolidated offering positions us as a world leader in power systems for “more electric” aircraft.

AUXILIARY POWER UNITS
Safran has engineered a full range of power units for business aviation. The SPU300[BA] is a state-of-the-art power source designed for long range, high performance business jets. The SPU150[DA] is the definition of reliability and cost effectiveness for the midsize to super midsize segments. The eAPU has been designed to meet the highest requirements of “more electric” aircraft.

POWER TRANSMISSION
The Integrated Generator Gearbox®, which we have jointly developed with GE, combines an electric generator and gearbox into a single unit, reducing the size and weight of the integrated propulsion system.

#1 WORLDWIDE IN AIRCRAFT ELECTRICAL INTERCONNECTION SYSTEMS
#2 WORLDWIDE IN ELECTRICAL POWER & DATA GENERATION
A WORLD LEADER IN APUS FOR BUSINESS JETS, HELICOPTERS AND MILITARY AIRCRAFT

CUSTOMERS: • Bombardier • Dassault Aviation • Embraer • Textron Aviation
Combining advanced engineering, integrated systems technology, and in-depth service experience, we deliver cost-efficient solutions to the world’s leading business jet manufacturers.

Our offering includes landing gear, landing gear extension and retraction systems, monitoring systems, steering systems, braking systems, and wheels and brakes integration.

Our focus is to ensure that the future generation of landing and braking systems are not only reliable and easy to maintain, but lighter, quieter, more cost-efficient and robust, ultimately providing overall value across the full lifecycle of a business jet program.

CUSTOMERS:
- Bombardier
- Daher
- Dassault Aviation
- Gulfstream
- Piaggio

* Mainline commercial jets with more than 100 seats.
SAFRAN’S COMPREHENSIVE AVIONICS OFFERING COVERS FLIGHT CONTROL SYSTEMS, ENGINE CONTROL SYSTEMS, FLIGHT DATA MANAGEMENT SYSTEMS AND NAVIGATION SYSTEMS.

**FLIGHT CONTROL SYSTEMS**

From throttle control assemblies and actuators to sensors, illuminated switches, and instrument panels and displays, we develop and produce an advanced range of flight control systems.

**ENGINE CONTROL SYSTEMS**

As an expert in automated engine control systems, we have partnered with BAE Systems to create FADEC International. This joint venture provides FADEC (Full Authority Digital Engine Control) units for enhanced safety, reliability and engine performance.

**FLIGHT DATA ANALYSIS**

With Cassiopée, we offer a full, integrated range of equipment for the acquisition, management, recording and analysis of flight data to enhance safety and maintenance.

**NAVIGATION SYSTEMS**

Navigation systems play an important role in flight safety. With SKYNAUTE, we offer the most cost-effective, reliable and compact inertial navigation system, ideal for business jets.

**ACTIVE SIDE STICK UNIT**

By electronically connecting the aircraft’s side sticks, this innovation will provide pilots with tactile feedback and greater situational awareness.

**CUSTOMERS:**
- Bombardier
- Cessna
- Daher
- Dassault Aviation
- Embraer
- Gulfstream
- Textron Aviation
CUSTOMER SUPPORT
PROVIDING COMPREHENSIVE WORLDWIDE CUSTOMER SUPPORT

WE NOT ONLY PROVIDE THE KEY TECHNOLOGIES THAT MAKE BUSINESS JETS FLY, WE ALSO PROVIDE THE ASSOCIATED SUPPORT SERVICES.

FLEXIBLE, TAILORED SUPPORT
The business aviation market demands reliability, flexibility, cost-efficiency and optimized planning. Safran is well-positioned to offer extensive, tailored support across the full lifecycle of a business jet program.

Our global aftermarket offering includes spares provisioning and supply, maintenance, repair and overhaul (MRO), engineering services, real-time data monitoring, logistics management, as well as on-site and technical support and training.

IMPROVING SERVICES THROUGH INNOVATION
As an innovator, our strategy is to constantly anticipate and introduce new technologies, new production techniques and new materials in order to better maintain and repair our products.

We believe in preventive maintenance, which is why we leverage our expertise in data analytics to conduct diagnosing and forecasting on the condition of business aircraft.

GLOBAL REACH, LOCAL SUPPORT
Our facilities are strategically located in major aviation hubs, close to our customers, so we can provide immediate, efficient and reliable support.

- SERVICE CENTERS WORLDWIDE
- SUPPORT BY THE HOUR
- TRAINING AND CONSULTING SERVICES
- 24/7 CUSTOMER SUPPORT AND SERVICES
- DISTRIBUTION CENTERS
- INTERNATIONAL REPAIR NETWORK
- MORE THAN 200 TECHNICAL REPRESENTATIVES WORLDWIDE