### SAFRAN AT THE 2015 PARIS AIR SHOW

PRESS CONFERENCE, JUNE 11, 2015





### 1/ SAFRAN: HIGH PERFORMANCE



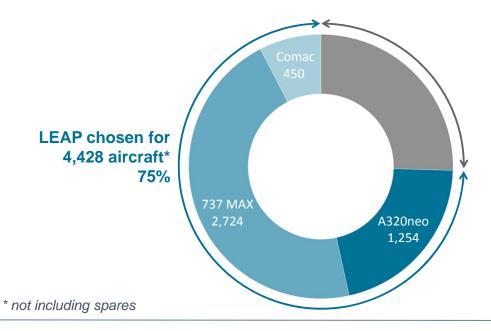


### LEAP

#### STRENGTHENED LEADERSHIP

### Market share exceeding 70% on next-generation single-aisle commercial jets:

- More than 8,900 orders and commitments at May 31, 2015,
   equal to more than 5 years of production at normal rates.
- 56% market share on the A320neo.





First flight of LEAP-1A-powered A320neo



Ground test of the LEAP-1B





### **LEAP** 2015 ORDERS (at May 31, 2015)

#### 442 engine orders:

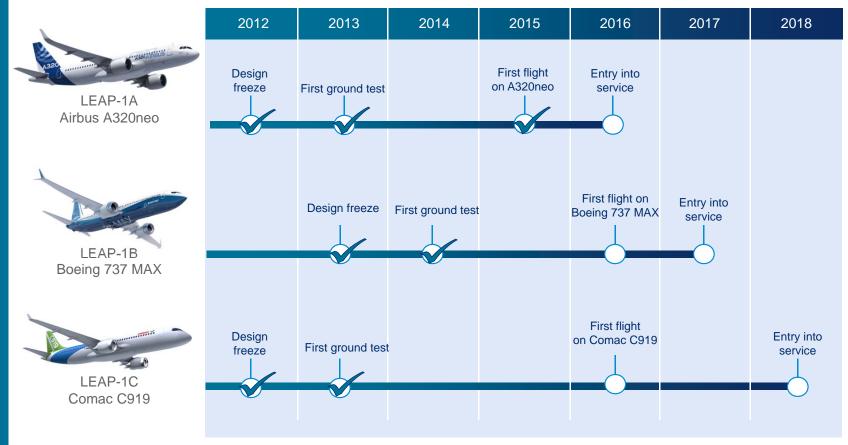
- 59 A320neo → 118 LEAP-1A
- 142 737 MAX → 284 LEAP-1B
- 20 C919 → 40 LEAP-1C





### LEAP

#### **DEVELOPMENT ON SCHEDULE**



#### Flight tests:

28 development engines and 32 engines for tests on the three aircraft.

### Flight-hours on flying testbed (FTB):

nearly 400 hours to date.

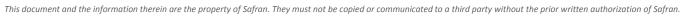
### LEAP-1A: flight tests on A320neo

13 flights, 50 hours (at June 5).

#### **LEAP-1B:** first flight

on 747 flying testbed (April 29).







### CFM56 KEY FIGURES (at May 31, 2015)

- 28,000 CFM56 engines delivered since 1982, including 1,560 in 2014
- 4,100+ CFM56 engines on order
- 314 CFM56 engines ordered to date in 2015, including:
  - 206 CFM56-5B for Airbus
  - 80 CFM56-7B for Boeing
- CFM's share of engine orders for the A320ceo in 2015 has increased significantly

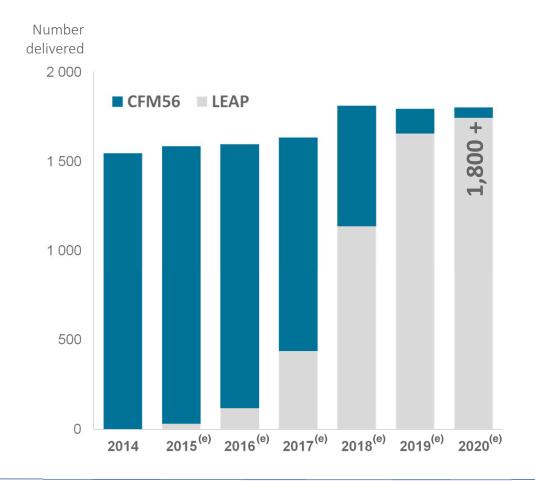


CFM56 pulse line at Villaroche plant



### CFM

#### RAMP-UP AND CFM56/LEAP TRANSITION



#### • For Safran, the LEAP means:

- 50% of production in France
- 150 suppliers
- 2,000 specific parts doubled-sourced
- 10,000 jobs generated in France (direct or indirect)
- More than 15 French facilities created or modified



### **AVIATION** GOOD PERFORMANCE

#### **Contributions to new aircraft programs:**

- Airbus A330neo: Safran to supply the nacelle
- Boeing 777X: slightly over 11% share in GE9X engine, and supply of nacelle nozzles



Airhus A330neo



Boeing 777X

#### **Development of Arrius 2R** for Bell Helicopter and Arrano for Airbus Helicopters



Bell 505 Jet Ranger X

#### Silvercrest: tests on flying testbed, and rollout of Falcon 5X



Falcon 5X rollout

#### **Strong growth in civil aftermarket** in 2014: 11.3% (in USD)



Maintenance operation



### DEFENSE

### GOOD PERFORMANCE



JIM LR binoculars

#### Sales momentum

- Optronics: surveillance system for French navy, multifunction day/night binoculars
- Avionics: seekers for future medium-range antitank missile and future French-British light antiship missile



Mica missile, with Safran seeker

## Rafale: first export contracts, from Egypt and Qatar, and announced order from India



Rafale

# Avionics: acquisition of Eaton's integrated cockpit solutions business strengthens presence in U.S. and product range









### **SECURITY** GOOD PERFORMANCE

#### **Several major contract wins**

- Safran selected by Slovakia and Egypt for secure ID documents
- Signature of a contract for multibiometric border control system with United Arab Emirates





Secure ID documents

Finger on the fly

#### Successful integration of Dictao expands offering of high-security solutions for governments and the private sector







#### OTHER 2015 HIGHLIGHTS

- Turbomeca receives certification for Arriel 2N engine, which powers the latest version of the Airbus Helicopters Panther.
- Creation of Aero Gearbox, a joint venture between Hispano-Suiza and Rolls-Royce to make power transmissions for Rolls-Royce's future commercial aircraft engines.
- First flight of the Embraer KC390, demonstrating the reliability of the **electrical systems** provided by Labinal Power Systems. LPS also wins design and production contract for the **wiring harnesses on the Beluga XL**, the Airbus cargo carrier.
- Messier-Bugatti-Dowty delivers first landing gear shipset for the Global 7000/8000, and opens a new wheel and brake repair shop in the United States (Bethlehem, PA) to support the growth of airlines deploying Airbus A320 and Boeing 737, 767, 777 and 787 fleets.
- Second complete and tested Ariane 5 launcher delivered to Arianespace under the responsibility of Airbus Safran Launchers, the 50/50 joint company between Airbus Group and Safran.



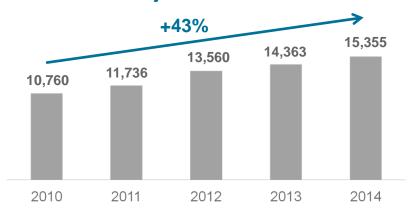
#### **OTHER 2015 HIGHLIGHTS**

- Sagem wins two major competitive bids, will supply PASEO sight for more than 2,000 systems (PASEO is an optronic sight used on infantry fighting vehicles).
- United States Coast Guard chooses the Sagem BlueNaute navigation system, the company's first major success in the U.S. naval navigation market.
- Heathrow airport in London chooses Morpho's explosive detection system, in line with European regulations (contract for 45 CTX systems). Successful launch of Morpho's Itemiser 4DX trace detector, which also meets new EU regulations. 600 of these have already been sold in the last six months, especially to airports in Germany, Switzerland, Denmark and Spain.
- Signature of Morpho's second PNR contract (Passenger Name Record): after a selection by France, this air passenger data collection and processing system was chosen by Estonia.

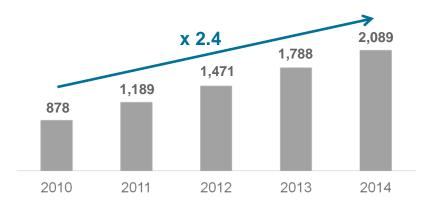


### STEADY RISE IN RESULTS AND INVESTMENTS (adjusted key figures)

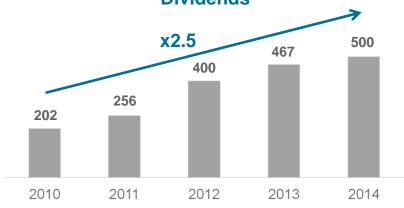
#### **Adjusted revenue**



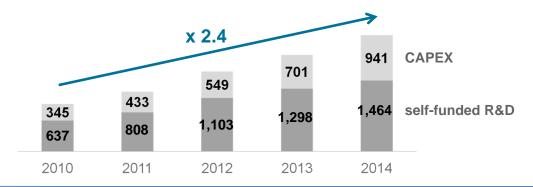
#### Adjusted recurring operating income



#### **Dividends**

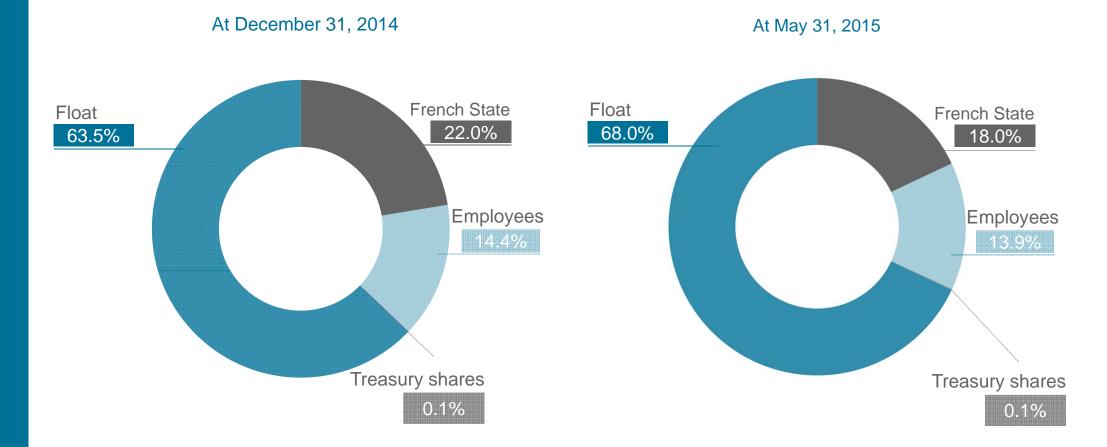


**R&D** and **CAPEX** (tangible and intangible)





### SAFRAN CAPITAL SHAREHOLDING







# 2/ SAFRAN: RESOLUTELY FUTURE-FACING



ART BIRDIONS, ART PECANOLOGIES, ARE TALEN









#### **BUILDING FOUNDATIONS FOR THE FUTURE**

#### Industrial investments: €674 million in 2014, 70% in France





Inauguration of twin plants for LEAP parts, in Commercy (France) and Rochester, NH (USA)



Inauguration of a carbon production plant in Malaysia

Founding of Airbus Safran Launchers to enhance competitiveness of the European space industry



Ariane 6

#### Investing in technological differentiation

- €2 billion invested in R&D in 2014, including €400 million in self-funded Research & Technology
- Inauguration of Safran Tech to accelerate the development of innovative solutions



Safran Tech, the corporate R&T center at Paris-Saclay

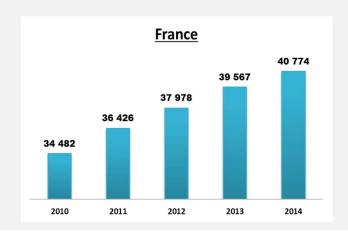




### SAFRAN BUILDING FOUNDATIONS FOR THE FUTURE

#### **Growing workforce**

- Nearly 8,400 net jobs created worldwide from 2012 to 2014, including more than 4,000 in France (10% of workforce)
- 45% of employees worldwide have less than 5 years of seniority (25% in France)



#### Investing in employee training

Safran Campus







### SAFRAN INNOVATION: THE KEY TO FUTURE SUCCESS





#### INNOVATION: THE KEY TO FUTURE SUCCESS

#### Tomorrow's aero-engines



The LEAP features several breakthrough or even disruptive technologies, making it the new standard in this market, based on its performance, reliability, environmental-friendliness and reduced operating costs.

Stronger and lighter, the LEAP's fan blades are made of a **3D woven composite**, using a revolutionary process invented by Safran et Albany International.





Open rotor type engines could well power upcoming generations of commercial airplanes.





#### INNOVATION: THE KEY TO FUTURE SUCCESS

#### "More electric" aircraft

Safran now covers all electrical systems for civil and military aircraft, based on its complementary areas of expertise consolidated in a single entity:

Labinal Power Systems.



#### **Autonomous vehicles**



Safran and Valeo have formed a research partnership focused on driving assistance and autonomous vehicles, for automobiles, military vehicles and aircraft.





### SAFRAN INNOVATION: THE KEY TO FUTURE SUCCESS

#### **Digital ID and smart transactions**

Safran ensures the security, confidentiality and reliability of electronic transactions, with applications targeting the banking, telecom, enterprise and other markets.



#### **Data, underpinning Safran's transformation**



In January 2015, Safran set up a special entity dedicated to the infinite possibilities of big data: Safran Analytics.





### SAFRAN INNOVATION: THE KEY TO FUTURE SUCCESS

#### **Future factory**

Robotization, digitization, additive manufacturing... Safran is pioneering the use of innovative production processes in its plants, to enhance industrial rationalization and performance.



#### Fab Lab



A dedicated space allowing Safran employees to give free rein to their imaginations and design new digital and other services, to enhance the operation and maintenance of aircraft engines.



### SAFRAN GOVERNANCE

■ The functions of Chairman of the Board and Chief Executive Officer have been separated



Philippe Petitcolin
Chief Executive Officer



Ross McInnes
Chairman of the Board of Directors



### SAFRAN EXECUTIVE COMMITTEE



Philippe PETITCOLIN Chief Executive Officer



Stéphane ABRIAL Senior Executive VP, International and **Public Affairs** 



**Bernard DELPIT** Senior Executive VP. Finance



Pierre FABRE Senior Executive VP. R&T and Innovation



**Alex FAIN** Corporate Secretary



Jean-Paul ALARY CEO Aircelle



Olivier ANDRIÈS CEO Snecma



Anne BOUVEROT CEO Morpho \*



**Bruno EVEN** CEO Turbomeca



Vincent MASCRÉ CEO Messier-Bugatti-Dowty



Alain SAURET CEO Labinal Power Systems



Philippe SCHLEICHER Chairman and CEO, Herakles



**Martin SION** CEO Sagem



Jean-Luc BÉRARD Executive VP, Human Resources



Éric DALBIÈS Executive VP, Strategy and M&A



Pascale DUBOIS Executive VP. Communications



Jean-Jacques ORSINI Executive VP. Performance and Competitiveness

\* As from August 1, 2015



### APPENDICES: SAFRAN, A PARTNER IN MAJOR PROGRAMS





26 / Press Conference, 2015 Paris Air Show – June 11, 2015



# SAFRAN AND THE BOEING 737 MAX



27 / Press Conference, 2015 Paris Air Show – June 11, 2015





 $28\,/$  Press Conference, 2015 Paris Air Show – June 11, 2015





Compressors and FADEC engine control unit on the GP7200 engine
Nacelle and electrically-actuated thrust reverser
Wiring, electrical generator
Landing and braking system, nose landing gear
Equipment for the onboard information system and flight control system

29 / Press Conference, 2015 Paris Air Show – June 11, 2015

SAFRA AEROSPACE · DEFENCE ·



30 / Press Conference, 2015 Paris Air Show – June 11, 2015



### SAFRAN AND THE AIRBUS A350 XWB



Integrated landing and braking system

Main landing gear, wheels and carbon brakes

Power transmission for the Trent XWB engine

Fuselage and engine pylon wiring

Equipment for the onboard information system and flight control system

31 / Press Conference, 2015 Paris Air Show – June 11, 2015



### SAFRAN AND THE

### **BOEING 777X**



Contributions to the GE9X engine: composite fan blades (via CFAN), 3D woven composite fan case, low-pressure compressor Nacelle nozzle

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SAFRAN



Propulsion system via PowerJet (SaM146 engine, nacelle) Landing gear



SAFRAN AEROSPACE, DEEENCE, SECURITY















36 / Press Conference, 2015 Paris Air Show – June 11, 2015





TP400 engine via Europrop International Landing gear and landing systems, wheels and carbon brakes Wiring Navigation system

SAFRAN

### SAFRAN AND THE PATROLLER<sup>TM</sup>



Long-endurance surveillance drone for defense and security missions
High performance: 20 hours endurance, 55 – 110 kts, max. altitude: 20,000 ft
Based on an EASA-certified airframe
Multi-sensor multi-mission tactical drone system

38 / Press Conference, 2015 Paris Air Show – June 11, 2015







SAFRAN AEROSPACE DEFENCE SECURITY



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