

# PRESS CONFERENCE

September 4, 2019



ARCHITECT OF  
THE FUTURE

## PARIS AIR SHOW 2019 (1/3)

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### **Future Combat Air System (FCAS): industrial agreement and submission of proposals to France and Germany**

Dassault Aviation and Airbus Defence and Space reached a major milestone of the FCAS program.

Éric Trappier, Chief Executive Officer of Dassault Aviation, and Dirk Hoke, Chief Executive officer of Airbus Defence and Space, signed a joint industrial proposal on June 17, 2019, under the aegis of Emmanuel Macron, French President, and in the presence of Florence Parly, French Armed Forces Minister, Ursula von der Leyen, German Federal Defense Minister, and Margarita Robles, Spanish Defense Minister.



## PARIS AIR SHOW 2019 (2/3)



French President visit



Tributes

Announcement of Archange and Albatros  
by the French Armed Forces Minister



## PARIS AIR SHOW 2019 (3/3)



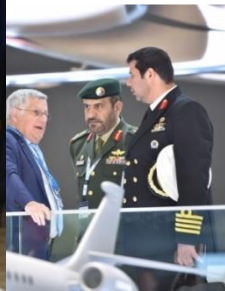
Prime Minister visit



Minister of Transport visit



Recruitment



Foreign delegations



AI & Big Data  
at Paris Air Lab



## CONTEXT

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European elections

Environmental pressures

Uncertainties:

- Geopolitical tension and terrorism
- Trade war between China and the United States
- Brexit
- Economic environment
- \$/€ exchange rate



# FUTURE COMBAT AIR SYSTEM (FCAS)

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## Unveiling of the first mock-ups of the New Generation Fighter (NGF) and support drones

The industrial agreement covers demonstrator programs for the main components of the Future Combat Air System: New Generation Fighter and support drones.

Joint industrial proposals for the initial phase demonstrators were submitted to the French Defense Procurement Agency (DGA) and the German Federal Ministry of Defense.

France has been designated lead nation and Dassault Aviation leader on the fighter

**Objective: a technology demonstrator, with first flight scheduled in 2026**



## RAFALE FRANCE (1/2)

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### **No deliveries in 2019 in accordance with the Military Programming Law.**

Delivery of the 28 Rafale remaining of the 180 ordered will start again in 2022.

Commencement of work on the F4-standard Rafale.

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F4-Standard: AASM 1000 kg integration study



## RAFALE FRANCE (2/2) - RAVEL

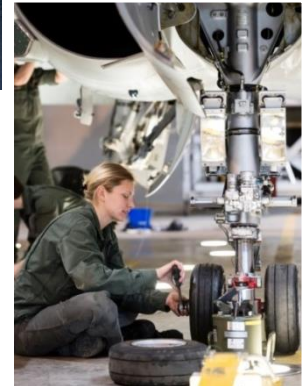
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### **RAVEL contract notification for the french Rafale Operational Condition Maintenance (OCM).**

Dassault Aviation is the OCM single prime contractor for:

- aircraft equipment (excluding engines and seats)
- enhanced technical and logistical services
- a 10 year term

Through-life support activities will be based on a Dassault Aviation/Dassault Systèmes “Big Data” platform.





## RAFALE QATAR

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**Delivery of the first 10 Rafale of the 36 ordered (end of August, 15 Rafale delivered).**

Continued training of the pilots at Dassault Aviation Convention Training Center (CTC) and set up of local technical support.

His Excellency Dr. Khalid bin Mohamed Al Attiyah, Qatar Deputy Prime Minister and Minister of State for Defense Affairs with Éric Trappier, February 6<sup>th</sup> in Mérignac



# RAFALE EGYPT AND RAFALE INDIA

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## Rafale Egypt

Delivery of the 24<sup>th</sup> Rafale in July (not included in first semester)

## Rafale India

1<sup>st</sup> deliveries in 2019 of the contract of 36 Rafale ordered

Indian Forces getting ready for the entry into service of the Rafale

Prime Minister Narendra Modi re-elected

Discussions put on standby during the electoral campaign resumed



# MAKE IN INDIA - IMPLEMENTATION OF A PRODUCTION LINE IN INDIA

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## **Dassault Reliance Aerospace Ltd subsidiary in Nagpur: progressive ramp up**

Construction of the main hangar (2<sup>nd</sup> hangar)

Production release of the first Falcon 2000 assemblies (5 front tanks, 3 front sections)



## **Development of an Indian supply chain: primary parts, tools, pylons, tanks, etc**

Delivery to Dassault Aviation of the first primary parts and tools

## **Ramp up of the engineering center in Pune**



## EURODRONE

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Ongoing set-up by Airbus Defence and Space, with Leonardo and Dassault Aviation as main subcontractors, of proposals in response to the OCCAR (Organization for Joint Armament Cooperation) invitation to tender, with a view to signing a contract for the development, production and initial support of a Medium Altitude Long Endurance (MALE) drone.



# SPACE PROGRAMS

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## Space vehicles

Pursuit of the studies for the reusable orbital vehicle  
« Space Rider » from the ESA (1<sup>st</sup> flight planned in 2021).

Dassault Aviation responsible for the vehicle design and  
approached for the missions' definition.

## Interest in the new Defense space policy





## MARITIME PATROL AIRCRAFT

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Delivery of the ATL2 upgrade and of the first modernized aircraft.



# MULTI-MISSION FALCON

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## Japan

Delivery of the first 2 aircraft.

Order of a 6<sup>th</sup> Falcon 2000MSA for maritime surveillance by the Japanese Coast Guards.

## France

Announcement by the French Armed Forces Minister on June 17, 2019 of plans to buy:

- 3 Falcon 8X « Archange » to implement the Universal Electronic Warfare Capability (CUGE)
- 7 Falcon 2000LXS « Albatros » for maritime surveillance and intervention

Delivery of the 2<sup>nd</sup> Falcon 50SurMar retrofitted with hatches for Search and Rescue (SAR) chains.



## BUSINESS JET MARKET

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- Very flat market at the start of the year leading to an order intake of only 7 Falcon at the end of June.
- Numerous prospects and negotiations started during the period.
- July and August: finalization and achievement resulting in a total of 26 Falcon order intake as of August 31, 2019 (including the 7 Falcon of the 1<sup>st</sup> half).



# FALCON 6X

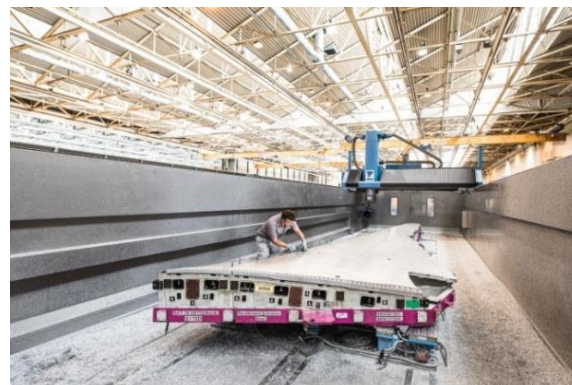
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## Program progressing in line with schedule for an entry into service in 2022

Production of the first components and commencement of work on the first T5 sub-assemblies and wing.

nominal PW812D engine tests:

- 4 engines in the test phase, 1,000 test hours
- 150 hours carried out on a flying testbed
- 5<sup>th</sup> engine in assembly phase



## FALCON IN SERVICE (1/2)

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Considering the effort made in Falcon support since a few years (Falcon Response, parts availability, service centers network...) the business jet market acknowledged Dassault Aviation's great results:

**N°1 overall (AIN and ProPilot)**

**N°1 parts availability (AIN and ProPilot)**

**N°1 parts cost (AIN)**

**N°1 AOG support (AIN)**

**N°1 overall aircraft availability (AIN)**

**N°1 service satisfaction (ProPilot)**





## FALCON IN SERVICE (2/2)

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### Falcon 8X

New time record across United States: from Santa Monica to Teterboro in 4:28 hours (take off on a length and noise restricted field).

Excellent customer feedback on the comfort of the Falcon 8X, recognized as the quietest jet on the market.

### Continuous improvement of aircraft security and capabilities

« FalconEye »: certification EFVS up to 100 feet for landings with reduced visibility on the Falcon 900LX, 2000LXS and 2000S (N.B.: obtained in 2018 for Falcon 8X).

FalconSphere II (flight aid system) available on iPad on the Falcon 7X et 8X.

### Royal Australian Air Force

2 Falcon 7X VIP delivered of the 3 ordered.



# FALCON FAMILY

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**8X (6 450 NM)**



**7X (5 950 NM)**



**6X (5 500 NM) from 2022**



**900LX (4 750 NM)**



**2000LXS (4 000 NM)**



**2000S (3 350 NM)**

## FUTURE FALCON

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In progress: marketing and technical studies are ongoing.

## FALCON CUSTOMER SERVICE

Continuing development of a network of excellence while expanding our market share in Falcon maintenance: **acquisition, in July, of RUAG's business jet operations in Geneva and Lugano** (in addition to the previous acquisitions of ExecuJet and TAG Aviation - Europe operations). Closings took place on March 28 for ExecuJet (excluding Dubai and Nigeria), July 1<sup>st</sup> for RUAG and September 2<sup>nd</sup> for TAG.



The transformation plan covers all the areas initially targeted (culture, skills and organization; digital tools, process and innovation; industrial tools; program management). In the 1<sup>st</sup> half of 2019, this involved:

- new appointments,
- the implementation of the extended engineering office,
- the implementation of the digital plan,
- the reinforcement of the industrial piloting with the support of the consultancy firm Accenture.



## DIGITAL (1/2)

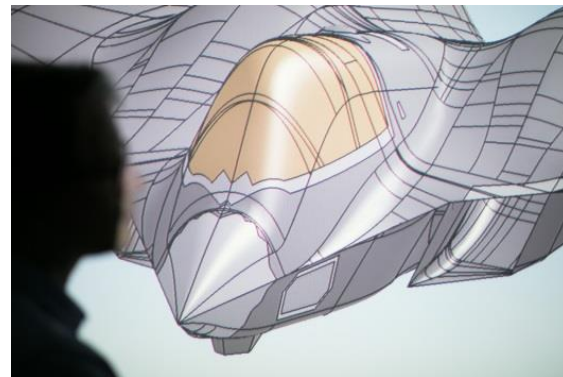
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Ramp-up of the Dassault Systèmes 3DEXperience™ collaborative engineering platform: Dassault Aviation / Dassault Systèmes strategic partnership (cf. next slide Dassault Systèmes Q2 results press conference abstract).

The future Falcon program is the 1<sup>st</sup> to use 3DEXperience™.

Big Data: implementation of a Dassault Aviation/Dassault Systèmes platform to meet the commitments made under the Rafale integrated through-life support contract, that will be extended to the Company's other departments.

Implementation of SAP and Apriso software to production departments.



Dassault Systèmes'  
Press conference  
abstract dated  
July 24, 2019



### Dassault Aviation Adopts 3DEXPERIENCE for Fleet Performance



Leading aircraft manufacturer



#### Business Values:

Dassault Aviation appointed a single contractor for the maintenance verticalized contract of RAFALE fleet embarking all industrial partners

- ▶ Maximizing **fleet availability**  
Minimizing operational **costs**  
Improving contract **performance**
- ▶ **AI & big-data** for continuous learning on fleet data to deliver predictive/preventive maintenance & reliability
- ▶ **Advanced & secured collaboration** for multi partners (customer and sub-contractors) on complex operations to leverage aircraft data while protecting all relevant information

#### Solution:

3DEXPERIENCE twin to consolidate the massive amount of data from the real world to a virtual model for projection, contextualization and learning, with EXALEAD and ENOVIA brands

## INDUSTRIAL

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Decision to relocate from Argenteuil to Cergy.

Mérignac: laying of the foundation stone of the future building that will house some of the Company's operational departments.

Biarritz: modernization works.

Martignas: delivery in August of the building for the pyrotechnics operations (relocating from Argenteuil and Poitiers).

Seclin: completion of the building extension intended to house the Argenteuil sheet metalworking and coating facility; installation of the first coating machines.

Poitiers: relocation of loads (from Argenteuil) and aerostructures repair.

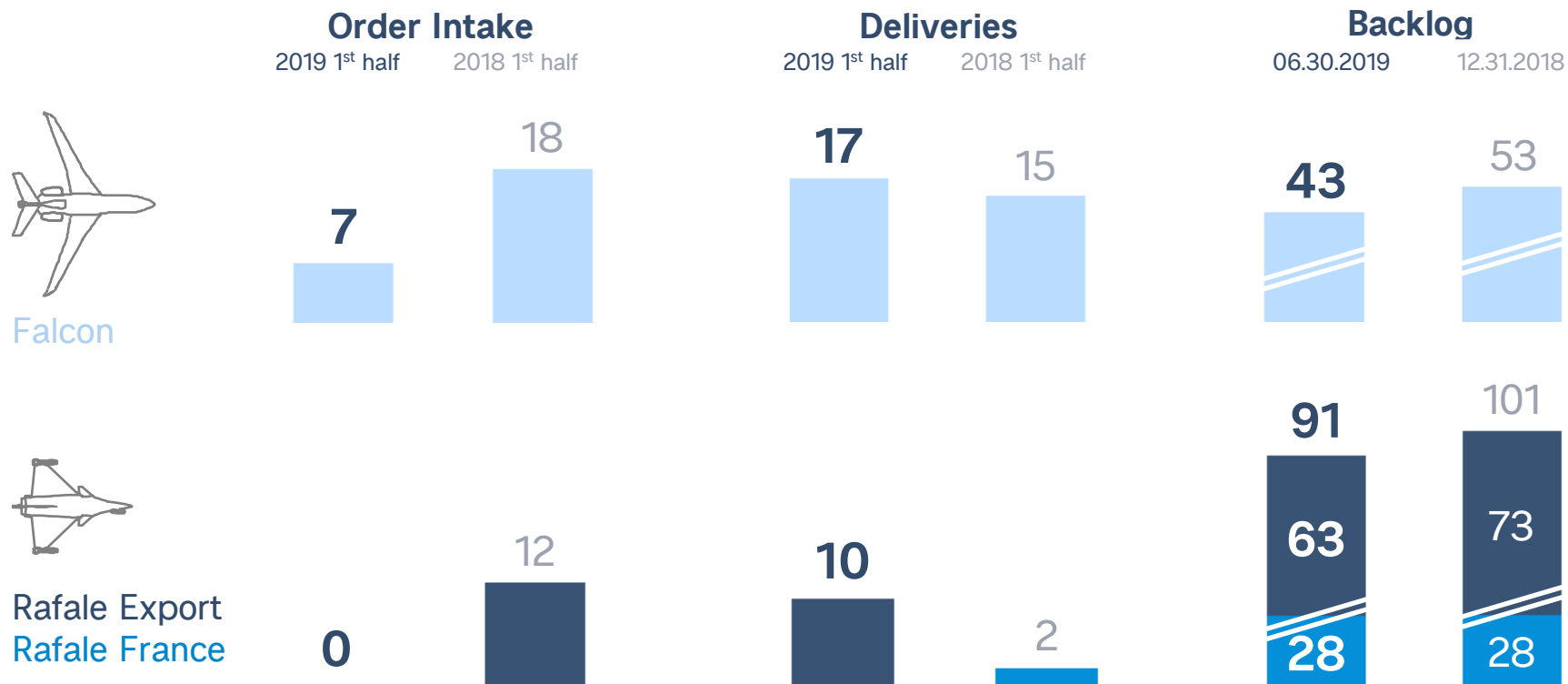


Laying of the foundation stone of the future building in Mérignac



Pyrotechnic building in Martignas

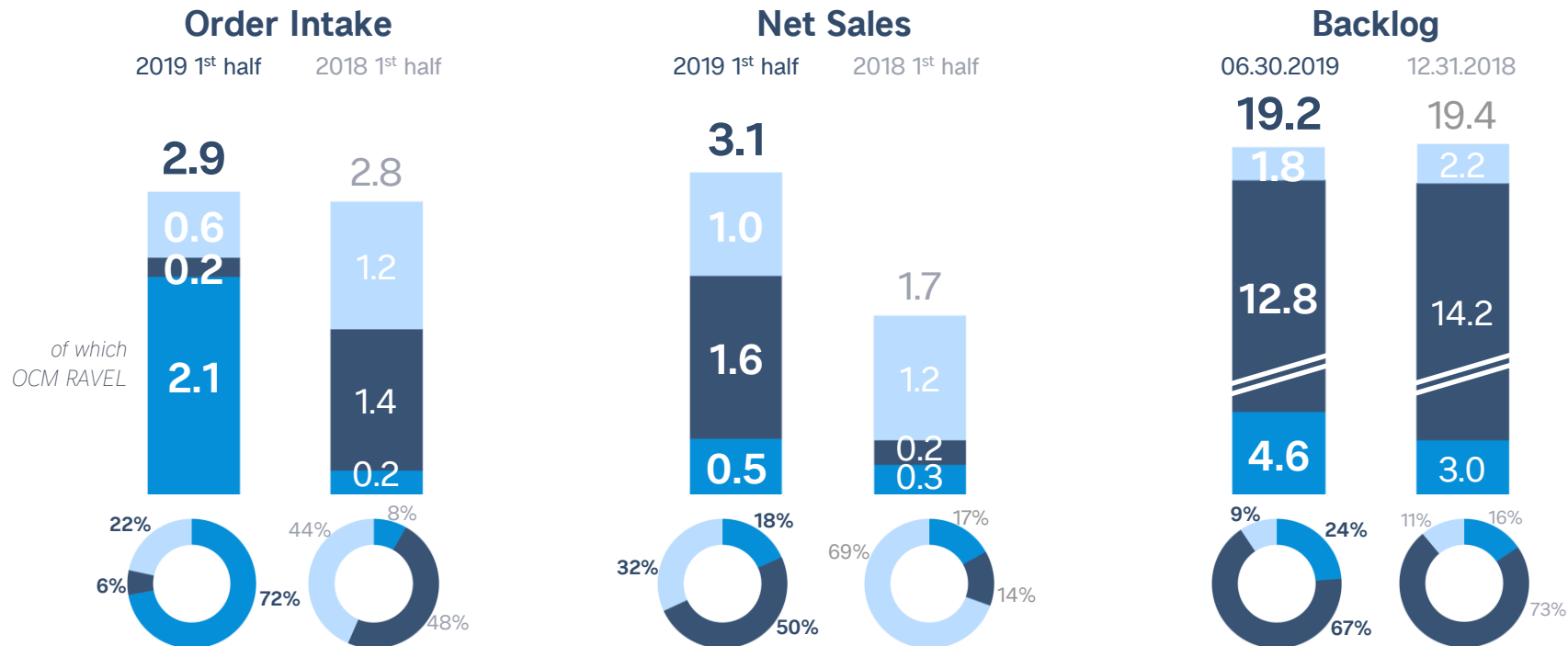
## ORDER INTAKE, DELIVERIES AND BACKLOG - IN UNITS



# ORDER INTAKE, NET SALES AND BACKLOG - IN € BILLION

Note: Dassault Aviation recognizes the Rafale Export contracts in their entirety (with the Thales and Safran parts) and the OCM RAVEL contract for Rafale France, whereas for all other contracts, only the Dassault Aviation part is recognized.

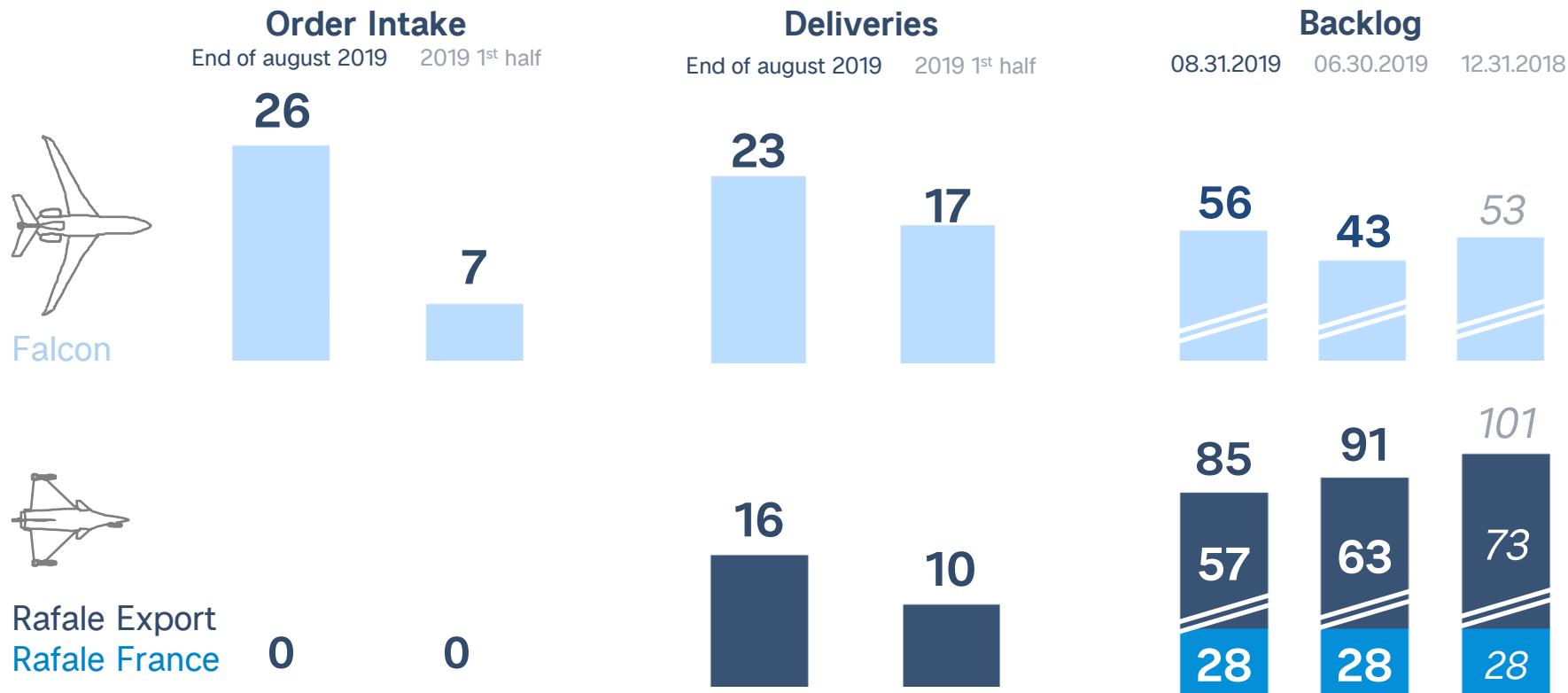
■ Defense France ■ Defense Export ■ Falcon





# ORDER INTAKE, DELIVERIES AND BACKLOG - IN UNITS

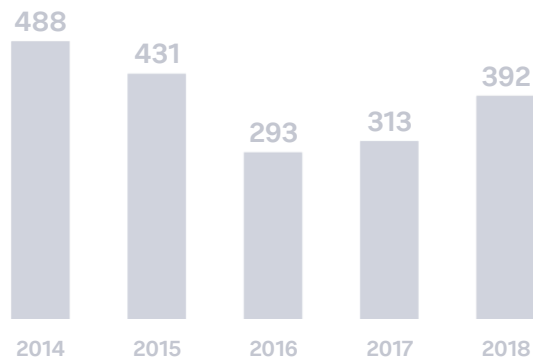
**END OF AUGUST**



## CONSOLIDATED SELF-FUNDED R&D - IN € MILLION

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Reminder:



9.2 % of net sales on average

**€ 258 M**

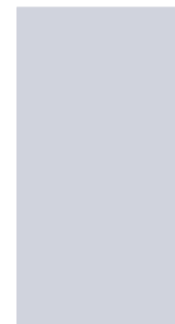
(8.4% of Net Sales)



**2019 1<sup>st</sup> half**

**€ 143 M**

(8.4% of Net Sales)



**2018 1<sup>st</sup> half**

## ADJUSTED CONSOLIDATED INCOME STATEMENT

	1 <sup>st</sup> HALF	
	2019	2018
<i>in € millions</i>		
<b>NET SALES</b>	<b>3,058</b>	<b>1,709</b>
<b>OPERATING INCOME</b>	<b>250</b>	<b>111</b>
<i>Operating margin</i>	<i>8.2%</i>	<i>6.5%</i>
<b>FINANCIAL INCOME</b>	<b>-26</b>	<b>-38</b>
<b>THALES and other equity affiliates</b>	<b>143</b>	<b>134</b>
<b>TAXES</b>	<b>-81</b>	<b>-21</b>
<b>NET INCOME</b>	<b>286</b>	<b>186</b>
<i>Net income margin</i>	<i>9.4%</i>	<i>10.9%</i>

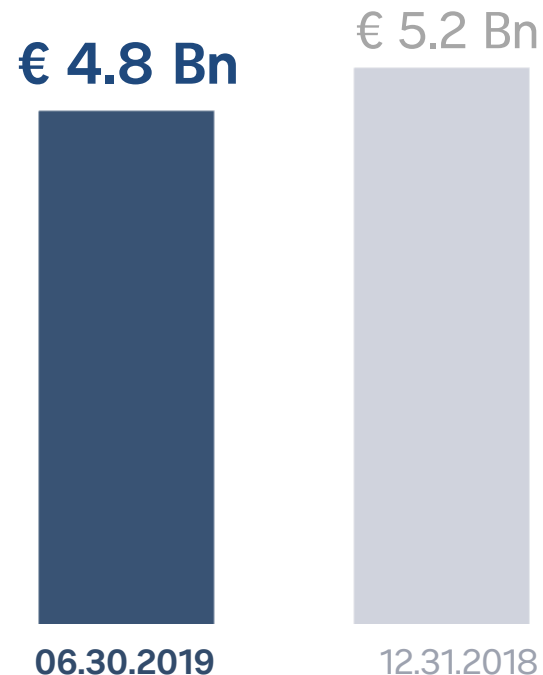


## CONSOLIDATED AVAILABLE CASH

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**The € 4.8 Bn cash includes in particular, Rafale Export down payments received for ongoing contracts.**

N.B.: in the coming years Rafale Export contract execution, development of two Falcon programs and large investments for the transformation plan in the coming years should result in the decrease of available cash.



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