Dassault Aviation
2019 Annual Results

27 February 2020

List of MAIN speakers	Company	Job title
Eric Trappier	Dassault Aviation	CEO

PRESS CONFERENCE – February 27, 2020

Eric Trappier
CEO

Good morning. Welcome to this conference concerning our 2019 full year results. We will first of all screen video that will recap the Dassault highlights for 2019.

2019 started with the Ministry of the armed forces visiting our Mérignac plant on the 14th of January. [? 00:00:31] officially awarded to our CEO, the contract to develop the new F4 Standard of the Rafale.

The Rafale is an operation on commercial success, retaining the best capability level, developed via successive standards. The Rafale will still be in service beyond 2050.

In this context, developments must be continued further to the F3R, including both technological advances and feedback from our operational staff with respect to facing new threats. Compared to the current F3R standard, the F4 standard will provide substantial advances in four areas: smart technology, engagement, survivability and availability. F4 validation is planned for 2024 with certain functions available from 2022.

In her speech, the Minister of the armed forces paid tribute to the expertise of the men and women of our company. You represent the best of France in work, industrial expertise and service.

Our Falcon support development strategy is improving with the acquisition declared at the start of 2019 of the maintenance business of TAG Aviation in Europe and ExecuJet in July. The company also announced the buyout of RUAG's business aviation activities in Geneva and Lugano.

This ambitious strategy focused on our customers, which included the construction of an ultra-modern spare parts centre, was rewarded this summer by Dassault Aviation's top place in the AIN and ProPilot surveys.

These are the main services for business jet support. Customers and operators pay close attention to them. The two magazines highlighted our excellence in almost all support areas: availability and price of spare parts, responsiveness of our repair specialists, aircraft reliability and customer satisfaction.

On the 6th of February, our Bordeaux Mérignac plant hosted the delivery ceremony for the first of 36 Rafale aircraft ordered by the state of Qatar.

This event is a historic day, as it marks the quality of a solid relationship established more than 40 years ago between the Qatar Air Force and Dassault Aviation. This ceremony, featuring Geneviève Darrieussecq, Secretary of State to the Ministry of the Armed Forces, was the opportunity for the Deputy Prime Minister of Qatar and Minister of State for Defence Affairs to reveal the official name and symbol of the Qatari Al Attiyah [ph 00:03:11] Rafale.

After a direct flight from France with in-flight refuelling, the first five Rafales, in the hands of Qatari crews trained in France, were delivered to Doha during a grand ceremony in the presence of His Highness, the Emir of Qatar, and our CEO.

The Rafale successfully completed a test campaign in the extreme cold of Finland from the 29th of January to the 2nd of February in the Lapland region. Engine starts and runway taxi tests were performed as well as flight tests.

A hot weather experiment campaign for the Rafale FR3 standard subsequently took place in July in the United Arab Emirates. The European Business Aviation Convention and exhibition EBACE took place in Geneva from the 21st to the 23rd of May. It was an opportunity for Dassault Aviation to show off our whole business jet range and present an update on the Falcon 6X programme which is progressing on schedule.

On the 14th of May, the official construction site was launched for the new Mérignac building, which will mainly accommodate the research, development and after-sales support teams. It is one of the projects in our infrastructure refurbishment programme, validated as part of our transformation plan. This programme involves specialising the production size by strategic sectors.

It also includes building a new plant in Cergy to accommodate the Argenteuil site activities, upgrading the Saint Cloud and Biarritz sites, expanding the Seclin site, and delivering new facilities to Martignas [ph 00:04:59], the company's pyrotechnic activities.

A tripod shipbuilding spanning 2,500 square meters and its bunker for storing explosive components was inaugurated on the 27th of November. The Leading Our Future transformation plan is based on our DNA: [? 00:05:28] military duality, innovation, teamwork, responsiveness, tenacity and the expertise of the company's staff.

Digital technology in which we are a trailblazer is at the centre of this transformation, which aims to enable Dassault Aviation to adapt to global changes and rise to the increasingly complex challenges the company has been facing over more than a century of passion for aviation.

As part of the transformation plan, our Dassault Reliance Aerospace Limited plant in Nagpur, India, started producing new sections and tanks for the Falcon 2000. The construction of a new 12,500 square metre building for developing the local supply chain and the growth of the engineering centre in Pune illustrates our desire to invest sustainably in India as part of the national Make In India policy.

On the 24th of April, the Falcon 8X beat a speed record, connecting the East and West Coast of the US in 4 hours and 28 minutes. The aircraft beat the previous record by 24 minutes, despite difficult conditions with the runway in Santa Monica, shortened by a third, and stricter take off noise standards. This new fleet demonstrates the flexibility and versatility of the Falcon family flagship.

Australia received at the end of April the first of three Falcon 7X aircraft, which were awarded for its government fleet. The Falcon VIPs that would be operated by the Royal Australian Air Force feature all the latest smart solutions with permanent broadband data delivery.

The first four of the six Falcon 2000 MSA Maritime Surveillance Aircraft ordered by Japan have been delivered. Dassault Aviation was awarded the RAVEL contract, verticalized [ph 00:07:22] Rafale, for the through life support of the French Rafale aircraft for ten years. This will be managed by the

company by deploying, to benefit all stakeholders, a support management IT system for the Rafales, and by using a Dassault Aviation and Dassault system big data platform.

Regarding drones, the first half of 2019 was marked by the end of a flight test campaign for the nEUROn, initiated in 2018, and the new contract awarded for late 2019. Dassault Aviation is also continuing to actively cooperate with Airbus Defence and Space and Leonardo to develop the MALE EURODRONE for a contract with the OCCAR.

The new inauguration of the Paris Air Show was marked by the unveiling of a full scale mock-up of the next generation fighter, the NGF aircraft, and its support drones, in the presence of French President, Emmanuel Macron, and the French, German and Spanish Ministers of Defence.

Eric Trappier, Chairman and CEO of Dassault Aviation and Dirk Hoke, CEO of Airbus Defence and Space, took this opportunity to sign an industrial agreement on demonstrator programmes. They also submitted a joint industrial offer to the governments for the initial demonstration phase of the future combat air system, the FCAS, for a maiden flight in 2026.

The ministers signed their initials on the framework agreement between three countries to develop the FCAS. FCAS entails creating, based on the NGF, a combat system of drones and flown [ph 00:08:54] platforms, current and next generation fighter planes, refuelling aircraft and AWAX [ph 00:09:00]. France was named Nation Leader, and Dassault Aviation was named Industrial Leader for the NGF aircraft.

At the 53rd edition of the Paris Air Show, French President, Emmanuel Macron, took in extensive presentations of the civil and military expertise of Dassault Aviation. Prime Minister, Édouard Philippe, discovered the various professions in the company. Several members of the French government appreciated the scope of expertise and knowhow within Dassault Aviation in numerous areas. Many military delegations and customers visited our static display.

Our very innovative stand was highly appreciated by the large number of visitors. During the show, the French Minister of the Armed Forces also confirmed the intention to buy seven Falcon 2000 Albatross Maritime Surveillance Aircraft. Preliminary research to prepare the contract to develop and produce these aircraft is underway.

At this 53rd show, the Rafale demonstrated its flight qualities on a daily basis. The Rafale was also presented to various foreign delegations throughout the week. They discovered the various innovations presented in the military support customer service space. A brand new Rafale simulator demonstrated the range of our aircraft's operational capability. Just like their Rafale, the Falcon 8X was flown every day and the flagship of the Falcon range was also presented at our static display alongside the Falcon 2000, the Falcon 900LX and a full scale mock-up of the Falcon 6X cabin.

As part of the plan to recruit 1,000 employees in 2019, Dassault Aviation actively participated in the fourth careers plane and the employment and training forum. The company was also present at the Paris Air Lab, a discovery space for innovation, where our specialists coordinated the big data and artificial intelligence exhibit.

Dassault Aviation also welcomed partners it supports as part of its corporate initiatives such as the *La Fondation Antoine de Saint Exupéry pour La Jeunesse*, *Rêve De Gosse* and the Association called *Elles Bougent*, encouraging young women to enter the aviation professions. Lastly, this show

enabled us to pay tribute to Serge Dassault who did so much for the development of Dassault Aviation.

On the 8th of October in Mérignac, the delivery ceremony took place for the RB-001, the Indian Air Force's first Rafale. The relationship between Dassault Aviation and India goes back to 1953, when India was supplied with the [? 00:11:52], the very first export order in our history. Since then, Dassault Aviation has never stopped equipping India with its aircraft.

This event took place before the French Ministry of the Armed Forces and the Indian Defence Minister who performed a test flight immediately after this delivery.

Three Falcons were presented at the NBAA convention this year. These three aircraft flew to Las Vegas using biofuel. The convention was an opportunity to review development of the Falcon 6X, which is running on schedule. The assembly of the first aircraft will start in early 2020. Work on the Pratt & Whitney engine is progressing as planned and in line with expectations. The maiden flight is planned for early 2021 and certification and entry into service are planned for 2022.

This summer, the [? 00:12:51] Naval Air Base received the first two ATL2 Maritime Patrol Aircraft modernised by Dassault Aviation. In mid-October, Florence Parly, Minister of the Armed Forces, flew on board one of these aircraft. The two events showed the smooth progress of the modernization programme, which aims to raise the ATL2 combat system to Standard 6.

The programme affects 18 aircraft. Dassault Aviation will deliver five other upgraded ATL2s over the 2020 to 2023 period. As a partner for over 40 years to the United Arab Emirates Air Force, Dassault Aviation took part in 2019 Dubai Air Show. The static display showcased a Falcon 8X, Falcon 900LX, and a full scale mock-up of the future Falcon 6X cabin. The French Air Force gave a flight display in the Rafale.

Florence Parly, Minister of the Armed Forces, confirmed on the 18th of November the official launch of the [? 00:13:48] programme based on the acquisition of three Falcon 8Xs. These aircraft are equipped with the universal electronic warfare capability to collect electromagnetic intelligence. A first system will be delivered to the Air Force from 2025 onwards.

In late 2019, the French Air Force and Navy announced the first operational capability of the Rafale F3R Standard, a major step towards the implementation in the near future of two new capabilities offered by this Standard: the Talios laser targeting pod and the meteor air dominance missile. On February 20th, 2020, in the premises of the French Ministry of Armed Forces in Paris, France, Germany and Spain officially signed the initial contract launching the demonstrators for the future combat air system, FCAS, in the presence of the main industrial partners. The aim is to achieve, by 2026, the first flight of the NGF, new generation fighter demonstrator, which has been placed under the responsibility of Dassault Aviation.

ACTIVITES & PROGRAMS

All right. We’re now going to review everything that was mentioned in the movie. A lot of things have been presented already.

HIGHLIGHTS

First of all, the highlights of 2019, the delivery of 26 Rafale and then there was the launch of FCAS. You know there was a major step in the [? 00:15:22] for the Falcon, there was the 40 deliveries and 40 orders. Dassault was recognised as being number one in terms of customer support everywhere in the world in several categories. I will get back to that in a minute. And the 6X programme development is on schedule to be completed in 2022.

CONTEXT

I won't mention the context. You know that there are geopolitical and economical uncertainties. I did not even mention the latest breaking news, the coronavirus, geopolitical tensions in the Middle East, trade war between China and the United States, and also between Europe and the United States. So, multinational organisations are being questioned. There will be elections in 2020 in the US. Is this going to change the game or not? Will we have a new model for Europe? There will be a new Commission, a new European Parliament and a new Europe altogether because the UK is leaving the European Union. So, we'll see how this is going to work out in terms of agreements between the EU and the UK.

And of course, rise of environmental concerns. So, the background changes quite quickly.

RAFALE EXPORT

As we said, delivery of 26 Rafale. There were 96 orders for raffle export. 49 have been delivered, 47 are still in the backlog. I forgot to mention that for 2020 sorry, 13 Rafale will be delivered. This is linked to the contracts because you know the contracts are scheduled to operate like this. But basically, it's about two and it will be ramping up in 2020.

FUTUR COMBAT AIR SYSTEM (FCAS)

For the futur [sic] combat air system, the first step was completed. They were already joint studies between France and Germany between Dassault and Airbus in particular. It was called the JCS, joined concept study. And then we launched a few days ago the demonstrator, which should be flying in 2026. So, this is really the first step of the demonstrator. The centre of the project will be here in Saint Cloud and German teams will come to share the project with us here in Saint Cloud.

We will also have Spanish members joining us because Spain signed the agreement as well. And so, we are going to take them on board as industry. The next step will take place in 18 months from now, but we are already getting ready to launch the demonstrator in the general sense of the word and this should take us to 2026 and we're going to cover all the test flights.

RAFALE FRANCE (1/2)

Now Rafale France has gone into a white period, if you wish. There will be no deliveries in 2019. The deliveries have gone down lately so there were only three last year. In 2019 there were no deliveries for France, and this is going to continue up until 2021. 2022 is when we're going to start delivering Rafale for France with 28 aircraft delivered between 2022 and 2024. And we have orders continuing based on the success of Standard. So F3R has gone operational. We launched the F4 at the beginning of this year.

A covenant was signed, adding a certain number of features, and so we are in the middle of this capacity development.

RAFALE FRANCE (2/2) - RAVEL

The fifth batch of the Rafale will take place later and the deliveries will start from 2027 onwards. You know that the Armed Forces Minister wanted to reshuffle the way we carry out support and one of the major applications will be verticalization, meaning that the aircraft manufacturer will have to carry out support throughout the life of the aircraft.

It was the case with the RAVEL contract signed in 2019. It covers basically all contributors to the Rafale programme except for the engine, which is handled separately. So, it's a big contract; about 2 billion euros over a period of 10 years and this is something that you can see in the order intake numbers. We're going to set up a new way of working with the armed forces in terms of support, in terms of data exchange, based on a platform on which we are working with Dassault System with a proprietary of cloud and ways of working that will make it possible for us to ensure data protection when data is exchanged between the army and ourselves.

EURODRONE

The EURODRONE, we've heard a lot about that in the price. Maybe there will be questions about that. We have Leonardo and we have committed ourselves to make sure that we would have a European drone. We are now in the key phase, which is the final negotiation phase. We've worked on this project for a few years now, and if I believe what I read in the press, I think that we are in the final round of trade negotiations and you might have questions about that.

nEUROn

nEUROn also continues. It's a programme that started in 2012. We have pilots on the ground and its programme dedicated to stealth and we continue flying this drone with the reduced teams. It's a combat drone, which has demonstrated very interesting and very important features, including further preparation of future NGF and FCAS projects because everything that we experiment and develop with nEUROn will be applied in the development of the future fighter plane.

SPACE PROGRAMS

Space programmes; we're mostly interested in Space Rider, which is programmed for the European Space Agency. It was confirmed during the European Space Agency Ministerial Meeting in Spain last year. Dassault contributes it skills with the Italians and it's mostly Italy. France is really not one of the key players, but we think that making a reusable orbital vehicle is very promising, both for civilian and military applications.

MARITIME PATROL FALCON

Maritime patrol aircraft, ATL2, has been upgraded. ATL2 is the maritime patrol aircraft. It hunts submarines, protecting our own submarines, and the system was developed and delivered with a PLM system, which was set up with all the stakeholders, together with Dassault System tools. Dassault Aviation is the system architect. Thales provides the radar and acoustic detection devices and the Naval Group is in charge of the core system software.

MULTI-MISSION FALCON

Multi-mission Falcon ramping up. Japan has ordered their sixth aircraft. We have already delivered four to Japan. France is going to go into a Falcon 2000 program, so in 2020, we will have more information about the programme, and I hope that it will be launched before the end of this year and also, as you know, the Archange programme with three 8X Falcon, should replace the Transall Gabriel.

The order was placed of two 8X Falcon and there is an option for a third one that might be activated later.

FALCON

The Falcon market is still very competitive in this adverse environment. We nevertheless managed to take 40 orders. We have delivered 40 planes also and this means that we have 53 in backlog as of December 31st. So, we are really working on preparing the future range; the 6X and the future Falcon that we are going to announce this year, but not today.

The plan is to deliver 40 aircraft in 2020, as we did in 2019.

FALCON FAMILY

FALCON 6X

So, here is a view of the range for the 6X. Everything is going as planned. Of course, we are very vigilant, given the previous experience. We have people in Canada who are monitoring the upgrading of the existing engine adaptation to our aircraft. Everything is going on schedule. The first

tests were done with a Boeing 747 with a Pratt & Whitney engine. The tests went well. Everything is going on schedule and we started assembling the first aircraft. You've seen the fuselage, and we are about to assemble a wings.

FALCON CUSTOMER SERVICE (1/2)

Now customer service. We have extended our market share with acquisition of [? 00:25:33] and TAG and ExecuJet. The integration is in progress. The service centres are now owned by us and this gives us more efficiency in direct link with support for all our aircraft.

FALCON CUSTOMER SERVICE (2/2)

And so, on top of all the services that we implemented, all the effort that we put in customer service has led us to be recognised by AIN and ProPilot as number ones in terms of customer service. This is really a ranking that is very dear to our hearts because we're ranking number one in terms of customer service and also in terms of a lot of other areas. So, this is really acknowledgement of all the work that we did, and it probably makes our customers even more loyal to the Falcon family.

DIGITAL

We are also ramping up in the digital project. This future aircraft that I don't want to tell you anything about right now, it will be done entirely with a 3D experience Dassault System Platform. It's a very powerful tool and this will be the first plane to be developed totally on that platform.

Also, we have a better management of big data. More and more data is available for the manufacturing, for the engineering and we are setting up platforms, as you've seen in the military area with a RAVEL contract, but also for Falcon, we are setting up an aircraft health book for example.

This is one of the services that we provide that actually comes out of the way we manage big data and the data management platform. So, there will still be a lot of work to do in order to keep the data under control and to protect the data because cybersecurity is key here.

So, that is going to entail a great change. Industrial and supply chain performance, as you have seen, we are refurbishing a lot of our locations and making them even more specialized and we want to manage this supply chain even better.

GEOGRAPHICAL FOOTPRINT
FALCON SERVICE CENTRES NOT INCLUDED

Now in terms of our footprints. You have all the locations here on this graph. I won't go into other details, but you've seen that in Martignas, the new site has been delivered for pyrotechnics. It is a tripod shaped building. In Mérignac we launched this new building for office work because there will be the design office and the support that will be dispatched between Saint Cloud and Mérignac.

Saint Cloud of course will remain the heart, if you wish, of engineering and design and the platform for the future Falcon will be here, but we will also have platforms for development that will be located in Mérignac.

When I said development, I mean not just designing the aircraft, but also designing the way it is going to be produced. And Sedin will be delivered later this year, and you have a certain number of other locations, including Saint Cloud that will be refurbished and upgraded because Saint Cloud is a little bit older - on the other side, not the part that you can see from here - and we will be able to work in a smoother way.

Then there is Nagpur in India and of course all these sites will have to take into account the future Falcon, but this is something I will tell you more about later during the year.

MAKE IN INDIA – RAFALE OFFSET AND FALCON 2000 IN INDIA

Now in India, it's ramping up. We're a little bit behind schedule because in India everything is complicated and takes more time, but Things are happening. We have already managed to qualify a certain number of parts like T1 for example.

They have been approved as per the regulations. This was a big step for us and now we are ramping up and we built this big building and we are now going to build another one because we are going to ramp up the manufacturing, especially with the T12. We are going to have this big hangar to assemble parts in the next years to come.

It's not just Nagpur and the manufacturing of Falcon. We also manufacture a few Rafale parts and it's the whole supply chain. We can actually now have an active supply chain in India. It's not just for that, so, it's also for a subcontractors and it's also in the area of services because we opened a centre in Pune near Mumbai, in which we have a team of engineers, Indian engineers, managed by French engineers.

We also are involved in training because Indian people receive a lot of training in the digital area, for example, and in the aeronautics. We help them also grow their skills in this specific area, design and engineering.

CORPORATE SOCIAL RESPONSIBILITY (1/2)

For CSR we talk a lot about that. So, we do a lot of things in CSR, just like everybody else. I'm going to give you a few examples.

CORPORATE SOCIAL RESPONSIBILITY (2/2)

Gender equality where we hired 1,000 people. That was for the parent company but actually in total 1,500 people were hired and 23% of these newly hired were women. And you know that today at Dassault, at large we have about 18% women. Quality of life: this is also an evolution that Dassault is moving into and it's nice for hiring young people, working from home and a day care centre for children and we also have a concierge system in order to help people get a better quality of life.

And we also work on our carbon footprint. That's several areas we work in. R&D: in the CORAC initiative, we try to come up with technologies that will enable us to fly greener in the future. We also have this Clean Skype programme in Europe. It's a framework development programme for the whole of Europe based on the Green Deal announced by the European Commission.

So, our engineers are looking for solutions. They are still looking. They haven't found a silver bullet that will enable us to be sure to fly totally green in a near future. But we're getting there. As was indicated in the movie, we already use biofuels. It's possible to use biofuels. And then there's the question of how these fuels are distributed. But work is also conducted to work on synthetic fuels.

And we are working with the oil companies in that area in order to prepare for the future and to be capable of meeting the demands of some countries. Of course, France in Europe, but also what we would like to do is to meet the ICAO standards because we think that in terms of the environment, you have to look at the whole world and not only Europe or France.

Then there's REACH which is a European standard. We have to abide by it, of course, and these are major changes. For example, we are going to no longer use chromates in paintings and this means that we have to find alternative solutions. We have to requalify these new materials and it's a process that takes some time and I want to remind you that it's something that you have to do if you are operating in Europe, but there is no such measures in the US. They do have some regulations in some states, but it's really got nothing to do with the REACH constraints. If you look at GIFAS, it's some billions of euro's which are spent by companies to comply with the standards.

So, you see that the environment is really something that you have to work on. You have to set an example, but also you need to understand that the economic environment is highly competitive and there are other companies that don't have to comply with the same standards. So, it's not really a level playing field, even though it should be.

2019 RESULTS

ORDER INTAKE, DELIVERIES AND BACKLOG

I return to the financial results now per se for 2019. You heard early in the year 40 Falcons ordered and 40 delivered. So, book to bill for Falcon remaining at 53. In terms of Rafale, zero Rafale [? 00:34:44] 26 delivered. So, the backlog going from 101 to 75. France remaining equal in that figure. In terms of figures, in particular, order intake that 5.7 billion compared to 5 billion in 2018. Sales historical record as an absolute all-time high for Dassault as you see here in the screen compared with 5.1 billion that we had in 2018.

So, backlog 17.8 billion to be compared with 19.4 billion previously in the previous year.

CONSOLIDATED SELF-FUNDED R&D

In terms of free cash flow, the companies upped its self-funded R&D effort. You see the figure here: 527 million euro worth for 2019. So, that's a lot of progress, mainly due to the fact that there were two Falcon aircraft that are self-funded and undergoing development. 6X: that has reached a peak in

terms of development and also the future Falcon that we launched but didn't announce yet. That has started using resources in terms of development.

And also, this year, this curve will continue to go up. The next time we will be announcing our results it will be more than 600 million euros worth. You'll see on the equivalent screen next year. So, you can do your mathematics regarding the operating margin for 2020.

THALES

Thales contributes to Dassault. As you know, Thales published their results yesterday quite in line with their guidance and we are taking out our stake in Thales here: 7.6% of net income that Thales posted yesterday. And you will see how much that makes up in terms of absolute value. Thales has totally integrated Gemalto also in 2019.

CONSOLIDATED AVILABLE CASH

And then on cash flow, 5.2 billion to 4.6 billion. That's mainly due to the working capital requirement going up because of the making of the Rafales and the Falcons.

GROUP ADJUSTED INCOME STATEMENT

Now the adjusted income statement 7.341 billion in sales. Operating income 765 million euros. That's also an all-time high. Operating margin 10.4%. Now that looks as if it's down compared with the reported figure for 2018 by in the 13.2% you see here for last year, you see the Safran compensation indemnity that was paid last year. That accounts for about four percentage points, so you've got to compare 10.4 with 9.2.

Last year saw an increase in the operating margin ceteris paribus financial income, -52 million euros reported Thales and the equity affiliates you see here returned 51 taxed on 50 million. So, net income hit 814 million euros and the net margin comes out at 11.1% as you see here.

Quite a marked improvement if you bring the 13.4% figure for last year down to take account of the indemnification by Safran. So, the earnings per share; 97.9 euros. An increase compared with the previous year 2018.

DIVIDEND

Dividend: 212 million euro. Up compared to the previous year. We've retained the same payout, 26%, dividend per share, 25.4 euro. Also, I would like to recall that when it comes to the parent company, we pay out statutory and non-statutory profit sharing to our employees and it will be 187 million euros worth for all of that this time round and in France we'll be paying to 215 billion euro worth of company taxes. Sorry, 10 million in France but 215 million in total.

2020 OUTLOOK AND STRATEGY

Now the prospects going forward, the strategy for 2020. I'll let you read the slide for yourself. The important thing is the guidance. The delivery of 40 Falcons and 13 Rafales. So, the sales figure is bound to go down, an increase in the self-funded effort, the free cash flow use and that sums up the main features of activity; the two Falcons, the factor [? 00:39:23], the FCAS, and the platform work and the pursuit of the deliveries for the Rafales and the Falcons.

We've got also to find the new export Rafales outlets so we're going to continue prospecting export markets. And that's really what I have to say in broad outline, but I will happily take your questions.

QUESTIONS AND ANSWERS

Eric Trappier (Dassault Aviation): Any questions? Or have I been clear enough?

Speaker 1: My question concerns business jets, business aviation. It looks as if things were rather frozen for the last while with the same players. Is there going to be a change there do you think? The health crisis we're going through at the moment, might that be an accelerating factor?

Eric Trappier (Dassault Aviation): Well, we won't turn bad news into good news [? 00:40:30] no doubt it's more reassuring to fly in the Falcon these days than to take a regular scheduled flight. But anyway, this is a cyclical situation. We can't draw macroeconomic conclusions on the back of that.

Now the players. As well, it's always the same players: we've got Gulfstream, Bombardier. We hear a lot about bomb Bombardier, there are many peer companies [? 00:40:56] not an awful lot because it's a lower kind of range and Embraer. These are the main players. [? 00:41:05] is still round, yes, and we'll see what happens in the future in that regard.

Speaker 2: [inaudible 00:41:16] 40 Falcons ordered, you said. What's the share of governmental planes and ones that would be used for military applications? I mean, is this figure going up proportionately?

Eric Trappier (Dassault Aviation): Well, I won't give you an exact figure, but we've got already four JCG Japanese Falcons and the 40 for 2019. We had deliveries of 7Xs for Australia. These are VIP planes, they are not militarised planes, they are VIP planes, and we will have shortly deliveries of airplanes for France. Archange and later on the maritime surveillance aircraft for France. So, slowly but surely, there is a trend towards selling aircraft to governments, yes.

Christian Schubert (Frankfurter Allgemeine): Christian Schubert from Frankfurter Allgemeine. I have a couple of questions. Firstly, on the EURDRONE, do you not think the industry is asking from reasonable prices here in that regard, and regarding FCAS, Indra is the coordinator for the Spanish partner and Airbus has been quite clear about the fact is not a good choice. Any opinion on that?

Eric Trappier (Dassault Aviation): The prices from industrial are never silly. People very often want to bring down their prices, but that's what negotiation and bargaining is all about, isn't it? So, in the prices you got the costs and you've got the risk evaluations, risk assessments, and some of you have written articles on this. If you take a contract like the Euro Mill [ph 00:43:12] as was done at one point by 400M [ph 00:43:15], from A to Z, the design, development and serious production, there are risks involved.

You've got to provide for these risks in your books. That's the rule of the project [? 00:43:25] the states organised among themselves. That's their business, let's say, and then you have the prime contractor where you've got to analyse where the risks are. If the industrials have to shoulder all the risks, well they will have to book provisions. They're called provision for contingencies and risks. And it's normal for an industrialist to earn a margin. You've got to stay in business and earn money and not make a loss.

You're not in business to make a loss after all. So, at the moment there are certain things I know as a partner of Airbus, but it's up to Airbus to do its own negotiations with OCCAR because the states

have gone to OCCAR to conduct these negotiations. So, we provide all of our support to Airbus in the context of these negotiations. But there's no question for the parties involved for them to sell at a loss. No question of selling at a loss.

Regarding FCAS, Spanish partner, well it's up to the Spanish authorities to decide the way in which the Spanish industry should be organised, and that's what they did. Now, there was a slight difference of opinion between the Spanish authorities and Airbus. They wanted Airbus Spain to be the leader and the Spanish authorities designated Indra as leader. For us in Dassault, there's no issue regarding all of that because we can work just as well with Indra or with Airbus Spain. It doesn't matter, formally, CASA.

It's not an issue for us. It's a controversy that doesn't exist for us in France here in Dassault. It's not an issue.

Speaker 3 (Le Figaro): Hello, I'm from Le Figaro. Could you please comment on the current talks going on in Brussels regarding the future budget for the European Commission? There have been proposals that there should be reductions in the space budget and the forecast budget for the European Defence Fund. Some countries have put on the table the need to bring down those budgets. If France wants to retain the CAP [ph 00:45:36] budget, what's going to happen to the other budgets? What will be the consequences for this industry in your group if those particular space and aviation defence budgets are brought up?

Eric Trappier (Dassault Aviation): Well, if we were other [? 00:45:51] we could say that we've all pleaded together so that the European defence budget would remain at 13 billion. Now, we also have pleaded that the research and technology fund upstream of Civil Aviation Clean Sky in particular, for example, that they should also be at the proper level they need to be at.

We also pleaded so that the space budget would be at the right level, but the authorities of the countries – because it's the countries within the Council of Ministers that will have to agree on the breakdown of the budgets. Now France is pushing in favour of everything: defence, upstream research, but also CAP for the farmers.

So, there's a budget to be taken care of. The UK is exiting so that is creating some new features on the landscape and in terms of putting together a budget. And the MFF and all of this, the talks going on, we'll have to see what's the outcome of that. The industrials are pushing forward these three main areas that I mentioned for Dassault.

It has an impact is not immediate, that's not direct. If we launched the NGF, the FCS and the MALE, it's the states that will continue to fund this on their cooperation agreements. Now we could go and look for money from the European Defence Fund, so as to provide matched funding for programmes, depending whether there is more or less money, we will ask for some matching budget, but your 13, billions is a long term period, while the open countries it's a minimum figure already and some people we want to bring it down.

But this start of the defence efforts within Europe institutionally speaking it's a more political than economic marker, I would say.

Speaker 4: To move on to space now, I'd like to go back to the Space Rider. Now, will this project avail of all the previous work you've done with Hermes or will you take Hermes out of your digital boxes so to speak? Are you going to work from scratch, basically?

Eric Trappier (Dassault Aviation): No, we've got a lot of Hermes based experience, but it goes back quite a while now and there's still some things going on in the design office, but we have especially the liaison with the XV experiments that we've already conducted with the Italians using the Vega Rocket and we've already done experiments, we've ruled out a small vessel that will come back and so on, that will return. So, it's continuing that research and design work in a very practical way and moving into top gear with an object that would be a little bit more fully constructed, completed, that might prefigure a more operational object later on.

The Italians are a real drivers in this and they are the ones putting most money under the table in the ESA. So, with them we have an excellent relationship to propose our services for the ESA research and design directly between ESA and Dassault as well, and we hope to pursue and develop that cooperation.

It is going on, on the parallel track to the usual tracks that are traditional Ariane launchers, or the satellites that are of interest to us via Thales as well, the satellites, but they are not within the remit of Dassault. When it comes to developing the defence activities in the space area, I think that the company is thinking about how it can contribute in the future.

Cortana Trait (AFP): Good morning. Cortana Trait for AFP. Back to the Falcon, why can't you announce the launch of the new Falcon today? Do you have a clear idea of the schedule of the announcement?

Eric Trappier (Dassault Aviation): Well, actually I might. I could announce this today, but I have decided that I wouldn't. So, it's the art of timing your announcements, right? So, we are currently working on the best date to make the announcement.

There's a little bit of teasing here because I announced it in Las Vegas. I said that it was going to happen this year. It's the standard procedure, I would say. You always announce your announcements in advance and so I will give you the date later during the year. Maybe during the first half of the year.

Speaker 5: Another question about FCAS. The succession Tornado [ph 00:51:01] in Germany, the use of Eurofighter to succeed Tornado. Is this important for the FCAS project. Could it be like a bridge that could be important for FCAS.

Eric Trappier (Dassault Aviation): Well, it's always very difficult to comment on a foreign country. I would say that Rafale would be a good substitute for F18. Of course, you will say that I'm being provocative, but I had to say it, right?

Now secondly, this might come as a surprise, but I think that Eurofighter could replace F18. Thirdly, why hasn't it been considered? Well, because if I understand right, what they say in the media is that you need a US nuclear armament, and so the US say, "OK, we're going to put the US nuclear weapons on an American aircraft." So, the only problem is the relationship between Germany and the US, and it's not a technical point.

So, I think it's just the authorizations had been given for Tornado, and apparently, they are not there for Eurofighter.

Speaker 6: I have four quick questions. The first is about Falcon and the global market because apart from the past few days, we've seen that air traffic has been going down almost everywhere in the world. The second-hand market is also going south, and so I was wondering how you were feeling about this objective of 40 deliveries for 2020? Do you feel a little bit more comfortable than during that same period in 2019?

The second question, I'll try it. On the pipeline of the Rafale. Can you tell us the status of the discussions or most interesting campaigns? And the third question is about your modernisation plan for all your locations. Could you give us more information about the expected productivity gains and savings?

And one last point about Bombardier. Do you think that the new Bombardier, which is exclusively centred on business jets today could actually change their behaviour compared to what they did over the past two years?

Eric Trappier (Dassault Aviation): That's a lot of questions, but the first question about the 40 Falcon. Well if we announced this, it's probably because we think we're going to make it. That's what I can say today. I would have said the same about 45 one year ago and we only did 40, so this is not an exact science. So, you never know, but we do see that the market is difficult to grasp, but I'm rather optimistic about the 40 I must say. About Rafale export. There are a certain number of things that I can tell you and there are things that I won't tell you.

What I can tell you is that we are competing in Finland and Switzerland. In-flight tests are going on. We are currently making new proposals both in Finland and in Switzerland and during the course of 2020, we will continue the talks with the Swiss and Finish authorities for deliveries scheduled in 2021.

For India we are working of course, on delivering the aircraft and also, we are working with the Indian Air Force and the Navy also. And so, we are actively working on the projects in India. There are other prospects which I will not tell you about today.

The third point is about the transformation plan. Well, of course, competitiveness is of the essence here. We are working on it to get our sites more specialised. As I said, we are working on the digital aspect. This hasn't been quantified for the moment because if you don't use the digital technologies anyway, you won't survive and so you have to do this. So, we expect a return on investment in a few years.

We are starting a cycle for the future Falcon. For example, we are starting the 3D experience platform today. So, we expect return on the production of the aircraft whenever we start producing it. We won't be able to compare because it's not the same kind of aircraft. There will be competitiveness gains. I have numbers, of course, but I can't give them to you.

And about Bombardier, I can't say much because from what I understand, it's not quite finalised in the railway area. There is maybe the possibility that Bombardier would only be present in business jets. Well, I would say that I'd rather be the CEO of Dassault than the CEO of Bombardier right now.

Speaker 7: Good morning. You talked about supporting Airbus for the drones. How can you calculate the risk provisions? What's the equation here? So, you say that you're bringing support to your industrial partner. What's the grounds for the 7.2?

Eric Trappier (Dassault Aviation): I'm not going to justify the price, 7.2. That's for the prime contractor to justify the price to the buyers. What I can say is that the way we make a price requires that you can calculate how much effort you are going to have to put into the development process. So, that's the size of the teams, number of people involved, et cetera.

It's also about deciding the way you are going to buy the materials, because you are working with suppliers, you need to make sure that you have control over your suppliers in terms of time, in terms of products. Plus, there's the risk provisions because you know that programme, you will always have contingencies. You have to hope that you don't have a major contingency, but that's really important, and that's what you have to include in the contract.

If you are working on a Falcon, you know that all the risk is on you, so you have to make your own assessments. If you're working on a defence system, you have to discuss with those who are going to buy the equipment and see how you are going to handle the risk you. There are several possibilities. The British do it the old way. Basically, they pay in costs plus, that is you have 30 people working on search and search package and they have to pay for the 30 people. They measure that.

So, as you go, if you have more people, well then, they will pay for more people. And then there's the other method which is to say, “OK, we're going to give you a package and then you will have to fit everything into the package.” In which case you have to assess your own risk provisions in order to be capable of going through the project. It's what was done for the 400M. It's difficult, but what I can understand is that the buyer always wants the cheapest possible price.

But you know you have to find the right balance. The balance is that, of course, it's not beneficial for the supplier if the buyer loses money and the other way around. So, you have to have a programme in which you assess the risk. And you have a step for each risk, and you might take a package or a flat fee for each step of the process.

This is why we went into prototypes of demonstrators. You manufacture the demonstrator and then you can see if the costs are under control. For nEUROn, for example, we said it would be 400 million euros for a nEUROn with such and such features and with DJA and our partners, we managed to weigh the risks and to balance the risks. And then we managed to actually fit into this budget of 400 million after seven or eight years.

It worked and we dispatched the risk that we were each willing to take and it worked because we have the right features and. We were on time. This is this is really based on the skills of the prime contractor. There is no magical formula here, it's just based on your experience. So, it's a question that you have to send to Airbus and look out because they are the ones discussing their own side together and we contribute their skills in the areas that we said we would takeover responsibilities in.

Speaker 8: Good morning, I'm from Challenge Magazine. A question about FCAS. You must have seen what the German reporter in Bundestag said about this project. When it was voted, basically he said, “OK, we're going to sign for 77.5 million euros because we can't say no, because president Macron is coming to Munich this weekend.” We've seen more enthusiasm on other projects, so I

was wondering if you were concerned about the German position on the FCAS, especially when it comes to the elected representatives?

Eric Trappier (Dassault Aviation): Well, you know we have different methods in France and in Germany. So actually, we have to work ahead a lot in order to get a decision in Germany. It always ends in the Bundestag because it's a parliamentary democracy in which at the end of the day, the budget is voted by the parliament.

It's also the case in France, but in France we have special law, the military procurement law, that allows the executive to operate with a certain number of delegations. So, you must have noticed that it's not that easy in Germany right now with the coalition in power. Germany is not like France because you have lenders with their own interests, which might not always be the same.

So, in order to get the right configuration and get a positive decision, at each step of the process, it takes a lot of work. However, we said that it would happen before the end of 2019. It came a little bit later than that, at the very beginning of February. Well, I think we've done some progress. Of course, it took a lot of energy, a lot of meetings between the chancellor and the president and the ministers, et cetera.

So, this is only the beginning of a great project. There is the symbol of Le Bourget Air Show and then there's the 150 million euros that was signed a few days ago. But we are really looking at a programme here which, if it is taken to the end, will amount to billions. So, it's only fair that the beginning of the process is a little bit painful.

The political choices were made between France and Germany. Spain also decided to join the two countries, France and Germany. So, as a company we will of course do what our government asks us to do to cooperate, to make proposals, to organise the work, especially for fighter planes and then there are other areas in FCAS. You've got drones, you've got engines, et cetera. So, it is going to require a lot of work to gain confidence and trust.

I am confident that Germany is going to go for it because you know that the German economic model is good, but in Germany it's important to be able to work on projects together, each playing his part, and I think that this is really important both for France and for Germany. So yes, I'm confident. Maybe I'm being a little bit naive here, but I am confident.

Thierry Dubois: Thierry Dubois, in the back here. I have two questions. One about Space Rider. What could be the use of an operational vehicle like Space Raider? And about Rafale, what are the features that you've added to the F4 compared to what you told us last year?

Eric Trappier (Dassault Aviation): Well in the Space Rider you go to suborbital layers and back. So, we are there as technicians. We provide the engineering to our Italian friends, who are the leaders of the project, because it's for them to imagine how they are going to design those little service shuttles that will actually perform work in these lowest layers of space. So, you can think of anything basically. The important thing is that you have to go there and come back. You start off from a Vega Rocket and you come back with your own little vessel.

So, about F4, the additions that we made are looking at a number of features, in particular communication features that were not ready one year ago and that we planned to add to the

contract at the end of 2019. And this is what we did. It doesn't change the general scope of the F4 as announced a year ago.

Marco Baron: Good morning. Marco Baron. Actually, I have a question about your research or investment programmes in artificial intelligence. There's RAVEL, Rafale 4 and FCAS. So, what expertise do you already have in that area and what expertise do you still need to grow?

Eric Trappier (Dassault Aviation): Well for the moment in Rafale there is no artificial intelligence. But what about later? Well, the GGA, the army notified Dassault and tell us that there will be contracts to prepare for an ecosystem with artificial intelligence features that will have to happen in the future. It's true in a certain number of fields, so we work with start-ups, we work with SMEs.

Thales and Dassault are trying to imagine how we can introduce artificial intelligence on board combat systems or fighter planes. It can be navigation; it could be UCAV [ph 01:07:03] for example in which you would replace the man in the machine by an algorithm system that would be actually flown from the ground.

So, we are currently in the exploration phase of a project called MMT. MMT, that's the name of the put. So, start-up companies. Does this mean that you are going to acquire start-ups? No. We're not going to buy the companies would just have contests and competitions, and people join the competitions and the budgets that are allocated to us by the French army will be dedicated to a signing contracts with those small companies because artificial intelligence is not just the big companies, it's also about creating a whole ecosystem of companies who are highly specialized. A lot of small companies have great ideas and great capabilities too.

Speaker 9: About the FCAS. Why are you so confident and so happy and so patient also, I must say, because we now hear that the budget is going to be 150 million to be split between ten companies, both in France and Germany, over a period of 18 months.

And so, if I do the math right, it means that it's going to be about 10 million for each company. And if I do the math right, what you showed us was that the revenue per employee is about 1 million. So, you can only feed ten people on this project. So, it looks like with the FCAS, we were invited to a banquet and actually two years later, we still haven't even had a drink. It's still the pre-meal peanuts here.

Eric Trappier (Dassault Aviation): Oh OK, so you want to do the math. I'm going to tell you everything about it. No, seriously, we have the Rafale. This is this is real bread and butter today. Look at our revenue. If we have this historical high, it's thanks to the Rafale because we delivered 26 aircraft which was never seen before. So, with the Rafale, the army and the government still place orders for development. The minister said that F4 was going to be about 2 billion euros, so we can actually feed the Rafale, I would say, for quite some time.

And on top of that, the governments have decided that when the Rafale will start to become a little bit old, when the Eurofighter will be a little bit older, well then it would be nice to have a European plane rather than having to buy the future American aircraft. So, it means that it's something that you have to start ahead.

So, instead of starting on our own, which we might have done because we have a background, we would have been capable of doing that, but they said you are going to have to do this with a partner

and so we could either say yes or no and I decided that I would say yes. Why? Well because I'd rather work with somebody else not work at all when it comes to preparing for the future.

Is this a guarantee that we will go all the way to complete development? Because as I said complete development would be tens of billions of euros because there's a plane, the radar, the whole system, the weapons, because we are preparing for a plane that might become operational in the first standard version in 2040, so it means that we are 20 years ahead of time.

We're starting slowly, that's right, but when we started the Rafale, we also started slowly. How did it actually start? When did it actually start? When we had a prototype demonstrator. This is why I said, "OK, I'm OK to work with somebody else, but I want a demonstrator". This is only the first step of the demonstrator, but still it's a step. It's there. It's something.

It's not just about communication. There is a lot of communication I must say but there is also something there too. There's a hope here because if Germany was to buy F35, it wouldn't be good. And this is the question that they have in Germany. This is the question that you asked about F18, but two years ago, the question that was prevailing in Germany was should Germany buy F35?

So, that's the question, and you know the theory of F35 is that it's the European preference. It's certainly not a European plane. So, this gives us a little bit of hope that maybe we could do something following the right methods. Of course, to do something that would not be F35. So yes, we will have to fight for that.

There's one last question here maybe. This is going to be the last question.

Leo Barnier (Le Journal de l'Aviation): I'm Leo Barnier from Journal de l'Aviation. Do you expect a reduction in development costs for the new Falcon with the 3D experience digital platform? If yes, how much and what's going to be the total amount?

Eric Trappier (Dassault Aviation): I'm not going to give you the numbers. It's complicated because it's not the same aircraft that you're looking at, so it doesn't make sense. If it was on a base 100, I would say without the platform we would not be as good. So, it's like the chicken and the egg; the platform makes us work better and so we work better, and we need the tool even more.

But in reality, what is important for you to understand, is that the tool also changes the way you work. So, this tool this digital platform is going to enable us to do what we've been dreaming of doing for quite some time now, but which we haven't done yet, which is a real platform in which the world of development and production and support will contribute a certain number of elements that will enable us to better monitor other programmes, to better manage it, to have a better management of configuration.

So, the answer is yes, they will be competitiveness gains. How much? Well, I will tell you that when we're done with the programme. But of course, we have to gain in competitiveness. Anyway, it's a winning bet because if we were to not do it, it would be worse. So, it means that we have to do it, and I'm 100% convinced.

And I think that I only have to thank you now and see you again soon. Have a good day. Thank you.