

# Rassegna Stampa per Rete Diplomatica

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### **Leonardo Spa: contratto per tre elicotteri Aw139 da Vigili del Fuoco**

Source: MF DJ NEWS (14 dicembre 2018)

MILANO (MF-DJ)--Per rafforzare le capacità aeree multiruolo intervenendo a supporto della popolazione italiana in qualsiasi situazione di emergenza, integrando i compiti antincendio di responsabilità del Corpo, i Vigili del Fuoco hanno firmato un contratto per la fornitura di tre elicotteri Aw139 prodotti da Leonardo Spa.

L'ordine, informa una nota, ha un valore di circa 45 milioni di euro, comprende anche servizi integrati di supporto e addestramento per piloti e tecnici e prevede opzioni per ulteriori 12 Aw139. La consegna dei tre nuovi elicotteri sarà avviata a breve e completata nel 2019.

Sono oltre 816.000 le missioni di soccorso e antincendio effettuate ogni anno per contrastare minacce come quelle che hanno interessato varie aree dell'Europa, Italia compresa, la scorsa estate. Con l'acquisizione del miglior elicottero al mondo per lo svolgimento di compiti quali ricerca e soccorso in mare e in montagna, soccorso medicale, antincendio e protezione civile, i Vigili del Fuoco potranno ora potenziare la propria capacità di reazione per affrontare tali sfide.

L'Aw139 è stato scelto dal cliente a seguito una gara indetta nella metà del 2017, dimostrandosi la soluzione migliore per soddisfare i requisiti del cliente.

Gli Aw139 saranno dotati di un'ampia gamma di equipaggiamenti come, tra gli altri, verricello di recupero, gancio baricentrico per l'impiego di benna antincendio, radar meteo, sistema di comunicazione satellitare, sistema elettro-ottico, console di missione ad alta definizione sviluppata da Leonardo e sistema di trasmissione dati, un avanzato sistema anticollisione di progettazione Leonardo, capacità di impiego dei visori notturni, faro di ricerca, galleggianti e scialuppe di salvataggio, megafono, strumentazione medicale.

I nuovi elicotteri sostituiranno progressivamente gli Ab412 dei Vigili Del Fuoco, in servizio ormai da diversi decenni. Con un peso massimo al decollo di 7 tonnellate, l'Aw139 presenta una spaziosa cabina accessibile tramite due ampi portelloni laterali, potenti motori e prestazioni e standard di sicurezza senza paragoni, caratteristiche che contribuiscono a renderlo il miglior prodotto nella sua categoria. Eccellenti capacità di volo anche con un solo motore funzionante permettono a questo modello di effettuare e portare a compimento in piena sicurezza anche le missioni più impegnative.

Leonardo: Los Angeles Fire Department to strengthen emergency response capabilities with the addition of a fifth AW139 helicopter

(Press Release – 14 dicembre 2018)

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- **Delivery expected in Spring 2019 to perform fire suppression, EMS and SAR**
  - **Current fleet of four AW139s has logged 7,000+ combined FH helping respond to over 700 incidents annually in the last ten years serving a community of 4 million**
  - **Bestselling model in its class with over 1100 units sold to over 270 customers in 70 nations worldwide to date**

**Rome, 14 December 2018** - Leonardo announced today that the Los Angeles Fire Department (LAFD) is set to introduce a fifth AW139 intermediate twin engine helicopter into its fleet. The aircraft is expected to be delivered from Leonardo's Philadelphia facility in Spring 2019 and will be used to perform a range of missions primarily including fire suppression, emergency medical service (EMS) and search and rescue (SAR).

The Los Angeles Fire Department protects more than four million people in America's second largest city. It is responsible for 400+ square-miles, 106 stations, and over 3,200 firefighters. LAFD Air Operations' mission includes fire suppression, air ambulance transport, hoist rescues, reconnaissance and mapping. Their helicopter fleet is housed at Van Nuys Airport (KVNY).

The existing fleet of four LAFD-owned multirole AW139s have a combined 7,000+ flight hours since the first helicopter entered service in 2008, helping respond to over 700 incidents annually. AW139s have proved their workhorse reliability and have demonstrated a crucial piece of equipment for suppressing wildfires throughout Southern California. Features customized for the LAFD AW139 include, among others, search light, rescue hoist, advanced water tank for fire suppression, wire-cutter and modular cabin interior.

#### **Note to editors on the AW139 helicopter**

The AW139 sets new standards through advanced technology and high performance, reliability, safety, flexibility and cabin space. The AW139 is the ideal solution to operate in harsh environments and weather conditions. Its modern avionics reduces crews' workload allowing the pilot to focus on the mission. Over 270 customers from around 70 nations have already ordered over 1100 AW139s, confirming itself as the bestselling aircraft in its category. The AW139 is able to perform a wide range of roles including government and public utility, EMS, SAR, patrol, homeland security and transport duties. Over 900 AW139s have been delivered worldwide to date and have logged in excess of 2 million FH. Many of the AW139s today in service in the U.S. perform law enforcement and public service missions in Maryland, New Jersey and California. The type has also set new standards in the intermediate category for firefighting operations in various nations such as Italy, Japan, South Korea and Malaysia.

## **Spazio: italiana e-Geos-Leonardo apre ai Caraibi l° Centro emergenze clima**

Source AdnKronos (18 dicembre 2018)

Un inedito centro per gestire attraverso le tecnologie spaziali gli effetti sulle piccole isole oceaniche delle emergenze climatiche. Prima fra tutte l'innalzamento del mare. E' quello che la società italiana e-Geos sta per realizzare alle Piccole Antille grazie ad un accordo firmato con il governo di Santa Lucia. La joint venture Telespazio (80%) e Agenzia Spaziale Italiana (20%), specializzata nel settore dei servizi di geo-informazione, ha annunciato che è pronta a produrre nel piccolo Stato-isola dei Caraibi un sistema di allerta rapido Early Warning System ad altissima tecnologia. "E' la prima volta che nasce un centro di geo-informazione del genere per gestire nei Caraibi le emergenze climatiche che colpiscono con frequenza queste isole" spiega all'Adnkronos Massimo Claudio Comparini, responsabile Geo-informazione del Gruppo Leonardo e amministratore delegato di e-Geos che ha annunciato oggi l'accordo. "Con le nostre tecnologie spaziali -continua Comparini- avremo la possibilità di capire le conseguenze climatiche, anche il punto di costa, cioè il monitoraggio delle coste, e questo contratto nasce grazie all'esperienza maturata nel settore delle emergenze coordinando il sistema Copernicus EMS in ben sei centri europei". Il servizio della Commissione europea Copernicus EMS (Emergency Management Service-Rapid Mapping) è attivo 24 ore su 24 per 365 giorni all'anno ed è infatti gestito da Leonardo attraverso la sua controllata e-Geos che, alla guida di un consorzio europeo, "elabora e rende disponibili alla Commissione Europea, in poche ore dall'attivazione del servizio da parte dell'utente autorizzato, mappe satellitari di aree colpite da un disastro naturale o da crisi umanitarie" sottolinea ancora Comparini.

E utenti autorizzati del sistema sono Protezioni civili europee e altri operatori di emergenza impegnati nell'assessment dei danni e negli interventi durante e dopo ogni emergenza. Copernicus EMS, inoltre, assiste le operazioni umanitarie internazionali extraeuropee, in collaborazione con Nazioni Unite, World Bank e ONG. Ma la novità del centro caraibico di Santa Lucia, rimarca ancora Comparini, "è che per la prima volta si realizza un centro che mette insieme sistemi hardware e software per dotare un Paese di una infrastruttura per la prevenzione delle emergenze effetto dei cambiamenti climatici". In particolare, il contratto annunciato oggi, prevede la realizzazione sull'isola di un centro per servizi di geo-informazione che sarà sviluppato da e-Geos integrando le capacità tecnologiche della costellazione satellitare italiana Cosmo-SkyMed, i dati generati dai radar meteorologici e le capacità dell'azienda nel settore strategico dell'emergency mapping. In questo campo, argomenta Comparini, e-Geos "è in grado di fornire in poche ore mappe satellitari pre e post evento con copertura globale, per supportare le operazioni di soccorso dopo eventi climatici estremi". Il nuovo centro e l'erogazione dei servizi che ne nasceranno consentiranno alle autorità locali di incrementare la capacità di allerta e di fornire una rapida valutazione dei danni provocati. La struttura, infine, sarà gestita dal Centro Meteorologico Slumet-Saint Lucia Meteorological Services dell'isola caraibica e dalla National Emergency Management Organisation (NEMO), responsabile della gestione delle emergenze.

## **ALTRI ELICOTTERI AW109 PER LA NIGERIA**

Source: [Analisi Difesa.it](http://Analisi Difesa.it) (19 dicembre 2018)

Altri elicotteri AW109 per la Nigeria 19 dicembre 2018 di Redazione in Analisi Industria La Nigerian Air Force (NAF) prenderà in consegna 6 elicotteri Leonardo AW109 nell'ambito del programma di potenziamento delle capacità antiguerriglia che include l'acquisizione di 12 aerei ColN Super Tucano. Lo ha riferito il Chief of Air Staff (CAS) nigeriano, Air Marshal Sadique Abubakar, che ha rivelato la nuova acquisizione l'8 dicembre durante una visita alla base aerea di Kano. "L'amministrazione del presidente Buhari ha fatto molto per rafforzare l'Aeronautica Nigeriana", ha detto Abubakar. "Puntiamo a ottenere 12 nuovi aerei dagli Stati Uniti d'America e inoltre, speriamo anche di ottenere 6 nuovissimi elicotteri da combattimento dall'Italia". Parlando il giorno prima a Kaduna, Abubakar aveva detto che gli elicotteri dall'Italia appartengono al modello AW109 Power. Si presume si tratti della versione AW109M che può essere armata con pod dotati di mitragliatrici e lanciarazzi da 70 mm. Il governo nigeriano ha già previsto un budget per l'acquisto di 2 AW109 ma è probabile che ne vengano ordinati altri col nuovo bilancio. Secondo il disegno di legge federale del 2018 approvato dal presidente Muhammadu Buhari il 20 giugno, il governo ha accantonato circa 19 milioni di dollari per l'acquisto di due nuovi elicotteri AW109 da Leonardo Helicopters. Questi si uniranno ai 12 AW109LUH già in servizio con la Nigerian Air Force e ai 4 A109E in servizio con la Marina nigeriana.

## **Solo un'italiana fra le 100 imprese che investono di più in innovazione**

**LA PRIMA AZIENDA TRICOLORE È LEONARDO SPA, CON UN INVESTIMENTO DI 1,8 MILIARDI DI DOLLARI. La spesa mondiale è aumentata dell'11,4% rispetto al 2017**

Source: [www.businesspeople.it](http://www.businesspeople.it) (20 dicembre 2018)

Non c'è crescita senza modernizzazione. Le aziende che vogliono continuare a rimanere competitive e a espandersi devono rinnovarsi e innovarsi continuamente. E, infatti, secondo il **Global Innovation Report del 2018 di Strategy&**, il consulente strategico di PwC, la **spesa mondiale** destinata dalle imprese all'innovazione è **aumentata dell'11,4%** rispetto all'anno precedente, raggiungendo la soglia da capogiro di **782.000 milioni di dollari**. Si tratta di una crescita quattro volte maggiore rispetto a quella avvenuta nel 2016 e nel 2017. Le più attive in questo senso? Le **aziende cinesi**: quest'anno i loro investimenti in questo settore sono saliti del 34,4%, a 58 miliardi di dollari, e la loro presenza nella classifica dei 1.000 che innovano di più al mondo è aumentata del 16%. Ma stanno facendo bene anche le imprese europee, che nel 2018 hanno destinato allo sviluppo il 14% in più dell'anno precedente, rafforzando la loro presenza nella classifica dei 1.000 del 7%.

Ecco le dieci aziende che puntano tutto sull'innovazione

I settori che più investono in innovazione e sviluppo sono sei: **informatico, elettronico, sanitario, automobilistico, software e internet**, che da soli coprono il **76% della spesa totale**. Tuttavia, si prevede che entro il 2020 il primato assoluto andrà al comparto sanitario.

Ma quali sono le aziende che nel 2018 hanno speso di più per innovarsi? La medaglia d'oro va alla solita **Amazon**, con la cifra record di 22.600 milioni di dollari. Sul secondo gradino del podio sale, invece, **Alphabet Inc**, con 16.200 milioni di dollari. Terza, con 15.800 milioni di dollari, è **Wolkswagen Aktiengesellschaft**. Chiudono la top10 Samsung Electronics Co (15.300 milioni di dollari), Intel Corporation (13.100 milioni di dollari), Microsoft Corporation (12.300 milioni di dollari), Apple Inc (11.600 milioni di dollari), Roche Holding AG (10.800 milioni di dollari), Johnson & Johnson (10.600 milioni di dollari) e Merck & Co (10.200 milioni di dollari).

Lontanissime le italiane: nei primi 100 c'è solo Leonardo Spa, 88esima con un investimento in innovazione nel 2018 di 1,8 miliardi di dollari.

### **Leonardo Spa: contratto con Sakhalin E. per elicotteri AW189**

SOURCE: MFDJ (20 dicembre 2018)

Leonardo ha firmato un contratto con Sakhalin Energy Investment Company Ltd. per la fornitura di tre elicotteri commerciali bimotores AW189. Gli elicotteri, spiega una nota, saranno impiegati nel quadro del programma di modernizzazione delle operazioni di trasporto a supporto dell'industria Oil&Gas e saranno basati sull'isola russa di Sakhalin. L'avvio delle consegne è previsto nel primo trimestre del 2020. Il contratto è stato firmato oggi a Mosca da Capo della divisione Elicotteri di Leonardo Gian Piero Cutillo e dell'Amministratore Delegato di Sakhalin Energy Roman Dashkov.

"Quest'ordine conferma la competitività della gamma prodotti di Leonardo sul mercato Oil&Gas e rafforza ulteriormente il successo dell'AW189 in Russia e nel mondo grazie alle sue prestazioni, il design moderno, i più recenti standard certificativi e il rapporto costo/efficacia per questo tipo di operazioni. Siamo certi che l'AW189 consentirà a Sakhalin Energy di compiere un significativo passo in avanti in termini di capacità operative", ha dichiarato Gian Piero Cutillo, Capo della divisione Elicotteri di Leonardo.

Roman Dashkov, a.d. di Sakhalin Energy, ha aggiunto: "il fatto che la firma di questo contratto per la consegna e il supporto di tre elicotteri per il trasporto del nostro personale verso le nostre installazioni più lontane avvenga alla fine dell'anno ha un forte valore simbolico per noi. Questa collaborazione avvantaggia tutti i partner, con effetti sulla sicurezza e la fornitura di servizi affidabili a supporto dell'industria Oil&Gas, considerando le difficili condizioni climatiche e ambientali in cui operiamo. Rappresenta un passo in avanti per l'industria russa e per la collaborazione internazionale".

## La Pologne commande quatre avions d'entraînement M-346



### **La Pologne a commandé auprès de Leonardo quatre avions d'entraînement M-346.**

SOURCE: [www.air-cosmos.com](http://www.air-cosmos.com) (27 décembre 2018)

Leonardo a annoncé le 14 décembre avoir reçu une commande de la part de la Pologne pour quatre avions d'entraînement M-346. La Pologne exerce une option, évaluée à 130 M€, comprise dans un contrat passé en mars 2018. Ce dernier prévoyait la fourniture de quatre M-346 livrables d'ici 2020.

Outre la vente de quatre nouveaux aéronefs, ce contrat comprend également le soutien des appareils et la modernisation de la flotte de M-346 d'ores et déjà en service au sein des forces polonaises, soit 8 aéronefs. La livraison des quatre M-346 récemment commandée devrait permettre une entrée en service des appareils au sein des forces aériennes polonaises d'ici le mois d'octobre 2022, qui opèrera alors 12 appareils.

Avec l'exercice de cette option, la Pologne devient le second pays, derrière l'Italie, à opérer la plus grosse flotte de M-346. A ce jour, le M-346 a été commandé par quatre Etats, à savoir l'Italie, Singapour, Israël et donc la Pologne. Un total de 76 appareils a été commandé par ces clients.



## **New-customer Typhoons Will Be the Most Advanced Yet**

Source: [www.ainonline.com](http://www.ainonline.com) (27 dicembre 2018)



*Seen while undergoing tests in an anechoic chamber, the Captor-E E-scan radar is installed in Typhoon IPA5 (photo: Hensoldt)*

For most of the life of the Eurofighter Typhoon program, the integration of new capabilities on the aircraft has been driven by the requirements of the original four partner nations, and export aircraft have been based on the four-nation standard. However, for the first time, the aircraft that are being built for delivery to Kuwait and Qatar from late 2019/early 2020 will have sensors and weapons that are not in service with the partner nation air forces. In some cases, these new systems will provide capabilities that are more advanced than those of RAF, Luftwaffe, AMI, and Ejército del Aire Typhoons.

Eurofighter is due to begin deliveries of 28 aircraft to Kuwait during 2019, including six two-seat trainers, following the signing of an \$8.7 billion contract with Italian defense company Finmeccanica (now Leonardo) in April 2016. Qatar then signed an order for 24 aircraft in December 2017, with deliveries due to start in 2022. The aircraft for Kuwait and Qatar will be to the latest standard and, like other Typhoons, will be capable of carrying Meteor BVRAAMs, as well as Storm Shadow, Paveway IV, Brimstone and other air-to-surface weapons.

While the four “core nations” have conspicuously failed to sign up to acquire an AESA radar for their Typhoon fleets, those for Kuwait and Qatar will incorporate this vital technology. Euroradar has secured production build contracts for 28 E-scan radars from Eurofighter/Leonardo Aircraft as the prime contractor for Kuwait and from BAE Systems for the 24 radars for Qatar.

The radar used by Kuwaiti and Qatari Typhoons is known as Radar One Plus and also forms the basis of the four-nation development program, with the same hardware and the same performance, although additional documentation and performance data will be required to satisfy the four-nation requirements as set down by NETMA, which manages the program on behalf of the European customers.

The Captor-E radar passed its Critical Design Review (CDR) exactly on schedule and its design has been frozen, with software that has been developed and matured through flight-testing using production standard hardware on Instrumented Production Aircraft (IPA) 5 at BAE Systems Warton, and on IPA8 at Airbus Defence and Space in Manching.

Hensoldt has now delivered two antennas to Leonardo UK in Edinburgh ready to begin series production with the delivery of the first radar systems due in mid-2019. Leonardo sources are confident that radar deliveries to the prime contractors will allow them to be fully integrated with the

Eurofighter weapons system in time for aircraft for both customers to have E-Scan radar fitted from day one. The Euroradar companies (Leonardo, Hensoldt and Indra) hope that the Eurofighter partner nations will soon make commitments to procure Radar One Plus for their own Eurofighter fleets, allowing for production of those radars to neatly dovetail with deliveries for Kuwait and Qatar.

Kuwait's Typhoons will be the first to use the Lockheed Martin Sniper Advanced Targeting Pod (ATP), which has recently been upgraded to include two-color laser spot tracking, short-wave infrared, and advanced non-traditional intelligence, surveillance, and reconnaissance (NTISR) modes. Lockheed Martin signed a contract with Leonardo Aircraft for the supply of 18 pods, together with integration and logistics support for the Kuwait Air Force's Eurofighter Typhoon.

Integration of the Marte ER anti-ship missile has also been started, based on what Eurofighter refers to as "formal interest from one of Eurofighter's export customers"—understood to be Kuwait.

Integration of the Marte ER was originally examined following interest from a Eurofighter export customer in 2011, along with the Saab RBS15 and the Boeing AGM-84 Harpoon. This early work was followed in 2014 by some preliminary work by MBDA and Leonardo. A contract for the System Definition Phase was then signed in May 2016, and this defined the engineering and interface activities that would be required to get to a final clearance. Kuwait's Typhoons are also due to be equipped to carry DRS-Cubic ACMI P5 combat training pods and will be fitted with an enhanced navigation aid with VOR.

Less detail has emerged about the planned "fit" of the Typhoons for Qatar, though they will use the same version of the Captor-E AESA radar. They are also expected to use the Sniper ATP, which has been specified for the new F-15QA Eagles and, since June 2018, for Qatar's Dassault Rafale multi-role fighters.

## **Leonardo promotes its M-346FA for Polish Air Force**

Source: Blog Before Flight Staff (27 dicembre 2018)

The fighter variant of the proven M-346 could replace the Su-22 fleet.



Leonardo promotes its M-346FA for Polish Air Force.

The Polish Defense Minister announced that the nation plans to begin the selection process for a new aircraft to replace the MiG-29 and Su-22 fleets by 2022. The soviet-era aircraft of the Polish Air Force are reaching the end of their service life and their replacement is now a priority. Poland will primarily select a substitute for Su-22M4/UM3K jets by looking at a modern multi-role aircraft capable of facing threats from the air, land and sea in all weather conditions and being able to operate with modern systems used by NATO forces. The previous Polish government had decided to extend the operational life of the Su-22s for ten years instead to introduce a new fighter jet so their replacement can no longer be postponed. According to the spokesperson of the Polish Air Force, they need to have two multi-role Squadrons composed of about 40 aircraft each. During a recent interview, the Head of Leonardo Office in Warsaw, Marco Lupo, encouraged Poland to evaluate the combat variant of the M-346, the M-346FA (Fighter Attack). He underlined that the M-346FA is equipped with Leonardo's multi-mode Grifo radar, can be load with an extensive variety of air-to-air and air-to-ground weapons and is able to perform tasks complementary to those of modern combat fighters as Close Air Support, Slow Movers Intercept and Air Defense.

Lupo also said that the M-346FA can cover all these activities by offering a considerable cost reduction and Leonardo will be ready to deliver the aircraft in a few years. He also added that the jet is fully compatible with the M-346 in the AJT variant already purchased by Poland.

The choice of the M-346FA would allow Poland to reduce the types of aircraft in its fleet as well as the most advanced air forces are doing to cut down on the operational costs. For example, France aims for an "all Rafale fleet" and Germany for an "all Eurofighter fleet". The Polish MoD had already evaluated an "All F-16 fleet" in 2016, but the proposal was not followed due to a reduced budget.

Poland has purchased 12 M-346 jets (plus an option for a further 4) for advanced pilot training.

**ABOUT THE M-346FA** The FA (Fighter Attack) is a new version of the advanced Leonardo's M-346 twin-engine trainer, designed and manufactured by Leonardo to meet Air Forces' growing and diversified operational requirements. The FA is an extremely effective and low-cost tactical solution for the modern battlefield, as it offers Air Forces the greatest effectiveness with all the M-346's AJT (Advanced Jet Trainer) features, including the advanced and pre-operational training capabilities of the basic version. Let's discover why. In the present operational scenarios, especially in those with a low-medium threat level, often modern and expensive 20/30 tonne class fighter aircraft are used for missions with high operating costs. Generally, these are Close Air Support (CAS) missions that have to be carried out in urban areas and for battlefield air interdiction, as well as for Homeland Security and Air Policing, tactical reconnaissance and support for the personnel recovery operations in combat areas, where the use of low-cost aircraft equipped with radar, a state-of-the-art designator pod, modern and technologically advanced self-protection systems, a state-of-the-art data link and a critical air-to-air refuelling capability would be enough. The M-346FA, the low-cost multirole master, was developed from the M-346's AJT advanced training version already in service with the Italian, Israeli, Polish and Singapore Air Forces. In comparison with the latter, the FA version's unique features consist of the upgraded avionics and the two additional wing tip hardpoints (seven in total) in order to have two air-to-air missiles, maintaining at the same time the full dual role capability and the entire extremely advanced Integrated Training System.

The M-346FA will be equipped with a DASS (Defensive Aid Sub System) self-defence system, which includes a Radar Warning Receiver, a Chaff and Flare dispenser as well as a Missile Approach Warning System, with six sensors and a comprehensive 360° protection against any missile threat. The aircraft will be safely able to exchange in real time all the tactical data thanks to a dedicated Tactical Data Link according to the NATO Link 16 or other standards.

A fundamental element of the FA configuration is the multimode GRIFO fire-control radar. The GRIFO-346 is a pulse-doppler multimode radar, produced by Leonardo, specifically optimised for the M-346FA and originates from the Grifo family that, with over 450 units sold worldwide, is a great commercial success due to its reliability and low operational costs. The GRIFO family of radars recently evolved to the Grifo-E version, the electronical scan version of this well proved radar offered by Leonardo. The M-346FA's cost per flying hour is 80% lower compared to a heavier and more expensive fighter used for close air support missions. The maximum speed is remarkable even with external loads, absolutely comparable with operational speed of other front line aircraft, when loads and armament is added, which in fact mostly operate at high subsonic/transonic speed. The manoeuvrability is excellent thanks also to the 4-channel digital fly-by-wire flight control system and this allows fast manoeuvring during close air combat. The remarkable specific excess power allows the return to base even with full payload, with one engine inoperative (OEI), at an adequate altitude to keep out of the more common range missile threat,

guaranteeing a notable survivability capability. The so-called Carefree Handling makes sure that the pilots can focus on the mission, without having to worry about risking to exit the expected flight envelope.

The twin-engine configuration assures a high battlefield survivability and, at the same time, the fuel consumption is kept low thanks to the engine's efficiency, definitely providing a good range, that can be further extended by air refuelling, a capability which is already operational within Italian Air Force. The Auxiliary Power Unit (APU) assures completely autonomous flight operations.

Furthermore, the visibility is excellent and this is very important during low altitude flight. The back-seater pilot can also act as a Weapons System Operator or a more specialised FAC-A (Forward Air Controller – Airborne) role. The state-of-the-art Human-Machine Interface includes advanced systems to provide the data to the pilots (Multi-Function Display - MFD, Head Up Display and the Helmet Mounted Display - HMD which is already qualified) and HOTAS (Hands On Throttle And Stick) type commands, this means being able to control all the aircraft's systems without having to take the hands off of the thrust lever or the control bar. The M-346FA keeps all the advanced trainer's features, such as the on board Embedded Tactical Training System (ETTS), that simulate, in a Live Virtual Constructive (LVC) environment, the entire suite of sensors and weapons of 346FA and other front line fighters. This is a significant advantage for the pilots that are thus able to effectively train on our platform both for the front line aircraft and the 346FA real missions.

The FA's new operational capabilities add on to those that the M-346 is already able to offer now, as a “Aggressor” and “Companion Trainer” for Combat Ready pilot training, as the Israeli and Italian Air Forces have been able to successfully demonstrate. The external stores that can be carried amounts to over 2 tons in addition to the 138 gallons in each auxiliary fuel tank. For the strike missions a series of 500 lb class munitions, both guided and unguided will be integrated, including the latest generation precision munitions capable of keeping the collateral damage to



a minimum and to increase the number of targets that can be simultaneously hit. The most modern state-of-the-art Laser Designator Pods are available for target designation. In regards to Homeland Security and Air Policing missions, including the identification of potential threats (even of a terrorist nature) while flying at low altitude (Slow Movers Intercept), such as for example small aircraft or ultralight helicopters, the M-346FA can be equipped with short range infrared guided air-to-air missiles, as well as with a centreline pod that houses a cannon or, upon customer request, an ECM electronic warfare jamming pod. Suitably configured with a mix of air-to-surface and air-to-air stores, the M-346FA can carry out, without any problem, support missions for complex Personnel Recovery/Combat Search And Rescue operations, namely recovery of personnel even on hostile ground and search and rescue of flight crews shot down in enemy territory.

## **Airbus, Leonardo : l'Espagne s'offre 23 NH90 supplémentaires**

Source : [www.latribune.fr](http://www.latribune.fr) (28 décembre 2018)

2018 a marqué le retour du NH90 sur le plan commercial avec deux belles commandes : Qatar (28 NH90) et Espagne (23).

L'Espagne a signé un contrat avec le consortium NHIndustries, composé d'Airbus Helicopters, Leonardo et le néerlandais Fokker portant sur l'acquisition de 23 NH90, dont sept dans une version navale tactique.

Airbus Helicopters et Leonardo ont terminé l'année sur une très belle commande. Selon nos informations, l'Espagne a signé un contrat avec le consortium NHIndustries (NHI), composé d'Airbus Helicopters (62,5%), Leonardo (32%) et le néerlandais Fokker (5,5%) portant sur l'acquisition de 23 NH90, dont sept dans une version navale tactique. Le gouvernement espagnol avait décidé en septembre, lors d'un conseil des ministres, de consacrer une enveloppe budgétaire de 1,5 milliard d'euros à l'achat de 23 nouveaux NH90 (dix pour l'armée de Terre, six pour l'armée de l'Air et sept pour la Marine). Le montant du contrat s'élève à 1,38 milliard d'euros (hors TVA).

2018 a vraiment marqué le retour du NH90 sur le plan commercial avec deux belles commandes : Qatar (28 NH90) et Espagne. Il y avait des années que le NH90 n'avait pas été exporté. La Nouvelle-Zélande en 2007 et la Belgique en 2008 avaient été les derniers pays à s'offrir des appareils de ce type. Fin 2015, le ministère de la Défense français avait commandé six hélicoptères NH90 dans sa version de transport tactique (TTH) destinés à l'aviation légère de l'armée de terre. Au total, 543 NH90 ont été commandés par les clients dans le monde entier.

Une flotte renouvelée à partir de 2006.

Le programme de renouvellement de la flotte d'hélicoptères a débuté en 2006 avec l'intention d'acquérir 45 hélicoptères NH90. Toutefois, en raison de restrictions budgétaires de l'époque, l'Espagne n'avait acheté que 22 appareils dans la version terrestre (TTH). Les nouveaux appareils de l'armée de Terre et de l'Air vont remplacer des Super Puma (AS332) tandis que ceux de la marine vont succéder aux très vieux Sikorsky S-60 pour des missions de transport tactique. En septembre, l'Espagne avait également décidé de moderniser ses hélicoptères lourds américains CH-47D Chinook pour un montant de 819 millions d'euros (livraison entre 2021 et 2025).

## **Brazilian Air Force confirms Leonardo to provide logistics services to the AMX fleet**

Source: Blog Brasil Soberano e Livre ( 28 dicembre 2018)

The Brazilian Air Force's (BAF) General Command of Logistic Support (COMGAP) again chose Leonardo to provide long-term logistics support services for the A-1 (AMX) fleet operated by the BAF. The agreement is part of the Brazilian Air Force's program to ensure the full operational capability of the AMX aircraft fleet over the next 5 years. Leonardo Sales Manager for Latin America, P. de Maio, said: *"Leonardo has been contributing for years to the logistical support of Brazilian and Italian AMXs thanks to decades of experience in the program. We are proud of the renewed confidence of the Brazilian Air Force which, thanks to this new agreement, will continue to operate the fleet with high levels of efficiency. "*

### ***Força Aérea Brasileira confirma Leonardo para fornecer serviços logísticos à frota AMX***

*O Comando Geral de Apoio Logístico (COMGAP) da Força Aérea Brasileira (FAB) escolheu novamente a Leonardo para o fornecimento de serviços de apoio logístico de longo prazo para a frota de aeronaves A-1 (AMX) operadas pela FAB.*

*O acordo faz parte do programa da Força Aérea Brasileira para garantir a plena capacidade operacional da frota de aeronaves AMX nos próximos 5 anos.*

*O contrato, com validade de 58 meses, prevê a prestação de serviços como reparo e revisão de componentes, atividades de apoio logístico voltadas a garantir o gerenciamento de peças de reposição, o tratamento de obsolescência de aeronaves e suporte técnico, e engenharia na Força Aérea.*

*Todas as atividades serão coordenadas pelo Centro Logístico (CELOG) da Força Aérea Brasileira em colaboração com a Leonardo.*

*O diretor do Centro de Logística da Aeronáutica, Luiz Amedeo Iozzi da Silva, afirmou: "A FAB, graças ao apoio de Leonardo, garantirá a operação da frota AMX. Estamos convencidos de que a continuação da colaboração positiva com o Leonardo irá melhorar ainda mais a eficiência operacional da frota.*

*A colaboração com o Leonardo vem acontecendo com sucesso desde 2012 e queremos continuar até o final da vida operacional da aeronave. Sem o apoio logístico fornecido pela Leonardo, seria impensável apoiar esse programa de manutenção. Graças a esse acordo, a FAB gastará menos em atividades de suporte logístico do que o AMX, também graças a uma redução nos custos de gerenciamento".*

*Placido De Maio, gerente de vendas da Leonardo para a América Latina, disse: "A Leonardo vem contribuindo há anos com o apoio logístico de AMXs brasileiros e italianos graças a décadas de experiência no programa. Estamos orgulhosos da confiança renovada da Força Aérea Brasileira que, graças a este novo acordo, continuará a operar a frota com altos níveis de eficiência".*

*O AMX é uma aeronave de suporte tático desenvolvida na Itália nos anos 80 pela Aeritalia (46,5%) e pela Aermacchi (23,8%) e no Brasil pela Embraer (29,7%). O AMX entrou em serviço com as forças aéreas italianas e brasileiras no final dos anos 80.*

### **Aviation exercises options for eight ATR 72-600s**

Source: Flight Dashboard (3 gennaio 2019)

Singapore-based lessor Avation has exercised options for eight ATR 72-600s, scheduled for delivery between 2020 and 2022.

“This order for eight additional aircraft extends Avation’s order book and firm delivery horizon and continues the business growth in regional turboprops out to 2022,” says Avation executive chairman Jeff Chatfield. “In addition to this order, the company has maintained its purchase rights and price protection over a further 25 aircraft extending to December 2025.” Flight Fleets Analyzer shows that prior the option conversion the lessor’s firm orderbook for the type stood at three aircraft, with 18 aircraft on option. In addition, it had 10 letters of intent to option, and five letters of intent to order. Avation manages 16 in-service ATRs with seven airlines. Chatfield adds that the lessor may convert some of its ATR orders to the cargo variant. “Avation is satisfactorily positioned as one of a few lessors with a modest number of forward positions to offer to our airline customers,” adds Chatfield.

Leonardo awarded contract worth about USD 80 million to provide additional TROPHY Systems

Press Release (8 gennaio 2019)

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- **Leonardo, through Leonardo DRS, will provide the U.S. Army and Marine Corps with additional TROPHY active protection systems**

**Rome, 8 January 2019** – Leonardo, through Leonardo DRS, announced today that it has been awarded a contract worth about USD 80 million to provide the U.S. Army and Marine Corps with additional TROPHY active protection systems. This brings the total funded value of the program to over USD 200 million and will equip several more brigades with Abrams TROPHY.

Developed by long-time partner Rafael Advanced Defense Systems Ltd. of Israel, TROPHY provides combat-proven protection against anti-armor rocket and missile threats, while at the same time locating and reporting the origin of the hostile fire for immediate response.

With no extra armor weight or decrease in vehicle performance, Trophy dramatically improves the survivability of the crew and vehicle. The system uses active electronically scanned array radar to see through harsh combat conditions to provide continuous 360-degree protection for the vehicle. Once a threat is detected, the onboard computer classifies the threat.



Leonardo DRS, based in the U.S., is focused on the supply of products, services and integrated support to the Armed Forces as well as to intelligence agencies and defence companies worldwide.

Leonardo awarded £293 million Apache Integrated Operational Support contract by the UK MoD

Press Release (17 gennaio 2019)

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- **Contract extends the current Apache AH Mk.1 Integrated Operational Support service until the types out of service date.**
  - **The Apache IOS contract will deliver the required levels of aircraft availability whilst reducing through life costs.**
  - **Leonardo also provides integrated support and training services for the UK MoD's AW159 Wildcat and AW101 Merlin helicopter fleets.**

**Rome, 17th January 2019** – Leonardo is pleased to announce it has been awarded a contract by the UK Ministry of Defence to provide the Apache AH Mk.1 Attack Helicopter fleet with comprehensive support and maintenance services. The Apache Integrated Operational Support (IOS) contract is valued at approximately £293 million (approximately €325 million) and will continue to support the Apache AH Mk.1 Attack Helicopter fleet from 1st April 2019 until the aircraft goes out of service in 2024.

During a visit to Leonardo Helicopters' facility in Yeovil today Defence Minister Stuart Andrew said "The Apache has provided years of crucial battlefield support to UK and coalition troops in operations in Libya and Afghanistan. This multi-million-pound contract will ensure our Armed Forces continue to benefit from this vital capability as we integrate the latest Apache model into service in 2022."

Geoff Munday, Leonardo Helicopters' Managing Director in the UK said "We are pleased that we have been awarded the contract to support the Apache AH Mk.1 fleet up to the planned out of service date and that the Minister has taken the time to visit us here in Yeovil to see first-hand the unique and exceptional capabilities we have here in the UK."

Under the contract Apache IOS prime contractor Leonardo, through the involvement of its Helicopter and Electronics divisions, will continue to be supported by its industrial partners Boeing, Lockheed Martin and Longbow International to deliver complete spares provisioning, engineering, depth maintenance, repair & overhaul and technical support services for the UK MoD's fleet of Apache AH Mk.1 helicopters. At Wattisham Airfield, the British Army's main Apache AH Mk.1 operating base, Leonardo will continue to manage the Depth Support Unit and the associated workshops, ensuring the throughput of the facility matches the operational requirements of the Army Air Corps. At Army Aviation Centre Middle Wallop, Leonardo will continue to be responsible for the provision of Apache aircraft on the flight line at the School of

Army Aviation, delivering the required number of flight hours to match the Army's training requirements.

The Apache IOS programme office, manned by industry and Ministry of Defence staff, located at Leonardo's Yeovil facility, will continue to manage the IOS contract. The Apache IOS contract will deliver the required levels of aircraft availability whilst reducing through life costs. Leonardo also provides support and training services for the UK MoD's AW159 Wildcat helicopter fleet under the Wildcat Integrated Support and Training (WIST) contract and for the AW101 Merlins under the Integrated Merlin Operational Support (IMOS) contract.

Leonardo, Vitrociset and the University of Palermo work together to conserve the Eleonora's falcon on the island of Lampedusa

Press Release (22 gennaio 2019)

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- **Leonardo and its partners will help maintain the local ecology of Lampedusa to protect the habitat of the vulnerable Eleonora's falcon, following the installation of an air defence radar on the island**
  - **The research project will monitor the population of the bird-of-prey for two years, including using satellite transmitters to follow individual birds. Guidelines will be developed outlining how to best conserve the species and a field data collection will be generated which will include valuable new information and photos**
  - **Leonardo promotes environmental protection in all of the areas in which it operates, considering ecological issues as an intrinsic part of doing business**

**Rome, 22 January 2019** – Today Leonardo, Vitrociset and the University of Palermo's Department of Biological, Chemical and Pharmaceutical Sciences and Technologies signed a multi-year agreement to monitor the population of Eleonora's falcon (*Falco eleonora*) birds inhabiting Lampedusa island. The agreement, which was signed at the Italian Ministry of Defence's TELEDIFE (Telematics and Advanced Technologies Department), will meet the needs of local authorities in Regione Sicilia and Legambiente to assess the environmental impact of the Fixed Air Defence Radar which was installed by Leonardo and is due for testing in February 2019. The research programme will help to maintain the local ecology of Lampedusa to protect the habitat of the Eleonora's falcon.

The agreement was signed by Lorenzo Mariani, Leonardo's Chief Commercial Officer, Paolo Solferino, CEO of Vitrociset, and Prof. Silvestre Buscemi, of the University of Palermo. The signing was witnessed by TELEDIFE's director Admiral Giuseppe Abbamonte.

Funded by Leonardo and Vitrociset and led by researchers from the University of Palermo, the Eleonora's falcon research project will monitor a range of factors relating to the species over two years, including the movements of individual birds via satellite transmitters. The final report will include guidelines outlining how to best conserve the birds and a database of valuable new



information and photos collected during the project. Leonardo promotes environmental protection everywhere it operates, considering ecological issues as an intrinsic part of doing business. By doing so, the Company contributes to stable and sustainable economic and social development around the world.