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Armament (Sept)**

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Egypt: Recent Military Armament (Sept)

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During September, 2018 the Egyptian military announced agreements to acquire new weapons, as follows:

1- Fourth Generation of M1 Abrams Tank Shells



The US State Department on Sept. 17, 2018, made a determination approving a possible Foreign [Military Sale to Egypt](#) of forty-six thousand (46,000) M831A1 and M865 rounds and ten thousand

(10,000) APFSDS-T rounds for an estimated cost of \$99 million. The Defense Security Cooperation Agency delivered the required certification notifying Congress of this possible sale Sept. 17.

The Egyptian government had requested to buy forty-six thousand (46,000) 120MM Target Practice – Tracer (M831A1) and 120MM Target Practice, Cone Stabilized, Discarding Sabot – (M865) rounds and ten thousand (10,000) 120MM 4th-Generation Kinetic Energy-Tungsten (KE-W) A4 Armor-Piercing Fin-Stabilized Discarding Sabot with Tracer (APFSDS-T) rounds. Also included are four thousand five hundred (4,500) 120MM Insensitive Munitions High Explosive with Tracer (IM HE-T) tank rounds, field implementation, testing inspections, spares and repair parts, support and test equipment, field support publications and technical data, U.S. government and contractor engineering and logistics support services, personnel training and training

equipment, quality assurance team support services, preparation of ammunition for shipment, ammunition delivery, component improvement program and repair, other associated equipment and support, and other related elements of logistical and program support. The estimated cost is \$99 million.

The proposed sale will improve Egypt's capability to meet current and future threats and provide greater security for its critical infrastructure. Egypt will use the 120MM IM HE-T cartridges to maintain a strategic munitions inventory for its M1A1 tank fleet and in support of operations against militants affiliated with the Islamic State of Iraq and Syria in the Sinai. They will use the target practice rounds to train M1A1 crews in proper crew procedures in a training environment using munitions that cost a fraction of tactical rounds and have nearly zero explosive or penetrating capability.

Egypt has been producing this type of ammunition under an existing co-production agreement for approximately 15 years. Egypt intends to use the APFSDS-T rounds to replace older model 120MM KE-W, KE-W A1, and KE-W A2 ammunition to maintain a strategic munitions inventory for its M1A1 tank fleet. The proposed sale of the munition and support will not alter the basic military balance in the region. The prime contractor involved in this program is General Dynamics Ordnance and Tactical Systems, St. Petersburg, FL. There are no known offset agreements proposed in connection with this potential sale. Implementation of this proposed sale will involve multiple trips to Egypt involving up to six (6) U.S. Government and contractor representatives over a period of up to 5 years.

2- German IRIS-T SLM tactical medium range air defense systems



[Rheinische Post](#), a German newspaper, reported that the Federal Government of Germany authorized further arms exports to Egypt and a number of Gulf and Middle

Eastern countries. Accordingly, Egypt will receive seven air defense systems made by Diehl, armed with the Iris-T SLM rocket.

The IRIS-T SLM is a tactical medium range air defense system based on IRIS-T SL surface-to-air missile (SAM), launcher vehicles as well as radar and fire control systems. The IRIS-T SL missile was developed originally as a complementary missile for the MEADS of the German Armed Forces. The IRIS-T can destroy a wide variety of targets with its high explosive fragmented warhead fitted with a proximity fuse. It is fitted as a standard weapon for Eurofighter Typhoon, F-16, EF-18, Tornado and Gripen fighter aircraft.

The IRIS-T missile is equipped with imaging infra-red (IIR) seeker for high accuracy and all-aspect capability in severe electronic counter measures (ECM) environments. The solid-fueled motor with thrust vector control ensures the engagement of highly manoeuvrable targets. IRIS-T SLS and LFK NG vertical-launch missiles are also compatible with the IRIS-T SL launcher vehicle. This new missile system is being offered by Diehl BGT Defense for export customers since early 2011. The IRIS-T SLM defense system is capable of dealing with various air threats (except ballistic missiles), including

mobile rockets, drones, helicopters and fighters, with enormous immunity against modern means of jamming.

3- French Rafale Aircraft



Photos for the new Egyptian Air Force [Rafale](#) double-seat jet DM07-DM08-DM10 during flight tests were circulated on Sept. 25, 2018 before leaving French Bordeaux airport in

France for delivery to the Egyptian Air Force.

Egypt has already received all single-seat fighters of the French 24 Rafale fighter jets deal (8 single-seat+16 double-seat aircraft worth € 5.2 billion). Egypt has already received all single-seat fighters. It has also received six double-seat fighter jets and the remainder is scheduled for delivery this year and next year. It is worth mentioning that the Rafale jet DM09 also underwent flight tests in September in preparation for delivery to the Egyptian Air Force.

4- German company TKMS and arming the Egyptian navy



La Tribune, citing identical sources, reported on Sept. 3 that the ThyssenKrupp Marine Systems TKMS German company, supported by French businessman and Lebanese billionaire Iskandar Safa, who is in turn heavily supported by German

authorities, is about to win a contract with the Egyptian authorities to build two MEKO A-200 light-headed frigates for the Egyptian navy. The TKMS deal consists of two Meko 200 corvettes, worth €1 billion (US \$1.2 billion) excluding weapons, La Tribune reported. “French Naval Group finds itself in direct competition with German rival ThyssenKrupp Marine Systems in Egypt’s acquisition of two more corvettes,” according to Hervé Guillou, CEO of the French shipbuilder. The contest comes after Egypt in 2014 placed an order for four Naval Group Gowind corvettes worth some €1 billion, with options for two more units. The Egyptian Navy sails a FREMM multimission frigate and two Mistral-class helicopter carriers. The four Gowind corvettes will complement that fleet.

The French newspaper added that negotiations are currently focusing on the equipment of the two frigates, in light of making progress on the financial level, unlike the negotiations with France, where a pessimistic atmosphere dominated the chances of winning the two extra Gowind 2500 corvettes for the Egyptian navy. If Egypt turns to Germany, it will be a slap to France, which did not do the necessary work this summer to protect its interests (the financial facilities requested by Egypt are to finance the deal from French banks at 100% of their value).

5- Launch of First Egyptian Gowind-Class Corvette



Egyptian naval forces on Friday (Sept. 7) [celebrated](#) the launch of the first Egyptian Gowind-class Corvette, built by the Alexandria Shipyard Company in cooperation with France, in

preparation for its use. The ceremony began with a speech from Navy Commander Ahmad Khaled, who said that the General Command of the Egyptian Armed Forces is keen to implement a comprehensive strategy to develop and modernize the Egyptian naval fleet as part of efforts to enhance stability. He added that the warship, dubbed the “Port Said” will ensure maritime security, protect borders and economic interests for the Mediterranean and Red Sea, provide safe maritime navigation and improve Suez Canal security.

The Port Said Corvette was developed to keep up with the international competition. It comes as part of a contract signed with France in 2014 to produce a total of 4 warships for Egypt’s Naval Forces. The other three corvettes will also be produced in Egypt. “110,000 hours have been spent for the Corvette production and the project was divided into several stages from the technical preparation,” said a press statement released by the Armed Forces. On the sidelines of its participation in the launch of the Egyptian Gowind 2500 in Alexandria Shipyard, and in the framework of strengthening the long-term partnership with the Egyptian Navy, French Naval Group (formerly DCNS) announced that its new branch, Alexandria Naval, was opened in June 2018 for manufacturing and maintenance of ships.

6- EgyptSat-A undergoing electronic testing



RIA Novosti, a Russian Press Agency, reported that a [source](#) in Russian rocket-space industry said in an interview with the agency that the new Egyptian Sat-A satellite is undergoing comprehensive testing of electronic systems before

launching into space. The source said that all tests will be completed for the Egyptian satellite in mid-November next year, provided that satellite will be shipped to the Baikonur Commodore base in Kazakhstan by the end of the month, where it will undergo final tests and preparations for the launch in December.

The Russian source said the satellite will be launched on the Soyuz -2.1B Russian launch rocket, reaching the Low Earth Orbit at a latitude of 500-800 km above the surface of the Earth. He said that the super accuracy of the new satellite will give it the ability to observe and survey for strategic purposes, as well as for agricultural and industrial research. The new Egyptian satellite would shoot in high-resolution, and clearly identify shapes ground reaching up to a meter. Its memory would also be greater than in the old satellite, and it can better protect itself from external dangers. The telescope of the new satellite is manufactured in the city of Minsk in Belarus, and features high-precision imaging. It is expected to provide Egypt with images to help in drawing development plans and border conservation, along with identifying phenomena such as desertification and the proliferation of water channels while also helping to map plans for cities and villages.

7- Drakon 220, the Croatian dwarf submarine



Croatian [Večernji](#) newspaper published a report on the small submarine industry in Croatia. In an interview with Mladen Šarić, director of Adria-Mar for marine industries and marine architect Ivan Mšterić, the newspaper said that

Egypt and a number of South East Asian countries, intend to buy the Croatian small submarine “Drakon 220”.

Drakon 220 is a new midget submarine developed by Adria-Mar in Croatia. It is 50% longer and twice as heavy as the R-3E (aka Una class) which allows it to carry two torpedo tubes under the casing and accommodate a diesel-electric powerplant for a ten-fold increase in range. It retains the characteristic X-form control surfaces but has a new distinctive vertical bow to house the larger sonar and torpedo tubes, plus a fixed sail with integral diesel exhaust. Special forces optimisation remains per the R-3E.

8- The technology of manufacturing and construction of French rubber boats inside Egypt



French [Le Marin](#) newspaper has revealed that Sullinger, a French company specialized in the manufacture of Rigid-Hulled Inflatable Boats RHIB, has signed a contract for the production and delivery of 20 boats for the Egyptian

naval special forces in the framework of a deal involving the transfer of manufacturing technology and building within Egypt, where it is planned to build 14 boats of the total number locally. The newspaper explained that it is the first precedent for the maritime company to transfer technology knowledge to an external state. France's Groupe Merck, a subsidiary of Sullinger, has announced a project to build the French RHIB boats for the Egyptian navy. The project includes preparing a training program for Egyptian technical crews in France, providing the necessary production equipment and

sending them to Egypt to supply production lines. A team of French technicians took over the project in Egypt. In the same vein, New Zealand's Future Mobility Solutions, which acquired 70% of Sullinger's stake, announced in April 2018 agreement with Egypt to supply the Marine with the Rafale 1200 rubber boats with granting Egypt license to manufacture them locally.

9- Communication systems for the two Egyptian helicopter carriers



Igor Kuleshov, Senior Vice President of Russian company "Intel-Tech", owned by Roselectronika, affiliated to Rostec Company for Defense and Industrial Technologies, said that the negotiations with Egypt

concerning the communications systems for the two helicopters have reached their final stage. Koleshov added that the contract was due to be signed last June, but because of the US sanctions (imposed on Rosostonexport of Rostec, which is responsible for Russian arms exports), the Egyptian side is negotiating cautiously.

Egypt has long been engaged in intensive negotiations with Russia to provide the two helicopter carriers with special communications and guidance systems for the naval combat helicopters, the Ka-52K Katran, a Russian-made marine version of the Ka-52 Alligator. The negotiations took a long time because of the need to adapt all the Russian systems desired with the rest of the systems of the Egyptian Navy, where the completion of the contract of Katran marine helicopters is linked with installation of these systems.

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10- 155th Armored Brigade Combat Team

[Photos](#) from the Kuwaiti Shuaiba Port of the military equipment of the US 155th Armored Brigade Combat Team, while being prepared for loading and shipping to Egypt to participate in the joint Egyptian-American “Bright Star 2018” exercise that took place in Egypt on September 8-12, 2018.

