http://www.defenseindustrydaily.com/syria-buying-mig31s-mig35s-for-1-billion-03391/

In June 2007, Russian newspapers claimed that Russia had begun delivering 5 MiG-31E Foxhound aircraft to Syria, under a deal that was reportedly negotiated in autumn 2006. The Russian newspaper *Kommersant* added that:

"...a lot of MiG-29M/M2 jets was sold to Syria as well. They are being sold abroad for the first time and are similar in their technical specifications to the MiG-35 model Russia is now offering India. The total value of the contract for the MiG-31 and MiG-29M/M2 aircraft is estimated at \$1 billion."

The paper added that the deal was being financed by Iran as a back-door purchase. Russia sort-of denied the sale, but careful reading raised doubts. Continued reports over the last several years have kept this issue smoldering, even as a recent drought has left Syria struggling to feed many of its people. Now, in the wake of a state visit, come confirmations concerning some aspects of the Russia-Syria arms deal...

- <u>A Cut-Out Purchase?</u>
- <u>Subsequent Developments</u> [updated]
- Appendix A: The Aircraft
- <u>Appendix B: Additional Readings & Sources</u>

A Cut-Out Purchase?



Kommersant cites a number of indicators that this may be the case, including a Jane's report in May 2007 that a similar arrangement has being used to funnel some of Syria's 36 new Pantsir-S1E air defense systems to Iran in exchange for a fence's (sorry, "intermediary") fee. They also cite the 2 countries' recent mutual defense agreements, including the July 2006 agreement signed by both countries' defense ministers, which envisaged Iranian financing of Syrian arms deals with Russia, Ukraine and China.

In response, Russian authorities have issued non-denial denials.

Russia's Foreign Ministry spokesman Mikhail Kamynin said in a statement that "...all of Russia's deals in the sphere of military-technical cooperation comply with international law and Russia's obligations under various treaties and United Nations resolutions." Since none of those obligation prohibit sales to Syria, this response is utterly meaningless.

Sergei Chemezov, head of state arms-trading monopoly Rosoboronexport, is quoted as saying that "Russia has no plans to deliver fighter jets to Syria and Iran." Of course, a sale of fighter jets only to Syria would comply with this statement – and if the Syrians choose to send them to Iran, that concerns Syria's plans and not Russia's.

Subsequent Developments



Pantsir-S1 (click to view full)

Oct 27/10: Asked at Euronaval 2010 about Russian MiG-31 sales to Syria, Rosoboronexport General Director Anatoly Isaykin tells reporters: "The existence of a contract on the delivery of MiG-31 interceptors to Syria is a journalistic hoax." <u>RIA Novosti</u>.

Sept 19/10: Israeli Prime Minister Benjamin Netanyahu admits that despite intensive diplomacy, Israel had failed to dissuade Russia from selling supersonic <u>P-800 Yakhont</u> anti-ship missiles (SS-N-26, the basis for India's PJ-10 Brahmos) to Syria.

On the one hand, Syria has transferred Chinese C-802 subsonic anti-ship missiles to Hezbollah before, which raises Israeli concerns. The other geopolitical angle is that Russia reportedly has an agreement with Syria to expand their naval supply and maintenance base in the Syrian city of Tartus, and turn it into a venue that can host Russian nuclear warships, and create a permanent Russian naval presence in the Mediterranean. A shore battery of SS-N-26 missiles near that base would provide formidable defenses. <u>Ha'aretz</u>.

May 14/10: Reports surface, in Russian media and beyond, that Russia has sold Syria MiG-29 fighters, and a package of air defense systems that include <u>SA-18/9K38 Igla</u> man-portable/ very short range anti-aircraft missiles, <u>Pantsir S1 (SA-22)</u> low-level air defense systems, and <u>Buk M2</u> (<u>SA-17</u>) systems that are substantial upgrades over Syria's older SA-6 medium range systems. The confirmations come in the wake a state visit to Syria by Russian President Dmitriy Medvedev.

To date, Russia has not supplied its most advanced S-300MPU (SA-20) long-range anti-aircraft missiles, or Iskander (SS-26) short range ballistic missiles. Nonetheless, these purchases could significantly improve Syria's point defense of key sites. The nuclear reactor that Syria was developing with the help of North Korean weapons scientists, and which Israel destroyed in 2007 during "Operation Orchard," would be one example.

The Israelis, who have been <u>selling Russia UAVs</u>, were predictably upset by this move. There is also a broader implicit issue of human costs. Syria has been <u>hard-hit by a drought</u> that has affected the region, resulting in hardship and near-starvation for over 800,000 people within

Syria. See: RIA Novosti op-ed: "<u>Moscow set to resume its influence with Damascus</u>" | <u>Moscow</u> <u>Times</u> | <u>Jerusalem Post</u> || <u>Agence France Presse</u> | <u>Lebanon Daily Star</u> | Iranian government's <u>Press TV</u> | <u>Reuters</u>.



MiG-31 Foxhound (click to view full)

Sept 2/09: Russia's Kommersant newspaper quotes UAC head Alexei Fyodorov, as saying that a \$400-500 million 2007 contract to sell MiG-31E interceptor fighters to Syria has not entered into force, but that a different contract to provide Syria with MiG-29M fighters is indeed being implemented.

There are also reports that Russia will sell <u>Pantsyr S1</u> short-range mobile air defense systems to Syria, with some of those systems destined to end up in Iran as a quid pro quo for financing. <u>Syrian News Station</u> | <u>RIA Novosti</u> | <u>UPI</u>.

May 20/09: <u>The Jerusalem Post relays</u> a Kommersant report that Russia has put the Syrian MiG deal on the backburner, though <u>Syria later denies this</u>.

What's even more interesting are the parallel reports that Israel may be selling UAVs to Russia, and speculation that the 2 sets of events may be related. Read: "<u>Israel and Russia in UAV Deal?</u>" for more.

March 29/09: <u>The Jerusalem Post reports</u> that Pentagon Defense Intelligence Agency Lt.-Gen. Michael D. Maples provided official confirmation of the sale in his testimony "annual threat assessment" to the US Senate Armed Services Committee:

"With regard to its external defense, Syria's military remains in a defensive posture and inferior to Israel's forces, but it is upgrading its missile, rocket, antitank, aircraft and air defense inventories.... Recent Syrian contracts with Russia for future delivery include new MiG-31 and MiG-29M/M2 fighter aircraft."

Appendix A: The Aircraft



MiG-31E (click to view full)

The MiG-31E is reportedly offered on a trade-in basis for countries that have the MiG-25 Foxbat interceptor, a list that currently includes only Syria, Libya, and Kazakhstan.

The big MiG-25 caused quite a sensation in the west when it was first unveiled, and incidents in which the planes were tracked at speeds around Mach 3 added to its mystique. In time, the west would learn that its aerodynamic design and lack of a gun made it vulnerable in dogfights, that flying at speeds over Mach 2.5 had a tendency to melt the plane's engines, and that its range was extremely short. Defector Viktor Belenko, who gave the USA its first look by flying his MiG-25 from Russia to Japan, found that the 1-way flight left his fuel tanks nearly dry.

The MiG-31 made a virtue out of the Foxbat's vices, turning it into a 2-seat hunter-killer of cruise missiles via extra fuel, improved engines and intakes, in-flight refueling, the 'Flash Dance' electronically scanned radar, a retractable refueling probe, and an internal gun. Unlike its predecessor, the MiG-31 is capable of low-level supersonic flight, and can reach Mach 2.8 before its engines begin to melt. It also has communications capabilities that allow its pilot to view the full air battle in a C3I mini-AWACS role, and direct other aircraft like a chess player.

Aeronautics.RU described the MiG-31E variant as:

"Export version of basic Type 01. Prototype ('903') first noted 1997; simplified systems, no active jammer, downgraded IFF, radar and DASS. Offered to China, India and other countries."

These planes could be of some use to Syria in an air defense role. Syria's air force, which was once reliably on the cutting edge of technology during its Cold War years as a Soviet proxy, has not modernized in over a decade.

Iran's two air forces (regular and Revolutionary Guard) would find the MiG-31's style crimped by the absence of air-to-air refueling capabilities, but cruise missile defense is important to them given the likelihood of cruise being used in enemy strikes from Israel or America. MiG-31s could also step into the 'fighter AWACS' role that has been played to date by Iran's dwindling but <u>ingeniously maintained fleet of F-14A Tomcat fighters</u>. This would be only marginally useful against a full American offensive, but could make a big difference to Iran's ability to cover limited targets – such as an Israeli strike on its nuclear bomb-making facilities.

Readers who really want to understand the MiG-31 are urged to book a flight for themselves.



Wir haben euch ge-pwn-t* (click to view full)

As for the MiG-29, Syria already flies earlier versions. So does Iran, thanks to the Iraqi Air Force who fled to "safe haven" in Iran during the 1991 Gulf War.

The aircraft has a poor combat record, in part because early variants, that were not fully equipped, were used in scenarios that were extremely lopsided from the outset in all respects.

When used on more even terms, however, German pilots who flew East Germany's older MiG-29As against NATO F-16s and other jets <u>believed that the planes were nearly unbeatable in</u> <u>short-range dogfights</u> when armed with Russia's AA-11/R-73 "Archer" short range missiles and helmet-mounted display systems. The fallout from those exercises actually led Germany to <u>quit</u> <u>the ASRAAM program, and begin work on the multinational IRIS-T</u> short-range missile instead. It also led to <u>helmet-mounted sights becoming standard equipment</u> on most modern combat aircraft around the world.

The MiG-29A's biggest weaknesses were short range, engines that produce telltale smoke (very bad in air combat) and lack of true multi-role capability. Its other weakness is Russian spare parts support; India found that the long turnaround times led to terrible readiness rates, with a large portion of its MiG-29A fleet grounded at any given time. In response, they have taken steps that include <u>licensed local engine production</u>.

The MiG-29M and subsequent derivatives use welded lithium-aluminum alloys to save weight, while adding extra fuel in a new aircraft "spine" down the back and in the spaces once occupied by the auxiliary air intakes. This is coupled with improved engines, and redesigned horizontal tailplanes that improve maneuvering performance. A new radar and avionics package improves air-air performance, broadens its available arsenal, and adds ground-attack capability, making it a true multi-role aircraft. It has been advertised in several versions, including an "M2" variant that was initially slated for India's MMRCA fighter competition. The most likely variant involved would be the MiG-29SMT, which is serving in Russia's air force via an upgrade program.

The <u>MiG-29OVT</u>, aka. <u>MiG-35</u>, adds further upgrades to the radar and avionics package, and offers multi-directional thrust-vectoring engines for an additional super-maneuverability edge close-in. It is now Russia's offering for India's MMRCA competition. While some articles have described the deal as offering MiG-35 equivalents, a Russian export drive with a strong incentive to show early success for the type has made no such claims.

In a situation where neither side had external advantages, when flown by pilots of comparable skill, and armed with similar missiles, it is likely that a true MiG-35 would be *at least* an even adversary for any Israeli opponent, and any American aircraft other than the F-22A.

Of course, war isn't about even odds. War is about finding the most unbalancing things available, and doing them as quickly as possible. The use of true AWACS aircraft, electronic jamming, better radars, better missiles, and pilot skill differences would all combine to ensure that any fight involving Israel vs. Syria or Iran vs. the USA would be anything but even. Syria's MiG-25s, MiG-23s, and MiG-21s experienced that first hand in 1982, when they were massacred 80 to 0 over Lebanon's Bekaa Valley.

* = German translation of the L337 slang phrase "we pwned you" ['L337' = Leet, or Elite, a hacker/gamer text messaging slang set; 'pwn' = lit. to own, alt. dominate or crush, esp. in a competition]. Thanks to DID's readers for the help.

Appendix B: Additional Readings & Sources

- Jamestown Foundation's Eurasia Daily Monitor (June 20/07) <u>The Strange Story of MiG-31 Jets for Syria</u>. A real sale, or a trial balloon?
- Associated Press via Turkish Daily News (June 20/07) <u>Newspaper: Russia delivers</u> advanced fighter jets to Syria
- Pravda (June 19/07) <u>Russia to sell large batch of MiG fighter jets to Syria on Iran's</u> money
- Kommersant (June 19/07) MiGs Will Defend Syria and Iran
- Aeronautics.RU <u>Mikoyan MiG-31</u>
- Global Security <u>MiG-31 Foxhound</u>
- MiG alley <u>MiG-31</u>. Private individual's web page.
- Global Security <u>MiG-29 Fulcrum (Mikoyan-Gurevich)</u>
- Aeronautics.RU <u>Luftwaffe MiG-29 experience</u>.
- MiG Alley <u>MiG-29</u>. Very good organization, includes sub-components like the engine and the aircraft's Zhuk and N019 radar options. Private individual's web page.
- Israeli Air Force <u>Lebanon War ('Peace for the Galilee')</u>. Dogfight figure given is 80-0, slightly less than most contemporary accounts which tend to be 86-0 or 88-0.
- Aerospace Power Journal (Winter 1989) <u>The BEKAA Valley Air Battle, June 1982:</u> <u>Lessons Mislearned?</u>
- RIA Novosti (Sept 3/09) Russia confirms talks on delivery of MiG-31 aircraft to Syria
- Jerusalem Post (May 26/09) Syria denies reports Russia called off MiG-31 deal.
- Jerusalem Post (May 24/09) Israel to speed up Russia's UAV order
- Jerusalem Post (May 20/09) <u>Iran stops funding for Russian MiG-31E Interceptor sale to</u> <u>Syria</u>. "Wednesday, May 20, the official Russian arms export company Rosoboronexport announced the deal was off without explanation"

Russian image tarnished over Iran missile deal: MP

by Staff Writers

Tehran (AFP) Oct 8, 2010 Russia's image as a "powerful country" that can resist US pressure will take a beating following its decision to stop the delivery of S-300 missiles to Tehran, an influential Iranian lawmaker said on Friday.

"This issue will decrease Russia's credibility as a powerful country that can resist American pressure," Alaeddin Borujerdi, head of parliament's foreign policy committee, told ISNA news agency.



On Thursday, Russian Technologies chief Sergei Chemezov said Moscow will

reimburse Iran for its down payment on a deal for advanced S-300 ground-to-air missiles, halted in the face of tough new UN sanctions.

Chemezov said "we have annulled the contract and are returning the advance payment," which he said was 166.8 million dollars (119.3 million euros).

He estimated the entire contract at around 800 million dollars (572 million euros).

Russia had come under strong US and Israeli pressure not to go ahead with the sale of a weapons system that was seen as greatly complicating any military action against Iran.

Both Israel and the United States have refused to rule out military action to prevent Iran acquiring a nuclear weapons capability, an ambition Iran strongly denies.

Last month, Russian President Dmitry Medvedev signed a decree banning supplies of S-300 missiles and other arms to Iran.

Iran has threatened to sue over what it regards as a breach of contract.

"The Islamic Republic of Iran will use all legal measures according to international law to protect its rights," Borujerdi said as he continued to urge Moscow to prove its "reliability and credibility in the region."

"More than the importance of the (S-300) itself, the issue is about Russia's credibility," he said.

"Russia's action in this regard will forever be etched in the history of relations between the two countries and in the public opinions of the two nations as a benchmark of whether Russia is reliable."

Russia's tougher line on Iran in recent months has coincided with a warming of its relations with the United States. Washington has repeatedly praised Moscow for its support in the nuclear standoff with Tehran.

Russia voted for the fourth set of UN sanctions against Iran on June 9, although it criticised subsequent decisions by the European Union and the United States to impose additional sanctions of their own against Tehran.

earlier related report

Russia to refund Iran over missile deal: arms export chief

Nicosia (AFP) Oct 7, 2010 - Russia is reimbursing Iran for its downpayments on a deal for advanced S-300 ground-to-air missiles, which Moscow halted in the face of tough new UN sanctions, Russian Technologies chief Sergei Chemezov told reporters on Thursday.

"We are now preparing all the necessary documents," said Chemezov, whose company includes arms exporting monopoly Rosoboronexport.

"We should return them all the funds," he said. "Of course, they are not very pleased. We do not have a choice."

Chemezov said it was unlikely Russia would return the money by the end of the year, however. He estimated the entire contract at around 800 million dollars (572 million euros).

Iran has threatened to sue over what it regards as a breach of contract.

Chemezov said "we have annulled the contract and are returning the advance payment," which he said was 166.8 million dollars (119.3 million euros).

"In accordance with a provision of the contract on force majeure circumstances we are under obligation to return this advance amount which we have received.

"We are under no obligation to return anything else. We are not talking about any other compensation."

Russia had come under strong US and Israeli pressure not to go ahead with the sale of a weapons system that was seen as greatly complicating any military action against Iran.

Both Israel and the United States have refused to rule out a 166resort to military action to prevent Iran acquiring a nuclear weapons capability, an ambition Iran strongly denies.

Chemezov was in Cyprus accompanying President Dmitry Medvedev on a first ever visit to the Mediterranean holiday island by a Russian head of state.

The UN Security Council adopted a fourth set of sanctions against Iran on June 9 over its failure to heed repeated ultimatums to freeze uranium enrichment, the sensitive process that produces fuel for nuclear reactors or in highly extended form the fissile core of an atomic bomb.

Russia was critical of subsequent decisions by the European Union and the United States to impose additional sanctions of their own but has vowed to implement the UN package in full.

Medvedev signed a decree last month banning supplies of S-300 missiles and other arms to Iran in a long-awaited move after weeks of deliberations by Russian officials.

Under the decree, supplies of any tanks, fighter jets, helicopters, ships and missile systems are forbidden.

Russia will also not supply Iran with any technologies related to ballistic missiles capable of delivering nuclear warheads. The decree also bans the transit of arms bound for Iran through Russian territory.

In addition, Iranian citizens or companies will not be allowed to invest in any activities in Russia related to production of uranium.

The decree will not mean a complete halt to all military cooperation between Moscow and Tehran, Deputy Foreign Minister Sergey Ryabkov told Russian reporters in New York last month.

"We did not add anything to the list (of banned items), but on every point there we will have no further military cooperation with Iran. However, there are other forms (of military cooperation still allowed)," Russia's RIA Novosti news agency quoted Ryabkov as saying.

Russia's tougher line on Iran has coincided with a warming of its relations with the United States. Washington has repeatedly praised Moscow for its support in the nuclear standoff with Tehran.