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Russia and Kazakhstan: strategic mutually beneficial relations

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CONTENTS

EDITORIAL

To arm for peace

Political situation in the world makes nations once again reconsider their defense possibilities. Threat of local conflicts to be evolved into global ones, failure of worldwide system of safety and non-ending economic crisis — all of this leads to an unstable and dangerous situation. One can predict raise of defense means market in times like this. But together with developing of defense technologies in order to secure people's safety, rivalry among sellers of weapons and defense systems increases in order to achieve such goals as increasing profits and market share.

World experience shows that it is not about how many weapons you have, but quality and possibilities of every single one of them is what leads to victory on the battlefield. Other significant factor is technological independence from seller — modern technologies make it possible to shut down any device from any place of the globe if you have appropriate access.

And so we believe, Russia has all it takes to remain one of the leaders of defense market in these conditions. With hi-tech technology, solid after-sales service and proven reliability of products, Russia is honest and friendly partner for all countries, ready for mutual work.

Valeriy STOLNIKOV

VEB: SUPPORT OF HIGH-TECHNOLOGY PRODUCTION

According to the Russian Government's executive order budgetary allocations in the amount of 7.6 billion rublesare to be transferred to the Ministry of Industry and Trade for granting a subsidy in the form of monetary contribution to Vnesheconombank to compensate for a part of expenses related to supporting high-technology goods production. Roseximbank (VEB Group) is to be provided with a subsidy worth 5.4 billion rublesin order to compensate for receiving less incomes on credits than the Bank was due, with the credits being extended as part of supportingproduction of high-technology goods.

NEW CONTRACT FOR SU-30SM

Russian Defence Ministry concluded a new contract with "Irkut" corporation for Su-30SM aircraft deliveries. Within the implementation of the State Defence Order for 2016-2018, the Russian Defence Ministry has concluded a new contract with "Irkut" corporation for Su-30SM aircraft deliveries. According to the conditions of the contract, the Russian Aerospace Forces are to receive over 30 multi-purpose fighters Su-30SM by the end of the year 2018. The aircraft Su-30SM is a multi-purpose "4++"-generation highly-maneuverable fighter designed for achievement of air supremacy. The complexes have been produced for the Russian Ministry of Defence since 2012.

REPRESENTATIVE IN BRICS BUSINESS COUNCIL

Russian President Vladimir Putin appointed Vnesheconombank Chairman Sergei Gorkovas Russia's representative in BRICS Business Council for a period of three years from 2016 to 2018.

BRICS is an informal group of states comprisingBrazil, Russia,India, China and South Africa.The BRICS Business Council was established during the BRICS Summit held on March 2013 in Durban, South Africa. Under a decision of the heads of state it is comprised of five representatives from each country.

The Business Council's objective is to identify problems and constraints that hinder the growth of economic, trade and investment ties between the BICS countries as well as make proposals and recommendations to address them.

UAC in Latin America

The United Aircraft Corporation (UAC) will take part in one of the most important air shows in Latin America — the 19th international FIDAE air show in Santiago, Chile.

UAC's military exposition will present the MiG-29M and Yak-130 aircraft. The MiG-29M is an upgraded highly maneuverable multifunctional 4+ generation fighter. MiG-29M uses advanced fighter technologies that provide superiority over other aircraft.

Yak-130, a two-seat new generation combat trainer is aimed at main and advanced front-line pilot training. This aircraft is very maneuverable and possesses modern avionics typical of the newest fighter planes. The aircraft are highly reliable and have a long service life.

UAC's civil projects are represented by the Sukhoi Superjet 100 and MC-21 programs. The successful operation of a large fleet of SSJ 100 aircraft by one of the leading Mexican airlines — Interjet opens new opportunities to this key UAC's program on the Latin American market. The market sees fast development and growth and is potentially very promising for UAC's products. The Corporation plans to capture up to 20% of the region's market in the 61-120 seat segment. The MC-21 medium-range narrowbody aircraft family program is progressing according to the schedule. This year the first MC-21 flight prototype will be rolled out from the factory.

MC-21 is a medium-range narrowbody aircraft family with wide operational capabilities. MC-21 will allow to lower operational costs by more than 10% if compared to the aircraft that are currently in operation.

Improve skills in mountains

Army aviation pilots of Erebuny Russian airbase located in Armenia started practicing flights in woody-mountainous area on Mi-24P and Mi-8MT transport-combat helicopters at night.

During the daytime pilots spent in the air on average 150-200 hours at the assigned routs. Pilots practiced take-off and landing on high-mountain platforms. Exercises were held with crews on mountain area orienting.

During the exercises, army aviation pilots practice flights in night conditions at the altitude ranging from 1.500 to 4,000 m and orienting by devices. Great attention will be paid to improving navigation skills by devices.

Flight difficulty is caused by overcoming mountains with cragged slopes and cliffs, sharp crests and rock ledges. Exercises with pilots and technical experts have been held under the guidance of experienced formation instructors during month.

FOR SUPERJET INTERNATIONAL

Another Sukhoi Superjet 100 soared from Venice-Marco Polo airport to Mexico. The aircraft rolled out today from the SuperJet International's hangar. This is the 21° SSJ100 delivered to the Mexican airline Interjet, part of a total order of 30 aircraft. Interjet is confirming its continuous satisfaction for the SSJ100 outstanding performance.

85th ANNIVERSARY

On June the Russian Military Transport Aviation celebrates the 85th anniversary of its creation. The date is timed to the moment of formation of the first in the Soviet Union experienced paratrooper squad as part of a heavy bomber squadron of 12 TB-1 airplanes and the body squadron of ten reconnaissance aircraft P-5, which was completed by June 1, 1931. MTA has turned today into a universal aviation complex, which works in the vast expanses of various latitudes and regions of Russia. MTA plays an important role as the carrier of tactical combat vehicles, cargo and troops to ensure combat readiness and functioning of the Russian Federation Armed Forces.

LARGEST AVIATION ENTERPRISE

10 June 2016 marks the 40th anniversary from the date of foundation of the Ulyanovsk Aviation Industrial Complex (JSC "Aviastar-SP"), the largest aviation enterprise in Russia. The plant specializes in production of Il-76MD-90A transport aircraft, passenger and cargo aircraft of the Tu-204 family, service maintenance of An-124 "Ruslan" transport aircraft.

50 TACTICAL EXERCISES

The Eastern MD formation located in the Amur River region has summed up the results of the winter training period. In total, about 50 tactical exercises with combat firing have been conducted. The training activities have been held at different levels: from company to brigade ones. A large-scale field training was held among artillery units of the formation, it involved about 2,500 servicemen and over 300 pieces of military hardware. The training period has finished by an inspection and tactical maneuvers.

First prototype of Ka-62

The first prototype (OP-1) of the medium multirole Ka-62 helicopter took off at Russian Helicopters' Progress Arsenyev Aviation Company (part of State Corporation Rostec) on April 28. The lift in a hover mode was part of the factory flight testing and was completed successfully.

The OP-1 Ka-62 was launched to evaluate its overall performance and to test its main power supply systems and avionics. The helicopter was operated by test pilots from the Kamov Design Bureau, which is the main developer of the Ka-62. Previously, the rotorcraft has successfully passed a series of tests in a ground-based racing mode.

"This is a very significant event for the Russian Helicopters holding company and a due result of our work", said the holding company's CEO Alexander Mikheev. "The new Ka-62 will complement the civilian versions of the honoured and most produced helicopter in the world — Mi-8/17, and it will fill a high demand niche in the class of helicopters with a 6-7 ton take-off weight."

The Ka-62 is designed for a wide range of tasks. Its main purposes include transporting passengers, rescue operations, and use in the oil and gas sector. With a spacious and comfortable cabin, this helicopter is ideal for corporate travel. The Ka-62's high power to weight ratio allows to operate it in a wide range of altitudes. The Ka-62 can be used in hot climates and above water.

Russian Helicopters, (part of State Corporation Rostec), is one of the global leaders in helicopter production and the only helicopter design and production powerhouse in Russia. Russian Helicopters was founded in 2007 and is headquartered in Moscow. The company comprises five helicopter production facilities, two design bureaus, a spare parts production and repair facility, as well as an after-sale service branch responsible for maintenance and repair in Russia and all over the world. Its helicopters are popular among Russian ministries and state authorities (Ministry of Defence, Ministry of Internal Affairs, Emergency Control Ministry), operators (Gazpromavia, UTair), major Russian corporations. In 2014 its IFRS revenues increased 22,8% to RUB 169,8 billion. Deliveries reached 271 helicopters.

Ground Robotic Complex

Prospects of development of military-purpose ground robotic complexes were discussed in the Main research and development test robotic centre of the Russian Defence Ministry.

Roundtable conference headed by Chief of Main research and development test robotic centre of the Russian Defence Ministry Colonel Sergei Popov was held in order to correct directions of development of military-purpose ground robotic complexes.

Special attention was paid to analysis of condition and priorities of the Russian-made robotic complexes. Conference participants exchanged their experience in implementation and operation of the military and dual-purpose robotic complexes.

Leadership of the Russian Armed Forces, representatives of more than 30 leading production companies, civilian and military educational establishments took part in the session. Session participants have agreed on list of criteria for assessing operability of robotic hardware in the interests of the Russian Armed Forces.

COUNTER-TERRORIST EXERCISE IN KHABAROVSK

Special tactical counter-terrorist exercise was held in the material-logistic support centre of the Eastern MD in Khabarovsk. During the exercise, counter-terrorist unit committed blocking and eliminating of simulated illegal armed formation, which had captured one building of the military unit. Then fire team removed the simulated ignition in building rooms, released from terrorists. In order to create conditions that close resemble the combat ones, servicemen of the same military unit assumed the role of terrorists. Significant amount of smoke, imitation devices and blank ammunition were used during the combat. Furthermore, simulated ignition of one of the fuel storage capacity occurred according to the intention of the exercise at base of POL storage. Several fire teams and one fire train were involved into simulated fire liquidation.

"CLEAR SKY"

District stage of the "Clear sky" professional contest among air defence units has started at the Southern MD air defence training centre in Yeysk (Krasnodar region). The competition is held within the preparation for the International Army Games. Eight Southern MD teams (50 servicemen) will take part in the contest. The servicemen are to fire portable air defence systems and 23mm anti-aircraft systems ZU-23 mounted on the army trucks engaging different targets including moving ones. Moreover, the participants will compete in driving KAMAZ trucks on a cross-country terrain, overcoming such obstacles as fords, slopes and mine fields. The 8-km track is equipped with a high-speed area and a range for combat firing with portable air defence systems and ZU-23.

RUSSIAN NAVY IN THE MEDITERRANEAN SEA

Valentin Pikul minesweeper of the Black Sea Fleet went out from Novorossiysk several days ago and arrived to perform tasks as part of permanent unit of the Russian Navy in the Mediterranean Sea. It is the first ship sortie to the distant marine zone which was carried out according to the force rotation plan. Valentin Pikhul has replaced Kovrovec minesweeper which had been in the Mediterranean Sea since the middle of February, 2016. Currently more than 15 ships, motor boats and supporting vessels are performing tasks of the Northern, Pacific, Baltic and Black Sea Fleets.

Landing on ship deck

Anti-submarine and Ka-27 search-and-rescue helicopter crews of the Baltic Fleet naval aviation practiced landing and taking-off on Yaroslav Mudry guard ship deck under preparation for preliminary stage of the "Naval ace-2016" contest.

In total, pilots committed more than 20 landings on escort vessel in drift and in motion at daytime and at night.

Landing on ship is one of the most difficult types of naval aviation flight preparation. First crews carry out aerodrome flights and only after that they are permitted to land helicopter on ship deck.

Apart from landing on deck, pilots practiced searching and monitoring of simulated enemy submarines and cooperation with ship crew under training flights.

Special attention in programme of helicopter crews preparation is paid to flights at night.

Robotic mine clearer Uran-6

"Rosoboronexport started international promotion of the Uran-6 robotic mine clearer," stated Valery Varlamov, head of the company's delegation at the SOFEX-2016 exhibition in Jordan. "The export design certificate of the Uran-6 robot has been already been compiled. We are starting to prepare the ground to interest our foreign partners in cooperating with us in this field."

According to him, the success of Russian robots in the international market is predetermined by the participation of Uran-6 in actual combat operations. These robotic systems were used for removal of mines in Palmyra, Syria.

The Uran-6 robotic system weighs up to 6 tonnes and is arranged on a light tracked vehicle platform. This robotic mine clearer is designed to pass though minefields and demining areas.

While clearing the area of explosive objects, it excludes direct contact of the field engineers with ammunition. An operator can remotely control the system at a distance of up to 1 km.

Uran-6 neutralizes ammunition detected on the terrain, either by its physical destruction or by setting it off. With that, the robotic mine clearer is designed in such a way that it is capable of withstanding detonation of explosive devices with a TNT equivalent up to 60 kg.

The weight of the armored robotic mine clearer is about 6 to 7 t depending on its complete package and its maximum speed is 5 km/h.

Aurora took its first shots of the Earth

The Aurora optoelectronic package made by Shvabe took and transferred its first high-resolution shots of the Earth's surface. Aurora was placed on the Aist -2D spacecraft launched on April 28 of this year from Vostochny cosmodrome. According to a press report from the holding, the Aurora system is designed to obtain shots of the Earth's surface in panchromatic and three spectral bands.

According to an earlier report from Alexey Patrikeev, Director General of Shvabe, Aurora is a new generation high-resolution package for space observation. Its fundamental difference compared to foreign similar designs is the combination of high resolution and increased field of view. With its specific degree of reliability, this package is capable of distinguishing objects with configurational features of over 1.5 meters.

The Aurora system for the Aist-2D small spacecraft was produced at the Krasnogorsk Works named after S. A. Zverev (KMZ). The package weight is just 72 kg. It is designed for obtaining shots of the Earth's surface in panchromatic, i.e. monospectral, black and white view, as well as three spectral bands. Aurora allows can obtain the data from the Earth's surface when surveying within an altitude range from 350 to 700 km.

The Aurora package was designed by order of the Ministry of Education and Science of the Russian Federation. The development from KMZ will take part in solving various science and applied science tasks over a period of three years.

UIMC at Angola's airports

United Instrument Manufacturing Corporation (UIMC) has supplied a batch of navigation systems for airports in the Republic of Angola. This equipment ensures the accurate landing of aircrafts at field and permanent aerodromes at any time of day or night, even under low-visibility conditions.

Angola received a short-range radiotechnical navigation system and a landing radio beacon group. This equipment developed by UIMC can operate automatically 24/7, i.e. without the continuous presence of attending personnel.

The landing radio beacon group works with manual, semi-automatic and automatic landing approaches. It is 500 kg lighter and consumes half of the power of its predecessors, while the operating temperatures range from +/-50 °C.

The short-range radiotechnical navigation system is used to facilitate the landing approaches of civil and military planes and helicopters. In addition, the accuracy of received and transmitted system data does not depend on visibility or the time of day. This equipment continuously supplies crews with their aircraft location data, automatically guides the plane to any preset location, and provides ground-based air traffic management.

"We have started using state-of-the art components in the navigation systems developed at our Chelyabinsk plant Polet, which improves their reliability and other properties." Comments Sergei Skokov, the Deputy Director General of UIMC.

According to Mr. Skokov, this latest generation of ground-based equipment is unrivalled in Russia and has vast export potential. "Nowadays, these systems are very popular in neighboring states and many other countries." Sergei Skokov stated. Currently, more than 160 airports in 31 countries (including Vietnam, Kazakhstan, Egypt, China, Iran, Iraq, etc.) are equipped with radar and navigation systems produced at the Polet plant.

Russian weapons in Syria

The effectiveness and high quality of Russian weapons have been demonstrated in Syria. Our Aerospace Forces and the Navy have shown this perfectly. Since the beginning of the military campaign against international terrorists on the territory of the Syrian Arab Republic, the Aerospace Forces have conducted over 10,000 combat flights and carried out numerous strikes, hitting over 30,000 targets, including over 200 oil producing and processing facilities.

There were 115 cruise missiles launched from both air and sea, including by submarines and surface vessels, as well as from strategic bombers. Long-range bombers performed 178 combat flights.

The strikes from the air and sea against ISIS and Jabhat al-Nusra and their infrastructure were precise, powerful and effective. This proved a game changer in the struggle against the terrorists, although we do understand that the situation there remains challenging, and the Syrian Army still has much to accomplish.

Creating conditions for a political settlement in the country is what matters most. I hope that the mechanism that we have put in place with our partners, including the US (the Armed Forces, your representatives and experts are actively involved in these efforts), would bring about positive and radical change in that country.

Overall, with the support of the Russian Aerospace Forces, the Syrian Army has been able to free over 500 communities from terrorists, including, as we all know, Palmyra, a pearl of world culture and civilization.

That said, the Syrian operation has enabled us to identify some problem areas and shortcomings that we will focus on during today's meeting. Every issue must be investigated in the most thorough manner. I am talking about a professional investigation, a thorough analysis that will lead to concrete measures to ultimately eliminate these issues. This would enable us to further adjust our plans to develop and improve weaponry.

MAIN TOPICS

Tigran Havanisian

RUSSIA-ASEAN: STRATEGIC PARTNERSHIP

The Russia-ASEAN Summit plenary session was taking place in Sochi to mark the 20th anniversary of the Russia-ASEAN Dialogue Partnership. The summit participants adopted the Sochi Declaration titled Moving Towards a Strategic Partnership for Mutual Benefit and approved a Comprehensive Plan of Action to Promote Cooperation Between the Association of Southeast Asian Nations and the Russian Federation in 2016-2020.

"I believe we can eventually create a common free trade zone between the EAEU and ASEAN. This could be our contribution to the development of an Asia-Pacific free trade zone. Of course, we will discuss this idea with our EAEU colleagues, in particular Kazakhstan, Belarus, Kyrgyzstan and Armenia."

The Association of Southeast Asian Nations (ASEAN), established in 1967, comprises10 states: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam. Russia has been a full dialogue partner of ASEAN since July 1996.

President of Russia Vladimir Putin: "Today we are reviewing the results of cooperation within the Russia-ASEAN Dialogue Partnership since the previous meeting in this format in Hanoi in October 2010. We will discuss key issues of our cooperation, set new guidelines for the future and share opinions on current issues on the international and regional agenda. The success of this session and of the entire summit are of great importance to Russia. We hope that our work here will be in-depth and productive".

Prime Minister of the Lao People's Democratic Republic Thongloun Sisoulith: "I am honored to be a co-chair of the anniversary ASEAN-Russia Summit, dedicated to the 20th anniversary of the dialogue between ASEAN and Russia. Compared to leaders of other ASEAN countries, I have spent very little time in the office of prime minister, just 30 days. This is my first time at this summit in this capacity. I hope that all the esteemed leaders present here will support me. I would like to express my heartfelt gratitude to Mr Putin for his hospitality and the warm welcome extended to my delegation and to me at this summit in the beautiful city of Sochi.

Russia is an important partner of ASEAN, and cooperation between Russia and ASEAN is gradually expanding. Russia established relations with ASEAN in 1991, and in 1996 became a full-fledged dialogue partner. We cooperate in the economy, politics and culture, and this cooperation is getting stronger and stronger. Russia's accession to the Treaty of Amity and Cooperation in Southeast Asia in 2004 showed its commitment to cooperation with ASEAN in order to strengthen security in the region and the world at large. Economic, trade, and investment cooperation and personal contacts are also getting stronger, which contributes to the further development of our relations and deeper trust between us.

With strong political will on both sides — from Russia and ASEAN — we can further build up our cooperation. We agreed to hold this anniversary summit in order to mark the 20th anniversary of establishing dialogue relations between Russia and ASEAN. This is an important historical milestone, which offers an excellent opportunity for both sides to discuss further steps to strengthen our cooperation on our way to a strategic partnership with a view to establish lasting peace, stability and prosperity of our nations in the future.

The Lao People's Democratic Republic not only chairs ASEAN, but is also coordinating the 2015-2018 ASEAN-Russia Dialogue Partnership. Laos is proud to have played a role in the development of cooperation between Russia and ASEAN, and to have contributed to drafting final documents of our anniversary summit, in particular, the Sochi Declaration, the Comprehensive Plan for Promoting ASEAN-Russia Cooperation in 2016-2020, as well as the Report of the Eminent Persons Group from Russia and ASEAN, which we plan to adopt today. I am confident that through our efforts this summit will be a success."

I believe we all understand the kind of world we live in; we understand the state of the global economy;

we know about the status of our own economies and there is a reason why we are addressing global and regional security problems. Many countries in the region have been confronted with manifestations of extremism and terrorism and have suffered as a result. Therefore, all of this is on our radar.

At the news conference following the Russia-ASEAN summit Vladimir Putin sad: "At the same time, I do not think we expected any unusual breakthroughs or revolutionary ideas from our meeting today. Nevertheless, I believe the meeting has been important and timely. We have reviewed the progress made during 20 years of our cooperation and indeed tried to glimpse toward the future. In this sense, I believe our meeting as a whole has been very useful, and in particular, our bilateral contacts, which are always useful.

In this context, I believe we should thank our colleagues, our associates who have worked on the text of the Sochi Declaration and the Comprehensive Plan of Action to Promote Cooperation between Russia and ASEAN for 2016–2020. If there are no objections, I propose adopting both documents. Are there any comments or objections on this matter? No? Let us consider that we are adopting both documents: the Sochi Declaration and the Comprehensive Plan.

On my own behalf and on behalf of all of you, colleagues, I would like to thank the ASEAN-Russia Eminent Persons Group for the report on their strategic vision of the future Russia-ASEAN ties. As is known, representatives of the business community, nongovernmental organizations and the scientific community participated in it.

I would like to thank you all again for finding the time to come to Russia, for meeting and sharing your opinions about the regional and global situation and discussing our cooperation in the foreseeable future.

Russia and ASEAN are marking the 20th anniversary of their dialogue partnership this year. This anniversary is a good opportunity to look back over what we have accomplished up until now and outline the steps for taking our cooperation further. This was the objective of all the program events of the summit that has just ended. Let me say that this summit took place in the spirit of friendship and mutual understanding that characterizes our relations with our ASEAN partners.

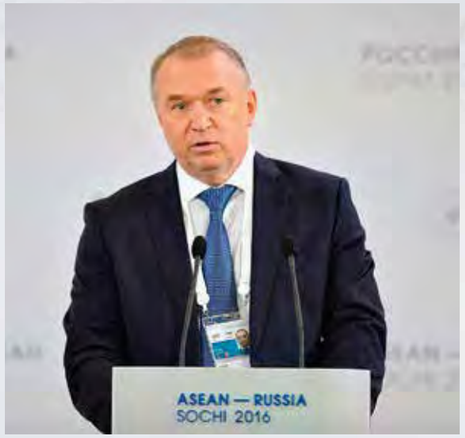
Our discussions brought us to the common conclusion that Russia and ASEAN have achieved some solid results over these last two decades in a wide range of areas. Most importantly, we have reached agreements on building a strategic partnership over the long term. This objective is set out in the Sochi Declaration, adopted at the summit, in the roadmap for developing our relations, and in the 2016–2020 Comprehensive Action Plan.

The recommendations formulated for the Sochi summit by the Group of Eminent Persons, composed of people from Russian and ASEAN diplomatic services and academic communities, will be very useful in this regard.

We agreed at the summit to develop our cooperation in the political sphere. Our countries will continue to work closely together in the UN, APEC, and the G20. We will continue to strengthen our cooperation with a view to developing a reliable and open security architecture for the Asia-Pacific region. Our work together at the East Asian summit, the Regional Security Forum, the defence ministers' meeting and other organizations working under ASEAN aegis pursues this same objective.

We will continue our cooperation in fighting international terrorism, trans-national crime and drug trafficking. We have agreed to expand the practice of holding annual courses organized by Russia's Federal Security Service for colleagues from ASEAN countries and will also expand our partnership ties between Russia's Interior Ministry and the Association of National Police Forces of the ASEAN region.

The economy was a particular focus of attention at this summit. Russia's trade with ASEAN countries came to $13.7 billion last year and our total capital investment came to $11 billion. But these figures do not reflect our countries' real potential, and so our partners supported the proposal to increase our mutual trade, investment and technology ties.



We are committed to developing the infrastructure for Russia-ASEAN

"The Bank of Russia's decision to introduce a flexible ruble rate has allowed our economy to adjust to new conditions and to maintain a high level of gold and currency reserves, which totaled about $391.5 billion as of May 1. As a result, we reached the bottom of the crisis in 2015, something the experts agree on."

MAIN TOPICS

cooperation. Over this last month alone we have established several new cooperation mechanisms, including in agriculture and education. The first informal meeting of our defence ministers took place, and we reached agreements on stepping up cooperation on emergency response to and combating infectious diseases. We have launched dialogue at the ministerial level in the culture sector and have also organized our first joint arts festival. On the plans for this year are the first meeting of our transport ministers in Moscow, a youth summit in Cambodia, and the universities' forum in Vladivostok.

Russia and ASEAN share a desire to play an active part in regional economic integration processes. Let me remind you that the Eurasian Economic Union signed a free trade zone agreement with Vietnam last year. We are studying the possibility of concluding similar agreements with other ASEAN countries — Singapore, Cambodia, Thailand, and Indonesia.

At this summit, we proposed that our ASEAN partners reflect on the establishment of a comprehensive free trade zone between the Eurasian Economic Union and ASEAN, and at the working breakfast, we exchanged views on how we could develop links between the integration processes underway in the Asia-Pacific region and in the Eurasian region.

News conference following the Russia-ASEAN summit. With Prime Minister of the Lao People's Democratic Republic Thongloun Sisoulith. Photo: russia-asean20.ru

Let me note that all these ideas have received considerable support from the Russian and ASEAN business communities. We had further evidence of this today at the meeting with participants in what was the biggest Business Forum event in our history so far. This was a constructive, concrete and useful discussion. The business community representatives assessed highly the prospects for developing closer ties between the Eurasian Economic Union and ASEAN countries and for intensifying business contacts.

Before the summit began, you know that I met in Sochi with the President of Indonesia, Mr. Widodo, who is in Russia on an official visit, and I met with leaders from other ASEAN countries too. I want to say that all of these talks were frank and substantial and reflected a shared desire to develop mutually advantageous ties between Russia and ASEAN countries in all areas.

Our common task is to bring our economies closer together, strengthen trade and investment ties, and create the conditions needed for launching new projects. We are working in close dialogue with the business community on this and will continue to do so.

I note that trade between Russia and the ASEAN countries came to $13.7 billion last year. This is quite a modest figure compared to trade with other countries in the Asia-Pacific region. The ASEAN countries' trade with China comes to $80 billion, for example, and Russia's bilateral trade with China comes to a similar figure.

The current level of investment cooperation also falls short of our potential. We have total investment of around $11 billion. It is therefore important to reflect together on what we can do to improve this situation and outline a consistent road forward for developing our business cooperation.

We should not forget that we have accumulated considerable experience in carrying out bilateral joint projects. Thai companies are investing in Russia's agricultural sector, for example, Vietnamese companies in oil and gas production, and companies from Singapore and Brunei have been investing in innovation.

Russian business has been investing in mining ventures in Indonesia and Myanmar. We are working in peaceful nuclear energy development in Vietnam and plan to do the same in Laos, and are investing in the high-tech sector in Malaysia, to name a few examples.

I am sure that we have all we need to give a new boost to our

MAIN TOPICS

business ties. Russia has drawn up a roadmap that encompasses 57 concrete projects aimed at establishing joint technology and innovation alliances.

We can boost our fuel and energy cooperation to next level. ASEAN countries' needs for hydrocarbon resources as well as electricity are growing. Russia can satisfy this growing demand by supplying energy on a long-term basis. We can offer our partners new-generation nuclear power plant projects. We are willing to cooperate in the sphere of power generation in the broad meaning of the word.

Our cooperation in transportation looks promising. Russian businesses are interested in participating in modern railway construction projects, which we are already doing in Indonesia, where a $1.9 billion railway project is currently being implemented in Kalimantan. Modern satellite navigation systems are the call of the times. We suggest doing this on the basis of the Russian GLONASS satellite navigation system.

Russia is also willing to join any development initiative in ASEAN. I am referring above all to our assistance in the implementation of the Master Plan on ASEAN Connectivity, which stipulates the development of energy, transportation and information infrastructure in the region.

At the same time, we invite ASEAN businesses to take part in our priority development programs in the Russian Far East. We have created 12 areas with a favorable business environment and the free port of Vladivostok. In addition, we are modernizing the Trans-Siberian Railway, a large railway system connecting European Russia with the Far East and, by default, with Asia. We have launched a large-scale program for the development of the Northern Sea Route, which is the shortest commercial route from Asia to Europe.

We have been working to create the most attractive conditions for doing business, cutting red tape, lowering the tax burden and monitoring the investment climate in Russia's constituent entities. This helped us move up from 120th to 51st place on the World Bank's Ease of Doing Business Index last year.

I would like to say that our economy has remained stable in an unfavorable external situation. In this connection, I want to say that the Government's anti-crisis measures have helped stabilize the key sectors of our economy and our financial market.

We have also maintained a low unemployment level (less than 6 percent), moderate foreign debt, which is one of the lowest in the world, and a trade balance surplus of $160 billion in 2015.

The Bank of Russia's decision to introduce a flexible ruble rate has allowed our economy to adjust to new conditions and to maintain a high level of gold and currency reserves, which totaled about $391.5 billion as of May 1. As a result, we reached the bottom of the crisis in 2015, something the experts agree on.

The role of regional integration associations in the global economy has been increasing. The Eurasian Economic Union, where Russia is a member, and ASEAN have created common rules for the free movement of goods, services, capital and manpower.

The Eurasian Economic Union's regulations are based on the World Trade Organisation's rules. The EAEU is a huge market with 180 million consumers, a market that has been duly assessed by our Vietnamese friends with whom we have signed a free trade area agreement. Interest in this cooperation has also been shown by Singapore, with whose Prime Minister we discussed this issue yesterday, as well as by other ASEAN countries such as Thailand, Cambodia and Indonesia.

I believe we can eventually create a common free trade zone between the EAEU and ASEAN. This could be our contribution to the development of an Asia-Pacific free trade zone. Of course, we will discuss this idea with our EAEU colleagues, in particular Kazakhstan, Belarus, Kyrgyzstan and Armenia.

Another promising sphere of regional economic integration could be the coordination of the EAEU, ASEAN, the SCO and China's Silk Road Economic Belt project.

I am convinced that our business communities will continue to contribute to the development of multifaceted Russia-ASEAN economic cooperation. In this connection I would like to invite everyone here to the St Petersburg International Economic Forum, which will be held on June 16–18, and also to the Eastern Economic Forum, which Vladivostok will host on September 2–3.

I cannot but support the representatives of businesses who spoke before me in saying that (and I mentioned it in my opening remarks), certainly, we must think about expanding our partnership and must not limit ourselves to the state borders of Russia and ASEAN. We must consider global events and what is happening in the Asia-Pacific. All the positive aspects of integration that are capable of expanding your business opportunities — which, in turn, means the expansion of opportunities for us as representatives of the state — will be employed to benefit economic development and, therefore, the citizens of our governments.

"Russia and ASEAN are marking the 20th anniversary of their dialogue partnership this year. This anniversary is a good opportunity to look back over what we have accomplished up until now and outline the steps for taking our cooperation further. This was the objective of all the program events of the summit that has just ended. Let me say that this summit took place in the spirit of friendship and mutual understanding that characterizes our relations with our ASEAN partners."

Tigran Havanisian

EURASIAN INTERGOVERNMENTAL COUNCIL

On May in Yerevan, Republic of Armenia, there was neeting of the Eurasian Intergovernmental Council. Dmitry Medvedev sad: "We need to focus on several areas. First, we need to consolidate the contract base of our union. Second, we need to ensure free movement of goods, services, capital and workforce. Third, we need to establish single markets in the key economic sectors."

List of heads of delegations at the Eurasian Intergovernmental Council:
Prime Minister of the Republic of Armenia Ovik Abraamyan;
Prime Minister of the Republic of Belarus Andrei Kobyakov;
Prime Minister of the Republic of Kazakhstan Karim Massimov;
Prime Minister of the Republic of Kyrgyzstan Sooronbai Zheenbekov;
Prime Minister of the Russian Federation Dmitry Medvedev;
Chairman of the Board of the Eurasian Economic Commission Tigran Sargsyan.

Dmitry Medvedev remarked: "The adoption of the Customs Code of the Eurasian Economic Union is a goal of paramount importance. The code should unify and simplify customs clearance procedures, make them straightforward and predictable for the business community, and user friendly. Right now, entrepreneurs can take part in the public debate about creating the EurAsEC legal framework. We agreed to give this name to our association based on our track record and on how we made our decisions in this regard.

We will continue to work on the draft concept for forming common oil and oil products markets. We need this document in order to have in place a common market with clear rules and operating guidelines by 2025.

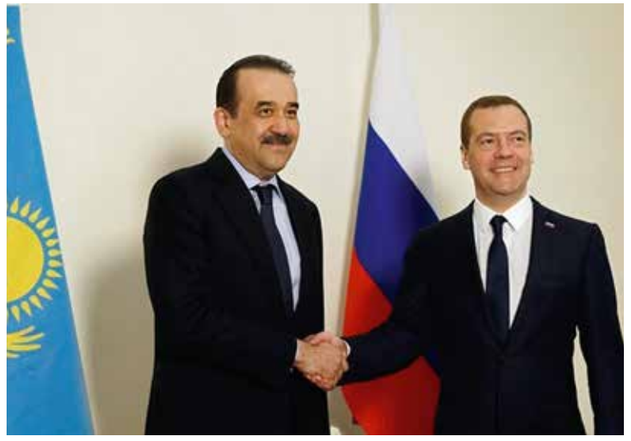
We plan to sign a number of agreements on transporting service and civilian weapons. It is important to unify these regulations so that all those who work in this area can act within a single legal framework.

Building trade relations with our key foreign partners is another important part of our work. This is especially true of China, given its weight in the world, and its relations with the EurAsEC economies. We have agreed on the directives for talks with China. In conjunction with the Chinese, the commission must start negotiations without any delay. In the mid-term, we can greatly expand all forms of cooperation, including investment in most economic sectors, and strengthen our cooperation in new industries. We are already on that track with our other partners. We should identify a fast track to ratify the free trade agreement with Vietnam.

We discussed building trade relations with the ASEAN countries. All government leaders with whom I have met recently as part of our work with ASEAN, were willing to build separate relations with the Eurasian Union.

The main documents of meeting:

Instruction On the Directives to Hold Negotiations with the Chinese People's Republic on a Trade and Economic Agreement Between the Eurasian Economic Union and its Member States, and the Chinese People's Republic.



A decision On Measures to Establish a System of Goods Tracking in Commercial Turnover in the Eurasian Economic Union Member States.

A decision On the Concept of Establishing Common Oil and Oil Products Markets in the Eurasian Economic Union.

An agreement on moving service and civilian weaponry between member states of the Eurasian Economic Union.

A decision On Certain Aspects of Goods Imports and Trade Turnover in the Customs Territory of the Eurasian Economic Union following the Republic of Kazakhstan's Accession to the WTO.

Instruction On the Annual Report of the Eurasian Economic Commission on Monitoring the Impact of Regulating the Eurasian Economic Commission's Draft Decisions Made in 2015.

Instruction On the Report on Calculating and Distributing Import Customs Duties Between the Budgets of the Eurasian Economic Union Member States in 2015.

Instruction On the Timeframe for Drafting the Agreement on the Customs Code of the Eurasian Economic Union.

Instruction On the Date and Venue for the Next Regular Meeting of the Eurasian Intergovernmental Council.

During Eurasian Intergovernmental Council Dmitry Medvedev has meeting with Prime Minister of Kazakhstan Karim Massimov. On that meeting Dmitry Medvedev sad: "Mr. Massimov, I'm delighted to have the opportunity of sharing information, even ifbriefly, oncurrent Russian-Kazakh cooperation. We meet on a regular basis so there is no lackof communication, but it is nevertheless important to exchange views on both integration within the Eurasian Economic Union and on bilateral issues. Kazakhstan currently holdsthe presidency in the EAEU. I wish you success in this job. But there is also our bilateral agenda that includes economic and trade ties. Our economies are going through a difficult period. Trade is falling, but luckily these figures are fairly insignificant in materialterms, as we have agreed. The numbers are mostly the result of currency rate recalculations and the dynamics of energy prices. There are also investment projects that are always up for discussion. I'd like to discuss them with you today."

Karim Massimov: "Thank you very much, Mr. Medvedev.I appreciate this opportunity to meet with you. We have had regular meetings this year. I'd also like to say that President of Kazakhstan Nursultan Nazarbayevsends his regards. I've been instructed by the President to organise an economic forum as part of his visit and participation in the St. Petersburg Economic Forum in mid-June. It's been some timesince we had meetings in this type offormat at the presidential level and involving business leaders. I think it's a great opportunity. It will help strengthen both the Eurasian Economic Union and our bilateral relations."

Andrey Tarabrin

BOARD SESSION

Minister of Defence of the Russian Federation General of the Army Sergei Shoigu held the Board session. Leadership of the Russian Armed Forces, representatives of state power bodies and public organization took part in the session.

On accordance to the agenda, results of activity for 2013-2016 have been summed up, and main tasks for 2020 have been discussed. Before the session start, Minister of Defence paid attention to situation in the Syrian Arab Republic, where the truce process was continued. The Head of the defence department noted that commanders of 59 armed groupings of "moderate opposition" had signed ceasefire application forms.

Moreover, leaders of 109 inhabited areas have signed reconciliation agreements. Warfare has been finished in these inhabited areas. The

population is receiving humanitarian aid, citizens are returning to their houses, and infrastructure, which had been destroyed by the war, is being recovered.

According to the Defence Minister, the United States of America are taking similar measures. In course of their work, 138 armed formations have joined ceasefire regime.

Russian army is actively taking part in establishing peaceful life in Syria. Mine-clearing unit of the International Mine Action Centre of the Russian Armed Forces have completed all tasks in Palmyra. The unit has cleared 825 hectares of terrain and 116 kilometers of roads from mines. About 19,000 explosive devices have been defused.

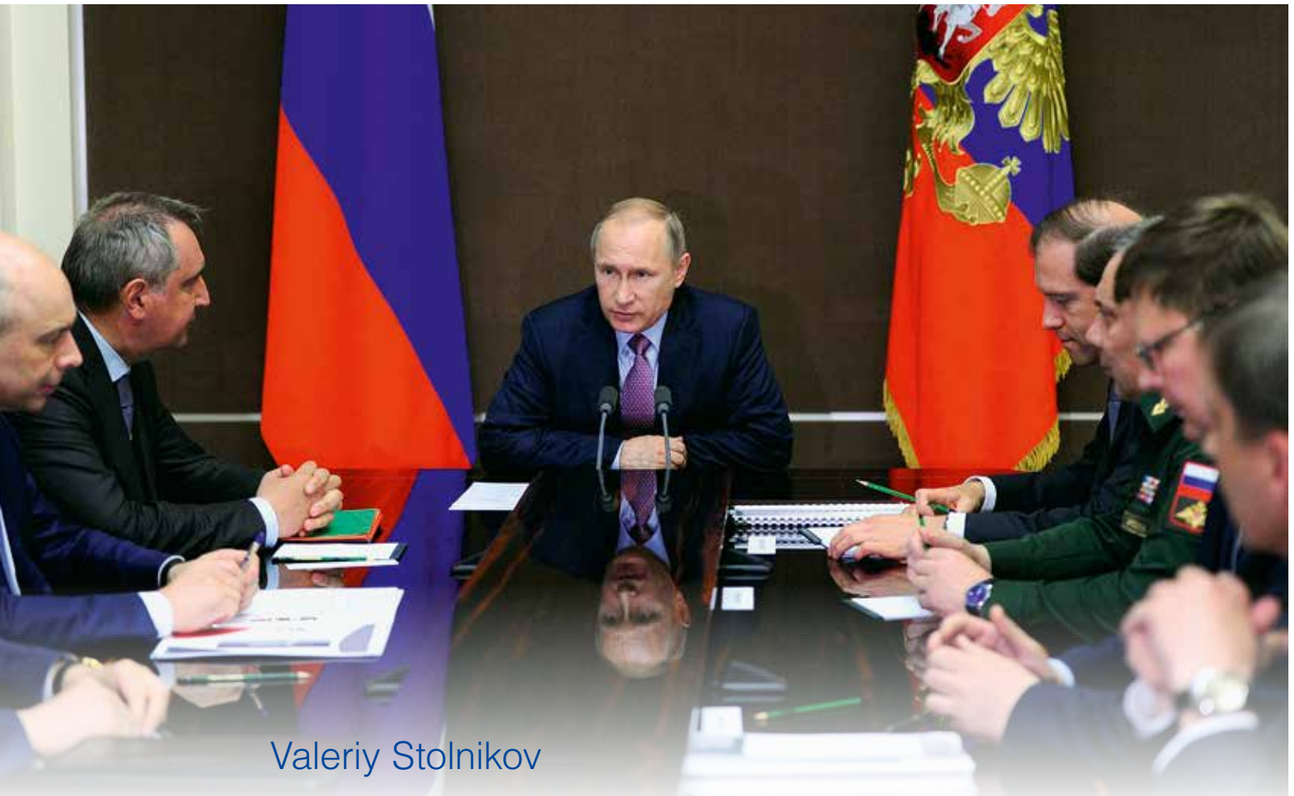
The mine-clearing unit has returned to Russia. Only a group of specialists training Syrian sappers is still in Palmyra. Water supply point and field hospital have been installed for citizens.

General of the Army Sergei Shoigu stated, that in general the ceasefire had been observed in most provinces of the Syrian Arab Republic despite a number of violations. He explained that situation destabilization was promoted by uncontrolled crossing of the Syrian-Turkish border by Jabhat al-Nusra and ISIS terrorists.

Proceeding to the main point of the agenda, General of the Army Sergei Shoigu noted that structural changes of the Russian Armed Forces for the last three years had promoted successful strategic task performance in the Arctic, Crimea, Mediterranean Sea, further sea zones and world airspace.

According to him, the troops have been fitted with more than 15,000 pieces of new and modernized armament and military hardware. There are more than 47% of modern armament and hardware in the Armed Forces.

In accordance to the Defence Minister, the military department has been paying special attention to moral and psychological support of the personnel, raising interest in the military service of the youth.



Valeriy Stolnikov

THREE MAIN OPTIONS OF REGIONAL AIRPLANES

Meeting on aircraft manufacturing development

Vladimir Putin held in Sochi a meeting to discuss development of new model planes for regional passenger transport. "I called this meeting today to discuss the prospects for developing our own plane for regional flights, with capacity for 50-60 passengers", said the president.

"We all know the difficulties we face in passenger transport in the Far East, Eastern Siberia, and within regions. Often, people wanting to fly to the neighbouring region have to fly via Moscow or St Petersburg. This is a completely unacceptable situation and creates problems for people and for the economy in general. Accessibility and transport links increase mobility within the economy and create the needed conditions for growth.

In this context, it would be a great help indeed to have our own regional plane, particularly one that can land on and take off from unsealed airstrips. At one time, we had many such planes, a big fleet that was widely used, but they have all aged now and it makes no sense to go back to them. What we need now is a new plane.

Of course, it is also possible to buy aircraft abroad, as we have been doing up till now, but a country such as ours, with such a vast territory, really needs to have its own locally-made planes.

Accessibility and transport links increase mobility within the economy and create the needed conditions for growth. In this context, it would be a great help indeed to have our own regional plane, particularly one that can land on and take off from unsealed airstrips.

But at the same time, if we do set this goal, we must develop a plane that will have good prospects not just on our market but will also be competitive on the global market. This is something we must think about".

Industry and Trade Minister Denis Manturov sad about it: "We have prepared several options, so that a balanced decision can be made. We would also like to take advantage of this opportunity and discuss the Il-96 issue regarding the programme's continuation. The fuselage has been extended by almost 10 metres, increasing the capacity by 71 passengers, and this will improve the economic characteristics. So I would also like to discuss this matter as far as possible.

We are considering three main options of regional airplanes.

The first is the Il-114, which was previously made in Tashkent. Its production stopped a long time ago, but, nevertheless, there are several fuselages that can make it possible for this modification to launch in our country in short order so as, while continuing R&D, to prepare independent production.

According to the United Aircraft Corporation, cooperation between practically all enterprises as part of this integrated structure, with the main plant, Sokol, including Aviastar-SP and the Voronezh plant, will make it possible in 2022 to manufacture a full-scale series of 12 aircraft per year. This is first. I would like to point out that the engine that can be used in this airplane is the TV7-117. It is now used as a basic engine for the Mi-38 helicopter. With minor, insignificant adjustments, we will be able to adapt it to this plane.

The second option is the AN-140, an aircraft currently manufactured in small numbers. You heard a report about it when you visited Samara in 2014. A country such as ours needs to have its own locally-made planes. But at the same time, if we do set this goal, we must develop a plane that will have good prospects not just on our market but will also be competitive on the global market.

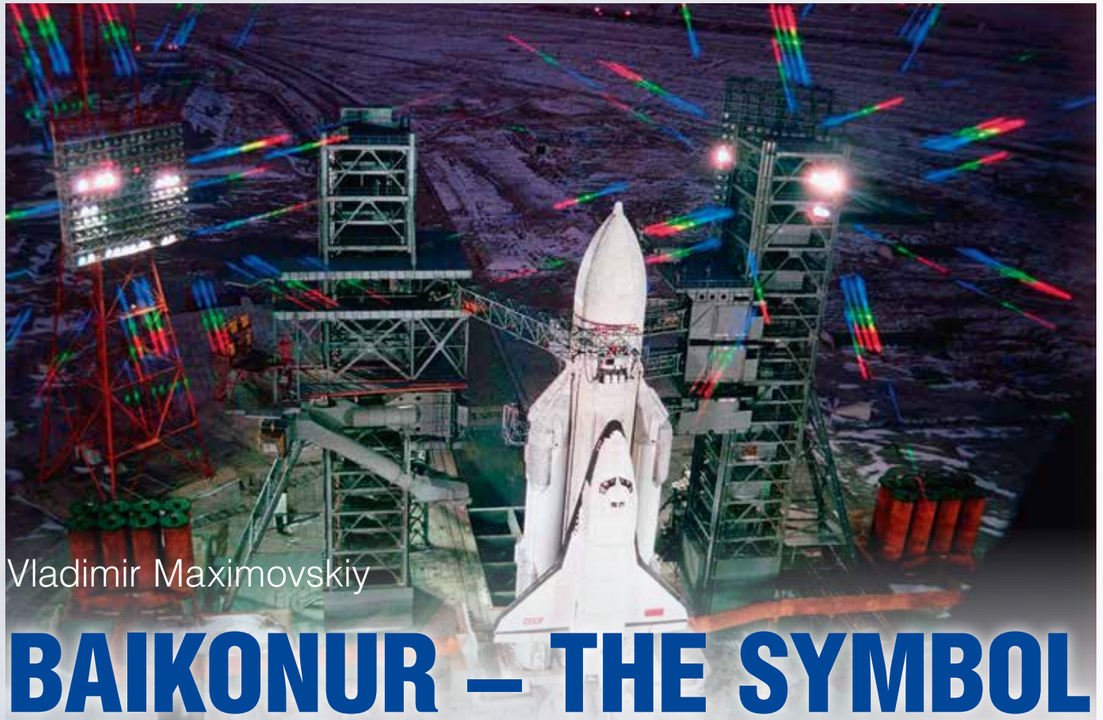
The Defence Ministry purchases this craft in small numbers. However, it seats only 50, compared to the IL-114, which seats 64. Here, we closely depend on Ukrainian designers and manufacturers. We are willing to discuss terms for purchasing a relevant license with our colleagues engaged in this civil project, and so to localise it entirely. We have analysed the option.

Like in the AN-148, but the latter is a jet. Here we have TV3-117 engines of Ukrainian production. As you know, we have launched the production of VK-2500 engines, entirely adaptable to this craft. It is a Russian engine produced by Klimov Co in St Petersburg.

There is a third option — the Russian-Chinese project for yet another turboprop, the MA-700, seating 83. Our colleagues are ready to start testing it next year for the craft to be certified in 2019. We are invited to join this localisation project and organise production in the [Russian] Far East. We have seen several plants from this point: particularly, we might use the Arsenyev Aviation Plant, 250 kilometres from Vladivostok.

Jets come last but not least, as a fourth option. They allow settling both problems and arranging regional transport.

There is the TU-324 craft, for which we have made exploratory studies. We did not go on with research and development because we concentrated on the MS-21, and shelved the TU-324 R&D. It is a jet seating 50, which might be used for administrative movements. We have prepared all the four options for today, and we dare ask you to consider them".



Vladimir Maximovskiy

BAIKONUR – THE SYMBOL OF THE SPACE AGE

Baikonur Cosmodrome is the first and largest space launch facility in the world. For 61 years, around 5 thousand rockets were launched from here. The first artificial satellite launch, as well as the launch of the first man into space, was carried out here. This is the launching pad for all Soviet/Russian manned spacecrafts, Mir space station modules and the International Space Station. The carrier rocket Energia and reusable space-rocket vehicle system Energia-Buran, interplanetary spacecrafts, artificial satellites of various purposes were launched from here.

The development of intercontinental ballistic missile P-7 designed to carry thermo-nuclear bomb conditioned the construction of a new range. Before that, the soviet missiles tests were conducted at the range in the Astrakhan Region. In 1954, the construction committee considered several places for the location of the future range. The possible areas were: Mari Autonomous Soviet Socialist Republic, the west coast of the Caspian Sea, the Astrakhan Region (near the city of Kharabali) and the Kyzylorda Region. In the end, considering all factors, the choice was made in favor of the Kyzylorda Region. A large part of the desert between two regional centers of the Kyzylorda Region — Kazaly and Zhosaly, near the Tyuratam headshunt of the Central Asia railway was set aside for the range.

However, missile P-7 became a prototype during the development of the carrier rocket for the purposes of space-flights. This condition made Baikonur not only a range, but the first cosmodrome in the world. The construction of Baikonur started on February 12, 1955. The official birthday of the cosmodrome is on June 2, 1955, it is the day when the General Staff of the Ministry of Defense of the USSR confirmed the staff structure of the Fifth research and development experimental range and established the range stuff — military unit 11284.

The construction works on the range were started in the second half of winter 1955. Soon enough, on May 5, 1957 a special committee approved the first launch complex of the range, and on May 6, the first P-7 missile was installed at the complex. It was launched on May 15, 1957. On August 21, 1957 the first successful launch of such missile took place. The missile carried the simulated weapon to Kamchatka. The test base of the range was a place where the guided missile systems designed by Sergei Korolev, Vasiliy Mishin, Valentin Glushko, Mikhail Yangel, Vladimir Chelomey Design Bureaus with missiles P-7, P-7A, P-9, P-9A, P-36 orbital missile, UR-200, UR-100, UR-100 M were proven.

The launch of missile P-7 on October 4, 1957 marked the beginning of the space age, because this missile placed the first artificial satellite PS-1 into orbit. On April 12, 1961, the first man traveled into space on the Vostok carrier rocket. Yuri Gagarin orbited the Earth on a spacecraft Vostok-1 and then successfully landed. On May 15, 1987, the launch of the Energia carrier rocket was conducted. On November 15, the following year, the reusable space-rocket vehicle system Energia-Buran was launched from Baikonur. By the end of the flight, the orbital spacecraft Buran made an auto-land at the Yubileini airport, located in the northern part of the cosmodrome.

Baikonur occupies the area of 6717sq.km. Its launch area runs 85 km from north to south and 125 km from west to east. Apart from the launch area, the cosmodrome territory includes tracking stations, spaced with a total area of 4.8 million hectares of land.

The National Space Agency of the Republic of Kazakhstan at the Baikonur cosmodrome was established in June 1993. In 1994, Kazakhstan leased out the cosmodrome along with the city of Lenninsk to Russia. On December 20, 1995 Lenninsk was renamed into Baikonur by the Presidential Edict of the Republic of Kazakhstan. On January 9-10, 2004, V. Putin and N. Nazarbayev held a meeting in Astana, where they signed an agreement on development of the cooperation on efficient utilization of the Baikonur complex and the lease term was extended until 2050.

Baikonur is still the only cosmodrome that allows Russia to carry out manned programs and send spacecrafts to the geo-based orbit. The utilization of the Baikonur cosmodrome by the Russian Federation is conditioned by the lack of any alternative that could satisfy the government's need in geo-based means of communication, tele-and radiobroadcasting, Earth's remote sensing and carrying-out of manned programs and international cooperation space programs, which, by now, can only be performed at the Baikonur cosmodrome. Thus, Baikonur is of great international importance. There are only three cosmodromes on the planet, which can serve as a launching pad for carrier rockets to launch spacecrafts with cosmonauts aboard: Baikonur, USA cosmodrome at Cape Canaveral Air Force Station and Chinese Jiuquan Satellite Launch Center.

Valeriy Stolnikov

"DUX"-BRANDED RENAISSANCE

The most experienced aircraft building enterprise in Russia begins its new stage of development

One of the world's oldest and the most experienced aircraft manufacturers, Russian factory "Dux" which celebrates its 123-d anniversary this year, is now undergoing full-scale upgrading phase. Known worldwide for its air missiles the enterprise is going to significantly increase the range of equipment manufactured and among other things enter a world market with its new civilian products. We have had a conversation with Director General of "Dux" JSC Yuri Klishin about principles of changes and new milestone of "Dux".

— Mister Klishin, "Dux" has a life history full of bright pages…

— The enterprise which traces its history back to 1893 had been an all-purpose machine builder for over 120 years. Among its great values was a capability of mastering new products in record time and putting wide range of goods into production. Suffice it to recall that during its history "Dux" had been producing hardware for circus, bicycles, motor bikes, propeller-driven sledges, airship, planes, air weapons, missiles and so on. The enterprise received the habitual title "the first' as it comes from its name (Latin Dux for the first). In 20th century "Dux" actually became the father of a number of aircraft companies and brands such as "Sukhoi", MiG", "Yak", "Vympel", "Progress". Today its main serial products are close air combat air-to-air missiles R-73 and R-73E as well as launcher P-72. I would like to add that thanks to performance R-73 leaves behind all known foreign counterparts in terms of reliability and safety. I may state it is based on my personal experience. According to experts this kind of missile is the most used one by air force.

— How do you describe the current stage of the enterprise in the context of its great history?

— During its more than 120-year-long history "Dux" has always been known for its diversified production and multifunctional products. Today we are also on the way of full-scale increasing product range. We wish to manufacture versatile goods both military and civil ones. Now we are fully engaged in doing so. Furthermore our enterprise is extending fields of application of military products. In particular, there are plans to upgrade the missiles as a whole and their components.

Quick mastering of new products has been the main distinctive feature of our company throughout its history. From bicycles and motor bicycles to propeller-driven sledges, aircraft, engines, weapon systems and small arms. Thus, range of products is defined by state requirements. "Dux" has been very quick in responding tasks and manufactured appropriate goods.

Nothing has changed so far. We are ready for a prompt mastering the widest range of products in favor of the state or customers based on the vast experience and perfect technical facilities which are being now intensively renewed.

— How successful was the production enterprise at the fulfilment of the GOZ-2015 order (State Defense Procurement and Acquisition)?

— The OJSC "Dux" production enterprise fulfilled the order completely, there were no claims on the part of the state customers, for the first time in last 4 years.

— What are the peculiarities of GOZ-2016 tasks?

— The volume of GOZ-2016 has grown considerably compared to that of GOZ-2015, that is why we are intended to do our best to fulfil all the set tasks with no claims in due time. Moreover, the demanded level of quality, technology and social issues has been raised as well.

— How important is the share of Kazakhstan and Central Asia Countries in the export structure of the production enterprise?

— The role that Kazakhstan plays in ODKB (Collective Security Treaty Organization), maintaining our testing facilities located in its territory, conditions the increase of Kazakhstan export share in our production enterprise considerably. This issue is as much political as it is technical.

— The products manufactured by the production enterprise still play major role in the maintenance of the defense capacity of CIS and EEU countries. Are the relationships with these countries changing in any way?

— Mainly, the products of our production enterprise are in demand with our Belarus colleagues, insignificant amount is supplied to Kazakhstan both through OJSC "ROE" and Russian aircraft plants within the final product.

— Do you consider the possibility of cooperation with Central Asia countries — the purchasers of "Dux" products in their territory?

— It is quite possible, we want to offer our Kazakhstan partners a number of new service maintenance schemes, which might change into joint venture with time.

— What are the main goals that "Dux" sets, taking part in KADEX-2016?

— The main participation goals are: expansion of the possibilities and prospects of local production enterprises in accordance with the needs of Armed Forces of the Republic of Kazakhstan, support of the Russian products promotion on this market; demonstration of the capacity of Russian production enterprises focused on the manufacture of products for Armed Forces of the Republic of Kazakhstan; development of cooperative relationships with Kazakhstan production enterprises

Yuri Klishin,
Director General of "Dux", JSC

in the sphere of joint production and modernization of weapons and military equipment.

— What current "Dux" programs do you think are the most promising and important?

— Our main task is increasing efficiency of our weapons. If yesterday our priority task was a serial production, today we are extending our range of products intensely. We are planning to become developers. In its new capacity "Dux" is going to be in charge of every stage of weapons life cycle: from design to disposal.

We make use of the best traditions of the best Russian engineering centers, cooperate with them, work side by side with national aircraft builders, provide "Dux" designers with the newest technologies, master modern production decisions…

— Is "Dux" today a big cooperative business?

— Yes, it is very big including dozens of enterprises and broad geography from Saint Petersburg and Moscow to Kyshtym and Kurgan. Besides, another important thing is that we have managed to reach mutual understanding with our partners based on close technical collaboration, exchange of guidelines and so on. All this is done to significantly increase rate of mastering new products.

"Dux" is deeply involved in industrial networks. We work with almost all leading national aircraft building enterprises such as "Sukhoi", Komsomolsk-on-Amur, Novosibirsk aircraft plant, "Irkut". "MiG", "Sokol", "Ilyushin" etc. Moreover, we produce

diversified goods and components both for military and civil aircraft.

— What can you say about the export geography of "Dux"?

— The export geography is very and very broad. It includes former Soviet republics and far-abroad countries such as China, India, Angola, Vietnam, Egypt, Cuba and others, which altogether involve every region of the world: Asia, Africa, North America, South America.

— Who pays "Dux" to manufacture new products?

— Development of new products requires the enterprise to changeover to another more complicated regulatory system. Thus we see incomparably more regulations, rules, standards, specifications etc. We are managing these challenges step by step.

In addition to that we have much more cooperation with various research and development institutions, government entity-owned bodies including Russian Ministry of Trade and Industry and Defense Ministry.

A production of new goods has been always done according to stricter rules. There are increasing requirements towards skill level since something new has to be added to the development, performances and operation should be improved, weapons potential should be increased.

— Are products already produced by "Dux" going to be improved too?

— Certainly. Thus, we were engaged in and now manufacture removable armaments such as flexible guns. Now we are moving this equipment to a more advanced technical level using latest technologies including microscopic electromechanical systems. We are completely improving control unit and other assemblies.

— And what about development program?..

— We defined the focus of interests during the first development stage, defined enterprises to cooperate with. They confirmed they were also interested in our new products. By the way, it concerns not only military but also civil products the range of which we are going to significantly increase including export-oriented ones.

I would like to highlight that "Dux" and Russia may fully rely on own technological capacities and studies related to innovations.

— As for innovations. Is "Dux" developing ground effect vehicles now?

— We have a program for development of nonconventional vehicles which include among others ground effect vehicles and airships. We are engaged in both subjects.

Ground effect vehicle is a high-speed (up to 250-300km/h) amphibious vehicle capable of long-distance carrying passengers and cargo over various water surfaces including oceans and ice. The speed of such vehicles is three-four times bigger than that of any fast-moving ship.

Meanwhile airships are very good for Russian environment. Western Europe with its well-developed traffic network does not probably need this kind of vehicles. But we have lots of space and difficulties in supplies to far regions… Moreover, an airplane or helicopter require special pad for takeoff and landing, but an airship is capable of moving to a site, lifting a cargo and transporting it to anywhere. Many advantages are offered in this case.

Ground effect vehicles have also many advantages…

— In other words, both airships and ground effect vehicles are not incredible being a real project the enterprise is involved in today?

— Yes, of course. Although we are in the beginning now and there are a lot of things to do in this regard, we have made real steps already. Thus, one of our ground effect vehicles is now being tested in sever environment of Yakutia.

— Is it a sequel of a known Soviet "Lun"?

— It is not. Though the project was very interesting, the vehicle was very heavy (over 500 tons) and had low carrying capability. We are making a vehicle made of composite materials, which weighs three tons and can carry three tons payload. The Russian-made composite materials are lighter than water. Operational and safety-related issues have been

solved. Besides, we focus on standardizing equipment, fuel systems, navigation, communications etc.

— Are the new vehicles transportation more money-saving?

— Carrying one ton cargo by "Ruslan" aircraft is approximately 10 times more expensive than carrying the same ton by an airship. It is true that an airship cannot fly 600-700km/h, its cruising speed is 150-200km/h. However, often high speed is not required. Besides, we are making hard structure airships capable of withstanding any load and being widely-used for tourist purposes, for example. It has several decks with cabins, elevators, restaurants and other tourist entertainments.

— Is "Dux" ready to produce sporting airplanes too?

— Yes. The point is that there are nearly no sporting airplanes manufactured in Russia. Though there is a demand, not so much for single-seaters used by highly-qualified pilots during sports events but two-seated airplanes designed both for training and sport flying. Making a sporting airplane is also included in "Dux" plan for development.

— You have extensive plans which require significant technological capabilities…

— Currently we are engaged in intensive equipment modernization. We buy new machines, renew and upgrade existing machines, install new attachments. Let us say we mount high-velocity spindles, holders, cutters, computers on solid powerful cast frames of Soviet and Russian machines.

Meanwhile, we bear in mind economy of each production area and buy only the equipment with certain performance which we require. When choosing machines and machining centers we rely on engineers' opinion

Some historical details

"Dux'" JSC traces its history back to 1890's when Yuri Meller came to Moscow from the town of Weisenstein in Estonia. In 1893 using his wife's dowry he purchased a small mechanical workshop in Sadovaia-Triumfalnaia street in Moscow. So he began with a production of thin-wall pipe-made parts for circus (aerial bars, stepladders, ladders etc.). Later he began to manufacture steam heating pipes. During the first year the workshop turnover was 30 thousand rubles. In 1894 Yuri Meller set up assembling of bicycles buying components from England. Bicycles were constantly improved, the owner was quickly introducing new technologies.

The production was continuously extended: annual release of bicycles grew from 150 pieces in 1895 to 1,000 pieces of different versions every year. By the end of 19th century there had been 115 workers at the factory. In spring 1901 the company bought a piece of land in Tverskaia Yamskaia and began to build a production facility upon the project of architect Gippius. By the end of the year equipment was installed in the new workshop and the factory commenced operation.

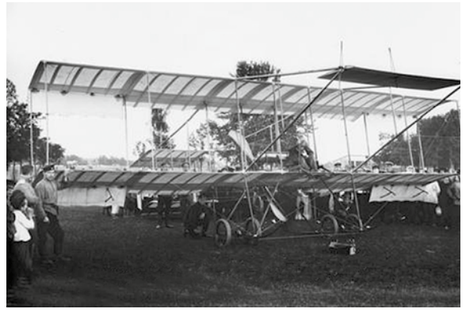
In early 1900's "Dux' started to set up a production of petrol-powered bicycles followed by cars with 7hp engines like American Oldsmobiles. In 1905 the enterprise manufactured about 100 Duxmobiles, 30 of which were fully Russian-made. The company has become the only ever Russian car-builder which produced steam, electric and petrol-driven cars.

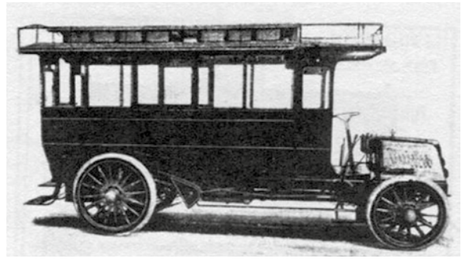
Aviation became the next stage. Having begun with manufacturing airships in 1910 "Dux" built its first airplane, and in 1910's the enterprise was nearly fully engaged in producing airplanes. Thus it became the biggest in Russia aircraft building factory. The beginning of the First World War led to pickup in orders. In average release of aircraft increased 2.5 times. Thus, during the period from 1914 till 1917 the factory built 190, 382, 481 and 543 airplanes respectively. No Russian aircraft building factory has had such production grow rates.

After the 1917 Revolution all aircraft building enterprises were nationalized. "Dux'"was named State Aircraft Building Factory 1 (GAZ 1). Not limited with producing smooth-running serial goods "Dux" set up serial production of new battle planes during difficult period of the Civil War. Along with building new aircraft the factory was engaged in aircraft overhaul. In the beginning of 1923 a design office was established at the factory 1. The office was headed by N.N.Polikarpov.

By the beginning of 1930's the factory 1 built 100 aircraft on a monthly basis, making nearly all components and assemblies by itself apart from motors and instruments. By the beginning of the Great Patriotic War the factory remained the only plant which specialized in producing air weapons. It manufactured almost all aircraft guns for Soviet fighters, ground support planes and bombers.

During the Second World War the factory fully changed to military production. Along with air guns it manufactured weapons for infantry. In 1946 the factory began emergency mastering series of Tu-4 strategic bomber.





who directly define things needed for production. In general we follow a flexible system allowing us to perform upgrade in real-time mode.

Among the principles we follow to establish development strategy of "Dux" is self-dependent and self-sufficient production to avoid being a hostage of circumstances. Currently it is self-sustainment which often determines stability of an enterprise, the extent it is ready for challenges especially in limited supply situation.

We have decided to increase our self-dependency, liveness and cost effectiveness. As I said before for this purpose we are upgrading production, renewing personnel, establishing cooperation with other research and development institutions and entities both military and civil ones. Thus, we try to be independent and define new approaches and views to develop some or another product, both military and civil. We wish to enter new markets not due to dumping price but thanks to higher quality goods, which are "Dux"-branded. This is worth doing that.

— So we may state "Dux" is in the beginning of a new development stage?

— It is. When introducing new workshop and department managers I say we are developing, we are on a new spiral turn of our history. That is why our requirements to managers and frontline employees get stricter. We also have high quality standards since we have to achieve the goals we defined. By the way, the changes which "Dux" is going through today find support of our partners and customers. We extend the range and area of application of our products, improve quality, and create such performance level which has never been offered in the market before.

— Will these changes influence export too?

— Certainly, they will, in the most positive way. By the way, foreign customers being as a rule quicker to respond to market changes make requirements to have products quality improved. "Dux" in its turn tries to be in advance of main international technological trends. Of course, we do it first of all for the benefit of Russian armed forces.

Besides, we surely try to make export-oriented developments. Russian development-related legislation allows us after entering contracts with Ministry of Defense to acquire author's rights for products and use them in the future for improvement. We use technologies which help us create high quality reliable "Dux"-branded goods which have no rivals in the market at all.

Indeed, no one has thought of creating redundancy rate for missiles. We have managed to do that. We have harmonized solutions for many critical issues. Thanks to this we are going along the road of increasing accuracy, versatility and capacities of our products. We are striving to harmonize solutions to achieve required results in a money-saving way. Due to our own developments our goods is getting more reliable and efficient.

— In what areas is "Dux" going to extend the range of its products?

— "Dux" has been always known for its capability of flexible and quick responding to various demands. Further on we will keep on performing missions assigned relying on experience, technologies and our courage for creating unexpected technical solutions. We are not going to stop with extending capabilities of our products and field of application, for example in terms of mobility, which lead to great outcome.

— In other words, you will do what is required?

— We will. Obviously, some supreme forces help our enterprise. It had been initially enshrined with an idea of quick response to demands. Since Latin "Dux" stands for lookout, leader.

— To what extent are you ready to discuss establishment of joint production facilities on the premises of purchasing countries?

— We are quite ready for it. It does not contravene our legislation or policy of "Rosoboronexport" which well facilitates establishing joint enterprise in various countries. Besides, we are in principle ready to extend cooperation with partners in friendly states, by exchange of specialists among other things.

— What are today's key trends in missile matters?

— First of all, this is pursuance of multi-task capability, increase of accuracy, antijamming capabilities and versatility. Secondly it includes decrease of cost. Besides, "Dux" tries to perform these tasks by using non-traditional methods among others, based on new technological and organizational principles.

— Where do you get money for such full-scale changes?

— Export contracts make the main source of income. Although everybody is talking about the crisis and difficulties, we consider this period the field of great opportunities and discuss mastering wide range of civil products.

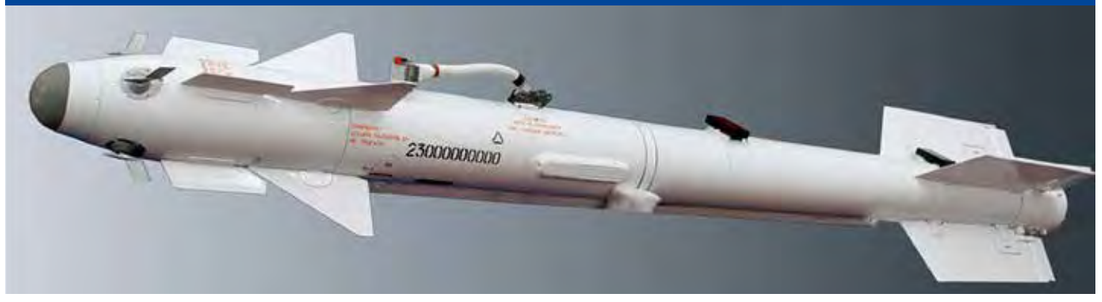
— Do you regard R-73 missile is a masterpiece of military technological thinking?

— Beyond any doubt! It features tested and very dependable aerodynamic configuration, long life. Conducting scheduled repairs of very old missiles we can see they are well operational, though some separate details should be replaced according to service policy. This missile has many ways of development. Fitted with new hardware components it can feature significantly increased fighting capabilities, range, speed, strength. We know a number of upgrading areas where the product can do its best.

Today many efforts are being made to update R-73 missile and its launcher. The missile is getting extended capabilities in terms of performance, G-loads, controllability, dependability, altitude and range. In general the updated version is going to be 1.5 times more efficient. The launcher used by all frontline aircraft is being improved too.

Although currently demand exceeds production, we are extensively developing new areas which include not only missile production. The areas involve warning panels, various electric valves, high-pressure tanks, electric mechanisms and other products most of which are components for other finished goods. We are absolutely sure that manufacturing wide range of goods is some sort of a safeguard against crisis situation.

Missile R-73



Short range air-to-air infra-red seeking combined aero and gasdynamic control missile is designed for conducting fast-moving close air combats, killing air targets (fighters, ground support planes, bombers, transport aircraft, helicopters and cruise missiles) from rear hemisphere and on collision course. It is capable of operating day and night, under active countermeasures taken by enemy, in any climatic conditions. The missile can also destroy ground-based heat-source targets and automatic drifting balloons.
The missile can be launched by both ground and ship-based fighters or ground support aircraft.

Combat performance:	
- Launch weight, kg	105
- Length, mm	2,900
- Body diameter, mm	170
- Wingspan, mm	510
- Finspan, mm	385
- Warhead weight, kg	8
- Launch range: Max front hemisphere, km Min rear hemisphere, km	 30 0.3
- Max angle of attack, grad	40
- Max lateral G load, g	60
- Designating angle, grad	±45
- Homing eye deflection angle, grad	±75
- Target altitude, km	0,02...20
- Max speed of target, km/h	2,500
- Target G load, g	up to 12
- Warhead type	rod
- Powerplant	Single-mode solid fuel engine
- Proximity fuse	Active radar fuse / Active laser fuse

Production facilities of "Dux', JSC:
Equipment in use:
John Ford
DMG
HAAS
AC-200
Trumatic-120R
Gemini
Schaublin- 225
Cheron
Anka

"DUX', JSC IS ENGAGED IN THE FOLLOWING PRODUCTION:

ELECTROPLATING
Automatic three-layer decorative and protective coating system (nickel, semi-bright nickel, bright chrome) for producing decorative and protective coatings for steel and copper with a capacity of 15 m2/hour.
The system is used for restoring cleaners, chroming solutions, continuous selective cleaning of nickel plating solutions, conservation of cleaning water and materials. The production is eco-friendly.
Silver-plating, gold-plating electrolytes and cleaning water recovery unit.
The types of coatings being manufactured are as follows:
• Alkaline zinc-plating (galvanizing) with brighteners made by Atotech Deutschland GmbH (Germany);
• Sulphated cadmium-plating with brighteners;
• Hard chromium plating;
• Nickel-plating;
• Electroless nickel-plating;
• Copper-plating;
• Tin-plating;
• Tin-bismuth alloy coating;
• Aluminum alloys anodizing;
• Aluminum alloys chemical oxidizing;
• Phosphating;
• Oxide phosphating;
• Stainless steel electrolytic polishing;
• Stainless steel chemical passivating;
• Removal of alfin layer from titanium alloy parts;
• Copper alloys chemical passivating;
• Silver-plating.

BLANKING AND STAMPING
• Mass production of 160x160mm up to 2mm-thick flat parts of any configuration powered by Bruderer-made press (with equipment available);
• Piece and low-batch production of up to 12mm-thick flat iron parts of any configuration powered by laser-beam machines LW -1325 and Platino 1530-2200-2D;
• Piece production of up to 3mm-thick flat parts of any material powered by punching machine TRUMATIK-120R;
• Low-batch production of parts drawn with stamping tools (height 160mm, diameter 400-500mm, thickness up to 6mm) powered by ERFURT 2500tf press machine;
• Low-batch production of pressed parts powered by general-purpose press machines 16, 25, 63 and 100ft;
• Forming (heated) of titanium parts with horizontal size of 500x1200mm powered by knee crank machines 2,500ft;
• High-ductile materials impact extrusion (aluminum, copper, brass).
There are works underway to produce low-carbon steel parts.

TOOL PRODUCTION
There are all types of equipment, to produce the most geometrically complicated parts (press tools, moulds, devices, special machine attachments, special non-uniform cutting and measuring tools). In particular, there are electrical discharge cutting machines AS-200 to make cut out patterns with maximum size of 400x250x256mm and tracer controlled punching machines AT-270 with maximum axial stroke (y, z) of 500x350x500mm. Tools are manufactured with Gemini and Picomax 90 Top grinding machines.

MECHANICAL PROCESSING
Is done with:
Automatic, semiautomatic and computerized capstan machines up to quality class 7 and up to Ø 50mm;
Multi-axis boring machines;
Gear-shaping and gear-cutting automatic machines;
All kinds of grinding finish;
All types of milling machining;
Processing with multi-operation ocomputerized machines (machining centers SHAUBLIN -60; SHAUBLIN-100; SHAUBLIN-140; SHAUBLIN-150; SHAUBLIN-180; SHAUBLIN- 225; Picomax-54 top); HAAS; Cheron.
Rolling of thin-wall shells;
Cold heading of parts up to Ø 80mm and up to 80mm long;
Thread rolling with automatic and semi-automatic threading machines with Ø up to 20mm and quality class 6.

FOUNDRY, FORGING AND FORMING
FOUNDRY
Various methods of cast molding:
Aluminum and zinc alloys (from 0.005 to 10kg heavy) high pressure casting (pic. 1);
Aluminum, magnesium alloys and cast iron sand casting; hand molding. Casting weight from 0.1 to 80kg (pic. 2);
Lost-wax casting of constructional steel (35KhG-SL, 16KhGTL), specialty steel (08Kh14N5M2DL, 10Kh18N9BL), copper alloys (bronze, brass). Casting weight from 0.005 to 15kg (pic. 3);
Metal mold casting of aluminum and magnesium alloys including high-strength aluminum alloys SIGMA > 40 kgf/mm2, DELTA > 8%. Casting weight from 0.03 to20 kg.
Alloys in use:
Aluminum: AK12, AK7ch, AK8l, AM4,5Kd, GOST standard 1583-93; magnesium: ML5, ML5pch., GOST 2856-79;
Bronze: BrA9ZhZL, Br010F1, Br010S10, brass LS59-1L; zinc alloy: TsA4M1
Steel: ST.20, 35KhGSL, 16KhGTL, 10Kh18N9BL, 08Kh14N5M2DL; Capability of casting with other alloys is available.

FORGING AND FORMING
Forming of heated blanks of steel and non-ferrous alloys with weight from 0.003 to 20kg with crank-type friction press;
Open forging of steel or non-ferrous blanks with weight from 0.1 to 60kg;
Non-ferrous forging (Ø 200mm and 150mm);
Open forging by ring rolling;
Cutting of blanks to be formed and open-forged with shearing press, belt and rotary saw.

WELDING
Oxy-hydrogen welding:
Argon arc non-consumable electrode welding of aconstruction, stainless steel, titanium and aluminum alloys;
Consumable electrode welding of construction low-carbon steel in carbon-dioxide environment;
Lock-chamber-assisted continuous brazing in rotor and vacuum furnace of heat-resistant construction steel with high melting point solders in chromium powder;
Oxy-acetylene brazing of high-pressure pipes;
Inert atmosphere copper brazing of low-carbon and construction steel with recovery elements available;
Argon arc impulse welding of sheet structures of titanium and aluminum alloys;
Arc plasma cutting of sheet aluminum, stainless steel and copper alloy blanks.

ASSEMBLING
Electrical works:
Producing wire harnesses, checking electrical data, connector sealing;
Assembling and soldering of circuit boards;
Producing electronic assemblies with modern microprocessor-controlled heat soldering stations PACE (USA) capable of ensuring the most safe soldering mode;
Manufacturing of electronic units, adjustment and checking of electrical data by means of test and control equipment.
Assembling:
Winding of armatures, stators, coils, toroidal cores;
Producing of up to 1,500W-strong electric motors;
Producing contact switches;
Assembling products, adjustment, equipment monitoring;
Polymeric powder paint-based coating line is designed for:
Producing coatings featuring high decorative and protective, insulating, physical and mechanical properties;
Coloring long steel and aluminum products and parts of any configuration.

PLASTIC AND ELASTOMERIC PRODUCTION
High-pressure molding of such thermoplastics as polyethylene, polyamide, polycarbonate, ABS plastic, polypropylene and others by means of injection-molding machines:
KuASY — injection volume from 31 to 407 cm3;
KLOCKNER — injection volume 1,760 cm3;
SP — injection volume from 130 to 1,230 cm3;
MST — injection volume 3,100 cm3.
Robotic system "KLOCKNER" Ferromatik Desma which includes injection-molding machines W-650 and W-800 is equipped with modern molding process data control facilities powered by microcomputers and microprocessors. Thanks to use of thermostat WCC-45, robotic manipulator "Remak" and drying unit "Somos" all production cycle including raw charging and pickup and placing parts is fully mechanized and automated:
Rubber mix rolling;
Pressing thermoset materials and rubber vulcanization by means of hydraulic press RNM-63, D2430B, RNM-100 using such molding materials as DSV, phenolic plastics, amino plastics and rubber mixes.
Thus, thanks to well-qualified personnel and modern equipment our enterprise is capable of excellent accomplishing any engineering and production task.
The unique combination of advanced technologies, special attention to details, selection of the best components, high production quality and many-year experience makes production capacities of "Dux", JSC one-of-a-kind. Our efforts to reach best value for money are a guarantee of success.

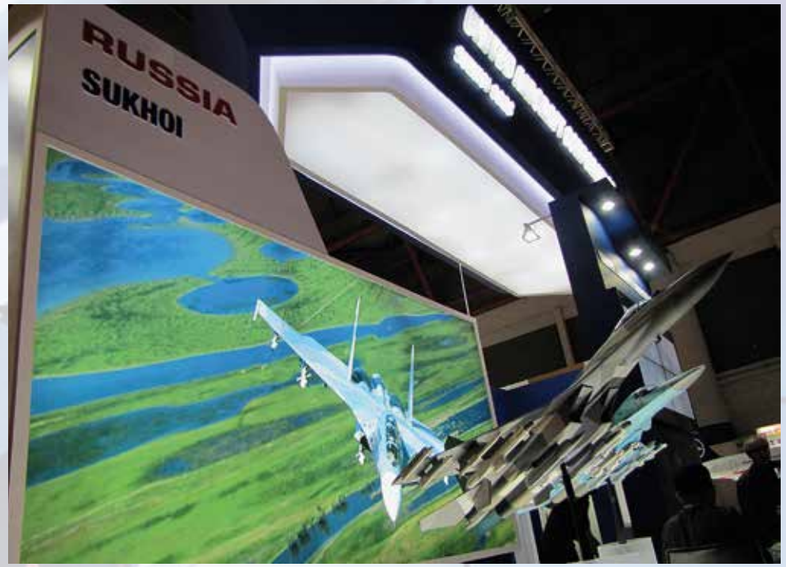
EXPORT REGULATIONS

Andrey Tarabrin

MILITARY AND TECHNICAL COOPERATION

Russia remains one of the world's top defense products suppliers

Since 2000, the Russian Federation has established a sufficiently effective system to manage military-technical cooperation between the Russian Federation and foreign states, incorporating the Federal Service for Military-Technical Cooperation ("FSMTC of Russia") as its critical enabler. The Federal Service for Military-Technical Cooperation is empowered with control and supervision functions in the MTC area. FSMTC of Russia shall be a decision making authority on import to and export from the Russian Federation of military purpose products as decreed by the President of the Russian Federation, also in the established manner and as authorized by the Russian Federation President, issue of licenses to military-technical cooperation-affiliated entities for import to and export from the Russian Federation of military purpose products.



"FSMTC of Russia" granting inthe established manner foreign trade licenses to (from) corporate developers and manufacturers of military-purpose products and arranging exhibitions and shows of specimens of military purpose products in the Russian Federation and foreign states as required by the Government of the Russian Federation; and in the established manner and as required by competent authorities of foreign states, issue of end user's certificates for import military purpose products to corporate developers and manufactures of military purpose products.

For example, on the conference on summarizing of the results of advertising and exhibition activity in the area of military-technical cooperation of the Russian Federation with foreign countries in 2015 and activity planning for 2016 with participation of representatives of the interested federal executive authorities, military-technical cooperation affiliated entities and other Russian organizations was held on December FSMTC of Russia presented the departmental awards to the most active participants of the advertising and exhibition activity in the area of military-technical cooperation. Among the award recipients were the representatives of the Ministry of Defence of the Russian Federation, the Ministry of Internal Affairs of the Russian Federation, the Federal Service for Technical and Export Control, State Corporation "Rostec», JSC "Rosoboronexport", JSC "UAC", "Almaz-Antey" Corp., JSC "Russian Helicopters", JSC "RPC "Uralvagonzavod", JSC "SPA "Bazalt", JSC "KBP", FSUE "Gamma Scientific and Production Enterprise", JSC "Exhibition Companies Group "Bizon", company "International Congresses and Expositions".

Military and technical cooperation between Russia and pacific region states is on the rise now. Pacific region nations account for considerable part of Russian defense products delivery. This number may quite possibly rise significantly. Besides, seeing the growing interest toward aviation and air defense equipment, we hope for stepping up of cooperation in this regard. Russian planes and helicopters have proven themselves highly efficient during large-scale counter-terrorism operations worldwide. Their air superiority and anti-ground high-precision strikes capabilities are also well known to our partners in other states. Among others, in this region large export potential belongs to gunships and transport helicopters, various air defense systems, antiaircraft gun and missile system.

From recent examples of successful participation российско the equipment in the international exhibitions can remember a little. So, Russia takes part in the arms exhibition in Gulf Defence & Aerospace 2015, an international exhibition of arms and military equipment to be

EXPORT REGULATIONS

held from 8 to 10 December in Kuwait City (Kuwait). "Rosoboronexport seeks to intensify cooperation with the Gulf countries, which are interested in strengthening their armed forces. Russia has deservedly earned recognition as a reliable and independent partner while Russian weapons have proven their effectiveness and reliability in challenging combat and climatic conditions. The participation in the exhibition in Kuwait is another step to strengthen our position in the region," said Rosoboronexport Deputy Director General Sergey Goreslavsky, who heads the Company's delegation at the exhibition.

The Gulf states are showing interest in Russia's army, air force and air defense weaponry. In addition, Rosoboronexport promotes naval equipment here such as patrol boats, frigates, and coastal missile systems. The foreign delegations are expected to pay more attention to the T-90MS MBT, TOS-1A heavy flamethrower system, Typhoon-K MRAP vehicle, Kornet-EM ATGM system, Su-35 and MiG-29M/M2 fighters, Ka-52, Mi-28NE and Mi-35M attack helicopters, Mi-17 and Mi-26T2 transport helicopters, Yak-130 combat training aircraft, Il-76MD-90A military transport aircraft, as well as air defense weapons of various classes, including the Antey-2500 and S-400 long-range air defense missile systems, Buk-M2E medium-range SAM system, Pantsir-S1 air defense missile/gun system and Igla-S MANPADS.

Major areas of FSMTC of Russia activities shall be:

- To perform control and supervision functions in the area of military-technical cooperation in compliance with laws of the Russian Federation;
- To participate jointly with other federal government authorities in elaboration of state policy in the area of military-technical cooperation and submit in the established manner relevant proposals to the President of the Russian Federation, the Government of the Russian Federation, and Defense Ministry of the Russian Federation;
- To ensure jointly with other federal government authorities implementation of key state policy guidelines in the area of military-technical cooperation as set by the President of the Russian Federation; and Within its competence and jointly with other federal government authorities, to implement state regulations in the area of military-technical cooperation.

At Gulf Defence & Aerospace 2015, Rosoboronexport will hold talks with the representatives of the armed forces of the countries from the Middle East and other regions over the prospects for expanding military-technical cooperation.

The Russian delegation will also include JSC NPO Splav (part of JSC NPO Tehmash) and JSC High-Precision Systems (Vysokotochnye Kompleksy) represented by JSC Shipunov KBP Instrument Design Bureau, JSC Tula Arms Plant, JSC Kovrov Electromechanical Plant, JSC VNII Signal Research Institute and JSC Nudelman Precision Engineering Design Bureau (KBtochmash)

Military and technical cooperation with the region's nations tends to increase both in terms of quality and quantity. Thus, recently FSMTC of Russia experts have participated in "DUBAI AIRSHOW-2015" international airspace exhibition held on November 8-12, 2015 in Dubai (United Arab Emirates). Russia has been an exhibitor at "DUBAI AIRSHOW" since 1993. The Russian display area this year has been 678 square meters. The exposition involved 23 Russian enterprises including the largest ones like "Rostech" State Corporation, "Rosoboronexport", "Almaz Antei", Russian aircraft Corporation MiG, "Sukhoi", "Vertoley Rossii" (Russian Helicopters). Altogether about 200 samples of Russian advanced defense products have been shown in Dubai.

During the exhibition Russia has held negotiations with delegations of UAE, Kuwait, India, RSA, Malaysia, Bahrain, Egypt, Iraq, Indonesia, Jordan, Oman and other countries. They discussed prospects for Russian armament supply including aircraft, air weapons and air defense equipment as well as issues of creating maintenance facilities and establishing after-sale service.

Russia considers Kuwait to be among the most signficant partners as to military and technical cooperation in this region and in whole Asia. Military and technical cooperation between our two countries goes deep. It began in 1978 and advanced in a rather active manner. Thus, back then our country provided Kuwait with about 700 "Strela" portable anti-aircraft missile systems and twenty "Osa" air defense missile systems.

Extending cooperation between Russia and Kuwait is spoken by the Memorandum of military and technical cooperation between "Rosoboronexport" and Defense Ministry of Kuwait undersigned in November this year, which shows Kuwaiti military's profound interest towards purchasing Russian military equipment. In particular, Kuwait is interested in Russian battle aircraft and air defense systems. More details of types and purchases will go public later. So far only growing interest can be observed. Besides, much attention has been paid to creation of heavy infantry fighting vehicle (IFV) based on Enigma IFV developed by UAE and Russian AU-220M weapon station equipped with 57mm gun.

In this year at the Bahrain International Airshow 2016 (January 21-23) many countries displayed an interest in buying Russian aircraft, helicopters and air weapons. The Su-35 and MiG-29M/M2 multirole fighters, Yak-130 combat trainer, Il-76MD-90A military transport, Ka-52 and Mi-28NE attack helicopters, Mi-35M transport/attack helicopter, and Mi-17 type military transport helicopters have great export potential in the region.

"Rosoboronexport's order portfolio for aviation equipment exceeds currently $22 billion. Interest from foreign customers, including in the Middle East and North Africa, is growing. This stems from both launching new aircraft models to the international market and high operational effectiveness of modern Russian military aircraft, including its capabilities for delivering surgical strikes on ground targets. Demand is supported by an excellent cost-effectiveness ratio and Russia's reputation as a reliable and responsible partner in military-technical cooperation," said Sergey Kornev, Head of Air Force

In conformity with laws of the Russian Federation, FSMTC of Russia shall perform control and supervision functions relating to:

- Compliance, of activities in the field of military-technical cooperation of federal government authorities, government authorities of the Russian Federation constituencies, and Russian organizations empowered in the established manner to carry out foreign trade activities regarding military purpose products, corporate developers and manufacturers of military purpose products, other legal entities, officials and individuals, with legal acts and regulations of the Russian Federation and key state policy guidelines in the field of military-technical cooperation, requirements of the Russian Federation laws on export control over procurement of military purpose products;
- Implementation of underlying state policy principles in the field of military-technical cooperation including state monopoly;
- Efficient functioning of state regulatory system in the field of military-technical cooperation;
- Fulfillment of international treaties of the Russian Federation in the field of military-technical cooperation;
- Activities in the field of military-technical cooperation of representative offices of military-technical cooperation–affiliated entities in the Russian Federation and foreign states, as well as those of other organizations;
- Marketing, advertising, and exhibition activities in the field of military-technical cooperation;
- Efficient application of funds allocated from the federal budget to finance activities in the field of military-technical cooperation, as well as efficient use of federal property by military-technical cooperation–affiliated entities;
- Level of foreign trade prices for export and import military purpose products with due regard to protection of economic interests of the Russian Federation;
- Level of local prices for military purpose products to be funded out of the federal budget, and supplied to foreign customers under international treaties of the Russian Federation.

Equipment Export Department, who leads the Rosoboronexport's delegation at the exhibition. At the exhibition, Rosoboronexport showed the open presentation "Russian Military Aircraft Fighting against Terrorism," which analyzes the Russian aircraft's capabilities for use in counter-terrorist operations.

The Bahrain International Airshow has been held since 2010. This year, along with Rosoboronexport, it was attended by Russia's Federal Service for Military-Technical Cooperation, Russian Helicopters and United Aircraft Corporation delegations.

The special story is demanded by a subject of the Russian-Indian relations. The Russian-Indian scientific and technical conference "Effective after sale service — assurance of high operability of arms and military equipment" was held within the International Aviation and Space Salon "MAKS-2015" in Zhukovsky at the House of Scientists TSAGI under the aegis of FSMTC of Russia on August 25, 2015.

A.V.Fomin, Director of FSMTC of Russia, A.V.Potapov, Deputy Minister of Industry and Trade of the Russian Federation, representatives of JSC "Rosoboronexport" and leading military-industrial complex enterprises, whose production is in demand at Indian arms market, took part in the conference work from the Russian side.

A.K.Gupta, Secretary (Defence Production) of the Ministry of Defence of the Republic of India, S.Garg, Joint Secretary (Defence Industry Development) of the Indian Ministry of Defence, representatives of Armed Forces Headquarters (Air Force, Navy, Army), Indian enterprises concerned with operating, maintenance and repair of Russian origin military equipment.

During the Conference, its participants discussed the existing issues in area of after sale service of Russian origin military equipment in India and exchanged opinions about its effectiveness increase. It was proposed to Indian partners a comprehensive approach for maintenance of arms and military equipment during the whole life cycle from delivery to utilization. During the Conference, held in close friendly atmosphere, the representatives of Russian and Indian military-industrial complex established direct contacts and achieved a number of arrangements on improving of maintenance quality of Russian origin arms and military equipment.

In his interview for Russian Industrial Weekly newspaper Alexander Fomin, Director of FSMTC of Russia has described the extent to

which the current stage of military and technical cooperation with other countries is significant. Among other things he said the following.

"Today the situation of world armament and military equipment market depends on many factors. These are ongoing global economic crisis, complex military and political situation in Middle East and North Africa, stepping up of military production competitors which include first of all the USA, Germany and France.

We should recognize stepping up of such armament exporters as China, Republic of Korea, Israel and Turkey as well as entry of new ambitious players like Japan and Republic of South Africa. It is needless to say that development of military and technical cooperation between Russia and other countries is to some extent influenced by so-called "anti-Russian sanctions". Nevertheless, Russia is still one of the largest global defense suppliers and it is keeping intensive military and technical cooperation underway.

Indian Air Force and Navy are armed with many Russian (Soviet) aviation equipment such as Su-30MKI, MiG-21, MiG-23, MiG-29 ground and ship-based fighters, Il-76 transport aircraft and Il-78 tankers, naval Tu-142M and Il-38, Mi-17, Mi-26, Ka-28 and Ka-31 helicopters. The mentioned aircraft are going to be used by Air Force and Navy of India for next decades and should be constantly maintained by Russia.

FSMTC of Russia shall:

- Submit in the established manner draft decisions of the President of the Russian Federation and the Government of the Russian Federation on deliveries of military purpose products to foreign customers, as well as on other foreign trade issues relating to military purpose products;
- Develop jointly with federal government stakeholders conceptual approaches for higher MTC efficiency, as well as review trends in the development of the world's market of military purpose products;
- elaborate jointly with federal government stakeholders draft international treaties of the Russian Federation in the field of MTC and submit in the established manner proposals for concluding and implementation of any such treaties;
- Elaborate and submit in the established manner proposals for working out a state defense order regarding export and import military materiel under international treaties of the Russian Federation;
- make analysis of effective long-term international treaties of the Russian Federation providing for export military materiel adjusted for mutual debts, ability to settle them through goods exchange, and, if necessary, submit in the established manner relevant proposals;
- participate jointly with federal government stakeholders in drafting proposals for establishment, suspension, termination and resumption of MTC;
- submit in the established manner proposals for creating, composition and arranging activities of bilateral and multilateral intergovernmental commissions relating to MTC;
- set up relationships in the established manner with international organizations relating to MTC;
- be in charge of Russian sections of intergovernmental commissions relating to MTC as instructed by the President of the Russian Federation and the Government of the Russian Federation;
- review orders of foreign customers for supplies of military purpose products, record them, appoint contractors among MTC-affiliated entities, agree with federal government authorities on contractors among corporate developers and manufacturers of military purpose products contracted for supplies of the said products, inform foreign customers on accepting their orders for consideration, and supervise preparation and approval of relevant draft decisions, monitor progress of implementation of orders of foreign customers for supplies of military purpose products by MTC-affiliated entities;
- maintain record of orders of foreign customers for supplies of military purpose products placed directly with MTC-affiliated entities, and monitor progress of their implementation;
- streamline and supervise activities of MTC-affiliated entities, review and summarize results of their activities;

EXPORT REGULATIONS

Nowadays India is much interested in establishing production of Ka-226T helicopters in India. There are negotiations underway as to cooperation conditions under this project. There is a possibility of additional lots of Mi-17V-5 helicopters to be delivered and increasing the number of Su-30MKI planes being produced under license in India. All this makes us enthusiastic in Russian and Indian cooperation in terms of battle aircraft.

Main areas of cooperation with Malaysia in this regard include after-sale service of Su-30MKM aircraft. In 2012 a maintenance facility was established under the delivery contract. Besides, there are efforts to promote additional lot of Su-30MKM's to Malaysian market. Currently Malaysia is considering proposals for upgrading MiG-29 planes delivered before.

Military and technical cooperation between Russia and China as to battle aircraft is also promising".

Answering the question of joint defense production to be established by Russia in partner countries, Director of FSVTS emphasized as follows:

"Decisions to establish joint defense-oriented enterprises are made by the President of the Russian Federation and the Government of the Russian Federation. Our Federal Service is responsible for implementing the mentioned decisions and monitoring.

In this regard I would like to state that while the decision to establish a joint enterprise is being prepared, the issue is to be addressed comprehensively in all departments and agencies including FSMTC of Russia, Russian Defense Ministry, and Ministry of Foreign Affairs, Ministry of Industry and Trade and other agencies in order to avoid losses for the Russian Federation. Besides, all factors like political, economic, military and technological ones should be taken into account. Targeted decisions are made as to each separate joint enterprise. Joint development and production are cross-pollinating and allow consolidating and developing technological potential of Russia as well as facilitate future innovation-driven growth".

Nowadays, promotional and exhibition activity is becoming one of the most important mechanisms of strengthening political and economic positions of states-exporters of arms to different regions of the world and also a set of actions efficiently assisting in innovative development of economy, primarily, of all the military-industrial complex, manufacturing of competitive goods through attracting investments and new technologies.

From 2000 till 2010 FSMTC of Russia in association with the concerned federal bodies of the executive branch created a harmonic and effective system of exhibitions regarding military purpose products (further — MPP) in the Russian Federation. This system is based on 3 nationwide exhibitions, held in the Central Region of Russia and covering principal areas in the field of production of arms and military equipment:

The International Aviation and Space Salon MAKS held starting from 1992 in odd-numbered years at the grounds of FSUE Flight Research Institute named after M.M.Gromov in Zhukovsky, Moscow Oblast;

The International Maritime Defense Show IMDS held starting from 2003 at Lenexpo Exhibition Complex in St.-Petersburg;

The International Show of Weapons and Military Equipment MVSV organized since 2004 in Moscow, which in 2010 has become the core exhibition within the International Forum "Engineering Technologies" held at the grounds of JSC "TVK "Russia" in Zhukovsky, Moscow Oblast.

The International Exhibition of Arms, Military Equipment and Ammunition "Russian exhibition of arms. Nizhny Tagil" at the grounds of the State Exhibition Centre of FSE Nizhny Tagil Institute of Metal Testing held in odd-numbered years is an attractive show and a salon of significant interest for foreign customers and partners. The pivotal and obvious advantage of this event is a unique test range which makes it possible to showcase in action a great deal of arms and large-sized samples of military hardware of the Land Forces.

The exhibitions organized in the Russian Federation proactively assist in promoting military-technical cooperation of the Russian Federation with foreign states and strengthening political and economic stands of Russia in various regions of the world.

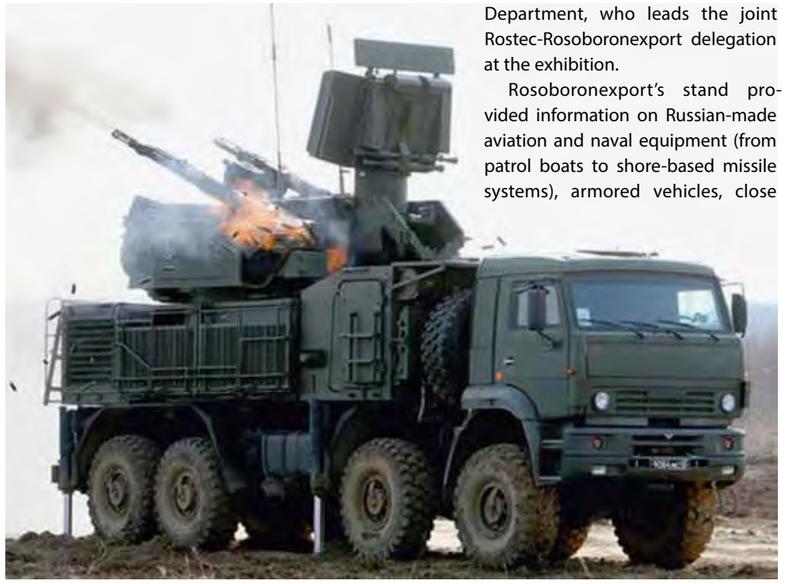
- maintain the register of MTC-affiliated entities and issue to them appropriate certificates;
- maintain record and registration, approve contracts for foreign trade activities relating to military purpose products, as well as maintain control of implementation of those contracts;
- if necessary, participate in talks conducted by MTC-affiliated entities with foreign customers for supplies of military purpose products;
- submit in the established manner proposals for implementation of key objectives and performance of functions of representative offices of the Russian Federation in foreign states regarding MTC;
- make proposals in the established manner for empowering corporate developers and manufacturers of military purpose products to carry out foreign trade activities and revoke the same from them;
- arrange exhibitions and shows of specimens of military purpose products in the Russian Federation and foreign countries as required by the Government of the Russian Federation;
- participate in working out proposals for MTC development with CIS-member states, and draft international treaties with those states on MTC issues;
- maintain relationships with authorized authorities of CIS-member states relating to export of military purpose products to third countries;
- take interdepartmental joint efforts relating to supplies and control over intended use of military purpose products under the Agreement of MTC Fundamental Principles dated 15 May 1992 between member states of the Organization of the Collective Security Treaty;
- maintain record of man-portable air defense systems sold and acquired by CIS-member states and promptly notify stakeholder states and international organizations of man-portable air defense systems sold and acquired by the Russian Federation;
- elaborate a consolidated volume of export military purpose products for the next year and control its performance;
- sponsor research and development of MTC-related works including its information coverage;
- streamline specialty retraining and skill enhancement system for staff involved in MTC;
- communicate to foreign customers scheduled phase-out of spare parts, plants, units, devices, and completing articles, specialty, training, and support materiel required for operability of earlier supplied military purpose products, as well as report about results of such communications to MTC-affiliated entities; and perform as state customer for export and import operations in the field of MTC to be carried out under international treaties of the Russian Federation, as well as customer for research and development works on MTC information coverage.

RUSSIAN WEAPONS: HIGH EXPORT POTENTIAL

Elena Stolnikova

At the International Defense Services Asia Exhibition DSA 2016, which was hold from 18 to 21 April in Kuala Lumpur (Malaysia), Rosoboronexport discussed with Malaysian partners the prospects for further deliveries of Russian military products.

"We pin our greatest hopes in the Malaysian market on Sukhoi multi-role fighters, helicopters, air defenses and close large-scale counter-terror operations. When the customers need weapons not for parades, they come to us," said Vladimir Ereschenko, Head of Rosoboronexport's Regional Department, who leads the joint Rostec-Rosoboronexport delegation at the exhibition.



Rosoboronexport's stand provided information on Russian-made aviation and naval equipment (from patrol boats to shore-based missile systems), armored vehicles, close assault weapons, air defense systems, a variety of arms and training simulators. Foreign delegations were expected to take keen interest in the Mi-171Sh military transport helicopter, Mi-35M, Mi-28NE and Ka-52 attack helicopters, UAV systems, Pantsir-S1 air defense missile/gun system as well as the Metis-M1 ATGM system.

During the exhibition Rosoboronexport presented for Malaysian partners the Mi-171Sh helicopter, T-90MS tank, BTR-82A APC, Pantsir-S1 air defense missile/gun system. These weapons fully meet the needs of the Malaysian Armed Forces and will significantly improve the combat capability of the army units.

Particular attention during the exhibition was given to further improvement in after-sales service of Russian aircraft operational with the Malaysian Air Force and overhaul of Su-30MKM fighters.

Rosoboronexport was also considering DSA 2016 exhibition as a suitable platform for strengthening ties throughout the whole Asia-Pacific region. In particular, the scheduled meetings with military representatives of Vietnam, Indonesia, China, the Philippines, Sri Lanka and other countries will be held.

As part of DSA 2016, Rosoboronexport presented the Integrated Security Systems, a new large-scale marketing project. The project has been developed on the basis of the Russian and international experience in the development and implementation of multi-level law enforcement and counter-terror systems. Enhancing security of the Winter Olympics in Sochi in 2014 as well as major international forums and summits in 2015-2016 are the most striking examples of their successful operation in Russia.

As part of the project, depending on customer needs, it is proposed to build integrated security systems for critical facilities, various administrative entities, state borders, coastal areas, etc. Rosoboronexport can supply all necessary hardware for building integrated security systems, from surveillance, automated control and communication systems to a wide range of weapons, special equipment and police gear for equipping the security agencies.

When establishing integrated security systems, provision is made for the integration of technical means that are already available in Malaysia as well as large-scale involvement of Malaysian companies. This will save significant funds, give impetus to the development of national high-tech industries and bring economic, scientific and technological cooperation between Russia and Malaysia to a new level.

The 15th International Defense Services Asia Exhibition DSA 2016 was held under the patronage of the Malaysian Ministry of Defense, Malaysian Armed Forces and Royal Malaysian Police. In terms of its scale and the number of exhibitors, DSA is one of the largest exhibitions of weapons and military equipment for land, air defense, naval and special operations forces in the Asia-Pacific region.

The first agreement in the sphere of military-technical cooperation between Russia and Malaysia was a contract signed in 1993 for the supply of MiG-29 multi-function

fighters, which later underwent in-depth modernization. During the 2000s, Russia and Malaysia secured contracts for the supply of Metis-M1 ATGM systems, small arms, Igla MANPADS and Su-30MKM multi-role fighters. In 2007, the first Malaysian astronaut flew on board the Soyuz spacecraft to the International Space Station as part of the offset program under Rosoboronexport's Su-30MKM supply contract. In 2011, within the same offset program, a full-flight simulator for the Su-30MKM aircraft was put into operation, while in 2012 a service center for maintenance of these fighters was completed.

Business Forum "RUSSIA-ASEAN"

National development programmes of ASEAN will promote Russian export growth

The Russian export center (REC) held a panel session during Business Forum "Russia-ASEAN", which was held in Sochi on the eve of the "Russia-ASEAN" summit -2016. The panel session was held to discuss one of the most important issues of Russian foreign trade — participation of Russian companies in the national programs of industrial development of the ASEAN region. The discussion was moderated by the director of international projects of REC Mikhail Mamonov and advisor on strategic partnerships with multilateral Organizations of the World Bank Group, Gilles Alfandari.

Participants of the event discussed integration of Russian suppliers into production chains and sector-specific development plans of the Association and told about their experience joining strategic ASEAN projects. Speakers and participants suggested that the discussion was practical — they discussed the needs of operators of the supply programs and contractors as well as opportunities of Russian companies.

"Russia has traditionally attended the ASEAN markets and, of course, is interested in expanding its exports to this geographical region. First of all, we are talking about exporting high-tech products. There are positive conditions for this. On the one hand, the volatility of the national currency has made our products competitive. On the other hand, the ASEAN countries traditionally are traditionally interested in Russian products of heavy engineering and power generation. In addition, the ASEAN countries today run large-scale program of modernization of the national infrastructure — social, transport and industrial. Russian companies are very interested in this, so today Russia has a lot of opportunities to return to the markets, where the Soviet Union was a main supplier some time ago", — said Mikhail Mamonov.

At the panel session there were Nikolay Kosov, Chairman of the Board, The International Investment Bank (IIB), Tan Sri Dato' Dr. Mohd Munir Abdul Majid, Co-Chairman, ASEAN Business Advisory Council (ASEAN-BAC); Chairman, Bank Muamalat Malaysia Berhad, Alexander Misharin, First Vice-President, Russian Railways, Wiratmaja Puja, Director General of Oil and Gas, Ministry of Energy and Mineral Resources of the Republic of Indonesia, Nikolay Volobuev, Deputy Chief Executive Officer, Rostec Corporation.

In addition, the discussion was attended by Tran Ba Huan, General Director, The Vietnam Development Bank, Igor Kozlov, Acting General Director, Ruselectronics, Anna Nesterova, Founder, Chairman of the Board of Directors, GlobalRusTrade.

In anticipation of the Business Forum "Russia-ASEAN" CEO of REC Petr Fradkov participated in the press conference in the news agency "TASS" in Moscow. He emphasized the strategic importance of cooperation with the ASEAN countries.

"Today the Russia's part in the total export volume of the ASEAN is only 1.5%. This is too modest comparing with China which has 18%, South Korea with 6.5% and the USA with 7%. But finally we can be sure that in five years Russia will be able to take up to 10% of export market of ASEAN. Now, Russia can make a breakthrough on the export markets of ASEAN, and the non-oil export will become the driver of the process", said Petr Fradkov.

Serial MI-171A2 will begin in 2017

The Ulan-Ude Aviation Plant (UUAZ) being a part of Russian Helicopters Holding, will begin serial production of its newest helicopter, the MI-171A2, in the first quarter of next year. As reported by Leonid Belykh, managing director of the plant, the machine is now undergoing final testing. "Our challenge in the first quarter of 2017 is to get the certificate and launch mass production."

It was reported earlier that Russian Helicopters Holding was preparing the fifth prototype model of helicopter MI-171A2 for certification tests. The holding's press service explained that the two flight models are already involved in the certification tests: the first one got off the ground in November 2014, while the second one had similar success in October 2015.

"Parallel tests were performed on a test aircraft based on the MI-8/17 serial. The third and fourth prototype models of the MI-171A2 have not undergone flight tests, because they are essentially bench models," announced the holding in a press statement.

MI-171A2 is the newest representative of the family of MI-8/17 helicopters. The machine was demonstrated at the MAKS-2015 International Aviation and Space Salon in Zhukovsky, near Moscow, and this May the helicopter will be presented at the Crocus Expo at the 9th International Helicopter Industry Exhibition, HeliRussia 2016.

MI-171A2 is equipped with KBO-17, an integrated digital aircraft navigation system. This "glass cockpit", designed by KRET, allows the machine to be operated without an engineer on board, and the number of crew members can be reduced to two. The airborne equipment makes it possible to successfully operate the helicopter day and night, in all-weather conditions, as well as in over-water flights.

The rotor system has also undergone modernization. In particular, the MI-171A2 received a rotor and an X-shaped anti-torque rotor made of composite materials. The innovations have improved controllability and reduced the gross weight of the rotor system. In addition, cruising and maximum speed have grown by 20%, while the flying range has also been extended.

The MI-171A2 will be manufactured in transport, passenger, fire-fighting, search-and-rescue, medical evacuation, and VIP configurations. It is expected that the new model will find use in traditional Russian helicopter industry markets: in the CIS countries, in the Asian-Pacific Region countries, as well as nations in Africa and Latin America.

ASIA PACIFIC CHINA POLICE EXHIBITION

Russian Helicopters takes part in the eighth Asia Pacific China Police 2016 (CIEPE) exhibition of police equipment and munition, which was take place in Beijing from May 17 to 29. At the exhibition, the holding demonstrated current and new models of helicopters.

The product range of the holding's helicopters represented with multi-purpose helicopter Ka-32 A11BC. This aircraft has been certified in China now, and as the holding points out, has a high potential of application on the markets of the region countries.

The Ka-32A11BC is designed to perform special search and rescue operations, casevac operations, transportation of suspended loads. Furthermore, it performs firefighting tasks on high-rise buildings where ladders of fire brigades cannot reach from the ground. The helicopter may also be used for evacuation of people from the roofs of skyscrapers in the event of fire.

The aircraft is capable of operating even under the concentrated smoke and dust conditions. The purchase of Ka-32A11BCs is particularly topical for metropolitan cities that have numbers of skyscrapers.

At the CIEPE exhibition, the Russian Helicopters holding also presented a medical version of the Ansat multipurpose light helicopter. This version of the aircraft is applicable for medical evacuation, continuous monitoring of state of an injured person, taking of life-sustaining measures, and delivery of intensive therapy by the medical team in the course of evacuation.

Within the framework of the exhibition's business program, Russian Helicopters run the "Application of Russian helicopters in performance of tasks of Chinese police" conference. The holding specialists told potential customers about the feasibility of application of Russian helicopters in the protection of public order, road traffic management, as well as carrying out of measures on prevention of crime, extremism and terrorism.

"Elimination of borders between countries in the era of globalization raises new challenges for maintenance of domestic security of states. With the increase of terrorist threats, provision of law and safety comes to the fore. In this regard, demand for helicopters capable to perform tasks of police forces efficiently has been raising", pointed Alexander Shcherbinin, Deputy Director General for Marketing and Business Development of the Russian Helicopters holding. He also emphasized that the Asian and Pacific Region united the fastest growing countries of the world, which are actually large importers of helicopters.

HIGH-SPEED HELICOPTER: FROM 2022

In June, the Russian advanced high-speed helicopter (AHSH) will take its flight at speeds of up to 450 km/h. This was reported by Andrey Shibitov, Deputy Director General of Manufacturing and Innovations at Russian Helicopters holding company.

"The laboratory helicopter is preparing to take its flight at the specified speed. In early June, we expect this flight to take place, and hope that at the first stage it will reach a speed of 400-450 km/h and subsequently up to 500 km/h," said Andrey Shibitov. The works on the AHSH are divided into two parts. The first is research activity called "Advanced High-Speed Helicopter".

"In this field, the flying laboratory has been created, and as you know, it has now taken its first flight," Andrey Shibitov said.

The other part of this project consists in the creation of an advanced commercial helicopter. Additionally, Andrey Shibitov pointed out that for good reason the layout of helicopter Mi-24 was used to create the AHSH cockpit. According to him, use of the existing aircraft is the optimum way to save funds.

The AHSH flying laboratory is an experimental aircraft manufactured on the basis of the Mi-24 helicopter. It is fitted with new all-composite rotor blades. Some elements of the flying laboratory fuselage have been altered to significantly reduce drag and improve the helicopter's aerodynamics at high speed. In January of this year, the helicopter got off the ground at the flight test complex of the Mil Moscow Helicopter Plant for the first time. It is planned that the aircraft will go into production from 2022 and will be able to gain speeds of up to 500 km/h.

Furthermore, Andrey Shibitov announced that Russian Helicopters have been hard at work on a new generation aircraft for the Russian Navy.

"Again and again, we came up with a proposal to renew development of the new generation aircraft for the Navy. It is gratifying that the Ministry of Defense has heard us. We have been hard at work on this aircraft," Andrey Shibitov said.

He pointed out that at the same time "tremendous and serious work" on the repair of existing shipborne helicopters is underway.

Last summer, Sergey Mikheev, General Designer of Kamov Design Bureau (part of Russian Helicopters) told TASS about the development of a new shipborne helicopter. According to him, we are talking about a successor for Ka-27 and Ka-29. Igor Kozhin, Chief of the Naval Aviation, informed TASS that by 2020, Kamov will develop a "fundamentally new helicopter" for the military.

According to the agency, the future helicopter has been created under the codename of "Minoga" lamprey. It will be smaller than the Ka-27, but will keep the "configuration traditional for Kamov helicopters."

In addition, a shipborne version of the Ka-52 Alligator helicopter was developed for Mistral helicopter carrier, ordered in France. The deal fell through, but Russian Helicopters and the Ministry of Defense of the Russian Federation announced that shipborne Alligators will find their use in the Navy.

ROSOBORONEXPORT begins export

This year a foreign customer will receive the dual-control Mi-28NE helicopters and the Ka-52 attack helicopters

Rosoboronexport is discussion the prospects for expanding export deliveries of whole range of Russian helicopters. Traditionally, Rosoboronexport will present to foreign customers the entire line-up of Russian-made helicopters, but special attention during the talks will be on the latest models.

"A lot of efforts to promote the latest Russian military helicopters in the world market have started yielding results. In particular, in 2015 Russia carried out the first export deliveries of the Mi-26T2 heavy-lift transport helicopters, while this year a foreign customer will receive the dual-control Mi-28NE attack helicopters. Moreover, export deliveries of the Ka-52 attack helicopters will start soon. Taken together, all of this substantially enhances our country's competitive position among the world's leading helicopter manufacturers," said Sergey Kornev, Head of Rosoboronexport's Air Force Department, who leads the Company's delegation at the exhibition.

In total, Rosoboronexport delivered more than 100 helicopters abroad in 2015, with the Mi-8/17 military transport helicopters accounting for most of deliveries. By and large, cooperation in the helicopter area (including repair, supply of aircraft weapons, etc) in 2015 was maintained with more than two dozen countries.

In the coming years, Rosoboronexport will be seeking to maintain Russia's strong positions in this segment of the global arms market achieved over the past five years. The Company will continue its proactive efforts to promote Russian helicopters in all regions of its presence, including through establishing joint and license helicopter production facilities and improving the quality of after-sales service, among them the setting-up of service centers on the territory of a number of partner countries with the participation of JSC Russian Helicopters.

Rosoboronexport is the only state-owned arms trade company in the Russian Federation authorized to export the full range of military and dual-purpose products, technologies and services. It is a subsidiary of the Rostec Corporation. Founded on 4 November, 2000, now Rosoboronexport is one of the leading world arms exporters to the international market. Its share in Russia's military exports exceeds 85 percent. Rosoboronexport cooperates with more than 700 enterprises and organizations in the Russian defence industrial complex. Russia maintains military technical cooperation with more than 70 countries around the world.

Verba MANPADS

Rosoboronexport began active promotion to the international market of the newest Russian-made man-portable air defence missile system (MANPADS) "Verba" designed and manufactured by the KBM Scientific Production Concern, a subsidiary of JSC High Precision Systems Scientific Production Association.

At present the Verba MANPADS is entering into service with the Russian Army, and its first appearance abroad was take place at the "DEFEXPO India — 2016" major international land and naval systems exhibition to be held in South Goa, India, from 28 to 31 March 2016.

"Traditionally Russia is ranked among world's leading manufacturers of air defence weapons including man-portable missile systems (MANPADS). We are confident that the Verba will provoke interest of our partners. It is the best weapon system in its class among offered today in the international arms market, judging by the combination of its tactical and technical characteristics and realization of unique technical solutions. It should be noted here that the demand for the Igla-S MANPADS, which is a predecessor to the Verba, is expected to remain at the same level since it satisfies the requirements of armies in many countries, - stressed Sergei Goreslavsky, deputy director general of JSC Rosoboronexport.

Anti-air combat performance of the Verba MANPADS has been significantly improved by introducing a new highly sensitive tri-band optical homer into the 9M336 missile as well as new instruments and a unique warhead featuring an adaptive contact/proximity fuze and increased-weight explosive.

These measures have provided the following improvements:

— Enhanced capability of engaging small-size targets with low thermal signatures, first of all such as cruise missiles and unmanned aerial vehicles;

— Enhanced jamming immunity to contemporary high-power pyrotechnical jamming devices;

— Enhanced combat effectiveness against modern air strike weapons thanks to more powerful missile warhead and high-precision guidance system.

The organic 1PN97N Maugli-2M night vision sight allows target acquisition round the clock and target engagement at a far-off boundary of the kill envelope. The Verba MANPADS can be also mounted on various land, maritime and airborne platforms. Joint employment of the 9M336 missiles of the Verba MANPADS, combat control set of equipment and launch modules makes it possible to build on their basis light-weight mobile close-in air defence missile systems, or to include these assets into existing air defence missile and artillery systems. Optional deployment of the MANPADS combat assets on various carriers allows salvo launching of missiles, which enhances target kill probability by 1.5 times.

The Lebedev Pistol

The testing of the Lebedev pistol (PL-14), commissioned by the RF Ministry of Defense, will be completed this year, announced Aleksey Krivoruchko, CEO of Kalashnikov Concern.

"We are now working within the framework of the technical specifications in the interest of the Ministry of Defense, and our plans are to finish it this year. We hope that it will be in production next year," said Alexey Krivoruchko on the air at the "Echo of Moscow" radio station. He also noted that the MVD may become a new customer of the pistol as well.

For the first time, the prototype of the Lebedev pistol was presented at the "Army-2015" forum. Also, Alexey Krivoruchko announced that an improved and modified version will be presented at the "Army-2016" forum.

As previously reported, the new pistol, which uses a 9x19 mm round, stands out by its low thickness — from 21 mm at the front and up to 28 mm in the grip area. The bilateral location and configuration of the controls of the PL-14 allow it to be used both by right-handed and left-handed users and make it comfortable to wear, draw, and fire.

Particular attention is drawn to the safety of weapons: the trigger/firing mechanism prevents the loaded pistol from misfiring even after falling from a great height onto a hard surface. In addition, the base version's trigger is intentionally made longer and requires more pulling effort than usual. This will prevent a shooter from accidentally firing a shot in a stressful situation when holding a finger on the trigger.

The enhanced handling safety of the pistol is also ensured by a highly efficient round-in-the-chamber indicator, which allows an operator to quickly and unmistakably identify "by touch" if the weapon is loaded.

The versatility of the pistol will enable its use not only as a combat weapon for the army and police, but also as a match pistol for competitions in various categories. As previously reported, Kalashnikov Concern intends to introduce modifications that will allow it to be used in sports events, as well as to release different variants that feature alterations to the characteristics of the trigger/firing mechanism.

Main characteristics of the pistol:

caliber — 9x19 mm
length — 220 mm
height — 136 mm
thickness — 28 mm
barrel length — 127 mm
magazine capacity — 15 rounds
empty weight — 0.8 kg
weight with loaded magazine — 0.99 kg

Kalashnikov will start exporting VIKHR-1

The Kalashnikov Concern has secured its first export contract for Vikhr-1 missiles. This was announced by Alexei Krivoruchko, the Director General, after the opening ceremony of five new manufacturing facilities at the Concern.

According to the Head of the Concern, currently there are two new supply contracts for Vikhr-1: one with the Ministry of Defense of the Russian Federation, and another with a foreign customer. However, he did not specify exactly what country ordered the missiles.

Let us recall that the first batch of missiles was supplied to the Ministry of Defense of the Russian Federation last October. Vikhr-1 is designed to destroy armored vehicles and airborne targets at a distance of up to 10 km.

This missile is used as part of the Vikhr-M 9K121M guided anti-tank missile system developed at the Tula Instrument Design Bureau. The Bureau has been working on this system designed to be installed on Su-25TM strike-fighters and Ka-50 helicopters since 1990. Currently, the system will be used on Ka-52 helicopters.

Alexander Solovyev, the Head of the Udmurt Republic, Sergei Chemezov, the Head of Rostec State Corporation, and Alexei Krivoruchko, the Director General of Kalashnikov Concern, all attended yesterday's opening ceremony for the five new facilities.

The cost of construction and upgrades for the production facilities reached 2.3 bln rubles. The area of the new facilities is nearly 49 thousand sq. m. Investments are expected to halve the time required for the commencement of batch production and commercialization of these new products and technologies.

Last year the Concern increased production by 158% with five new commercially produced military and civil weapons, and the plan for 2016 is no less than 10 new products.

The Kalashnikov Concern is the largest Russian manufacturer of a wide range of precision weapons. A huge segment of its civil products includes hunting rifles, sporting rifles, mounts and tools. The Concern sells its products to more than 27 countries. There are three product brands in the Concern: Kalashnikov combat weapons, Baikal hunting and civil weapons, and Izhmash sporting weapons.

India replaces British fighters with MiG-29K

Russian aircrafts will join a squadron at the Indian Navy base and Vikrant aircraft carrier

The Indian Navy has replaced the British Sea Hurriers with Russian carrier-based MiG-29Ks. The official replacement ceremony for the fighters took place on May 11 at the Navy base in the State of Goa.

According to the news agency, the Russian aircraft will join the squadron stationed at the naval base. In addition, the MiG-29Ks will replace the British aircraft on the Vikrant light aircraft carrier. Sixteen carrier-based MiG-29K fighters have already been deployed at another Indian carrier, the Vikramaditya.

It should be noted that India is now the first customer of these aircraft and has received them even before the Russian Navy. The first contract for 16 aircraft was signed in 2004, and the second one in 2010 for 29 aircraft.

The MiG29K is the 4th generation carrier-based multi-role fighter developed from MiG-29. It is designed for carrying out fleet air defense missions, gaining air superiority, and defeating sea and land targets with guided high-precision weapons day and night and in any weather.

The carrier-based fighter was jointly developed by Rostec enterprises. In particular, KRET specialists designed the SUO-29K weapons control system, the KARAT-B-29K integrated onboard monitoring system, and the 20SP-M-01 jamming dispenser control system.

The MiG-29K is also equipped with a modern Zhuk-ME general-purpose radar made by KRET. These onboard radars feature large azimuth coverage, double acquisition range, lower weight, and higher reliability. The Zhuk-ME has an acquisition range of 200 km and can track up to 10 air targets.

The MiG-29Ks are fitted with RD-33MK jet engines made by UEC. The increased thrust of this engine allows aircrafts to take off from the carrier deck without having to be catapulted. The RD-33MK also features special systems that reduce infrared and optical signatures. The new engine makes it possible for the aircraft to efficiently operate under tropical weather conditions.

HIGH-PRECISION WEAPONS

- Russian holding “High-Precision Weapons” is the world’s largest developer and a producer of high-precision types of arms for the land forces, the navy and the aviation.
- The holding unites 19 leading Russian enterprises that create new generation of high-precision arms.
- Being one of the largest suppliers of the latest arms, “High-Precision Weapons” provides Russian Army and the armies of a several other countries with high-precision arms according to their requirements.
- “High-Precision Weapons” is a founder and a producer of the most effective samples of precision weapons in the world, such as Pantsir-S1, Kornet-EM, Palma, Sosna, Igla-S, Kapustnik-B and others.

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