

## **Interview with Eugene Maslin, head of 12th Department, Ministry of Defense of the Russian Federation by Vladimir Orlov**

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A. Twelfth Department of the Ministry of Defense is in charge of development, testing (new tests have not been carried out for a long time) utilization, storing and delivering nuclear weapons to different services of the armed forces. It is a controlling body carrying out technical policy in the armed forces. In addition, in the 12th Chief Office there are special services that control testing of nuclear weapons on foreign testing sights, record different movements in the earth's crust, including earth-quakes, and have various means of control over seismic and other changes that might follow nuclear weapon tests.

Q. Let's move to the issue of nuclear security because it arouses much concern in the world community. There is a widespread belief that in the Ministry of Atomic Power (Minatom) the problem of nuclear security has been given short shrift while in the Defense Ministry it has been traditionally given proper attention. There is also the feeling that there has been no information on this issue from the Defense Ministry, while Minatom has started to inform the public. How do you comment on this situation?

A. First it is very important to agree on the term "nuclear security." Nuclear material control and accounting is only part of it. It also includes the inner characteristic of the nuclear munitions that prevents static nuclear explosions in any conditions if it is operated normally, or, at least, reduces the risk of radiological pollution during an emergency. This characteristic is provided by the design of ammunition, which rules out the possibility of explosion. Secondly, in the Ministry of Atomic Energy as well as in the Ministry of Defense nuclear security is ensured through super-reliable storage facilities, whose walls and roofs can endure big overloads, etc. The personnel who are involved with nuclear ammunition are also carefully chosen. At present the system of choosing personnel has been improved. Our research institutes have been working out various tests on the basis of physio-psychological traits of individuals. The next thing is training. This is also a system that prepares personnel professionally. There are special training systems in special colleges with special curriculums, and then there is additional training for each kind of ammunition. Then each military group who will have access to nuclear ammunition takes an exam. Only those who pass the exam with good and excellent grades will have access to the nuclear weapons. Thirdly, there is a wide range of technical-managerial arrangements that help ensure nuclear security. It is first of all, physical protection of the nuclear storage facilities. There are several lines of protection that are based on physical principles and are called technical

means of protection. There are appropriate nuclear ammunition transport means (the cars have protection and even while overturned nuclear ammunition will not be seriously damaged, railway cars are also specific and they can provide for proper climate conditions). Not less than three people work with ammunition.

Transport is one of the most vulnerable points because there might be a lot of unforeseen situations. The Ministry of Transport, the Interior Ministry, the Intelligence Service and a number of other departments provide for secure transportation. There are specially trained people who provide for transportation and were taught to defend and to take appropriate measures in any emergency. We have been working in this perspective.

Q. Could you comment on the regrets people have had regarding the moratorium?

A. Not only the Russian military regret that there are no nuclear weapon testing because nuclear weapons have first of all political value. Despite the fact that there are complexes of modeling plants that enable the detection of some things that were usually detected during nuclear explosions, there is a danger of spreading individual nuclear materials without an explosion. For example, such toxic material as plutonium presents serious danger if it is in the soil. Then there is the possibility of the detonation of some material in the nuclear charge in case the warhead is physically damaged or in case of fire. Designers in our country and abroad have worked on security improvements of nuclear ammunition under normal conditions. There is first of all the problem of creating a less sensitive explosive. In the U.S. they have succeeded to create one and we would like to have something similar. But to make sure that it is what we need, we have to carry out nuclear tests, which are banned. Of course, there is the possibility of imitating such explosions, for example Americans refer to hydronuclear tests that help to imitate a nuclear explosion without an energy release. At the time of the first moratoriums in the beginning of the 1960s Americans managed to improve their nuclear bombs with the help of such explosions. Those bombs which later fell over Spain during the aircraft-crash, and thanks to the tests that helped to improve them, they did not explode. Now such tests happen only in the minds of scientists who have been thinking how to improve nuclear ammunition from the point of view of their effectiveness, their size and security. All experiments are under control. We have appropriate agreements with the U.S. That's why all tests planned during the moratorium were connected with improving nuclear ammunition security. I must note that testing and maintenance of the testing area help to maintain professional knowledge and skills of the personnel, and without testing they might be lost. As far as I know the Nevada testing area is maintained in such condition that nuclear tests can be carried out any time. I cannot

say the same thing about our testing areas. But even from a financial perspective it is much easier to maintain the personnel's skills at least with the help of hydronuclear tests than later to teach new people how to do things. And we have to carry out tests for scientific purposes, for example to find a more secure design that will be less sensitive to emergencies. Test should also be used to keep personnel ready and up to date.

On the territory of the Russian Federation, there is a lot of ammunition. Nuclear ammunition has remained only in the Ukraine, Kazakhstan and Belarus. At present a new echelon is delivering a new lot of nuclear ammunition. There is an urgent problem of housing the military. I place great hopes on the governmental commission on nuclear weapon problems with Prime Minister Chernomyrdin as its head. I think that this committee will help to solve a lot of problems. There used to be an industrial commission, but after it was abolished a lot of issues ceased to be coordinated.

To improve the physical protection of nuclear ammunition we have transport-protective devices (TPD), or supercontainers, made to order. They enable one to safely transport nuclear ammunition, for they do not catch fire, they cannot be shot through. In the training in August we had a chance to see a crash of railway trains and the results were most reassuring. We have been working on railway cars and as I have found out that Americans fulfill their commitments in this respect. We have signed with them a number of agreements. Under them we'll obtain some devices that will enable us to increase its safety, to liquidate the consequences of emergencies. We transport nuclear ammunition from the Ukraine in those super containers. But not only the Nunn-Lugar fund helps us in this respect. We have signed a number of agreements with Great Britain, who designed and shipped supercontainers to us in a very short time. Right now another 47 containers have arrived in St. Petersburg and we will immediately use them. They have also delivered armored cars, 18 tons each, trained personnel and are going to train more people to transport nuclear ammunition in those cars. We have other agreements with the Federal Republic of Germany and France. these countries will make containers of another type specially for our Defense Ministry. We have agreements with Italy on radiation devices that enable us to monitor radioactive pollution, etc. Nevertheless, we can do all these things on our own.

I will raise another very small question of finance. All aforementioned has been written in the Federal U[UR^Y program on improving nuclear security. Appropriate departments have been studying it for more than a year and a half. The program covers all problems, especially technical ones. Technical protection devices have been outdated. The storage facilities were built in the 1960s and need major repairs. All this is stopped because of

the money shortage. So this federal program stipulates for the technical side of nuclear security.

Q. But have any funds been allocated under this program?

A. No, they have not. You must have been told about it in Minatom as well. There are a lot of ministries which are interested in it. Nuclear security includes not only nuclear ammunition, but also missile carriers as well. I think that the main contribution we did to the elaboration of a national system of nuclear security, a system which will be nation-wide. We have developed such system together with Minatom. There is space for all ministries there: the Interior Ministry, etc. It will be submitted to the governmental commission and approved by the government. Q. What do we actually need and what can we do without regarding what has been done for us by Americans, Britts and French? What do we need to upgrade our security system?

A. It depends on the prices. Prices of which year do you mean? This is the major problem. That's why we need the aforementioned program with a fixed budget. In these issues we are dependent on other programs of the Defense Ministry. At the same time manufacturers of military equipment are dependent on our orders and feel almost as uncertain about their future as we do: whether we will have funds to pay the orders or not. Apart from that we need a carefully-thought over military budget to pay our personnel. So we hope that the State Duma will hurry with this issue.

Q. There is an opinion that your department is privileged in comparison with other departments inside the Ministry of Defense because you deal with problems of very special weapons.

A. I will not comment on that. Of course, we manage to carry out our tasks. I report on all important issues to the General Headquarters officer, first deputy minister of defense, chief of the Armed Forces, General-Colonel Svetov. He helps us a lot, but there is a lot of questions that even he, with his great talents, is unable to solve. For example, we have great debts to civilian departments for electrical power, gas supplies because we have first of all to pay salaries, which is usually one month late. Then we have to house our personnel, which is also a big problem. There is a need for 4 thousand apartments, but we managed to build only 500 last year. I report about it to appropriate officials. So I would not say that we are very privileged. Probably, in comparison with others our situation is a bit better since a few months ago the President made a decision to finance first of all those facilities that are connected with the nuclear weapon complex.

Q. It is interesting what you said in this respect about Nunn-Lugar fund. There have been controversial points of view regarding

this program. On the one hand, when I met with the deputy minister of defense, Mr. Smith, he sounded very optimistic and said: "Though not much has been done under the Nunn-Lugar program, the year of 1995 will be a break-through and Russians will be the first to feel it." On the other hand, officials in Moscow told me that Americans have been helping not Russians but themselves with this fund, that Russians can build and already have projects of containers which are not worse than American ones. They said that the best thing Americans could do is to finance our industry so that we would give work to our capacities.

A. You are absolutely right and any country would do the same that the U.S. has been doing. They allocate funds, but do it for their own manufacturers and deliver containers to us. Of course, we could build such containers and we have actually built and been building supercontainers, TPDs. Such TPD cost 32 million rubles a month ago. Now it might cost even 50 million rubles. And containers that Americans have been delivering to us are absolutely free-of-charge. They have been also shipping us equipment that we do not manufacture. And everything is free-of-charge to our Ministry of Defense. why not make use of it? There is a point of view that they want to disarm us. But that is only natural. Americans have been afraid of us for a long time, they still are and they will be for some time in the future. But we try to see that agreements we conclude are mutually beneficial. As far as Nunn-Lugar program is concerned, Americans have been fulfilling their commitments very well. In March the U.S. Congress will allocate more funds and they have asked us to name what we need most. So we asked for another 600 containers despite the fact that the English and French also deliver them, but we need much more. Then they offered to equip few train cars with anti- emergency kits since we transport nuclear ammunition by railway. This is an example of different approaches to the same problem on transportation: Americans transport nuclear warheads by air while we by railway. They think that by aircraft is much safer than by railway.

So we suggested they design carriages that can be used in emergencies. Then Americans could help us with diagnosing the railway, which would enable us to prevent catastrophes long before a train comes to the dangerous point. They could supply computer equipment, which is one of the weak points of our industries, to establish a reliable nuclear ammunition control and accounting system. Americans have suggested a number of issues themselves. I think that all projects and proposals have to take into consideration Russia's interests. If we have money then we will be able to do that ourselves. But now we can exchange information and work out a common approach as to how to resolve our problems in Russia and how to respond to emergencies.

Now the nuclear terrorism issue has become a very urgent one. This problem has been resolved in Minatom and the Ministry of Defense

just as well as they have been done in the U.S. Americans have been amazed and wondered how we managed to withdraw all tactical nuclear ammunition from Eastern Europe in a month. They are very much surprised how efficiently the Russian military resolved many scientific, technical and military issues. That gives us assurance that we can do everything on our own if we are provided with substantial funds.

Q. As far as nuclear terrorism is concerned, were you informed of any cases of it?

A. Let's agree about the term "nuclear terrorism." Nuclear terrorism is a theft (it is impossible in the Ministry of Defense), or a robbery if terrorists assault a railway car with nuclear ammunition, which is more probable. But what for? To blackmail the way general Dudayev did? This is also possible. But the whole security system impedes it. Of course, the unstable political climate, social upheavals, ethnic conflicts contribute to the possibility of such assaults. There were several cases of nuclear materials theft, but in all cases the amount was not enough to create a weapon. That's why we go in for it together with other ministries. We have also carried out a training exercise "What if?". We have to foresee different situations when some retired officers are unsatisfied and desperate and might want to steal it. We also very thoroughly choose personnel that have access to nuclear weapons and materials. Here we do not tolerate cases of drunkenness among officers and enlisted men. I have reported about it to the interdepartmental commission in the Security Council and it reached the decision on appropriate financial and other measures to improve security system. but we have not accounted such cases so far. And I hope that there will not be any. We also withdrew nuclear ammunition from Chechnya a long time ago.

Q. But pro-Dudayev fighters could penetrate into the facilities where nuclear weapons are dismantled.

A. Yes, Mr. Dudayev threatened to attack nuclear power stations and other nuclear facilities. That's why we try to be all the time in good combat readiness. Thousands of personnel are on guard duty every day.

Q. Let's go back to the question of nuclear tests. I think that it is not for nothing that the meeting of Security Council was to be on March 1. Or will be its next meeting still devoted to criminality? No matter when it will be, I think that we will discuss this issue in March. Some steps, even demonstrative ones, are expected from the nuclear powers before New York Conference on the NPT extension. One of these steps might be some break-through regarding a comprehensive nuclear ban treaty.

A. First of all, a comprehensive nuclear ban treaty is very much

needed. We support its indefinite extension. For the last 25 years it has played a positive role. There are different points of view regarding this treaty. I think that by the years 2000 or 2003 nuclear weapons will exist. But in the long run I think that we will sign the treaty in the future. On the other hand, many non-aligned countries, like Nigeria, Mexico, think it will be discriminative until nuclear states give absolute assurances not to use or threat to use nuclear weapons. There are a lot of questions to it. For example, some countries think that Israel should accede to the NPT, others, including Israel think that there can be no question of it.

Comment. And if there are 200 nuclear warheads there, then the perspective is very gloomy.

A. Yes, the same with India and Pakistan. There are too many problems regarding these countries. Though we think that there should be a comprehensive nuclear ban treaty, until it is concluded it would be very sensible to make a few peaceful explosions to improve security of warheads. I personally think that nuclear explosions should be carried out under control. Our institute in cooperation with Arzamas-16 (Central Physico-technical Institute) has worked out a method of peaceful nuclear explosions to eliminate or to bury radioactive wastes, including naval reactors under international control. Such explosions would be very inexpensive and help to quickly solve the problem. This is how we understand the problem.

Q. As I understand, not only Russian military think it to be very important to carry out a few peaceful explosions. The American military also feel the necessity to carry out such explosions.

A. I can tell you that Americans are ahead of us in this respect and can not worry and extend the moratorium. They managed to rearm themselves with more secure warheads since they began to use less sensitive charges. We cannot rearm with warheads of less sensitive charges for political reasons, though China has been doing it.

Q. What would you say about computerization of nuclear control and accounting system?

A. We have a computerized system of control and accounting, but it needs improvements. The system allows to know about where each ammunition is at a certain time. Every six months we take inventory and we have a mechanism for it. No people apart from personnel have access to the storage facilities. Each ammunition even on its way to another depot is under strict control. There is a national program on physical protection and control for twoyears, but it needs financing. We want to computerize this system the Americans did it. I think our software is better than the American one, but we have a computer shortage.

Q. You mentioned the necessity to upgrade nuclear facilities. Which nuclear facilities need it most badly?

A. We close down the most dangerous ones. We have recently reduced the number of storage facilities of nuclear ammunition by 2,7. For example, we closed down four facilities in the Ukraine, one near Gomel in Belarus, in Semipalatinsk, in Nalchik in Russia and a number of facilities in the Far East and in the North. A lot of anti-aircraft facilities were closed down. We have an agreement with the U.S. under which all ammunition to tactical, operational-tactical missiles, nuclear mines, artillery ammunition are subject to destruction before 2000. Many of them have been destroyed already, and this means an increase in security, reduction of transport etc.

Q. You said that nuclear weapons will be more humane in the next century. In what perspective they can work here?

A. You know that there are electro-magnetic emission, electro-magnetic impulse apart from radiant flash. This emission may impede the energy supply, various radiolocating devices and electric means, even the frames of aircraft and warships, etc. It could have an impact on technical systems and to a less extent to people. In this perspective we should upgrade nuclear arms.