# Igor Kravchuk (Petropavlovsk – Kamchatskiy)

"Glory to the Sailors! Shame on the Navy?"

The "Express-Kamchatka" newspaper, August 11, 2005

Not many believed that the crew of the mini-submarine AC-28 will be saved, even though the 13 meters long cockle-shell would be eventually brought to the surface, a titanium coffin with seven dead sailors inside. But, as it turned out, death had only taunted the boys with his scythe, through the portholes, at the depth of 200 meters. They had already said their goodbyes: wrote letters to their wives, which they would later give to them, to keep as the mementos, when the small British autonomous sub "Scorpio", a remotely operated vehicle, cut with its powerful cutter the bonds holding the bathyscaphe. The American "Super Scorpios" were about to arrive, but were no longer needed.

Surely, from now on, the six sailors and the 59 years old engineer, the crew of the bathyscaphe, will drink each year to the glory of the British arms, Her Majesty's fleet, and the American Navy, for the rest of their lives. But not to the Russian Navy. Our Navy, once again, got the thorn wreath of shame. As the list of our excuses runs: did not have enough time, could not do it, did not have the rescue equipment, wanted to avoid publicity...

It seems the "Kursk" tragedy has not taught our Navy much. Then, we called on the Norwegian divers to open the submarine's hatches. It had turned out that for some reason we did not have our own divers available, although we used to be "ahead of the whole planet" in diving R&D. Now, again, we made an emergency call to the world, "Brothers, help as you can: our bathyscaphe has drowned". It was shameful, but honest. At least for that we should be thankful to our silver headed admirals, who have not been accustomed neither to honesty, nor to asking for help from abroad. We used to sacrifice to self-reliance tens and hundreds of lives of soldiers and sailors in the fear of disclosing our "secrets". But our call for help was an acknowledgement of weaknesses of our fleet. We have acknowledged that although our strategic subs could destroy half of the world, we are unable to save a tiny submersible cockle-boat that has sunk at a shallow depth.

## CLUBS INSTEAD OF SHIPS

In the previous issue, we have written of the visit to Kamchatka, on the eve of the Navy Day, of Defense Minister S. Ivanov, and of his coming to Rybachiy for the official opening of a new officers club (the Officers Palace), in building of which a lot of money have been sunk. It now

transpires that what are needed are not new recreational facilities, but living wages, new ships, rescue equipment and vessels, such as the British "Scorpio". As we have written, not a single new combat vessel arrived to bolster the Kamchatka fleet in the last 15 years, except for two or three nuclear submarines laid down in the Soviet times. I would add that not a single bomber or fighter plane has arrived either. Everything is aging, gets corroded, written off, plundered. It is sad to watch this degradation knowing that military budget of out mighty neighbor, China, exceeds ours by 15 billion dollars. But our rulers have a more important thing than defense on their minds. Nothing matters as long as the oil prices remain high…

# A CHEKIST WAS IN CHARGE OF THE RESCUE OPERATION

What I don't get is what qualifications Defense Minister Sergei Ivanov, in the rank of lieutenantgeneral of the KGB, had to assume on the spot operational control over a marine rescue operation? Perhaps he took charge of the operation to save his own skin, and not out of concern for the lives of the sailors. He is considered Putin's successor, but if what had been brought to the surface proved to be a coffin with seven corpses inside, he would be out of both the job and the line of succession.

The minister started to breathe easier when the hatch got opened from inside and live sailors came out to the light of day. In his jubilation, the minister proclaimed the sailors from the AC-28 heroes and promised they will get awards. He even put on, on camera, an army field cap, with a non-regulation cockade made of a marine badge. In truth, I don't get what was so heroic in what the crew has done? They got entangled in the cables, failed to get out on their own, blew up a secret mission, and damaged an expensive antenna device. In Stalin times, they now would be interrogated on Lubyanka, and not prized for heroism. They say they have demonstrated perseverance and courage. Excuse me, but how any of us would have behaved sealed in a capsule with minimal reserves of food, water, and air? We would be sitting quietly, as mice, without much thrashing around. And this is exactly what the crew did. We were told that they had food and water to last them for five days. It turned out there was just enough for each to have a cracker and a few mouthfuls of water a day. The state awards will be both their consolation for the ordeal and the sign of forgiveness.

# THE ANONIMOUS CALL

As usual, at the beginning, information on the bathyscaphe in distress was contradictory. Some were saying that the bathyscaphe got caught by a fishing net, which did not ring true, then there

2

were reports about some antenna. It was said that they had managed to pull the bathyscaphe 100 meters closer to the surface, or 60 meters, according to a later report, but nobody was saying how far was it from the shore. The accident became news thanks to an anonymous call to the press made by a woman, who said she was the wife of a submariner. We should thank this courageous woman. As usual, at first, the military were denying everything, but then acknowledged the emergency, and it became a major world news item. The Navy, as usual, wanted initially to keep it under wraps, hoping to resolve the situation quietly, on their own. There would have been an open scandal later had the sailors died.

## SECRET INSTALLATIONS

The AC-28 (a rescue underwater vehicle, the project 1855) mission was apparently to blow out the ballast tanks of an underwater surveillance antenna device. Those installations are said to be located seaward from the Schipunskiy Cape, from Anglichanka<sup>1</sup>, and from the Beryozovaya Bay.

A hydro acoustic antenna, as reported by the national press, is a lattice holding hydrophones and measuring 70 by 20 meters, and 2 meters high. The thing is mounted on ballast tanks, and, just as a submarine, submerges when tanks are filled with water, and is held in place by anchors. It comes to the surface when the tanks are blown out with air. Reportedly, the AC-28 was supposed to bring to the surface the blow out tube intake.

Possibly, the strong underwater current caused the AC-28 to get entangled in all those tubes and cables of the hydro acoustic antenna.

# WHERE WERE THOSE DIVERS?

Why is that the divers have not been brought in to take part in the rescue? The Russian press said we did't have that kind of divers. It is not true. In Lomonosov, Leningrad region, there is a deep sea divers' base headed by Aleksandr Zvyagintsev, a holder of the Order of Hero of Russia. But, during the first 24 hours of the emergency, nobody from the Navy General Staff contacted them, because, they say, the Pacific Fleet has its own divers.

Then, one may ask, why the Pacific Fleet divers were not used? The military say they were engaged in the rescue operation but have not been able to accomplish anything. I am not an expert on diving, but it transpires from open sources that, before divers could start working at

<sup>&</sup>lt;sup>1</sup> A garrison town near Petropavlovsk-Kamchatskiy.

these depths, they have to spend several days in a pressure chamber adjusting to the pressure. But there was no time for that.

I came once upon an article in the "Popular Mechanics" (issue 1, January 2005) that said that there had been invented the Atmospherics Diving Suit (ADS) called Newtsuit. There is normal pressure inside the suite, and the diver breathes normal air. Essentially, it is a mini-submarine, so there is no need for compression and decompression. And this is what the article said on page 56, "After the 'Kursk' tragedy, the Russian Navy's Directorate for Search and Rescue Operations bought from the OceanWorks International Corp. eight Atmospherics Diving Suits of the type Newtsuit HS1200 suitable for depths up to 365 meters".

So, where are those suits? According to press reports, the Pacific Fleet has one of them, and the suit is located on the rescue vessel "Sayany". However, the suit and the auxiliary equipment that include a winch could not be just put on a plane and delivered to the scene of the accident. At the time of the scheduled maintenance operation conducted by the AC-28, the "Sayany" was too far away. She was dispatched to the scene, but, having maximal speed of 5 to 8 knots, she would have arrived not earlier than the 9<sup>th</sup> of August. Why do we need this slowcoach for a rescue vessel?

I think the military prosecutor office, chekists, and Deputy Zavarzin should try and find out where are those eight expensive suits (each costing about 2 million dollars), and what condition they are in. Just to make sure that they have not been rented out to oil companies for sea shelf drilling.

#### THE SECRET ANTENNA

It was not for nothing that the AC-28 had found itself in Berezovaya Bay. It was supposed to work on an underwater surveillance antenna. The Americans littered ocean and sea floors with hydrophones and connected them into a single network. The USSR lacked recourses to do the same. All we can afford are stationary hydro acoustic surveillance systems monitoring our coastal waters.

It is said there are also other, very secret, antennae on Kamchatka, which detect submarines not acoustically, but with help of radio waves, just as radars do with the above surface targets. Possibly, the AC-28 was servicing just such an antenna.

Military forces in the North East have the military unit 51401 called the 71<sup>st</sup> Surveillance Region. It comprises several hydro acoustic stations situated along Kamchatka coast. The military listen into the depths of sea to detect enemy submarines. Data from the acoustic stations is relayed to the Battle Information Post (BIP) of a flotilla.

4

One of these posts is located at Anglichanka. In late 1990es, it has been upgraded with an experimental nuclear submarines detection system "Dnestr – B". There it was to be tested before putting it into service by the Navy. The system included a gigantic antenna, 120 meters long and 15 meters high. As far as we know, it carried hydrophones, but it mainly functioned as underwater radar. The antennae was towed 12 miles from the shore and sunk at the depth of 200 meters. There were tanks situated along its long sides. Tanks along one of the sides were ballast tanks, and would sink the antenna when filled with water. After sinking, the antenna was anchored. The "Dnestr – B" surveillance system has shown good results. Its radar range was 200 miles and reached several kilometers deep. The system was able to detect small targets. But in 1997 it went blind. The divers sent to investigate did not find the antenna were it was supposed to be anchored. Most probably, it was caught by a dragnet or an anchor and put adrift.

### THE UNIDENTIFIED OBJECT IS TOWED BACK TO KAMCHATKA

In 2000, the world's news agencies reported that an unidentified object had been had been discovered near the Japanese shores. It turned out to be our antenna. Our military towed it back to Kamchatka and put in a dock of the Vilyuchinsk ship repair plant. Reportedly, the repairs were completed last year and the antenna was put in place for further testing and tuning. So, it cannot be excluded that this was the antenna the AC-28 was working with. There are a lot of cables, pipes, and ropes coming in and out of the antenna, so it is no wonder the bathyscaphe got caught in them.

#### WHO HAS DIVULGED THE MILITARY SECRET?

As to the "Dnestr – B" system, it's hard not to mention that it had been plundered, with the officers' tacit consent and under the sleepless eye of the military counter-intelligence. While the antenna drifted for three years toward the Japanese shores, and the ground part of the system was not functioning, the sailors of the military unit 27120 were busy removing from it valuable electronic parts, the capacitors. If you ever have taken a capacitor apart, you know there is a roll of aluminum foil inside. But unlike the capacitors used in consumer electronics, the foil in the military grade capacitors is not just made of aluminum, but contains silver, platinum, palladium, and other rare-earth elements. Throughout armed forces, billions of rubles worth of military equipment has been plundered and ruined because of those capacitors.

A stocker serving in the military unit 27120, Aleksey Abramov, and his comrade, Andrei Devyatov, have been stealing, for several month in a row, electronic boards from instrumentation racks. They would take these boards to the boiler room, cut out the capacitors, and burn the rest in the furnace. Altogether, more than a hundred boards have been stolen. The KM series

capacitors containing precious and rare-earth metals the sailors sold, for 1200 rubles, to "individuals whom the investigation failed to identify", but who, in fact, had been regularly touring military bases and buying stolen electronic parts.

In 2001, military tribunal sentenced Abramov and Devyatov who had plundered the secret system "Dnester – B" to 7 and 5 years of imprisonment, respectively. After I wrote about the case, an expert commission of the General Staff decided that I had divulged top secret information. Office of the Chief Military Prosecutor opened a criminal investigation. The investigation was assigned to the military department of the FSB<sup>2</sup> of the Pacific Fleet. Their investigator came from Vladivostok to Kamchatka to question me as a suspect. But there was not much they could do: I could not be considered a carrier of state secrets, since I had not been cleared to access them, and therefore could not have divulged them.<sup>3</sup> They unburdened themselves of the case by passing it on to the "coffins house"<sup>4</sup> on the Sovetskaya street, the Regional Directorate of the FSB, where it was then promptly closed.

If the antenna the AC-28 was working with was indeed the "Dnester – B" antenna, one could say that the surveillance system has been cursed: it was again badly damaged when, to save the crew, the British "Scorpio" was cutting through all those antenna cable and pipes. Perhaps it sustained even greater damage in the first two days of the accident, when the military were using a dragnet trying to free the bathyscaphe.

#### MERCURY FILLED BATHYSCAPHES

#### AND A CUT OFF HEAD

On board the bathyscaphe in distress, there was a 59 years old engineer, Gennadiy Bolonin, who represented the company "Lazurit", which had developed it. These titanium hull bathyscaphes (officially called Underwater Rescue Vehicle), were developed by "Lazurit" to help rescuing crews of submarines at diving depths up to 500 meters. The so-called Project 1855 "Priz" rescue vehicles have the following characteristics:

displacement - 55  $M^3$ ;

speed: maximal horizontal. -3.3 knots, cruising -2.3 knots; vertical -0.5 knots; log speed -0.6 knots;

range – 21 miles at the cruising speed;

<sup>&</sup>lt;sup>2</sup> Federal Security Service, the heir of the KGB.

<sup>&</sup>lt;sup>3</sup> It should be noted that lack of clearance to access sensitive information was not a factor in persecution by the FSB of a Russian military expert, Igor Sutyagin, who was convicted, in 2004, to 15 years of imprisonment for divulging state's secrets. Concern over Sutyagin's conviction was expressed by Amnesty International and other human rights organizations.

<sup>&</sup>lt;sup>4</sup> So called because of the rectangular shields prominently featured on the FSB's emblems that grace the façade of the building on the Sovetskaya street in Petropavlovsk-Kamhatskiy.

diving depth - 1000 m;

dimensions - 13,5x3,8x4,1 m;

submerged operation time – 120 hours, the same with rescued sailors on board - 10 hours.; crew of 3 plus up to 20 rescued sailors.

The AC-28 was built in 1989 году. Altogether, there were 9 vessels of this type built. All of them are based on surface rescue ships, which make them difficult to launch in rough seas. Two of these rescue vehicles are kept in the hold of "Georgiy Kuzmin", which is based at Kamchatka. At least, that is what the situation was by mid 90es.

A series of accidents has marred the record of these mini-subs.

It is a little known fact that mercury was used in one of them to fill ballast tanks. The main purpose of these vehicles is rescue of submarine crews: the mini-sub should be able to attach itself to a sunken submarine and evacuate the survived crew members. To be able to do that, the rescue vehicle has to be tilted to align it with the submarine and its escape hatches. It is by pumping mercury to and from different ballast tanks that the tilting of the rescue vehicle was to be achieved. After completion of the mission, the mercury was to be simply dumped into the ocean to allow the vehicle to surface. However, in early 90es, it was decided to substitute water for mercury. It turned out that that the mercury seeps through the hull and creates dangerous concentration of mercury vapor in the air inside.

In 1992, the "Georgiy Kuzmin" was taken to Vladivostok. There, mercury was drained and the ballast tanks enlarged to allow for use of water. Someone from the crew got in touch with the coastal mafia and offered the mercury for sale. The deal apparently went sour and Warrant Officer Steshenko got his head cut off by the bandits. The military have written this off as merely an accident: allegedly he was drunk and got himself under a streetcar. Nobody investigated the source of his sudden wealth, which he had been spending in bars. The mercury remained on board the "Georgiy Kuzmin", in small cast iron tanks, in sealed wooden boxes. In 1994, an inspection on board the "Georgiy Kuzmin" discovered more than 600 kilos of the mercury missing. The thieves were caught and convicted. A part of the mercury they had managed to smuggle ashore and hid in an apartment in Petropavlovsk – Kamchatskiy. The rest of it they had hidden under the deck. The military are saying there is no mercury on board the "Georgiy Kuzmin" and the mini-subs use only water as the ballast. However, kilos of mercury are routinely found in Petropavlovsk – Kamchatskiy.

In 1980es, the Soviet Navy got two unique ocean going rescue ships, "Elbrus" and "Alagez", (built under the code name Project 537). Each carried four different mini-subs, a robotic underwater vessel MTK-200, and diving equipment for work at the depths of up to 250 meters.

7

Last year, the "Alagez" with four mini-subs on board came to Kamchatka. We don't know whether the diving equipment is still there.

We would be grateful if our readers could update us on the situation with the diving equipment. We don't expect the military to enlighten us: they keep everything secret and report that everything is in tip-top shape.

English translation © Efrem Yankelevich, efrem@englishwriting.ru

TO THE CONTENT PAGE