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THE TOMB

SPECIAL INVESTIGATION: 118 men died trapped inside the Kursk. One man and a ruthless regime stand accused

THIS SAILOR WAS ONE OF 118 MEN WHO DIED WHEN THE KURSK WENT DOWN. IS HIS SCRIBBLED NOTE OUR ONLY WAY OF FINDING OUT WHAT HAPPENED?

Special investigation by Christine Toomey

THE 118 SEAMEN WHO LOST THEIR

Dmitry Kolesnikov kept his passion for writing poetry private. As lieutenant captain aboard Russia's supreme underwater war machine – the state-of-the-art nuclear submarine the Kursk – the towering 27-year-old officer, nearly 6ft 4in tall and 16 stone in weight, rarely let other crew members see the softer side of his nature. Nicknamed "Solnyshko" or "Zolotoy Malchik" – sunny or golden boy – because of his copper-coloured hair and optimism, Dmitry was a tough athlete and keen wrestler who seemed to excel at everything he did. His father had made sure of that. When he was three, Dmitry was hauled up one of the highest peaks in the Caucasus mountain range by his father, Roman, who admits he took his son climbing less for enjoyment than to instil discipline. "How else would he have learnt to be a real man?" Tough love reaped its rewards.

Dmitry and his brother, Alexander, younger by two years, idolised their father, then a first-rank captain aboard an earlier class of nuclear submarine. The boys grew up awed by tales of maritime adventure and relished rifling through Roman's bookshelf; their favourite title was Killer Submarines. Both yearned to follow in their father's footsteps. "I did not actively encourage them," says Roman. "I used to tell them, 'You will never earn lots of money. You will lose your health. Nobody will say thank-you. But you will make the best friends anyone could in life.'" By the time the boys reached their late teens, a military career seemed an even less attractive prospect. The Soviet Union had begun to splinter, its military might crumbling with the collapse of communism. "In my day, naval officers were heroes, the hope of the country," Roman reflects, surrounded by naval memorabilia in the family's cramped St Petersburg apartment. "Then the military became so humiliated and reviled, they were advised, when off duty, to wear only civilian clothes so they would not be recognised."

Undeterred, both boys entered the naval academy in St Petersburg, from which Dmitry, or Mitya as his family called him, graduated with the highest honours in 1995 – followed two years later by his brother. Dmitry was immediately sent to serve with the Northern Fleet, stationed within the Arctic Circle in one of the network of secret military settlements and ports strung along the coast of the Kola peninsula. Within two months his dream of becoming an *atomshik*, as nuclear submariners call themselves, was realised. His first active posting as a junior engineer was aboard the Kursk – a Project Antey 949 or Nato Oscar II-class nuclear submarine regarded as one of the jewels in the crown of the fleet's submarine flotilla. Soon after Dmitry took up this position, his father was granted permission to visit him on board. The retired submariner was astounded by what he saw.

To compare the submarines Roman had served on in the 1960s with the Kursk, he said, was "like comparing a student hostel with a Sheraton hotel". In his day, submarines were so cramped that crew had had to constantly duck their heads as they moved around, and ratings sometimes had to sleep on the floor. At 154 metres long – more than twice the length of a Boeing 747 – and 18.2 metres wide, the 10 Oscar II submarines operated by the Russian Navy are the largest "hunter-killer" submarines ever built.

Divided lengthways into nine compartments, each with three- or four-level decks, the Kursk had a formidable arsenal of weapons. But it was not the firepower or machinery that astonished Roman as much as the luxury of the crew's living quarters. All senior officers had their own cabins, other officers shared two to a room, while the ratings had bunks in quarters close to their positions throughout the vessel. On the second and third deck of the fourth compartment were two recreation rooms. One contained a sauna, solarium and six-metre swimming pool. The other consisted of a relaxation area, with one corner dedicated to playing chess and another to watching videos. This housed a small aviary and an aquarium, potted plants and a few cats; domestic cats were allowed on board if a seaman's family was away on holiday and had no neighbour to care for their pet. To the rear of this recreation area was a row of rocking chairs from which the crew could press buttons to alter digital images on the surrounding walls to fit their mood – ranging from giant pictures of pine forests to snowy landscapes. "It was a floating palace, an amazing feat of military

LIVES

Left: an officer attempts to calm Nadezhda Tylik, whose son Sergei (outlined, above left) died in the Kursk. Soon after, she was forcibly sedated. Far left: the Kursk's commemorative banner. Below: Dmitry Kolesnikov (top right and outlined above) in 1988, with his brother, Alexander, mother, Olga, and father, Roman

PREVIOUS PAGES, INSET, AND THIS PAGE, CENTRE: EPA. PORTRAITS: PRAVDA

engineering," says Roman, a stocky 60-year-old, shaking his head.

Dmitry's first commanding officer was Victor Rozhkov, then 40, who had been appointed captain of the submarine in 1991, while it was still under construction. Like others of its class, it was named after a Russian city in 1992. This was part of a desperate move, at a time when central funding for the military was being savaged, to secure sponsorship for the vessels in the form of cash and essential food supplies from the cities they were named after. In the case of the Kursk, this meant apples, chicken, sugar, flour and, at Christmas, plenty of the tasty sweets for which the southwestern Russian city was renowned.

In 1994 Rozhkov oversaw the launch of the Kursk and put it through an exhaustive series of exercises until it was commissioned into the fleet's submarine flotilla in January 1995. Rozhkov, who prided himself on consulting with his senior officers before issuing orders, recruited a crew that included not only promising young officers like Dmitry, but many seasoned submariners. He resigned his command of the vessel in 1997, however, and was replaced by the far more authoritarian, teetotal Captain Gennady Lyachin. Over the next two years, virtually the entire crew of the Kursk changed. Some were promoted to other vessels, some retired, some left, unable to adjust to Lyachin's style of command. Only a dozen crew members recruited by Rozhkov remained, among them Dmitry, who was promoted to commander of section 7, the engine room.

"Mitya continued to serve under Lyachin because he had so much respect for him. Otherwise he had intended returning to St Petersburg to take up a post in scientific research," says his father. By this time, Dmitry's brother, Alexander, had joined him as an engineer with the Northern Fleet. The brothers shared a one-bedroom apartment in the closed town of Vidyayevo, where temperatures drop to -30C in winter. The apartment had no central heating, was plagued by a faulty sewage system and walls so thin the men could hear their neighbours whisper. ⇛

'THE SUB WAS A FLOATING PALACE, AN AMAZING FEAT OF MILITARY ENGINEERING'

Still "filled with romantic ideas about the sea", his father says, Dmitry had personal reasons for finding life there hard. In December 1999 his mother, a secondary-school chemistry teacher, had introduced him to a young colleague of hers, a biology teacher two years his senior, named Olga. Within four months the two were married. A month later Dmitry returned north, while his wife stayed in St Petersburg. Early last summer she visited Dmitry, who took her on a tour of the Kursk. The newlyweds made a sentimental home video of the visit in which Olga can be seen surveying the baffling array of gauges and switches in the turbine room and declaring: "I am shocked that you have such serious work... I will take care of you even more now. I will love you fiercely."

The romance inspired Dmitry in his love of writing poetry. While other crew members made the most of the long summer evenings in the land of the midnight sun, enjoying picnics and barbecues in the forests around Vidyayevo, he penned love poems to his wife. Though he was optimistic by nature, some of his poems took on a darker tone. One that particularly unsettled Olga at the time read: "When the hour comes for me to die/ Though I push these thoughts away/ I want time to whisper just this, my beloved/ How much I love you."

On August 10, 2000, Dmitry's 27th birthday, he reported for duty on board the Kursk. He told his wife he would be away at sea for four days. Before he left he wrote Olga a letter, which she opened on the morning of August 12. In it Dmitry told her again how much he loved her: "I could drown in your eyes," he wrote, "like a real submariner, without any sound."

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As Olga read those words, Dmitry's mind was far from such romantic thoughts. The young naval officer was powering through the Barents Sea towards the position 69'40" N, 37'35" E, northeast of Fisherman's Island. The Kursk was one of more than 30 warships, submarines, auxiliary vessels, aircraft and 10 shore units taking part in naval exercises carried out in the area by the Northern Fleet each summer. Every year the manoeuvres are monitored by Nato, who this time were paying particularly close attention; the manoeuvres were billed as one of the most ambitious since the collapse of communism.

In overall command of the exercises was Admiral Vyacheslav Popov, the fleet's highly volatile but popular commander. Popov had good cause to feel edgy as the manoeuvres got under way on Friday, August 11. Their success could cement his chances of promotion to the position of head of naval headquarters in Moscow. Those skilled in reading smoke signals from the Kremlin believe Popov's promotion could in turn free the naval head Admiral Vladimir Kuroyedov for elevation to the position of minister of defence. Popov chose to oversee the manoeuvres from the Kirov-class heavy missile cruiser the Pyotr Veliky, or Peter the Great. Popov felt in good company. The commander of this warship was Vladimir Kasatonov, who offered Popov good connections – the Kasatonov family is one of the country's most illustrious naval dynasties.

Throughout the exercises, every vessel was to carry out minutely planned tactical manoeuvres to test the fleet's capabilities at firing missiles, torpedoes and artillery at targets both on shore and at sea. The mission of the Peter the Great and the other surface ships was to act as targets for the Kursk and other smaller submarines firing dummy torpedoes, programmed to run underneath their targets rather than hit them so that the torpedoes could be recovered later. The Kursk was expected to test-launch one of its Shipwreck cruise missiles, also equipped with a dummy warhead. In addition, the Peter the Great was under orders to test some of its array of weapons, which included Shipwreck missiles, by firing them at floating metal targets equipped with radar reflectors to make them imitate the dimensions of a large ship.

Secretly monitoring the manoeuvres at a distance were Nato ships that included: the American surveillance vessel USNS Loyal; the American nuclear-powered submarines Memphis and Toledo; and the Norwegian naval reconnaissance ship Marjata, which was moored 20 kilometres away from the perimeter of the 400-square-kilometre exercise area. Also picking up data was a network of secret hydrophones with which the Americans have permanently peppered the floor of the Barents Sea. Further afield, acoustic data on the exercises were being analysed by the Norsar seismic research institute in Norway and by the Norwegian Navy's northern division headquarters in Bodo.

In a cavern buried deep inside an Arctic mountain of the division's Reitan command centre, Rear Admiral Einar Skorgen was poring over a giant electronic map charting the positions of the Russian vessels. Once frontline command posts at the height of the cold war, these listening stations have had less to worry about since the collapse of communism. Over the last 10 years Russia has decommissioned 100 submarines, partly as a result of international arms reduction treaties and partly because of lack of funds, most of which have been left to rot in military harbours along the Kola peninsula. Despite the Russian president Vladimir Putin's ambitions to rebuild his country's once proud navy, it remains plagued by a chronic lack of funding and low morale.

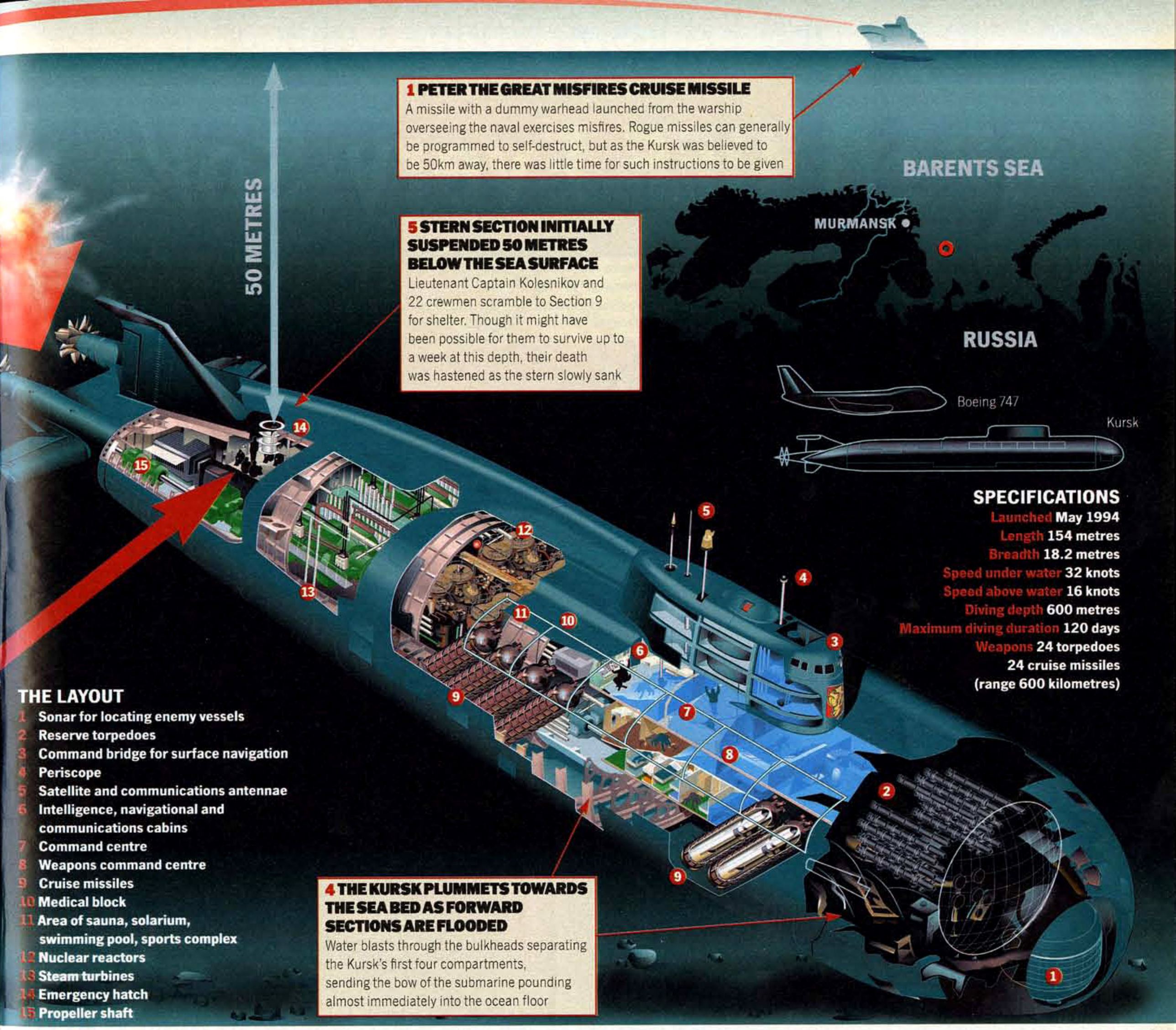
But as Saturday, August 12, dawned clear and calm, such concerns were far from the minds of Russian admirals and their officers at sea on their summer exercises. In the first part of the morning, western surveillance vessels recorded data consistent with a series of test firings of missiles and artillery. All seemed to be going as expected. Then the nature of the exercises appeared to change. American observers on board the USNS Loyal, which had been tracking the movement of Russian vessels by radar and satellite, noted that the vessels had begun gathering close to one location and moving in the way that implied a search-and-rescue operation was under way. It was not clear if this was part of the exercise or not. Sonar operators aboard the US Memphis were left in no doubt, however, that something had gone wrong. At 11.28am local time

IS THIS HOW THE KURSK SANK?

Dmitry Kolesnikov (centre) with fellow crewmen, including his best friend, Rashid Aryapov (back, far right), Dmitry Murachev (front left) and Sergei Lyubushkin (back, far left), who all perished with him. It is possible that Kolesnikov, and those who fled to section 9 with him, could have been saved if a rescue mission had been launched earlier

ILLUSTRATION: MARK LAWSON

TWO-THIRDS OF THE CREW HAD BEEN TURNED INTO 'MINCEMEAT'



(07.28 GMT) they registered the sound of an underwater explosion. Two minutes, 15 seconds later, they picked up a much larger, convulsive boom. So large was the second explosion that the shock of it was picked up at seismic stations in Africa. The Norsar institute registered it as the equivalent of five tons of TNT, measuring 3.5 on the Richter scale. Russian naval officers can have been under no illusion, either, that something had gone terribly wrong. Yet Popov's response was to order all vessels in the exercise to maintain radio silence.

To Popov it was quickly apparent that it was the Kursk that was in trouble; the submarine failed to make prearranged contact with commanders aboard the Peter the Great shortly after the explosions and again that afternoon. Yet, according to the Russians, it was not until 3.21am the day after – Sunday August 13 – that the operator of a sonic depth finder aboard the command warship alerted Popov that he had located the Kursk, by registering an "abnormality" on the sea bed. Four hours later, President Putin was informed that the Kursk was in trouble. He did not consider it serious enough to curtail his vacation at a secluded government dacha in the exclusive Black Sea resort of Sochi, where his only official engagements included appointing new ambassadors to Jamaica and Chile and sending a 70th birthday card to a well-known actress.

It would be another two hours before Russian rescue ships were in place above the submarine at 9.30 on that Sunday morning – 22 hours after the Kursk sank. By this time the weather had deteriorated. Strong winds had whipped the sea into a heavy swell. Efforts to lower a diving bell from which Russian divers could establish what had happened to the Kursk failed – the depths of ocean were churned into what divers call "marine snow". This did not stop Popov, resplendent in uniform and medals, standing on the deck of the Peter the Great later the same day – the afternoon of August 13 – and proudly declaring for the benefit of the Russian press that the exercises had been "completed successfully". His men, he added, had performed "with the utmost professionalism". It was the first of a litany of lies he and other senior officers and officials would utter over the months to come.

When news leaked out the next day that one of the fleet's submarines was in trouble, Popov said that one submarine – he would not confirm it was the Kursk – was having "technical difficulties". Radio contact had been established with the crew, he said, and tubes had been connected to the vessel to supply it with oxygen and water. He was, he said, "confident of a positive outcome".

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Below the surface of the Barents Sea, the crew of the Kursk had been plunged into hell. In less than three minutes, two-thirds of them had been turned into what one official would later grotesquely describe as "mincemeat". What took place during those fatal few minutes and their aftermath has since become the subject of fierce international debate. All that is certain is that the Russian military has done its best to distort the truth with a concerted cover-up. For ⟶

The force of such an impact above the submarine could have been enough to destabilise it, causing it to heel and lurch. Could this have caused a torpedo to shake loose from its mounting, leak fuel, explode and set off further explosions of munitions? Weapons experts describe this scenario as "extremely unlikely, though not impossible". Yet according to the admiral, the pilot of a Russian plane monitoring the exercise that was close to the Kursk's position reported seeing "a kind of small explosion on the water, a flash" around the time it is now known the Kursk sank. The admiral says "it is 100% certain that a cruise missile went the wrong way". His sources tell him that civilian engineers on the Peter the Great started shouting: "What the hell have we done? The missile has gone the wrong way." Repeated requests to interview those serving on board the warship were turned down. All military personnel who have any connection with the Kursk have been ordered by the FSB not to discuss the accident.

Russian military analysts say there was talk of Popov being flown ashore in a distraught state to fleet headquarters in Severomorsk on the afternoon the Kursk sank. "Popov is a very emotional man," said one. "There have been many rumours that Popov tried to shoot himself that afternoon." Requests to interview Popov, Kuroyedov and Kasatonov were turned down.

Shortly after we left Murmansk, the state news agency, Interfax, released a bulletin accusing foreign correspondents of spying. After that the admiral telephoned to plead that he not be identified in this story. He had, he said, been warned not to speak out again.

'THEY WANT TO MORALLY DESTROY ME, FOR ME TO BE QUIET'

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Few relatives of those who died believe the Russian authorities will ever officially reveal the cause of the disaster. Sitting in another bleak hotel in Murmansk, enveloped by the twilight that descends north of the Arctic Circle during the winter, Nadezhda Tylik says she believes the authorities are trying to stop relatives asking too many questions about what happened, by offering each family the most generous compensation package the military has paid out: the equivalent of 10 years' salary supplemented by insurance payments and private donations, bringing the total to around £35,000 – a small fortune in Russia. "They are trying to buy our silence," says Nadezhda, cradling a folder containing all that remains on paper of the life of her 24-year-old son, Sergei, a senior lieutenant in the Kursk's control room. In the days following the sinking of the Kursk, Nadezhda was filmed being forcibly sedated when she shouted at the deputy prime minister, Ilya Klebanov, as he addressed distraught relatives in Vidyayevo, fudging answers to their questions and feeding them false information. As she screamed that he was not fit to hold office she was injected in the back with a tranquilliser. The international media interpreted her sedation as a sign that those who speak out against authority are still silenced. Nadezhda says the injection was for her own good, since she was known to be suffering from a weak heart. But, she insists, since then the authorities have engaged in a far more sinister campaign to silence her demands for the truth.

Journalists are advised not to talk to Nadezhda. The authorities claim she is mentally unstable. "They want to morally destroy me, for me to be quiet. I don't know why they are so afraid," she says with a quiet dignity that belies any accusations of hysteria. She is adamant this will not happen. "As long as I live I will continue to demand the truth." So too will Roman Kolesnikov. Together with other bereaved fathers who are also former submariners, he has repeatedly demanded they be allowed to join the commission investigating the Kursk disaster, which some claim is at the heart of Russia's attempted cover-up. It is headed by Deputy Prime Minister Klebanov. So far their demands have been ignored. The commission claims that the truth will only be revealed when the Kursk is hauled to the surface. Few believe this will ever happen. The latest $70m plan to raise the hull this spring proposes cutting the wreck in two and leaving the front section – most likely to contain clues to what happened – on the sea bed for retrieval at a later date.

Attempts to penetrate the wreck to retrieve bodies and sensitive military records have resulted in so many holes being bored in the mangled hull that many experts doubt it will be possible to raise what is left of the vessel without it falling apart. In addition, in the six months since it sank, the Russians have dropped 44 depth charges near the wreckage to deter any foreign submarines from snooping around it. This could have further damaged the hull.

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Dmitry Kolesnikov did his best to tell the truth about what had happened to the Kursk. But it would be more than two months after it sank before his voice would be heard. Even then, few believe the full extent of what he wanted to say was made public. But the folly of a government assurance that the crew had not

suffered but had died immediately after the explosions was painfully exposed.

In the days immediately following the disaster, relatives were told that tapping noises – coded messages of "SOS water" – were being picked up from inside the submarine, indicating some crew members were trying to communicate with rescue workers. Relatives were assured that emergency tubes had been hooked up to the Kursk to feed the crew with fresh oxygen and drinking water, while Russian rescue teams worked to free survivors. It was not until Wednesday, August 16, that the Russians accepted offers of western help, forthcoming for three days, after admitting their submersible rescue vessels were experiencing technical problems docking with the Kursk. By the time a joint British and Norwegian rescue team reached the site of the vessel on Saturday, August 19, the Russians had changed their tune. There had been no emergency tubes attached to the Kursk, and no SOS messages, they claimed. The tapping noises had been caused, they conjectured, by the final methodical clanking of machinery aboard the sub. They wanted no questions asked about whether their own failed rescue efforts had missed the chance to save anyone. Sure enough, by the time British and Norwegian divers lifted the rear escape hatch flap located in the ninth compartment, on Monday, August 21, they found it flooded. All 118 men on board were officially declared dead.

As grief engulfed their relatives, some lashed out with fury that the navy had not accepted foreign help sooner. Putin was lambasted for failing to halt his holiday to take charge of the crisis when the news broke. When he did eventually fly north to meet the relatives on August 23, he assured them that accepting foreign help earlier would have made no difference. His attempts to placate not only the relatives but an increasingly outraged nation were severely damaged, however, by the bitter recriminations of the British and Norwegian rescue teams, who claimed that the Russians deliberately obstructed their attempts to reach the Kursk in time to find survivors.

Rear Admiral Einar Skorgen, head of the armed forces in northern Norway, it was revealed, had threatened to call off the rescue effort because false information he was receiving from the Russians was endangering the lives of the foreign divers. This misinformation, he said, included reports that currents near the Kursk were strong, that the rear escape hatch was badly damaged and that the submarine was listing to one side and tilted at an angle of 25-30 degrees to the sea bed. There are some who now believe, however, that the Russians were telling the truth when they said that immediately after disaster struck, the entire length of the Kursk did not plummet to the sea floor. If they are right, the implications are even more chilling.

As the first storms of the Arctic winter began to whip up the waters of the Barents Sea in mid-October, a team of Russian, British and Norwegian divers were dispatched to swim down to the waterlogged tomb the Kursk had become and attempt the dangerous task of retrieving what bodies it could from the wreckage. Unable to pass through the rear escape hatch in their bulky diving costumes, they were forced to cut holes through the outer and inner hulls to gain access first to section 8, then section 9. On October 21 the divers began loading bodies into a wire basket, which was then winched to a surface diving platform. Twelve bodies were recovered in this way from the rear compartment before bad weather called a halt to the operation. One diver described how the dead seamen wore expressions of terror frozen on their faces.

On October 27, Dmitry's body was hauled to the surface and those aboard the diving platform made an astonishing discovery. As they gently laid out Dmitry's corpse, a plastic wrapping containing a handwritten note was discovered in his breast pocket. The note was written in pencil on an oil-smeared piece of A4 paper that had been folded twice. At first the military would allow only officials to study the note because, they said, it formed vital evidence for Klebanov's investigating commission.

When parts of the note addressed to his family were leaked to the press, however, Dmitry's parents and his widow lobbied vigorously to be allowed to see it. Eventually the military allowed Roman to view it, though he was not allowed to take a copy of it, but just take notes. Settling a pair of gold-rimmed glasses on his nose, Roman refers to the notes he made: one side of the A4 sheet he was shown, he says, starts with the date 12.8.2000 and the time 13.34 – more than two hours after the submarine was wracked by the explosions. The note continues in neat cursive handwriting Roman recognises as his son's: "All personnel from compartments 6, 7 and 8 moved to the 9th. There are 23 of us here." He writes out the names and ranks of the crewmen, placing his own name 17th on the list. Also on the list is one of his best friends, Rashid Aryapov, a 29-year-old from the Samarkand region of Uzbekistan, who like him had served with the Kursk's original crew under Rozhkov. At the end of the list, Dmitry notes the time: 13.58.

Overleaf the message continues, still clearly written. The time at the top of this page is 15.45. This part of the message is addressed to "Olechka", the term of endearment that Dmitry used for his wife, Olga. "I love you. Don't be too upset. Say hello to G V [the initials of his mother-in-law]. Say hello to my ⟶

family too." It is signed Mitya. "Usually he would write 'Embrace and kisses' at the end of his letters to us," says his mother, Irina, starting to cry. Tears roll slowly, too, down the cheeks of her husband, a gruff man who rarely allows anyone to glimpse behind his tough facade. "Further down the page the letter continues, but nobody can say when this last part was written," says Roman. There is no date or time in this section, though Roman believes it was written several days later, under conditions of appalling difficulty once the lights had gone out, the temperature had plummeted and his son realised that he had little time left. It is dark to write here," the letter continues, "but I will try to write by touch. Looks like there is no chance – 10 to 20%. Let's hope that at least somebody will read this. Here is the list of the crew of other sections who have moved to section 9 and are trying to get out."

During the initial attempt by British and Norwegian divers to enter the wreckage, there were reports that the body of one crew member was wedged in a flooded decompression chamber below the rear escape hatch. This was later denied by the military. But Dmitry's note suggests that at least one man tried to escape the vessel and became trapped in the chamber, unable to move out of the vessel or back inside it. There are those who also now believe, on the basis of information from those involved in the rescue operation, who fear retribution if identified, that the stern of the submarine was suspended far above its bow in the first days after the blast. Given that the depth of the sea in which the Kursk lay, 108 metres, was less than the length of the vessel itself – 154 metres – this would have meant that Dmitry and others sheltering in section 9 could, for some time, have been in a section of the submarine resting little more than 50 metres below the surface of the water. If this scenario is true, had a concerted rescue effort been launched immediately, the task of freeing them from the wreckage earlier might have succeeded.

While the force of the explosions left the rear half of the submarine structurally intact, it did break the seals surrounding the rear propeller shafts, allowing water to seep into these rear sections. As the water level rose and the temperature inside the vessel dropped to 2-4C, the psychological and physical toll on the survivors would have been unimaginable. Emergency food supplies kept in each section, including biscuits, canned meat and bottled water, were intended to last for 10 days. As only five crewmen worked in section 9, these rations shared between 23 survivors would have been severely reduced.

Military doctors have drawn a horrific profile of the physical decline the men would have suffered as a result of the increasing pressure and air growing progressively foul; one can only hope their relatives were never made aware of it. They stress that the speed with which the men would have been affected by deteriorating air quality would also have hinged on the depth at which they were stranded – foul air becomes more toxic the greater the depth at which it is breathed. While they might have survived for up to a week at depths of 50 metres, as the wreckage sank deeper their death was hastened. Naval doctors believe the maximum they could have survived was three or four days; more likely they were dead within 24 hours.

Few now believe that his father was allowed to see the full text of Dmitry's final letter. Roman believes his son wrote more than one sheet of notes, and is certain he would have explained as much as he knew of what had happened to the submarine before listing the names of the crewmen who had survived the explosions. He is supported in this belief by Dmitry's first commanding officer, Victor Rozhkov, who says in such situations military training would come before sentimentality. Both men's suspicions are lent further weight by the military's refusal to allow relatives to see a second note found shortly after Dmitry's. Officials have never announced the identity of the man on whose body it was found. But regular contact between families of the dead soon revealed it was Dmitry's friend Aryapov.

What details of this second note the authorities have released are more technical than personal. They include reference to a shortage of belts for individual breathing kits and oxygen regeneration cartridges. "Our condition is bad. We have been weakened by the effect of carbon monoxide," Aryapov writes. Even those rear compartments that escaped the fireball of the initial blasts are believed to have suffered a series of smaller fires. Dmitry's note, his father says, was singed around the edges, so that when it was laid out flat it broke up into four small squares. A post-mortem concluded that Dmitry died of carbon monoxide poisoning. Several other bodies recovered had also suffered extensive burns; one man had a breathing mask melted onto his face.

Despite such horror, Dmitry did his best not to die the silent submariner's death he described to his wife in the poem she received the day the Kursk sank. What the waters of the Barents Sea failed to silence, however, it now seems his military masters, skilled in practices of deceit from the country's past and motivated by self-preservation, have managed to muzzle.

At least the young officer did accomplish the wish he expressed to Olga, to be able to tell her he loved her before he died. Yet it is the words with which Dmitry concludes his note that are the most painful for his family. As his life ebbed away he scratched out, "Hello to all," and followed it with the final plea: "Don't lose hope!" Whether this is directed at himself or others is not clear. But by the time his countrymen, his family, and in particular his younger brother read those words, many of the hopes they had for themselves and for the future of their country were long gone. In late December, Alexander abandoned his boyhood dreams of serving aboard a nuclear submarine. He resigned his naval commission, packed his bags and left Vidyayevo for good ■