



# KURSK

118 MEN TRAPPED BENEATH THE BARENTS SEA.



CLINCHANDHILL

# Kursk

*BASED ON TRUE EVENTS*

Burt Clinchandhill

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SAMPLE EDITION

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For information contact address: [info@clinchandhill.com](mailto:info@clinchandhill.com)

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Dedicated to all the real heroes that gave their lives in the Kursk incident.



## CONTENTS

1 The Arrest.....	1
2 The Issue .....	5
3 Vidyayevo .....	9
4 Zapadnaya Litsa.....	17

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*“Tell me, what happened with the submarine.”*

*“It sank”*

Larry King interviewing Vladimir Putin. September 8, 2000



# 1 The Arrest

*April 2000*

**T**HE STREET LOOKED DULL AND GREY. Not a single tree or any spark of green stood out between the low-rise buildings. The year might have been 2000 but everything from the architecture to the parked cars screamed mid-20th century. In fact, with the empty playgrounds and lack of people the scene could easily have been mistaken for an abandoned Eastern European movie set from the '50s. However, one sixteen-story high-rise Stalinist architecture building stood out thanks to a large neon sign above the entrance that read SAYANI HOTEL MOSCOW.

Beyond the large glass doors the only indication that the building was occupied came from a man standing alone behind a counter, reading a newspaper in the otherwise empty lobby. When a column of fast-moving cars stopped with a screech on the road outside, the man looked up – at first surprised and then nervous.

Doors were pulled open and slammed shut. From the first car four men in suits headed towards the hotel followed by a number of men from the other two cars, their casual attire failing to disguise their

military training. Finally, from the rear vehicle followed soldiers armed with sub-machine guns. They immediately took up position in front of the large glass doors of the hotel entrance as the other men walked fast-paced into the lobby. The startled desk clerk put down his paper and instinctively took a step backwards, towards the wall, as one of the men approached slowly while lighting a cigarette.

“Can I help you?” the desk clerk asked, unable to control the tremor in his voice.

The Suit calmly exhaled smoke from his cigarette. “I think you can.” He paused to stub out his cigarette on the desk. “I’m looking for an American, early fifties, wearing a suit, probably accompanied by an older looking Russian man.”

Knowing that asking for papers would make his life only more miserable, the desk clerk glanced at his computer. “Room 701, fourth floor,” he said.

The Suit turned to point at two of his men. “You and you, follow me. The rest of you stay here and watch the exits.” The three men then headed towards the elevator, which opened as they neared. A woman holding the hand of a small boy exited. She gave the Suit a glance before quickly looking away, pulling the boy with her as she walked into the lobby.

The men entered the elevator. The smell of chemical cleaning solutions was strong, but it did little to conceal the state of decay the hotel was in.

“Four,” the Suit ordered and one of the men replied by pushing a button on the panel. The doors closed. When they opened again a large ‘four’ sign welcomed them; the only distinguishing feature of the floor from any of the others. Before leaving the elevator, the Suit looked down the long corridor to the right, checking the doors on both sides.

“Come,” he ordered the other men as he walked into the hallway. As they made their way down the hallway, he quietly counted the numbers of the doors as they passed, “697, 698, 699, 700”. Finally

arriving at Room 701 he saw the door was open. Inside of the room, a man walked towards him, clearly intending to close it.

To all intents and purposes, Edward Payne looked like any other middle-aged American businessman. His blue suit was modern but worn casually with no tie and his flat, grey, two-thirds parted haircut coupled with a pair of horn-rimmed glasses gave him the look of a banker crossed between a character from a '70s movie. Payne looked the Suit in the eyes and though he didn't say anything his frown clearly expressed a desire to know what he wanted.

"A talk," the Suit replied calmly. He stepped into the room, put a hand to Payne's chest and gave him a gentle push backwards. With no other option, Payne turned and led the way into his suite, noting how the two men accompanying the Suit were holding video cameras.

Through the small hallway they entered the living area. The room was typically old-fashioned in décor with an aged and plastic-looking fire-red couch standing out like a sore thumb amongst all the beige. On the couch were three men, two of them relatively young and seated either side of a grey-haired older man whom they were obviously accompanying and who looked increasingly nervous as the strangers intruded on his meeting with the American.

In his late sixties and dressed in a cheap brown suit, Boris Lukin could have passed as a college Professor or a rocket scientist. However, there was no mistaking the fear on his face when Payne walked back into the room followed by the Suit and his men.

Ignoring everything and everyone, the Suit focused on Payne, staring him straight in the eyes as though daring him to lie. "Are you Payne, Edward Payne?"

The color drained from Payne's face. "Yes, I'm Payne. Who –"

"Who I am is of no importance," the Suit interrupted as he turned to Lukin on the couch. "And you? I know who you are. Boris Lukin, a brilliant scientist and most recently head of the rocket engine faculty at the Bauman Technical University in Moscow. Am I missing anything?"

Lukin remained silent.

“Mr. Lukin, Mr. Payne, I have orders to escort you to FSB headquarters where you will be charged with espionage and treason against the Russian Federation.”

## 2 The Issue

**I**T WAS A SUNNY SUNDAY at the almost 1,000-acre joint base Anacostia–Bolling military installation. At the Defense Intelligence Agency Headquarters a young naval officer in a clean white uniform rushed through a long hallway reminiscent of a sterile hospital corridor. At the end of the hallway he stopped at a glass door engraved with an American Bold Eagle. Below the eagle, a sign read: CMDR, M. JAMES, NATIONAL SECURITY COUNCIL. The officer pulled open the door and stepped into a small front-office where a young secretary kept guard.

“You can walk right through,” she said without looking up from her desk. Appearing to pay her no attention, the officer raced towards the door at the back of the room and knocked urgently.

“I said you can walk right through,” the secretary snapped only to be ignored once again by the officer who opened the door and entered the room without a backwards glance. Immediately in front of him, sat behind a mahogany desk flanked with two patriotic flags was Mitchel James.

As the officer entered the room, the half politician half naval officer's eyes narrowed slightly as the chill of a problem looming ran down his spine. Mitchel James was only in his mid-30s and relatively young to have made a mark on Capitol Hill, but though he was ambitious he was not reckless in nature and problems were only okay if they belonged to the mistakes of someone else.

“So what's the rush?” James asked a slight lisp apparent as he spoke. “You look worried.”

“They've got Payne commander,” the officer responded, still trying to catch his breath from the long run through the hallways.

“They've what?”

“Payne. The FSB took him from his hotel along with a contact he was meeting,” the officer almost shouted as he spoke, his arms flailing with exasperation and concern.

James stayed calm and hooked a thumb under the waistband of his trousers, an action that reminded him he wanted to lose a few pounds. “Take a breath, officer. Do we know why the FSB took him?”

“Nothing official, but my contact in Moscow tells me he was meeting with Lukin when it happened.”

James's face lost its composure almost immediately. “Did we get it?” he demanded, and the officer coughed nervously.

“I couldn't say, but the last I heard was that Payne was supposed to meet Lukin only the one time. So if this was it, we have to assume –”

“We didn't get it,” James interrupted. “Any idea where they took him?”

“No,” the officer replied honestly before taking a handkerchief from his pocket to wipe the sweat from his forehead. “There's been no contact, although I would expect to hear from him or from official Russian channels fairly soon.”

James frowned for a second before pushing the intercom on his desk.

“Yes, sir?”

“Get Mr. Turner on the phone and if they say he’s not available tell them it’s urgent and have him call back ASAP.”

“No problem, sir.”

“Thank you, Mary.” James turned to the officer. “Please keep me informed if there’s any more news.”

The officer nodded and left the room. As he passed the secretary he saw her push the intercom. “I have Security Advisor Turner for you on Line Four.”

In his office, James reached for the phone and pushed a lit button at the bottom of it.

“Mr. Turner?”

As he spoke, he pictured the middle-aged Harvard man at the other end of the line. At 55, Turner still looked every inch the corporate lawyer he once was. Coming from a humble background, his parents were shopkeepers, his legal training and no-nonsense upbringing had enabled him to keep his head while others struggled to do so and as a result he had already survived his share of political storms as National Security Advisor.

–“Charles,” Turner insisted, even though he liked the reverential tone in the young politician’s voice. “How many times have I told you George, call me Charles? Now, what can I do for you?”

“It’s Payne,” James replied, cutting to the chase immediately. “He’s been arrested.”

On the other end of the line, there was a pause before James heard Turner rising from his desk to close the door to his study.

“Where?” he asked.

“Moscow. He was meeting with Lukin to obtain the plans. I need to get confirmation but it looks like we’ll need to find another way.”

Turner said nothing as his brain scanned through all the possible repercussions of Payne’s arrest. As James was about to ask whether he

was still there, he finally replied. “Is there anything Payne can tell them about us?”

This time James took a moment to think before answering. “Payne believes he’s buying declassified information so it’s unlikely.”

Turner nodded to himself, but the slight hesitation in James’s voice hadn’t convinced him. “OK. I’ll try my contacts to find out what happened and I suggest you do the same.”

“Will do.”

When the line went dead, James looked at the phone for a while, wondering what his next move should be, and how quickly the Press would find out about Payne

## 3 Vidyayevo

June 2000

**V**IDYAYEVO, POPULATION 5478, MURMANSK OBLAST it said on the sign when entering the closed-to-civilians village in the uppermost north-western region of Russia. Immediately before the secure military area there was a small public-housing community where concrete buildings, built like barracks, stood out in the rural wasteland. Only the Eastern European-made cars in front of the barracks revealed there were people living behind the closed curtains and the plain colors and lack of plants or trees revoked memories of the Soviet era. It was as though time had simply stopped here a long time ago.

A young woman carrying heavy grocery bags walked up to a small house built with concrete and wood. Dressed in a thick warm coat against a backdrop of grey, she could have been dressed for winter rather than the beginning of summer. As she entered the house she lowered the hood from her head revealing black hair to her shoulders, fair skin, dark eyes and full lips. Unsurprisingly, Sophia Kastamarov was considered to be a pretty woman in this region.

“I’m home,” she yelled into the empty living room.

A female voice yelled back.

“We’re in the kitchen!”

“Of course you’re in the kitchen, you’re always in the kitchen, you live in the kitchen,” Sophia mumbled to herself.

“What’s that, dear?”

“Nothing, *Mama*.”

Sophia took off her coat and crossed the living room to take her groceries into the kitchen, which was clearly the centerpiece of the house, with a large stone countertop on one side and a wood-burning stove on the other. At the top of the room, a television was constantly set to the news channel while in the center of the room, at a small table, a young man in his mid-twenties with a military brush-cut to his blond hair and a playful look in his eyes read a newspaper. With his plain clothes, jeans and stained white T-shirt, Mischa Kastamarov looked more like a construction worker than a naval officer.

As Sophia entered the kitchen he stretched out his arms to her.

“There’s my wife, come here and give your husband a kiss.”

Sophia looked at her husband and threw the shopping bag into his outspread arms. “Kiss this before you put it away and grow up. You’re twenty-seven years old, act like it,” she said, but she was unable to stop a smile from softening her harsh words or the kiss she then blew to him. God knows her husband wasn’t the easiest of men, but she had never met another like him. He was her world; something she discovered when she left him only to find she couldn’t live without him.

At the stove, Mischa’s mother, Elena, was preparing food for that night’s dinner. Her long, colorful dress, printed with flowers, dragged over the wooden kitchen floor.

“Stop teasing, *Mama*,” Sophia cried, trying to nip the older woman’s playfulness in the bud. “You like a clean house and your doting son here has faithfully sworn never to go to the pub again without me.”

“And you believe him?” Elena laughed, again oblivious to the undercurrents of Sophia’s replies. “You are of good faith.” Mischa, however, was not so deaf to his wife’s sensitivities and he intervened by jumping to his feet, straightening his shirt and giving a military salute. “I always make good on my promises,” he declared, and both the women had to laugh at that because it blatantly untrue.

As Elena turned back to the stove her attention was caught by the mention of her president and President Clinton in the same sentence on the news. She turned to the television, intrigued.

“Shh, I want to hear this,” she said and waved her hand to make the others pipe down. A second later President Clinton’s White House Daily press briefer, came on the screen.

*“This election shows that the ballot box has indeed become the undisputed way for Russians to select their leaders. I think this is an important milestone in the consolidation of democracy in Russia. The United States would like to see a Russia that is not only consolidating Democracy, but one that is consolidating the free market economy and instituting the rule of law that is helping the Russian people to get back on their feet after these difficult years of transition.”*

Mischa glanced at his mother. “Well said, don’t you think, Mama?”

Elena looked less than convinced. She wasn’t well-educated, she’d broken her back working on the land for most of her life, but she had experienced enough over the years to know that change doesn’t come with simply a new face at the top. “Son, whether it’s a Tsar, a General Secretary, Chairman or president, as long as one man is in power nothing much will change, I’m afraid.” She turned down the gas on the stove, set the lid on a pan and turned to her son to further explain herself when the doorbell rang.

“Saved by the bell,” Mischa joked and Elena stepped forward to playfully box the ears of her only child.

“I’ll get it,” Sophia said, partly to get away from the mother-son love-in and partly because she was curious; visitors were rare during the day when most people were at work on the base.

At the front door was a large man in an even bigger fur coat poised to ring the doorbell again. The relief at finding someone home was evident on his red-cheeked face when Sophia opened the door.

“Oh, thank God. I was starting to think I would have to come back later in the evening,” he said.

Sophia smiled. “So what can I do for you?”

“Ah yes,” he replied and quickly unclasped the brown satchel hung over his shoulder to take out a letter. “I work with your husband and our boss wanted me to bring this to him, today.” As the man handed the letter to Sophia, she noticed it was actually addressed to Elena.

“Do you want to come inside?” Sophia asked.

“No, thank you,” the man replied with a warm smile “I have to get back to base. We’re having a special party for the officers this evening to celebrate the last mission of our captain this summer. Will you please say ‘hi’ to Mischa for me? I’m Lieutenant Vitaliy, and tell him I’ll see him this evening at the party.”

Though Sophia was surprised and a little rattled by the revelation she didn’t show it. “I’ll be sure to give him the message. Thank you.” She closed the door and glanced at the letter before turning away, deep in thought.

“So, who was it?” Mischa asked when she returned to the kitchen.

“When were you going to tell me about the party?” she sweetly demanded of her husband, and recognizing the danger, Mischa immediately put down the newspaper he was reading to better concentrate on the best way to answer his wife without getting into an argument.

“I wasn’t going to go,” he lied.

“Then why did your friend say otherwise?” Sophia asked not even trying to hide the disbelief in her voice.

“He doesn’t know. Everybody expects me to be there, but I seriously wasn’t planning to go.”

“I don’t understand. Why would you say you were going if you weren’t planning to?”

Mischa emitted a deep sigh, as though he was about to make a confession. “Look, I didn’t want the men to know why I can’t be there. I was going to call in sick at the last minute. Nobody would be any the wiser.”

Sophia looked at him. On the one hand she was more proud of him than she could possibly say, on the other hand she didn’t know if she could trust a word he had just said. This was where they were at. This was the bittersweet nature of their love. But when all was said and done, she had been the one to come back and she had been the one who promised they would face his demons together. So she took her husband’s hand in her own.

“It’s OK. We’ll get there,” she said, and because Elena was looking at them in confusion she left it at that and quickly changed the subject. “Look, I’ve got a letter from your boss, Captain Yaroslav Kuznetsov.”

Mischa raised both eyebrows and gestured for her to pass the letter over.

“Not so fast,” Sophia teased. “It’s not for you. It’s addressed to your mother.” She then handed the letter to Elena.

“Why would he write to you?” Mischa asked his mother. “Open it.”

Enjoying her son’s frustration, Elena took her time as she inspected first the front and the back of the letter. Then she picked up a knife from the countertop and meticulously started to open the envelope as if the contents were highly breakable. It was provoking Mischa and he was doing his best not to react. When his mother took the letter from the envelope he could see it was one sheet of paper with a small amount of handwriting on it. Elena started to read to herself, mumbling.

“Out loud, please, out loud,” Mischa begged while Sophia smiled at Elena, encouraging her to continue teasing him.

“Ok, so here it goes.”

*Dear Ms. Kastamarov,*

*I was very pleased to hear that your son Mischa has extended his stay in the proud Russian Navy.*

*I am particularly pleased to re-welcome him under my command as Captain Lieutenant in charge of the Turbine Department of the Navy's Royal Submarine Kursk.*

*I would also like to give you my personal assurance that I will do everything in my power to keep him healthy and bring him back to you safely after each voyage.”*

*Yours truthfully,*

*Captain Yaroslav P. Kuznetsov*

Sophia threw her hands in the air in exasperation. “What about me?” she demanded. “What about bringing him safely back to me?”

Instead of answering, Elena turned towards Mischa who shrugged his shoulders. “Your captain knows how it's done,” she said. “A sailor belongs first to his mother no matter how old he is or whether he's married, especially when you don't have any kids to show for it.”

Sophia raised an eyebrow at the remark because she knew it was in jest, but the joke was starting to wear thin and Mischa would have to have a word if his mother didn't let go of it sometime soon. “I still think you should have got out when you could, Mika,” she said, her tone turning serious. “I've always thought this is a dangerous job. Not only that, the pay is terrible, the environment is unhealthy and you are surrounded by people all too eager to lure you back into bad habits.” She leant forward to brush her lips against her husband's ear so only he would hear her next words. “I tell you, Mika, if you ever want children you better show it to me.”

Mischa quickly turned his head to catch Sophia's lips on his own. "I'll prove there's nothing dangerous about my work and that there's nothing to fear," he gently assured his wife. "My love, my work on Kursk is probably the safest in the entire navy. In fact, next week on Wives' Day you can come and see for yourself."

Although Mischa didn't intentionally try to make fun of Sophia's concerns his face was habitually set in the kind of a smirk that made it near impossible to assess his true feelings, and Sophia's scowl grew deeper as she sensed he was toying with her. Sensing a fight brewing, Elena decided to intervene, as she always did because she knew from bitter experience how a fight could escalate between couples. "Not one more word," she told the pair. "You two have a lot going for you and an entire future ahead. So stop bickering and help me get this food to the table."



## 4 Zapadnaya Litsa

**T**HE DOCKYARDS OF ZAPADNAYA LITSA LOOKED CLOSE TO EMPTY and sad. With little to no vegetation, the sandy, windy plain was home to just a few old buildings, and the entire scene brought to mind the demise of the once mighty Soviet Union. Most of the operational nuclear submarines were based at the dockyard. Built in the 1960s, the Zapadnaya Litsa complex consisted of eight large wooden piers, most of which were empty now and stood like a memory of better times. A lot had changed following the end of the Cold War and the navy had taken the brunt of those changes. Today, only a few submarines remained at the dockyard. A handful of guards walking their rounds were the only sign of life on the ground. In the center of the docks, an old wooden building was notable for its size, if nothing else.

In the distance, a large dust cloud rose from the sandy plains signaling a car was approaching. As the vehicle neared the gated entrance to the docks, a lone sentry left a small wooden shed and took his place near the barrier. The vehicle, a luxury town car, drove up to the barrier and stopped. As the window opened, the guard noticed two

Russian officers in the front. The passenger wore an Admiral's insignias on his uniform. In the back of the car were two Asian-looking men, one of whom was also wearing a military uniform.

"Papers, please," the guard said as he stretched out an arm ready to receive them. The Admiral handed some documents to the chauffeur who passed them through the driver's side window. The guard looked at them briefly before handing them back and opening the barrier.

"You know where you need to be?" he asked, while pointing in the direction of the old wooden building some 200 meters away. The chauffeur nodded his head and drove away.

As the car stopped in front of the only building in their immediate surroundings, the Admiral and the two Asian men exited and walked up to a large steel staircase snaking up the side of the building.

"Mind your step," the Admiral cautioned. "These stairs can be slippery under the dust layer." As the men walked up to the first floor, the door at the top swung open to reveal a captain in his late forties. With his big, round head, beady eyes and a thin layer of dark hair, he wasn't the best-looking officer in the navy, but he was one of the most experienced and his loyalty to the greater glory of the old Soviet Union had no match

"Welcome, gentlemen," Captain Yaroslav Kuznetsov greeted.

Kuznetsov waved his guests inside and the men entered what looked like an old classroom with school benches stacked up against the walls. In the center of the room was a table with ten chairs. On one end of the table sat a laptop, placed in front of an old blackboard covered with what looked like a white sheet used as a projection screen. At one side of the table two men were already in position.

"Please take a seat." Kuznetsov pointed to the chairs opposite the seated men. "I suggest that when we are all comfortable we start with an introduction from everybody."

Once everybody sat down, Kuznetsov was reminded of a warzone negotiation scene from the Second World War, somewhere in the pacific.

“Shall I start?”

One of the men dressed in Russian uniform asked. And without waiting for an answer, he did just that.

“I am Northern Fleet Admiral Nikolai Petrov of the proud Russian Navy.”

In his mid-fifties, the Admiral looked every inch the seasoned seafarer with a large, reddish mustache, slightly over-heavy build and starched uniform. He was an officer who managed to look both Navy and family man; a man to whom you might trust your secrets. After his introduction, he looked to his left.

“Michail Federov, Defense Minister of the Russian Federation,” the man next to him said. In his sixties, Federov had only a little grey hair left on both sides of his head. His large, round glasses gave him the air of a scholar if not the brain of one.

“And I am Captain Yaroslav Kuznetsov of the Russian submarine the Kursk that you might have seen in the dock when you arrived.” Kuznetsov pointed at a small window, not that anyone could see the submarine from where they were sat. He turned to the Asian military officer, inviting him to introduce himself.

“Colonel Xu Junping, Ministry of Defense of the People's Republic of China, intelligence department.”

Junping was in his forties and in full dress uniform. Though he spoke pleasantly it was clear from his eyes that darted between Petrov and Kuznetsov that he had reservations about being there.

Finally, the last man at the table introduced himself. “Qiungian Wang, civilian contractor for the Ministry of Defense.”

Admiral Petrov nodded briskly and rose from his seat to walk up to the computer.

“Welcome gentlemen to Zapadnaya Litsa and thank you all for being here at such short notice,” he began. “Forgive me for the poor conditions in which this meeting takes place. I’m convinced the low profile of this arrangement will suit our privacy the best.” The Admiral paused to survey the faces around the table. “I will try to keep this briefing short and to the point as much as possible,” he assured them. “As you all know, the Russian Navy’s been much criticized in the past years since the demise of the Soviet Union and though it’s true that due to budget cuts there have been some dramatic changes, we now have the means to take back some of the worldwide naval leadership advantage that we once had.”

As Petrov worked to get his first slide on the screen, Junping and Wang followed his every move without saying a word. On the screen the first slide showed what appeared to be a regular, green torpedo with a strange chrome nose. Instead of a propeller at the rear it had eight small rocket exhausts. Junping straightened in his chair as he looked at the screen.

“Is that what I think it is?”

For the first time in the meeting, Petrov allowed a small smile to escape. “The VA-111 Shkval,” he said before pausing to enjoy the silence in the room. “With its roots of development some 30 years ago during the time of the Soviet Union, the Shkval will tip the balance in marine warfare in our favor again. Ask yourselves, what’s the weakest attack point in submarine warfare?” Petrov walked away from the screen, confident that it would take several seconds before any of the men ventured a reply, but Junping answered the question quickly, as if taking part in a quiz.

“Surprise.”

“Indeed, surprise,” Petrov confirmed. “The fastest torpedo currently travels at a maximum speed of 50 knots. This gives the enemy plenty of time to react to it with all kinds of counter measures.” Petrov rushed back to the computer to put on the next slide. On this sheet were

more specifics and numbers, created to impress the Chinese visitors. Petrov gave them a second to absorb the statistics before resuming his performance. “Not with the Shkval. The Shkval reintroduces the element of surprise to submarine torpedo warfare,” Petrov stated proudly. “The Shkval is launched from a submarine at 50 knots and accelerates to a speed of up to more than 250 knots. The enemy will never see it coming.”

Up unto that moment, Michail Federov had remained silent, now he weighed in to help sell the torpedo to the Chinese. “What’s more, these weapons are cheap, very cheap,” he said. “At about 10 percent of the cost of a conventional torpedo, we can deliver you the fastest and meanest torpedo ever designed.”

“And how is this any different from the concept you tried to sell us some five years ago?” Wang replied.

Realizing Wang must have been to the table before, most probably during the period under Mikhail Gorbachev, Petrov kept his face unreadable and answered him by putting up a slide showing the torpedo traveling underwater. “Here you see our perfected concept of the supercavitation of the Shkval. You notice the silver nose on the torpedo? This nose creates a long bubble of gas under water, large enough to encompass the entire torpedo traveling through the water. Therefore, there is no more friction from the water to slow down the torpedo, allowing it to reach far greater speeds. At the back you see eight small rocket thruster pipes. These thrusters control the direction and speed.” Petrov smiled proudly again.

“I’ve heard about this theory,” Wang replied, not even attempting to disguise the skepticism in his voice. “I also heard that the Americans experimented with the same technology, but abandoned it because of safety issues.”

Federov smiled easily. “We have been developing and perfecting this principle since the late ’60s. I can assure you that we wouldn’t be using them ourselves if we didn’t consider them to be totally safe.”

Wang stretched out his arm to Kuznetsov. “You are a submarine captain and responsible for your crew. What do you think of this torpedo?”

Kuznetsov thought for a moment before responding. “I think - no, I know - that risk comes with the use of all weapons.” Again, Kuznetsov paused as he searched for the politically correct answer so as not to embarrass his comrades. “I don’t think that the Shkval brings any extra risk to the ones we take every day. If I didn’t think the risk was acceptable I wouldn’t subject my sailors to it.”

Federov and Petrov both looked at Kuznetsov, relieved that he’d made a good job of the answer.

Seemingly convinced by Kuznetsov’s response, Junping cleared his throat, indicating he was ready to move the discussion on.

“And what about the warhead?”

“Glad you asked.” Petrov put up his next slide; a table of figures listing the variations of payload the torpedo could carry and the damage it could do. “As you can see, the Shkval can carry any kind of warhead up to 269 pounds, from conventional to nuclear. You can also use it without any payload at all but with a dummy head. Due to the speed of the Shkval you will shoot straight through any ship, sinking it or at least rendering it defenseless in the water.”

From Junping’s expression it was clear he was falling for the sales pitch yet he remained concerned about the dangers of deploying such a weapon. “This all looks very interesting but I would like to get back to the topic of safety,” he said. “Originally, there were safety issues on the propulsion system.”

For a second, Petrov glanced at Federov asking for permission to take back the conversation. Federov nodded in consent.

“The torpedo runs on a mixture of 95% hydrogen peroxide and kerosene. Together they form HTP, high-test peroxide. Once in contact with the catalyst, in this case kerosene, the hydrogen peroxide decomposes into a high-temperature mixture of steam and oxygen and

forms a bi-propellant. We also use it to fuel our Soyuz rocket. As long as we keep it away from air and corrosion there's nothing to fear. Regarding its effectiveness, well, the numbers speak for themselves."

Federov stood up from the table and walked up to the front. "Gentlemen, you can find all the details in the folders in front of you and read them later. I'm sure they will satisfy all your curiosities about the performance of the Shkval. There will be plenty more time for questions later. After all, you didn't come here just to talk and watch a presentation." Federov paused for dramatic effect. "You came here to see the Shkval with your own eyes."

Petrov nodded and took the lead from Federov. "In two days you will join us at our summer naval exercise. Mr. Wang, you will travel with Captain Kuznetsov on the submarine Kursk to see the weapon being fired. Colonel Junping, you will witness the demonstration from our command ship and exercise target, the Peter the Great. I'm sure our demonstration will answer any questions you might still have. I thank you for your attention and I'll be glad to welcome you again in a few days.