

multiple satellite communications to plug them securely into a Joint Defense Information System. No one waited for orders. Everyone knew what he or she was doing. Both the Australian and American teams worked together seamlessly. So well in fact that Cyrus and the ship's Captain had to be careful not to get in the way. But still, it felt good to make a few suggestions here and there.

After barking out some orders the two COs retired to work over the operational plan once again, knowing the preparation was in good hands. Cyrus looked across the chart table to Lieutenant Commander Hudson.

"The Tactical Air Control (TAC) is based here out of Pine Gap facility. We run our own AOPs and the upper deck facility acts as the Flight Control Center. The Pine Gap TACS will coordinate the F-111 Group, RAAF Orion assets and ourselves. This is going to bring the Longreach within the range of either or both the Chinese fleets Shipwreck missile system's as well as aircraft-delivered threats. That could be either a Sukhoi or one of the many choppers that carry antiship missiles, not to mention T-95s and 142 maritime strike aircraft out of Martin de'Vivies."

"Understood. We anticipated that," Hudson said.

"From our own recent Intel we believe they have a measure of electronic protection, but nothing to the level we currently possess. But we don't expect to blind all their systems. To achieve that, we have to get close. This time we just want to keep them looking our way." He checked his watch. It was close to briefing time. He could swear the Australian was almost smiling.

"You point, we'll drive, Sir," Hudson said. "Just let me know where you want us to be and at what time." Cyrus nodded. He would enjoy working with these Australians. They had balls.

The Longreach was a Fast Combat Support Ship. For that reason she lacked many of the sensor suites and radar capabilities one would

normally find on a combatant. Temporarily she was transformed into a Fast Fighting Catamaran. The top deck was now a flight deck. Numerous GCSs, mobile container-like contraptions with command and control systems, were distributed throughout the ship. One had been welded to the top of the bridge. It didn't look pretty, but it was a great position for the ship's Flight Control Center.

There hadn't been time for a full briefing before the Longreach lifted its ramps and wound the huge turbines up. That was left for once they were underway. The ship's senior NCOs and officers now gathered to get a better understanding of what their mission was about.

USAF Colonel Paul Cyrus, the Wing's AOC, introduced himself briefly but quickly handed over the briefing. "This is Major Mike Mitchell, Commanding Officer of No 11 Squadron, 57 Air Wing U.S. Air Force," he said. He motioned the Major forward. This was going to be their fight and he wanted to give them the maximum opportunity in the small amount of time available to blend themselves as some sort of team.

"This has been a rapid deployment, so we are making up a lot of the mission planning as we go," Mitchell said without hesitation. "Before I go into the operational stuff, I first of all want to brief you all on what we have brought along for the trip; the hardware.

"Essentially, we operate three systems, which includes Global Hawk. These are being operated out of the mainland but controlled from the operations center here. The two systems we are operating from the Long Reach are what we call Tier II and Tier III systems; Tier II being the MQ-9 Mariner and Tier III the MQ-15 Shadows." The Mariner project had recently been re-instated as a maritime armed reconnaissance UAV.

"This," the Major said, pointing at a serious looking console with lots of lights, switches, controls and screens, "is the Reaper

and Shadow Ground Control System, GCS for short. It provides command and control of the vehicles and their payloads. It can also disseminate intelligence directly to the ground system or battlefield Net.

"The MQ-15 Shadows can take off from here, but we can't land them. We can tanker them to get them back to the main land. The same goes for the Boeing QF45s. Both the Shadows and QF45 will be launched using the electromagnetic launch system being installed on the top deck.

"We communicate with the birds once they have flown the coup, through airborne sensor suites. The ground segment components interact through satellite and line-of-sight links to maintain command and control and sensor data communication paths. If any of these are broken the aircraft resorts to a pre-programmed mission profile. This may occur in our mission due to the satellite blackout below the 60th. We have Global Hawks on station to act as communication relays.

"Now, I could rabbit on for some time about their vast capabilities in gathering intelligence and how they link into our, and your, command and control networks. But what you really want to know is; can they blow shit up?" He paused. "The answer to that is a big yes. They are capable of carrying a wide range of munitions, including the Harpoon.

"We have four mission commanders, who are either pilots, navigators or similar, but all are experienced in electronic warfare, intelligence or weapons. The mission commanders are responsible for receiving the mission tasking and executing the mission objectives. The MCs job is to maintain situational awareness, evaluate survivability, mission plan feasibility, and coordinate the air vehicle operations. Individual aircraft are flown by the Air Vehicle Operators.

"As you know, these toys come packed with a serious bunch of intelligence gathering electronics. Supporting the AVO we have specific sensor specialists, imagery analysts and communications operators and technicians."

While the briefing continued and despite the horrible conditions outside, a small army of welders and fitters were crawling across the Longreach's roof, turning it into a flight deck. Even as the last spot welds were burned into place, the first CUAV was rolled into the elevator.

The Mariner fitted with folding wings for carrier deployment was the size of a small Cessna airplane. It had evolved a lot since its original introduction to service in the 1990s. Now nearly thirty feet in length, it had a long thin wingspan of a little over 50 feet, a V-tail with vertical fin underneath driven by a powerful rear mounted turbofan jet engine. The Mariner could stay airborne for over 36 hours and cruise between 100 and 230 knots. It was stealthy, smart and most importantly, could take off from the top deck of the Longreach. One after the other, the MQ-9 Mariners were elevated to the top deck, wings unfolded and then rolled into position. It was time to rock and roll.

Normally requiring over 1800 feet to take off, the measly 250 feet of flight deck in front of the first unit to launch looked impossible. Under normal conditions it would have been. However, the 50-knot speed of the big cat, combined with a 35-knot head wind, meant the Sea Predator was able to take off with a full load unassisted. Improvisation by the naval engineering team had worked wonders in building the tie downs and installing the electromagnetic rail that would be used for the faster CUAVs that would be launched later.

The big Cat slowed while the aircraft were positioned one behind the other for launch. Once the aircraft were tied down and

secure, Lieutenant Commander Michael Hudson ordered the Longreach to two thirds. The aircraft's ground crew, working with their remote control equipment, started the CUAV's engines. Just like on the deck of an aircraft carrier, the launch sequence became a small ballet.

The upper deck was completely covered with small airplanes, two across in neat rows, wings over lapped between. Deck handlers moved amongst them in preparation for launch.

"Initiate launch sequence."

"Start em up!" The vague whine of jet engines confirmed the start-ups. The panel showed green from one zero to ten.

"Engine starts confirmed, engines to idle. Please follow the directions from the deck manager. Only listen to him and follow his instructions to the letter."

"This is the deck manager. We will launch one at a time from zero one through to zero one zero. Then we will prep zero one-one through to zero two zero. Do not reply at this time." The wind was screaming across the open top of the catamaran's upper deck. The deck officer and his crew, all new positions invented in the last 48 hours, braced themselves against the bitter 70-knot gale. The deck officer spoke loudly into his mouthpiece.

"Okay zero one, ready, comply."

"Zero one ready," The deck officer stood over the hold down strap.

"Zero one, power up!"

"Roger, deck zero one power up," the AVO said, the engine howling at almost full power as the AVO ran the throttle forward, straining against the hold-down strap. The holding restraint was a long and strong piece of carbon fiber strap that reached behind the airframe. Being a pusher prop it meant that the handler, on releasing the restraint, was only just behind the propeller. Not ideal but far better than being run over by it.

"Zero one release!" With that, the deck handler punched and released the hold-down shackle separating the strap. The Mariner surged forward and with the wind speed across the deck exceeding the aircraft's stall speed, the Mariner climbed almost vertically from its position, the AVO powering the engine to prevent it from backsliding into the other UAVs behind it. It was dangerous.

"Deck, zero one roger, released."

"Roger zero one, zero two, deck ready," the deck officer said moving to the next aircraft. Across the opposite side of the deck his partner had joined in the launch sequence, sandwiching his own launches in between.

Below deck, housed in numerous container-like constructions, 30 young men and women sat intently in front of rows of monitors, their hands working quickly between keyboards and small sophisticated control sticks festooned with a multitude of buttons and switches. It looked like they were playing some pretty serious video game, which wasn't far from the truth. The real difference was that people could, and probably would, die as a result of how well they played. Each of these remote pilots or AVOs controlled a Mariner.

With the launch completed, they could for a moment relax, as their charges headed further south.

The UAV pilots operated from CARS - 30 feet long, streamlined, self-sufficient containers with environmental systems, pilot and payload operator workstations, and more. These were similar to the system used by David Stringer nearly ten years previously in Afghanistan. Most of the Air Vehicle Operators were ex fighter/bomber cockpit crew. In the past the AVO would have used a line of sight method for take off but were now completely enclosed in a helmet system that provided an enveloped virtual reality system, fed directly from the aircraft's sensor suite. He or she still used the traditional stick and rudder when they decided to override the

system, but most of the time they and the sensor operator were very busy analyzing the data that was being projected into the pilot's helmet display and the sensor operator's terminals. Another significant difference was that all the aircraft could if required carry out the entire mission autonomously, without any input from the AVO's.

The Mariners had longer endurance than the QF-45s but were slower. So they took off first, several hours in advance and climbed to over 40,000 feet. Some carried as many as fourteen AGM-114 Hellfire missiles or two Harpoons. They Hellfires were not ship killers, but were armor piercing and could create some real problems when they hit. The Mariners joined up and flew towards their objective over 620 miles ahead.

The Lieutenant Commander looked around. It was a pretty ideal ship for what they were doing - fast, big payload, could carry a lot of fuel. They could carry the equivalent of a whole air wing of UAVs.

A few hours later the electro magnetic launch rail was charged up and ready to go again. The deck crew and pilots began the launch preparation for the faster UAVs. Once again the Longreach turned into the wind, cutting through the heavy swells, her decks barely moving.

The QF-45s were the latest highly stealthy Aggressor CUAVs developed by Boeing. They had come aboard in containers and were all hooked up to a central computer system to 'prep' and pre-flight them before they were even out of their boxes. They were the same size as the original scaled down X-45 but still big, along with the others, the central deck elevator was required to bring them up from the lower storage areas.

Then the temporary 'Cat Officer' who seemed like he was having far more fun than he should have, fired the birds off towards the southern horizon.

Above the water, the Longreach was a mere shadow, almost invisible to anything outside of 40 miles. Below the waves was another story. With twin turbines driving over 60,000 horses, pushing a cavitation enhanced hull through the water in excess of 50 knots, it was noisy. At high speed, she was acoustically a bright beacon in a pitch-black night.

The Chief of the ship Warrant Officer (WO) Dan Sanders, Lieutenant Commander Hudson and Lieutenant Mathers were seated in the skipper's cabin after all the birds were launched. The cabin was not big by destroyer class standards, but tidy and comfortable. For Hudson it was a Command; not many Lieutenant Commanders got a Command. Mathers had done well with the launch, acting as deck officer with one of the ship's two Midshipmen helping him. They were trying to work the best defensive strategy that might keep them alive in an ocean full of enemies.

"So we have launched 20 of our total of 40 CUAVs. The plan is to close the gap to less than 250 miles," which to a sailor was always nautical miles, "and then launch the rest. The first flights are programmed to spread out and approach from different directions. The second flight will circle and come back from the south of the fleet. By this time we will be well into the missile envelope of the Chinese; which means if they see us we are dead. But unless a sub spots us, it's highly unlikely they will have a clue we are here. We will slow to 25 knots at a range of 500 miles." Hudson looked around the cabin. It wasn't that part that worried him. The Longreach would be hard to see, let alone catch. "What concerns me is that running at this speed we are noisy as hell. We are also blind as bats. We have no passive sonar; we could have a Shkval torpedo headed at us right now and the only indication we would have is when our lights go out."

The Chief of the ship, a veteran of over twenty years, nodded his head in agreement. "That's the part that's been worrying me as well. Do we get any support along the way? You know, some of our subs, Orion's or something?"

Hudson frowned. "Nope, nada; they are all tasked. As for our subs or anything else, we are simply too fast, which puts us out on our own."

"So we just hope like hell no one hears us then."

"That's what it's looking like."

Josh Mathers had been working on the same problem. "Maybe not," he said quietly, still looking off at an invisible point in space. He pulled a thick sheet of papers from the folder he was carrying. "This deployment all happened so fast we had little time to inventory everything. We didn't check all of it; just loaded it on board...quickly."

"Go on," Hudson said.

"Well it seems logistics was out thinking us." He was scanning the documents. "They were thinking of all contingencies." He stopped half way down one of the sheets and underlined some items, handing the sheet to Hudson.

The ship's Captain looked at the sheet intently. "You think we can work that?" Hudson said handing the sheet onto the chief. "What do you reckon Chief? Possible?"

The Chief paused, his eyes a little wide in surprise. "Why not? We've gone this far. Sounds like sci-fi crap, but I can't see why it wouldn't work, as long as those kids downstairs can manage it."

The Captain looked back to the young Lieutenant. "So according to this Josh, we have four of these plus a whole bunch of sonar buoys and Mark 50s?"

"Yep, ADAR's AN/SSQ-101 Air Deployable Active Receivers plus some monitoring units. It can also be fed back through the operational command network and to the air control center."

"The kids downstairs," the chief said again.

"Yes. The buoys weigh 39 pounds and according to the spec sheet the Sea Predator can carry 30 of them."

"Fan-fucking-tabulous," the Captain said, a broad grin stretching across his face. "We at least won't be sub bait for the whole trip." He was sure Mitchell would go for it. "Okay Josh, good work. Why don't you work out a plan with the Air Wing Ops officer to see if you can fly one of these out in front of us to make sure we don't get shot in the face by Kilo or Akula. If we know where they are we can avoid them. Those boats are fast, but not as fast as us!"

"Chief, can you get your guys together, get all this gear out of the glad bags and ready to work? It also looks like we will need to look at the retrieval system we talked about. We are going to want these ones back."

The Shi Lang

Shi Lang mistakenly identifies UAVs as F-111's

"Sir, the AWACS report possible tracks of aircraft, bearing 035, looks like F-111 aircraft at very low altitude."

The Chinese Fleet Commander mused for a moment. Not strong enough yet for the system to classify, but the AWACS crew had done a good job in getting him information on time. The AWACS was a KJ-2100 Beriev-A 50 Mainstay. It was among China's latest AEW upgrade programs. Capable of guiding 30 aircraft and tracking 300 hostiles at distances of over 231 miles, it was providing the Chinese Task Force Commander situational awareness in advance - something they had lacked for many years. He had positioned two of these aircraft 120 miles north, covered by Sukhoi and MiG fighters. This meant the

approaching force was still well over 340 miles northwest from the main fleet. But that didn't mean he wanted to lose any of his northern pickets either, several of which would soon come under the incoming enemy's missile envelope.

"RC, say thank you and let me know when you can confirm."

"Jinuan," he said to his 2IC, "begin a steer of three of the CAPS to cover these potentials. Keep the others orbiting further south, I have a feeling the Australians will try something very shortly." They would not, he thought, wait too long to act, allowing his forces the luxury of digging in deep. No, they would have to try soon if they really wanted to regain the ground. IF they wanted to regain the ground, he thought. Never take anything for granted.

The digital plot system identified and allocated targeting procedures on the incoming flight of F-111s as soon as the system's wide aperture arrays picked them up.

"Incoming flight of four. Plotting from the Noshi, inbound 240 kilometers."

That still meant they were 186 miles from the main force. That would put them in range to drop their Harpoons at any moment.

RANS Longreach.

Longreach monitors flight, Chinese Sukhois attack UAV's

On board the Longreach, Cyrus was watching the progress of his deployed UAVs. The six Scarab 324 UAVs were low and fast. Despite being just 18 feet in length with raked wings 18 feet wide, on radar they looked very similar to the signature of the F-111 and matched their speed and mission profile. The six Scarabs now heading towards the Chinese task force were unarmed surplus production models built for the Egyptian Armed forces.

They were travelling at over 558 miles an hour, capturing incoming radar signals and returning something that looked a little

bigger and nastier. Painted all black with low mid-body mounted wings, twin fin tail, single air intake on the spine and a Teledyne CAE 373-8C turbojet pushing it along, the Scarab looked menacing. It was however a wolf with just a whisper instead of teeth. And to the watching radars of the Chinese AWAC's and destroyer pickets, they looked just like the wolves they had been expecting - F-111s on the hunt. This time the AWAC's operator thought, we are ready. We shall send our own wolves out to stop you.

The sensor operator on the lead Scarab looked up from his console. The AVO could see the same thing. "Sir, we have a radar lock from a pulse doppler source. Looks like the type an Su-33 uses. We are also getting emissions from something I am not too familiar with, nothing I can ID. Maybe Irbus E."

That was unusual, Colonel Cyrus thought. They had pretty much everything catalogued on the system. The passive sensor system was now smart enough to combine the radar emission characteristics, source profile and other factors to make an accurate assessment of the platform. They were obviously missing one. He wondered whether it made a difference.

"Systems automatically logged the contact Colonel."

"Thank you." He turned to the Mission Commander. "Major Kelly!"

"Yes Sir."

"What do you think?"

"Snow Leopard, from either Su-35, 34 or MiG-35, this is smart radar with really long range and deception capabilities. The aircraft have reduced radar cross section which combined with their radar range is why we have nothing on any of our sensors yet, with long range missiles they have great stand off distance to attack from. Even our stealth Global Hawks can't see them yet. Perhaps if the Hawks were closer we could pick em up; we certainly see them when they go active with the Doppler."

The 51st Air Wing boss pondered that for a moment. "No, let's keep them out of the picture for the moment. If the Chinese see the Hawks or get too annoyed with them, they might try to take them out. If they're using the 34 or 35's that could be a real problem."

No shit, Kelly thought. But he wasn't about to say so. His boss knew what he was doing.

At 45,000 feet, the lead Chinese pilot of the flight of three Sukhoi fighters called the pop up. "Looks like they are preparing to launch!" Thinking he was looking at F-111s.

The pop up maneuver performed by the CUAV's had surprised the lead who immediately rolled in. "Lead will take the first two, Hu right, Pei left." There were two squawks in response. Fifty five miles out the lead got a good lock on both targets. He squeezed off two Alamo active radar-homing AAMs that immediately split, separating to attack from slightly different angles and making it far more difficult for the targets to evade.

His wingmen followed suit with the other targets. After the launch the three Sukhois kept their noses onto the target to watch the countdown and to make sure the missiles retained a good acquisition. The time of flight took less than 60 seconds, and with a closing speed of over 2500 miles per hour the missiles obliterated the prey, leaving just small smudges of smoke to mark where they had been.

Back on the Longreach the lead Scarab's AVO suddenly sat back.

"Damn, didn't even see that coming." The other Scarab AVO's quickly followed suit, pulling off their helmets.

"Do you think they had visual?"

"No, the radar was way beyond visual range. The attackers were still 60 kilometers away after closing subsequent to the launch. They might have seen the bright flashes of the hits."

"Good."

The flight lead of the Chinese Flankers grunted in response. This was his first real kill. He was elated, two kills and one each for his wingmen. Like the F-22, the Su-35 Flankers enjoyed a super cruise capability and could cover great distances with good fuel economy. The flight controller congratulated him and confirmed his request; keep hunting. They still had plenty of fuel, could re-tank, and there was nothing out here today he thought, that could touch them.

Back on the Chinese flagship, the Admiral had taken over the C2 Command and Control System, a replicate of the Shi Lang's main control room, which allowed the carrier Captain to do his job while Wen was able to direct the displays in the C2 Center to provide him fleet-wide situational awareness to manage the unfolding battle. Much like the American allied network, the real-time information that he enjoyed as a combat commander on the spot, was also being observed and analyzed by his superiors in China. That was the downside; they were nightmare backseat drivers.

"Admiral Wen." The teleconferencing command console came alive. The Admiral felt like pulling the plug on it. It was the Chief of Staff. "As we expected the Australians are making a last minute attempt to dislodge us," the General said, the picture a little grainy. "After making a crude attempt to take the oil fields by force, the United States is finally realizing that trying to do so by proxy was stupid."

Wen Jinsong nodded. "Perhaps you would like me to take this in my wardroom?"

"No need Admiral," the General said sharply.

The Admiral looked around the control room. His flag staff and the operators were smart enough to pretend they were not listening. But he was betting their ears were burning.

"I commend the efforts of the pilots in shooting down the F-111s," the General said. What makes you think they were F-111s, the Admiral thought? "Which means having lost five, they barely have another six F-111s to mount any sort of attack."

And where did you get these numbers?

"The Americans are still in the Tasman Sea about to tangle with the Russians. So Admiral, all you have to do is worry about squashing a small force of Australian natives with some antiquated aircraft. We have positioned a sideways looking satellite to keep in touch. We are interested in your progress and wish you the best of luck."

"Yes Sir." If only it were as simple as that, Wen thought. But it never was. The Australians had never struck him as being stupid. They enjoyed a beer, but when you looked in their eyes they were sharp as tacks. He turned to his XO

"Did we get a visual on those F-111s?" the Admiral asked.

"No Sir." The XO answered.

"So we don't really know whether they were F-111s."

"The pilots and AWACS were fairly confident that the signatures were that of F-111s on a low level ingress."

"But they did not see. They assumed. Walks like a duck, quacks like a duck and even flies like a duck. Doesn't mean it's a Pig though, does it?"

The XO looked perplexed. The English term of pig escaped him. Pigs and ducks, what did they have to do with F-111s?

330 miles to the east and further behind the first flight of UAVs that had been destroyed, three other Ryan-built craft, BQM145As, all plastic composite construction, flew unnoticed and unchallenged. They looked very similar to their Scarab cousins except they were a little

stealthier, had two air intakes and larger engines. The other difference was the HPM payload they carried.

From the opposite direction, three Boeing QF-45s approached the task force. A stealthy tail-less aircraft, it also had a mid-body mounted wing. These were swept back with a straight leading edge and a saw tooth trailing edge, all with 45-degree sweep angles. It was as big as a Ford pickup, featured an F124 turbofan and thrust vectoring exhaust to help compensate for the aircraft's lack of a tail assembly. Unlike the Ryan designs, the QF-45 could also carry munitions inside its fuselage, over 2240 pounds worth, as well as an advanced HPM actuator in the nose. There was also another difference. The QF-45 was super stealth and virtually invisible to all normal radar.

Orbiting west of the Chinese fleet was a KJ-2100 Mainstay AWACS, operating out of the newly acquired Davis Station airfield. The AWAC sported a version of the Phalcon AEW phased-array radar, reverse engineered from the Israelis and the AWACS was able to scan an area 600 miles in diameter.

"Incoming UAVs, bearing one seven zero," an operator said. The Mainstays AESA radar had picked up the small signals the Ryan's used to fly with, looked at the emission profile and identified them as UAVs.

"Multiple incoming targets, multiple tracks, each track locked, designated as MQ-9 Reaper air craft."

Admiral Wen Jinsong watched patiently. Behind him, an operator blurted, "Possible contact. Bearing two seven zero. Very stealthy, picked up on the Bing Qing J-321," This meant 'Ice (crystal) clear', also the code name of the operation plan. This was a Metric Wave radar, which, combined with the ship's high powered computers, was able to discern disruption in television or cell phone signals to locate moving bodies. The QF-45s were no longer invisible.

The J-321 data was fed directly to the AWACS, which, able to track over 100 targets at a time and guide over a dozen fighters in all weather day and night, quickly vectored available aircraft to intercept the incoming threat to the fleet. The task force commander watched the intercept as the data was fed real time into his command and control center.

At a range exceeding 120 miles, the Mariner CUAVs dropped their missiles and turned tail. The AWACS picked up the launch, feeding the data directly into the fleet's TAVITAC system.

"Missiles! Inbound!"

Three SU-34s fitted with the Feng (Phoenix), Ranets-E radio frequency cannons and high powered AESA, closed on each of their designated groups of incoming harpoon targets. The radio frequency cannons and radar fired high-powered microwave emissions, which fried the brains of the missiles. Within seconds, the missiles terminal homing disrupted, radar incapacitated and shocked by the focused HPM bursts, the would-be Harpoon killers spiraled out of control.

Escaping to the northwest, the Mariners were targeted by four Chinese EMG missiles. These were licensed Chinese versions of Russian Explosive Magnetocumulative Generator or coil weapons, another way of producing powerful electro magnetic pulses with a wide area of influence. None of the Predators escaped. The Ryan's operating systems hardened to withstand EMP were not affected and kept flying.

Still inbound the Boeing QF-45's were highly evasive and making it hard for the Chinese sensor systems to keep track, but it was the older Ryan's that struck first. Target selection was no accident. In terminal phase the Ryan's confirmed targets by their own radar emissions, the Ryans closed, popped up and fired directed, high-powered microwave bursts. The electronic sensors on the missile ships the Putian, Guilin and Nanchang were momentarily blinded. Behind,

the Boeing QF-45s closed to six miles before dropping two Harpoons on each target. The three ships were defenseless. The Luda Class ship the Guilin, hull number 164, took two hits and sank immediately. Her sister ship the Nanchang took a hit in the stern and the Jiangwei-II Class FFG Putian took a heavy hit in the super structure, killing everyone on the bridge.

This isn't what he had expected, Wen thought. They hadn't even tried for the carrier. There was something very deceptive about what was going on. He had expected an all-out fight. No, they were doing something else, but what? The logic was that they would try to create a beachhead. Everything else they had done so far supported that. This flowed from the coalition's initial attempt to take over Vostok. It was the logic that dominated his understanding of the enemy's tactics.

The control room was very calm. Wen ordered an immediate search and rescue operation, but kept the fleet at speed covering the wounded ships by air. He then ordered an all out effort on anti submarine operations, plus a full effort on air defense detection. He wanted his commanders in the best-protected part of their ships - the command and control centers. Unlike years previous, the warships were not managed from the bridge, but from the CCS. Well protected, the French-built CCS Thompson system, using technologies given in good faith to the French by their U.S. allies at the time, was now being put to good use to fight the U.S. and her current friends.

The French were clearly no longer allies but adversaries to the Americans. They had, in fact, sided with those that had wished to conquer the French in the past - the Russians and the Germans. The efforts by the U.S., who had saved her twice from occupation, were forgotten. But clearly that was the way of the French. They might love romance, but loyalty was not one of their great assets; they were fickle, were not good in a drawn-out fight and essentially could

not be trusted. They were Wen Jinsong thought, a legend in their own lunchtime; he really didn't like them. Anyone that could mistreat a proven friend like they did the Americans, were dishonorable and distasteful. But at the end of the day, the technology was badly needed by China in its attempt to gain ground on America's seemingly endless capability to invent. The French were simply handing them American technology. For the life of him, Wen could not understand why the Americans hadn't pole axed the dim witted French assholes. The Admiral at least respected his adversaries, the Australians and the Americans. These were distasteful times, but there was always, he believed, a place for honor and integrity.

One of the advantages Wen had in his defensive planning was to know there was very little threat from the south. He was right. They had to get past him to get there. He was therefore able to focus his resources on the northern approaches. The AWACS, CAPs, destroyers and frigates formed an in-depth defense against anyone trying to penetrate the main force. He was now getting close to the western extremity of his AOPs, the two other Chinese naval task force units behind him. The attack had been launched from the northwest, as might a follow on attack attempting to penetrate past weakened defences resulting from the first attack. He wouldn't feel safe until he knew where these attacking forces were coming from.

Wen Jinsong sent new orders to his western most task force, led by the Mistral Class LHD, the Chee, a ship almost as powerful as the Shi Lang. This force supported by the cruiser Qing Yuan commanded a unique and deadly weapon within its ranks, the progeny of what many called the Caspian Sea Monster. Called the Hong, this was a sea skimming flying monstrosity and was just what Jinsong needed.

After receiving the Admirals orders, the Russian pilot of the Hong had run the throttle levers all the way forward, his Chinese

copilot holding his left hand on top of his, the same way as their western counterparts did in the take off procedure. This practice ensured that there was no accidental retarding of the throttles at the crucial moment of taking to the air. Loss of any power meant plunging into the waves and certain death.

Six jet engines in the nose and fuselage directed airflow over and below the wings of the monster craft, providing immediate lift. Two big tail engines then surged the beast forwards, the heavy craft rising on the air compressed beneath its body and short wings. Once up to speed the pilot shut down the six starter engines, the forward speed providing enough air compressed between it and ice to hold it level. The ice then disappeared beneath, replaced by the longer rollers of the ocean. At over 450 knots, the WIG (Wing in Ground Effect) 600 ton ship killer traversed Prydz Bay from its land base at Zhong Shan to join the third task force and its first combat mission.

The pilot looked out of the cockpit at the sea just a few feet below. It was a long way from flying the single seat, 160 horse power piston ekranoplan on the shores of the Caspian he thought. He had never imagined for a second it would lead to piloting this leviathan into battle in the Antarctic oceans.

He listened to the radio as more instructions were issued from the Chinese task force commander. They were to search and destroy any enemy ships close enough to fire on the Chinese fleet. His crew plotted an intercept with the approaching allied ships and search pattern for the hidden vessel that launched the UAV strike.

Satisfied the Hong was on its way Admiral Wen Jinsong then ordered the fleet to turn around unaware this is exactly what his enemy wanted him to do.

Canberra.

Canberra learns of three ships sunk by UAV's.

"Three ships?" the Prime Minister exclaimed.

"Yes, their HPM capabilities were a whole lot better than we thought. We don't know the damage assessment yet, but in this instance it doesn't matter; the fleet turned west which is what we wanted."

"Now we just have to worry about the rest of the plan," the PM said; there was a long road ahead yet.

CHAPTER SEVENTEEN



The F-102 Almirante Juan de Borbon CSSQT, the same design that Australia's Hobart Class destroyers were derived from.

The Ross Iceshelf.

Saturday, December 8. 1530hrs UTC. C130 lands.

The Australian SAS Colonel, sitting on his 'borrowed' snow ski, had spent several hours scouting the best spot that would require the least work to prep for the F-111.

It was with relief that he finally sighted the C130 as it came in low, having flown the last 100 miles at less than 50 feet over the ice shelf. Hamilton had marked the landing zone with red and green dye markers, vivid splashes of colour that were hard to miss on the white background. Homing in using good old fashioned navigation, the C130 crew were ready; they saw both Hamilton's initial marker and the rest of the line, chopping the throttles and flaring the aircraft to touch down within 10 feet of the first marker.

This was where trust came in. The Aircraft Commander did not circuit the LZ; he flew straight in blind, too low to see the condition of the ice ahead of him. If Hamilton did not know what he was doing, had incorrectly marked or just simply picked a bad place for an aircraft the size of a C130 to land, it would all be over in a matter of seconds.

Designed for rough field landings, the C130 hit the reverse pitch as soon as the wheels touched, the aircraft disappearing behind clouds of ice thrown high into the air. Once slowed it was able to use the engines to steer across the slippery surface to the marker on the ice. The back ramp dropped and a large metal matt slid from the rear of the airplane to drag across the ice. The matt was in fact a rake. The hundreds of small metal blades attached to the rake chopping off the numerous icy outcrops and smoothing the surface. The pilot had the engines back up to power to overcome the heavy drag. It wasn't perfect, but it was all they had.

Hamilton watched in fascination as the Hercules dragged the steel mesh rake backwards and forwards over the piece of hard ice that was the runway for the inbound F-111.

After preparing the ice for the F-111, the C130 pilot retarded the throttles back to the rear indents and cut the switches. He then pulled his Nomex flight gloves off and wiped the perspiration off his face. It might have been cold outside, but he had definitely been working up a sweat that day.

Now it was the turn of the bomber. Like the Herc, it drove in low and fast but using its AESA radar homed on a narrowly focused beam which could see the Herc from miles away, too easily. Visually confirming the sight of the C130 parked at the threshold of the temporary ice field, the big jet's wings swept forward, flaps and gear dropping and the nose lifting as the aircraft flared. There was a collective sigh of relief as the airplane touched and the gear took

the weight. They were down and safe. So they thought. Then, in slow motion, things went bad. The aircraft began to go sideways, a slow spinning pirouette that sprayed clouds of ice into the air as the airframe ploughed through small powdered rough spots on the ice.

"Hang on! This looks like we are going for a ride!"

The bomber was simply too heavy to be pulled straight by the rudder, and the front wheel was just skidding uselessly with absolutely no steerage. Without the power of the engines she was just 75,000 pounds of unguided metal on ice. Rough ice too. The pilot and weapons operator were bounced and thrown around violently as the aircraft skidded helplessly, skating sideways, backwards and every other direction but forwards.

"Shit," was all Hamilton could manage. He had his hands closed hard over both throttle levers, every instinct telling him to push them forward and get back in control. He gritted his teeth and hoped the Wrangler would survive the punishment.

The design of naval aircraft, of which the F-111 was initially supposed to be, started with the airframe and landing gear because they had to withstand the tremendous shock each time the aircraft launched or landed on an aircraft carrier. So, despite the undulations and rough spots that would have ripped the legs out from under most other airplanes, the Pig's heavy undercarriage stayed together. And after what seemed an eternity, the bouncing, spinning, skidding and out-of-control airplane finally came to a stop. The engines were set to idle as the canopy came open and the pilot and navigator sucked in the super cool air.

The Hercules had brought with it a full complement of ground crew. Within minutes the crew chief and his team were all over the airframe, snapping in safety locks and securing the ejection seats. Once this was done, the pilot and weapons office lifted their sorry butts from the aircraft and climbed down the stairs, a strange luxury

in the middle of nowhere. In the distance they could see the white pillar of Mount Erebus, standing high against a foreground of endless flat ice.

Lance and Jake tested their legs, the dusted ice crushing loudly beneath their flight boots. They felt the cold immediately; the flight suits held some back but not all. One of the C130 crew rushed towards them with heavy jackets and gloves. It was all well thought out, including the cold weather mittens for the crew while they waited. But despite that, the Squadron Leader knew his operational plan, delivered on such short notice, had more holes in it than a colander. Success or failure depended on mission planners at home anticipating every need, logistical, and operational. They weren't letting him down. They did their jobs very bloody well.

The little tractor borrowed from the USS Clinton came in handy. Once the ramp was lowered, it pulled out the ordnance trolley with the first of two weapons that the F-111 would carry to the target. While the first weapon was being fitted, the little tractor pulled the rest of the supplies off, including a large bladder of fuel.

Stepping from the bottom of the ladder, Lance was immediately looking for his brother. Brian had waited until both Lance and Jake had put on their jackets and gloves. Lance couldn't see him. But he did hear him.

"Damn it! I call for the cavalry and get my little brother!" He feigned a look of dismay. "Aren't you supposed to be retired or something?"

"Aren't you?"

"Touché," Brian said, turning to the navigator. "How are you Jake, long time no see." He shook his hand. "Here to look after my little bro?"

"Keep him pointed in the right direction anyway, make sure he doesn't lose the keys," he said. "That sort of stuff." He noticed Brian flinch. "You alright?"

"Banged my shoulder in the Dry Valley, just bruised." He lied.

Lance looked at him questioningly. He knew when Brian was lying. Brian quickly changed the subject. "Obviously you got my message, I had a feeling you might turn up."

"So what happened?" Lance asked.

Brian gave him the unedited version of what had transpired, leaving out the getting shot part. They quickly updated each other on the last few days' events. It was the first time, Lance suddenly realized, that his older brother had ever talked about his field activities, always cloaked in secrecy. Lance and Jake were awestruck. When it came to their turn to talk, Brian's blood chilled as he listened to Lance's experiences over the last few days. Still, he could not help smiling. His brother was still alive, and a goddamn hero again to boot. Ironically, heroism or bravery was never a thought he translated to himself. It always just seemed like a battle to survive, what choice did you have? Fight or die. He was scared shitless most of the time anyway. It never seemed brave.

"I thought you might need this." Lance threw the heavy kitbag at Brian. It was his personal kit. Brian caught it with his good arm.

"You didn't have to come all this way just to give me this," Brian said mockingly, but smiling at the same time.

"Yeah, well," Lance said. "I was worried whether you had changed your undies. You know how mum was about those things. If you have an accident and they see those stained and stinky ones you're wearing, we'd all have to disown you."

Jake rolled his eyes listening to the two.

"Almost show time," Brian said finally.

"Yeah," Lance said, scanning the massive expanse of ice. "It's the waiting that gets me. Hurry up and wait, ever since I joined the service."

"Amen to that," Colonel Hamilton said, unzipping the bag, quickly rifling through the contents in a rapid stock take.

"The guys have also brought you some other nice surprises," Jake said. "When they heard you were down here, they ransacked the joint to get your favorite toys, plus some extras by the looks of it."

They had too. Brian was starting to become very focused. He looked up at Lance and then at the procession of equipment rolling out of the back of the C130. He then leaned forwards to his brother while Jake turned to inspect the progress. "I just hope like fuck we don't disappoint all these guys," he said quietly into his ear.

Lance looked at his older brother in surprise. It was the first time in his life he had ever heard him sound less than absolute. It made him more human. "Me too bro...me too." He said.

Brian turned back to examine his equipment. He pulled the ground sheet out first and laid it on the ice. He then pulled out items one at a time and placed them carefully on the sheet, after a few moments the sheet was covered with a whole assortment of weapons, clothing and sophisticated electronic devices. The Colonel lifted a dull black helmet, examining it for cracks. He could remember the cumbersome night-vision, infrared goggles they used to have to wear on their helmets.

Within his short two decades of service, he had witnessed some amazing developments. He spun the light Special Forces Combat Helmet between his fingers. The night vision, thermal sensors, day-night video cameras, and chemical and biological sensors were all fully integrated within the helmet. The visor also acted as a 'heads-up display' equivalent to two 17-inch computer monitors in front of his

eyes. He placed that to one side and picked up the clothing and immediately started to change, turning away from Lance and Jake to conceal a spreading bloodstain. The uniform system he now struggled into was an ECW or Extreme Cold Weather multi-function combat suit that worked from the inside out. It incorporated physiological sensors that allowed him and his field controllers, who were sitting comfortably in an air-conditioned room near Alice Springs, to monitor his blood pressure, heart rate, internal and external body temperature, and caloric consumption rate. Field controllers could access the information through the tactical operations network. All useless of course until the satellite communications came back online.

It was called the Objective Force Warrior system and also boasted a built-in microclimate conditioning system. The private climate-control system used "spacer fabric" that was a little bit thicker than a regular cotton T-shirt. The garment had "capillaries" that blew hot or cold air through the system. The system's functions were powered by small ultra light high tech fuel cells, cell phone batteries on serious steroids.

The climate-control feature eliminated the need to carry extra clothing. The outer garment had some biological and chemical protection capabilities also reducing the need to carry extra protective gear. A driving force of the new technologies was to try and reduce the total weight load a soldier carried into combat. Despite that, the warrior in the field was like a woman's handbag. As soon as you did away with one thing, there was always some new weapon or device to keep the space filled up, more ammunition, communications or multi mission capability.

In addition to the kit Brian was quickly assembling, he also noticed they had brought his 'ass kicker', a robotic Mule, fully loaded with goodies. Anything that was mission-essential, but not

built in to the individual soldier system was carried on the Mule. Better still, the Mule (Not to be confused with the car sized US UMV) could be deployed as a remote controlled recon unit and even had offensive and laser designation capabilities. It was three feet high and six long, but instead of wheels used fast tracks.

It also acted as a recharging battery station and a weapons platform. It had day and night thermal, infrared and forward-looking imaging systems inside the nose of the Mule, as well as chemical-biological sensors. The Mule could communicate with unmanned aerial vehicles to give him a true 360-degree image of the battlefield. Just like the animal kind, the Mule was a follower, and unless instructed otherwise would always be within hand reach of where the Colonel was.

In another case that had been dropped next to him was the centerpiece of Brian's mini arsenal, his TCS3 Tactical Combat System, essentially, a really tough looking laptop, an upgraded version of his TACTERM that he used in Papua New Guinea. The TCS provided support for mission planning, navigation, situational awareness, target acquisition and engagement. The system interfaced with the Wideband Global Satellite (WGS) communications system as well as any other friendly network node in range to establish large-scale networking. The RTC linked to standard combat net radios to access the network and transfer data between the network's units. The TCS, like a lot of the kit fitted neatly onto the Mule.

On this trip the Colonel also got one other useful asset: the Possum Autonomous Observation and Target Intercept System, developed by the Australian Defense Industry. The Possum was another type of unmanned security vehicle (USV), which could be operated from a rather nifty remote control that interfaced with his helmet's head-up display. Like controls used by the the CUAV pilots it was very much like playing a sophisticated computer simulation game. It could carry out routine patrols and fire suppression missions, holding attacking

forces back in the event of detection to allow time to escape. It was almost the same size as the Mule, three feet high, three wide and six foot in length but operated on six lightweight all rubber tyres.

Like the Mule, the suspension on the Possum collapsed for transport, which meant they could travel in specially adapted underwing pods fitted to the F-111.

The Possum was equipped with an automated tactical positioning system and could operate autonomously on and off road, at speeds over 50 milers per hour and could carry payloads of up to 700 pounds, including a light armour shield to protect vital systems. The Possum USV could carry a wide variety of sensors, including video and thermal cameras, with auto-target acquisition and capture, sensitive microphone, powerful loudspeakers and two way radio. The vehicle was equipped with a lethal rapid-fire cannon and Maverick III missiles. Given the amazing level of preparation, Brian had no doubt the Possum was also programmed with the Vostok tactical area definition, namely, flat and white with black spots and holes where the cruise missiles hit.

"So how are you going to designate?" Lance said, breaking into Brian's concentration for a moment.

"This," he said holding up something small in his hand, "Or this," gesturing to the Possum. "I'll have to figure that out when I get there, if it all arrives in one piece."

"In addition to you, we have two other full pods that will follow your insertion and land within 100 meters of you, just to make sure you don't have a train smash before even starting the mission."

The two men sat beneath the white camouflage netting reviewing the data on the Tactical Combat System.

"There was no other way we could do this," Lance was explaining after a few minutes. "Out of time, we had to do a lot of the work on the way down here, in the Herc, to make these big bastard fuel air

bombs fit the F-111. Firstly, they weren't ready and secondly it was too far to fly with them hooked up. With those on board I would not have considered for one second landing on the ice. It was bad enough dry weight. Besides, I would have had to unhook them again to load you."

"Sold me on that one," Brian said. He had seen the landing and could easily have imagined what the skidding F-111 would have been like with another 30,000lbs of FABs, probably a big hole in the ice by now. "I'm going to need time to get in position," Brian continued, looking at the map display. "Their troop positions and anti air assets are all over the place."

"That's what we figured. It's why we are doing this in two parts. It's also why we set it up this way," Lance said, gesturing to supplies around them.

Brian looked at his little brother. This was a long way from playing football barefoot in the red dust in the back of Burke. It appeared Lance had become a master planner. From a small text message he had quickly put a difficult plan together, anticipating most contingencies, and so far had made it all work. Brian would not have been at all surprised if no one had turned up at the RV point. Lance was still talking.

"There is no way, once in the air, that I can land the Pig with those huge bombs stuck to it. If I drop these anywhere on anything hard," He threw his arms open, "Kaboom."

Brian was listening intently. He normally had something to say. This was new. "Once I take off with them. I either drop them or lose them and that will be our last and only chance at putting that flame out. It's risky, but I believe it gives us an overall better chance if we do this in two parts. If I tried to do both at the same time there are too many things that could go wrong, besides the weight configuration would be all wrong."

Brian thought about that. He was right. Dropping him with the pressure of having the weapons on board, unable to land, having to loiter with an ever-diminishing fuel supply was a bad scenario. Better he had the time to get in position and Lance arrive with a healthier fuel load. "I'm with you, sounds good."

Brian suddenly sniffed the air. "What's that smell? Smells like sausages," Brian said, somewhat mystified. They all stopped for a moment sniffing the air. "It is sausages!" he said standing up, it felt like a long time since he had a cooked breakfast, even though it had been just a few days.

"It was the Crew Chief's idea." Lance said. "Hey, we can't go off saving the world without a snag!" If they were all going to die, let's do it on a full stomach he thought.

The Breakfast while nice was eaten on the run, the Herc crew were in a hurry to leave. The C130 stood out on the ice like a huge neon sign. With Russian air assets on the rapid increase not far to the west it would inevitably be seen, it was quickly back in the air flying low to remain undetected. Brian had no doubt fighter aircraft were also on the way to help secure Russian held McMurdo. The unloaded stores were covered with plastic igloos and ice to conceal them from the air.

The ground crew left behind by the C-130 would have to fend for themselves for the next day. But they were essential to the success of the mission ahead. The small knot of men in their issue EWCs huddled out of the wind behind the only shelter for miles. For Brian and Lance, the next few hours would prove pivotal to the very survival of their country and possibly the world. Like the stores, the Wrangler was also covered under a white shroud that made it difficult to see unless you were almost on top of it.

They were all intently aware that they were at the mercy of the weather. The igloos and shrouds were not protection against weather,

just camouflage. 'Can't see me, but sure can wet me.' It was an old term that Brian remembered from his days at officer training in Portsea, training for jungle warfare in the middle of winter in Southern Victoria in sleet and snow. They were forced as cadets to wear camouflaged tropical coats that became completely soaked and stuck to the skin in minutes, freezing your ass off. He still wondered who the fuck knuckle was who made them do that and who purchased the stupid fucking things.

They were now on the final and most dangerous part of the plan, for all of them. First of all the F-111 crew would be required to drop Brian into position near Vostok station. It would then return back to the ice runway to be refueled and loaded with the two huge bombs that now hid beneath the camouflage.

The crew chief checked his watch and smacked his hands together, replacing his gloves. "Time to move!"

It was amazing how many things could and might go wrong to scuttle what was an already complicated plan. Would the GPU start, Lance wondered? If it didn't, they were all stuffed. There was simply no other way of getting the Pig going. Not wanting to look worried as he carried out his own housework in preparing for the mission; his ears though, intensely tuned to the sound of the machine starting up. It coughed once and fired. He looked up to see his brother staring at him, smiling. He could swear the man could read his mind at times. Brian gave him a little thumbs-up, speaking loudly over the now noisy GPU.

"See, nothing to worry about. A little Aussie beauty that. Scared you might have to push start the Pig?"

Lance smiled back, if they could get it up to well over a 100kph to turn the turbines...maybe? It was a little later as final preparations for the insertion took place that Lance voiced his doubts about some of Brian's planned activities in the operation.

"Are you sure about this? This isn't exactly proven technology." He was referring to the SF insertion unit they called the HB.

"Got another plan?" Brian said.

No he didn't. He just needed to say it. He noticed Brian check his watch. He frowned, clearly worried about the little time left to get this right. If one thing went wrong, they would be too late. He wondered what it looked like when several gazillion gallons of fuel ignited. Brian's voice broke into his thoughts.

"It's the only way. Now that they have ground assets there, and air cover, there is no way you are going to be able to designate the target from the air," Brian said. "And from that angle the thermal flare will obscure the pointer.

Lance nodded, he was right. They walked over to the unit in question. "So this is it, the poor mans version of the British Special Forces insertion unit." Lance patted the casing. "The great Australian HB (Human bomb)"

Brian grunted, he hated that name, didn't like the idea of being part of a bomb. The big unit still looked menacing, except all things going well he hoped it didn't blow up. It was a big cruise missile that had pretty much been gutted with the exception of its navigation equipment. It was easily large enough for a man to fit into, was pressurized and fitted neatly under the wing of an F-111. Most importantly it could be launched several hundred miles from the LZ, meaning the delivery platform could get out of Dodge before everyone started shooting.

After launch, two small wings unfolded from the somewhat flat, coffin like fuselage. Powered by a small jet, the HB would cruise at over 500 miles per hour, just feet above the ground, navigating using a pre loaded course verified against terrain and its own internal mapping system that continually referenced its position to the foot. Like its delivery platform, the SFIU was terrain following coupled

with exceptionally stealthy design characteristics. Compared to iron bombs and missiles that the Wrangler normally carried, the HB was positively light. Considering that the F-111 could carry tens of thousands of pounds of ordinance, stacking six H-bombs under its wings was a walk in the park, at least for the driver and weapons officer.

The Australian HB was experimental and had pretty much been shelved, leaving the research to the British. But desperate times needed equally desperate solutions. This was the only way. There was no more time to try to conjure up another solution. They were committed. With his team of one, himself, he would drop far enough from the target to not be detected and make the rest of the way by foot. It was his job to designate the target for Lance, when he returned with the Fuel Air Bombs (FAB's). There was only one shot, so they had to get it right the first time around.

"You ready?"

"I'm ready." The nose of the HB lifted up to allow Brian to grip the rack that held it and swing himself into the unit. It was like climbing into a coffin. The front of the cruise missile casing was made up of the same stuff used for F-22 canopies, allowing the occupant a view to the front and below. As the nose was closed over, there was an almost immediate feeling of claustrophobia. There was very little room to move.

Insertion into Vostok. December 8, 2230hrs UTC.

While the Australian designed SF insertion unit was nothing like the super tech toys deployed in Dale Brown's novels, it was functional, worked and, most importantly, was available now. However, small details like how to stop had not been refined.

The landing was Brian's favorite part, because this thing didn't land. It crashed. In the last few moments Brian would actually take over the controls and belly the small cruise missile onto the ice. At the moment of touching down a large drag chute deployed from the rear which would stop the small missile with a man on board from going end on end, bringing it quickly to a stop. But it would be rough, really rough. Unlike other models that had deployed chutes to land, this model just had the drag chute. Not big enough to land the whole thing safely. But it would have to do, like so many other things on this mission.

"You hear me brother?" Lance said from the Wranglers cockpit after strapping in. He looked down from the cockpit to the nose of the human missile slung beneath his port wing.

"Yes brother hears you loud and clear." Brian replied, not a lot of cheer in his voice. He wasn't too sure he wanted to see out the front of the damn thing.

"Sweet. Shall we rock and roll?"

"Sooner the better, this thing is already cramping my style." Surprisingly, if he craned his neck, he could actually see the helmeted head of his brother in the cockpit.

The dark visored helmet turned towards him and gave him thumbs up. He could then feel the rumble of the engines through the airframe as the APU fed air into the Pig's turbines and the igniters did their job of starting the fires that would turn kerosene into noise and speed. And noise it was.

Brian squeezed the little yellow earplugs and pushed them into his ears. Even that didn't stop it, the rolling thunder of the afterburners drove through his entire body making his teeth chatter and every bone in his body vibrate. He was sure everything was going to come apart. Beneath him, the ice had turned into a trembling blur as the aircraft rapidly accelerated; the hard surface seemingly

inches from his face. He made a mental note to request business class next time, this really sucked. The vibration increased as the big jet ploughed at high speed through the ice bumps. Just as quickly as it started, it stopped. The wheels left the surface sucking up into the airframe, Lance cutting the burners. As the aircraft's speed increased, the sound was left further and further behind. He unplugged and put his headset back on.

"You know when you said come fly with me; this is not what I had in mind." Brian said over the internal intercom.

The head in the cockpit turned around and pushed up the visor. The eyes were smiling. Lance was still amazed there was a person sitting in the bomb hanging off one of his wing pylons. "You didn't actually think I was going to let you anywhere near the controls did you? Remember how many times you made me sit in the back of Mossies Commodore while you were busy up front!"

Brian smiled at that. He was right. He would tell Uncle Mossie that he was taking Lance for a drive, and did. But he would pick up his girlfriend Jacky on the way. He would make his younger and very annoyed brother sit in the back. They would then park, and while he and Jacky went for a walk and had some fun, Lance would sit bored shitless in the car, trying in vain for a radio station and music, a luxury in those days that did not exist, not at the way back of Burke in nowhereville Australia anyway.

"Yeah, but I never made you ride on the roof or outside." Lance could hear Brian chuckling. While talking to Brian, Lance never for a moment stopped his eyes from looking at both the large MFD and the ground in front. The bomber was flying low and hard. The view from Brian's little office must have been something else he thought. He would have to try it one day; it looked exciting. With the weapons panel armed, he let the aircraft's system update the telemetry of the cruise missiles before release.

"Well, consider this payback for all those lonely nights," he said after a pause. His voice became more serious. "Okay, we are coming up on drop point. Get ready...good luck, I will see you in four hours."

"Thanks bud. Luck to you too. Shoot when you are ready."

"Coming up on my mark."

"Mark."

Brian's stomach had lurched as the explosive bolts had fired and the HB dropped from the rack. There was the sickening feeling of free fall as the HB dropped off the wing pylon and he wondered for a moment if the damn thing was going to fly or just keep falling.

"Missile away and running fine," the Pursell confirmed.

"Let's go." Lance Hamilton initiated a low and hard turn, reversing direction, leaving the small cruise missile with his brother on board, speeding towards a lot of uncertainty.

The HB began to vibrate and wobble. For a terrible moment there was no noise and nothing happened. He couldn't see, but could hear the wings unfold. At least he assumed that's what the noise was. Immediately the wobbling smoothed out and the little ship began to steer. He felt before he heard the cruise missiles engine rpm wind up and start delivering thrust. It felt good.

But if he thought the F-111 flew low, the cruise missile was something else. For 20 minutes it sped at a mind-numbing speed a scant few feet above the surface. The ice came and disappeared beneath the cruise missile so fast it was just a blur. He gave up trying to focus because it was making his head spin. The small digital monitor in front of him showed his proximity to the DZ. To confirm what he was already thinking, he felt the power come off the engine as the missile slowed as part of its pre-programmed ingress to the target. Vostok he knew was now 10 miles off to his starboard side.

It could hardly be called flying, but after over riding the system's autopilot, Brian grabbed the poor excuse of a control stick, slowing the missile down by punching a button on the console much the way you did with a computer game, when all you had was the keyboard to fly your simulator. The missile hit the ice at over 100 miles per hour. The chute immediately deployed, preventing the impact from turning into a messy metal-crunching crash. But it was still violent and completely knocked the air out of Hamilton, banging his head hard against the top of a heavily padded cabin. Even after the missile had skidded to a halt, he was still reeling, small pinpoints of light swimming across his vision.

The urgent desperation of the job at hand helped brush aside the haze. Triggering the front latch, he pushed the nose cone open and pulled himself out. Standing up he was surprised to see that the cruise missile showed virtually nothing of its rough landing. Considering how it had felt he was almost disappointed, like having a small cut hurt like one that should have been 10 times larger. Maybe he was just getting too old for this shit.

His small bag of tricks had been packed behind him. He retrieved them and a custom-made white camouflage net with which he covered the missile. He did the same with the other two missile containers once he had relieved them of their loads, most importantly the Mule and the Possum. He was impressed that in the short notification and breakneck speed in which the plan had been slapped together, they were able to get them ready to ship like this. After moving 50 feet away he realized that it would be almost impossible to see the containers unless you tripped over them. He looked to his east. Ten miles away there was Vostok.

He sat down and conducted a quick equipment check, looking for any damage that might have occurred during the landing or crash. By far the most prized possessions in the storage packs were the small-

unmanned aerial vehicles (SUAV). They looked like incredibly flash model airplanes, which in some ways they were. But unlike their civilian counterparts, they were quiet, stealthy and very smart. Potentially they could be controlled from anywhere in the world; however, experience showed that the split seconds in lag time could be fatal in controlling them effectively. In addition to the reconnaissance Microstars, Brian also packed a few dragonflies, capable of hovering and sitting, the same as he had used in Papua New Guinea. They could be useful. These were later models incorporating a synthetic muscle tissue that flexed with electric impulses and developed a more natural and efficient wing beat.

His first objective was to get a good look at what was going on in and around Vostok. Brian powered up his laptop. The military called it a TCS, or Tactical Control Station. Brian called it one tough son of bitch of a laptop; because they looked the same size and had a keyboard and screen. In reality it was a lot more. Brian's TCS incorporated the control hardware and software for the UAVs. He plugged in a small joystick into the hardened side of the units casing especially designed for such devices.

He then selected one of the small Microstar reconnaissance UAVs. It was light as a feather. Made up of carbon fiber and solid circuits, the only real weight was in the battery. The Microstar had an amazing two-hour endurance and was whisper quiet. Hamilton fed the co-ordinates into the control console and after checking the ID number, selected the aircraft from a pull down list and started its power unit. The suitcase control module was based around an ultra high-resolution monitor. The data from the unit was fed back directly to the console as well as the satellite feed to Pine Gap, if it got back online.

He did this while holding the small craft in his left hand. The small control stick included a throttle lever, he ran the power

up on the small engine and with a small throw the tiny airplane was airborne and on its way. He turned back to the control console and selected the nose camera. The visuals were amazing in their clarity. He flew the Microstar low and slow. The first indications that he was coming up on target were the craters. These were dug out by the numerous cruise missiles fired from the Blackjack bombers. They were an excellent marker of the outer boundary. Not far away he could also see the pillar of smoke that marked the oil fire, the target.

The biggest challenge from his current position was the lack of high ground. There was none. The whole area, apart from that torn up by the missile attack, was one big white flat pancake. Within 60 minutes he needed to have that oil fire designated. It was easy to hide here, but not if you wanted to get close and personal. In this environment the only thing that hid you was the earth's curvature. It was light 24 hours a day and you could easily be seen for miles, standing, walking or crawling. How the hell to get closer, he thought. It was then the Microstar UAV flew over a field of sastrugi, anthill like mounds of blown ice and snow. He would go for them.

But before he had even moved, he could hear the faint sound of an engine, probably a patrol he thought, he. He waited, training his field glasses into the distance. As the Russian patrol came into view he knew straight away they were Spetznaz. A shiver ran down his spine. That made his job harder but was expected. He was just hoping for a break. They were still a long way off. After they had left he moved out towards the sastrugi field, like obedient huskies, the Mule and Possum followed him.

An hour later he was in a better position; both the Mule and Possum were dug in, hard work done courtesy of the Mule, which was fitted with a small blade. He and his electronic team were buried in the whiteness that surrounded them. He had spent another full hour smashing the ice they had dug up and spreading it around into

something that looked like snow berms adding to those that already existed.

Another two-man patrol appeared on snow skis. Unless they drove right over the top of him, the bad guys couldn't see him; unless, he suddenly thought, they were using thermals. That was a worry, looking through his IR field glasses that didn't seem the case. He hunkered down until he heard the engines of the two snow skis rev as they moved on. Thank Christ. Now for the next stage: the advanced Microstar Dragonfly.

Everything was called advanced nowadays, Hamilton thought. He used the tough little laptop (TCS) to bring up the operating system on two of his Dragonflies. They made no sound other than the beating of tiny wings. From the palm of his hand they took off towards the large crater, flying low and erratically. The cruise missile attack by the Russians had one positive affect, it had created lots of small craters and mounds, things that something as small as a hovering Dragonfly could hide behind or sit on.

While Brian went about the process of setting up target designation, Lance Hamilton's F-111, call sign Buckshot, was once again stretching out its heavy undercarriage as it returned to the ice shelf and waiting air crew, ready to load the FABs. The round trip was over two thousand miles. They had avoided using the drag chute on the first landing, which was a mistake. Not this time though, the landing was still scary but mostly pointed in the same direction. The first priority was to tank the bird in the event they had to move quickly.

Lance kept the turbines idling, parking close enough to the fuel bladder for the hoses to reach. Once again the little tractor from the Clinton proved its worth. The PTO on its rear end fitted neatly into the fuel pump attached to the bladder and after just a

few turns of a wrench, they had fuel pumping into the Wranglers tanks.

While the refueling occurred, the two bombs, with the help of a small team of technicians that had traveled on the Hercules, were gradually winched up onto the inboard pylons and locked into place. The bombs had been flown to the USS Clinton just in time with the help and quick thinking of David Stringer. In flight the two weapons received a hot fix to be able to attach them to the RAAF's F-111S.

BLU-85A's were advanced versions of the BLU-82 Daisy Cutters - 15,000 pound fuel-Air Bombs (FAB), which exploded just prior to hitting the ground at a height of one to six feet, killing everything within a square-mile radius of the impact point. They are the largest conventional bomb the United States military has in its arsenal. The Conventional F111 was not supposed to carry them and even the F111S was marginal, threatened by the development of an uncontrollable rolling moment. But there was no other choice.

This type of weapon was introduced in 1970 during the Vietnam War as a method for instantly clearing sections of jungle to create helicopter-landing zones. The weapon worked by squirting out ethylene oxide and then ignited the fuel vapour creating a massive pressure wave, which sucked oxygen out from the surrounding area. This created a powerful vacuum effect. And it was this effect the Pig crew was hoping would snuff the fire out.

The bombs in their basic casing, even if fitted to the F-111, were useless to the task, lacking the guidance and accuracy required for such a delicate 'one shot' mission. The interim and heated discussion had decided on two things. Instead of one 35,000lb monster they would go for two 15,000lb bombs, this made it easier to fit on the F-111 and to get to the Clinton. The second part was a real fast play in getting a hold of a pair of smart kits. These were developed by the Israelis and strapped onto the bomb cases after

ripping off the fins and other exteriors of the BLU or FAB casings, depending on what you referred to them as. The smart kits gave the bombs autonomous Electro-Optical and inertial guidance with satellite feed (if available) and laser guidance. You could preload it with several target images, and it would then compare the targets to a real-time Electro-Optical image, which is acquired by the bomb's Electro-Optical seeker. The bomb could locate the target autonomously, prepare its flight course and hit it with absolute precision. Which was great when the entire landscape wasn't white and featureless and you knew what the target was going to look like. In this case the target shape was changing, albeit still a big hole in the middle of white nothing. The system also employed GPS guidance, in case the Electro-Optical sensor could not acquire the target for some reason. That also assumed satellites, which were no guarantee. Laser designation was the best solution but might not work since the 1.066 micron band infrared brightness of the blowhole flare would blind any laser seeker from miles away. Inertial was the next best option but much less accurate.

"The bombs have to fly down the throat of the hole and both detonate half way down at the same time," the guys at Rosenbridge had theorized. "Not on the side, not near it, but inside. That's why we need to be sure with the laser designation."

The Israelis were brilliant engineers; after making the necessary changes to the casings on the trip in, the bombs fitted like gloves to the standard pylon fittings on the F-111. Better still the software was developed with a generic communication interface that came online within moments of powering up.

Things were going so well, Lance was starting to get worried. There was a real nasty bastard surprise around the corner. There was no such thing as a dream run; he preferred the bad news elements spread out in smaller doses. It was the big dose he felt coming that

now worried him. He wouldn't know until he got there whether the fires were burning deep enough in the hole to use the laser designation.

As he ran the throttles forward, the world behind him turned white with the jet wash over the ice. "Shit I hate that," His navigator said.

"Me too, you gotta be able to see that for miles."

The Navigator looked back over his shoulder at the rapidly shrinking knot of men and equipment alone on the ice shelf. "When's the Herc due back?"

Lance looked at the cockpit's readout. "Fifteen minutes."

"I have to say, man, I don't know whether it's scarier going where we are, or waiting helplessly on the ice."

Lance Hamilton knew the F-111S would handle like a loaded Mack truck without power steering or hydraulics. But it was a whole lot worse than he had imagined. His hands holding the throttles rattled and shook. With full afterburner and the extra weight, the incessant shaking and hammering from the rough ice running through the airframe made him wonder just how much punishment the bird would take before losing some feathers. He sighed inwardly as the vibration suddenly ceased, the heavy bomber clawing her way into the air.

McMurdo Station. Under Russian Control.

McMurdo's new station Commander, Pavel Kondrat'ev syn Khudiakov, a Russian Colonel from the Northern Fleet looked up from his new desk.

"Are you sure?"

"Yes sir. They said a jet took off from the ice. They were too far away to identify what it was. But it headed inland."

"Tell them to investigate immediately. Have a team ready to back them up. I want to know what's going on. We have no aircraft

operating over there, nor do the Chinese." Not enough information to jump to conclusions, but enough to tell him to investigate. Throwing on his jacket, he walked quickly out of his new office. "Get me my chopper now."

Back on the Ross Ice Shelf the Russian patrol that had made the report, made up of a group of four snow skis and a tracked carrier, closed on the point where they had heard the thunder of the jet and the rooster tail of ice particles in its wake. A katabatic wind stirred across the white surface. The first wind there for two days. The Russian officer in command of the small patrol squinted and looked inland. The wind would freshen quickly. Looking back across the ice, over a mile away, he could make out a small contingent of men huddled beside boxes and other equipment. Through his field glasses, he couldn't see anything particularly threatening. The scattering puffs of ice particles were starting to haze the conditions.

"What do you think?" the unit's commander said to his senior NCO.

"I think to be safe; we blow them up. We should get close enough to use the anti-tank gun and mortars. Hit them now."

"Tempting, but I'm thinking we should wait. They are waiting for something, possibly another aircraft. If we take them out, we are not going to find out what it is. If nothing turns up in fifteen minutes we will hit them with the mortars, unless, of course, they start shooting first."

The Russian Sergeant grunted. "As usual Petroski, your superior logic and wisdom is a shining light in an army of ignorance."

Petroski shook his head; the Sergeant was a real wit. The edge of sarcasm and flattery heavily blurred. It was his way of adding some humor into otherwise long and tedious days. "Well Sergeant,

let's have the mortars ready then, eh?" Did they want to take prisoners or play safe?

The Australians had picked up the Russian patrol with a small portable ground radar. "You think they have seen us?" the Loadmaster asked, operating the unit.

"Without a doubt, you would have to assume that. But they have not fired at us, which is curious."

"Bugger." The C130 Loadmaster swore. He would have to call an abort. He picked up the radio. No need for radio silence now, he would warn off the inbound herc bird.

"Lumberjack this is ground, you copy?"

"Ground we copy, loud and clear." The copilot gave the aircraft commander a quizzical look, calling in the clear meant trouble.

"Lumberjack, ground, we have an abort, copy. Say again it's an abort."

"Ground, copy; we are still inbound five clicks."

"Lumberjack, we have a Russian patrol one klick southwest of our position, small arms, probable anti-air, currently static perhaps waiting for backup."

"Copy that ground. Hang in there; just tell the guys to keep their heads down. We will be there in a minute."

The Loadmaster didn't like the odds. The F-111 was still engressing the target; it wouldn't help to let the bad guys know in advance by getting themselves and C130 captured. They would quickly figure it all out. He looked at the small deep hole in the ice. Most of the equipment that might have revealed the nature of their mission was now in safe keeping, sitting on the bottom of the Ross Sea. He spoke softly to one of the men. "Wally, pack the hole with ice... quick, but don't be obvious." If they were captured he could say they were part of a rescue team, the last ones out. That's if the Russians were of a mind to take prisoners.

Four miles out and still inbound, the skipper of the inbound C130 stretched and flexed tired muscles. It had been a real long day. This would in fact have been one of the longest missions in Wing Commander Graham's entire life. From the landing on the carrier to the RV on the ice shelf, and now this final extraction mission before going home. Graham looked at his copilot. "You want to turn round?" The copilot shook his head. "You guys?" he said to the rest of the crew that had crowded the flight deck's door. They all shook their heads. "Good, get strapped in. This is going to be the roughest ride of the day. I'll be buggered if we leave anyone here." He looked over the copilot's console. "Phil, when I call for that," he pointed to the newly installed console, "keep it going until I say stop."

"I can tell you, my hand will be stuck on it until we get home!"

"Ground, this is Lumberjack."

"Ground."

"You better have saved some of those prawns, you bastards, and they better be warm otherwise there will be shit to pay when we get back home."

"Roger that Lumberjack. There's enough heat here at the moment to fry anything!"

With the Hercules about to show, the Russian patrol commander just two miles south was looking intently through his field glasses, noticing an increased pace of activity. He dropped the glasses as his Sergeant was yelling something.

"The Colonel is on his way now. He told us to hold!"

"Great," was all Petroski said. The sound of a helicopter could be heard in the distance. He looked through the glasses again. The chopper he realized wasn't the only inbound aircraft. Scanning the horizon he spotted the transport. "Look!" He pointed towards it

and handed the Sergeant his field glasses. Low on the horizon the Russian NCO could make out the shape of C130. "I guess that's answered your waiting question."

The sound of the helicopter coming from their southwest grew louder.

"Get the mortar teams firing!" Petroski ordered.

The Sergeant spoke over the unit's internal communications. Seconds later there was the sound of mortar rounds leaving their tubes, the first ones landing well short of the men and equipment waiting on the ice. A quick correction brought them a lot closer.

The Loadmaster could see the Hercules coming in low. They had ignored the abort. He had mixed feelings; he wanted to be saved but this was stupid. Mortar rounds began to impact around them. Ice showered down on top of them as they dived behind whatever cover they could find. He looked back at the C130, instead of flaring to land it kept coming; maybe after they saw the impact of the rounds they had decided to abort after all. Its shape got bigger and bigger until it flashed overhead, climbing and banking heavily. Another volley of rounds landed close.

The ice shook and much heavier pieces of ice crashed into the ice surface around them. The next lot would land on top of them. Through the flying white snow and ice, the Loadmaster they called Mr Bean saw the three Grail shoulder launched missiles snake out from the Russian troop's position. He also saw Russian backup just arriving in one of those double rotor jobs, flaring to touch down. The C130 was dead he thought, the missiles moving too fast, and turning into the big airplane's circle. It looked like they would all hit.

The C130 copilot called the launches, punching chaff and noting the position of the Russian troops as well as the helicopter landing.

On the ground the three soldiers who had fired the SA-7ds, shoulder-mounted man-portable air defense systems, watched with a great deal of satisfaction as the missiles homed in on the target, ignoring the chaff and decoys the aircraft was furiously ejecting.

The C130's missile-warning sensor was warbling incessantly. Watching the approaching missiles bright exhaust's colors against the white, the copilot's finger was poised firmly on the button.

The pilot picked just the right moment. "NOW!"

The aircraft's missile-warning sensor knew the location of the missiles and trajectories. The anti missile microwave system fired, flooding the region of the sky where the missiles came from with microwave energy. The concentrated microwaves, the same technology we all use to heat food, penetrated the missiles metal skins. The missiles electronic brains were swamped with the energy burst and momentarily disabled, losing control resulting in drastic changes to their flight trajectories. This rapid change of attitude immediately produced multiple mechanical failures in all the missiles, quickly becoming catastrophic because of the high "g-force" turn they were all in.

The sudden change in direction and obvious loss of control of the missiles was the first indication to Petroski of something going wrong. The loud explosion of the Kamov 27 helicopter behind him quickly followed as it crashed into the half-track transport. None of it was making sense.

He picked up the radio to speak to his Sergeant who had run forwards to find out what had gone wrong with the SA-7 missiles. The SA-7 team looked like they were trying to set up another shot. The radio was dead. He next tried the ignition of the nearest snow ski, which just a few moments ago had been running. It was dead as a doornail. "Shit," he said to himself. The mortars had stopped firing. He then looked at his digital watch. There was no readout.

He finally understood. Nothing was going to work. Welcome to 21st century warfare. If they had been a common infantry unit, some of their equipment would still have been working. This was the best stuff though. All modern and all fucking computerized, using some tiny microprocessor even if it was just to count the range or time, now all as useless as his watch. He took it off in disgust and threw it on the ground.

Broken ice now separated them from the Australians. The Russian patrol, unable to communicate with anyone, watched helplessly as the C130 landed, boarded the ground team and disappeared to the north.

Vostok Station.
December 9, 0234hrs UTC.

Normally the wind would blow constant at five mile per hour from the southwest, cold air sliding down the contours of the interior towards the coast. For the moment it was calm. It was always daylight at that time of the year; there were no trees, no vegetation and in the interior no living organisms. Usually the constantly blowing snow meant that anything left in the open was quickly buried. This at least would be helpful in concealing his equipment and hide Hamilton thought. The wind would return, which is why he planted a marker post next to his hide, to stop him losing the exact location.

To the southeast of the Vostok Station where he was currently lying, there were long shallow snow dunes that at least afforded him some protection from ground observation. These were punctuated with berms and sastrugi, snow formations created by the wind, a little over a foot high.

The Russian forces would be monitoring the area for any sort of electronic emission, which meant it would be impossible to use any emission signal to talk to, or watch what the miniature UAV was

doing, which is why he now opted for another Microcraft product only six centimeters long and powered by a silicon micro turbine fan. At the micro scale level, silicon made an excellent structural material, superior to super alloys or titanium. It had low density and thermal expansion, and was very stiff. The tiny jet engine weighed less than 80 grams. Installed into the vertical take off Microcraft airframe, it had 100 times more thrust-to-weight ratio than its larger cousins, and spun the tiny turbines at an incredible 1.2 million times per second. With a range of 90 miles and a forward speed of 100mph, it used propane gas, consuming just 25 grams per hour.

Back in his hide, Hamilton removed the heavy outer gloves so he could manage the keyboard mouse and control stick. Specialized under-gloves, heated by his suit's power pack, kept his hands from freezing in the insanely cold temperature. Unlike normal radio controlled model aircraft, the MUAV Microcraft flew itself unless you overrode the system. Normally you pointed to places on a map, set altitudes or even just used the touch screen to select points in space. These instructions were transferred either by microwave emissions or cable.

The Dragonfly, as good as it was, wasn't powerful enough to drag a cable and fly at the same time. For this part of the mission, not being detected was paramount. The micro-fiber control cable was gossamer thin and virtually invisible to the eye close up. Hamilton sent the small MUAV vertically to 2000 feet and rotated the small airframe to point the camera at the target. The imagery came through on the HUD within his helmet. Over three miles away he could see the hole, nearly 500 yards wide at a guess.

It was black for miles around. Because of the tremendous noise, flames and smoke, he guessed the Russians had based themselves at least a mile away. A quick scan revealed anti aircraft batteries of numerous types spread out in a wide perimeter and in depth. There were moving from the central location of the skiway as he watched. He

flew the little MUAV fanjet carefully so as not to tangle the cable. If the cable were cut unexpectedly, the little jet would make its way back home or continue on an alternative pre-programmed mission.

He steered the MUAV west of the outermost air defense units. They were mostly tracked and included both medium and long-range missiles. That was really bad news. There was, from what he could tell, a single Grumble unit that had over 16 missiles with a range of 200 miles, plus numerous Gadfly, Gremlin and Gopher carriers that reached anywhere between 10 and 60 miles. Lance and his F-111, already on their way in, had to penetrate to within 25 miles of the target itself. Some of these anti aircraft units were stationed at least eight miles west and south of the target. He could also see several mobile gun systems, two Tungustas at least.

Brian knew Lance was a sitting duck to a concentrated barrage of anti air missiles like this. There was no way with his small electronic warrior force he could take all these units out. But he had to make sure at the very least he created a corridor for the bombs, otherwise it was all over.

Wombat, Inbound Vostok Station.

The Pig, with Squadron Leader Lance Hamilton urging her on, slugged low and fast over the Antarctic interior. Like a fine needle, the F-111 threaded its way between the valleys and peaks of the Trans Antarctic Mountains, then over Victoria Land and the super snow dunes that dominated that area. They were coming up on target.

"Okay, Jake, let's look at our LLEP so we make sure we get home."

"Right," He replied. Jake computed the bombs-away time for their target and then backed up on the numbers to arrive at their Low

Level Entry Point and, hopefully, an air-refueling control point many miles north.

Lance took a quick look at the TIME TO DEST readout on the primary display window he had setup and shoved the throttles forward to almost full military power. He then hit the HEADING NAV on his autopilot, which put the Pig into a steep turn before rolling out on its approach heading. The time over target was almost nonexistent.

Following inertial guidance back by optical target recognition, the system knew the exact location of the target, but not the potential missile threats until they were lit up or picked actively by their own radar.

"Whoa," Jake said suddenly. "We have S-Band search radar, F-band director for some Gadfly missiles and some X-Band from cannon. Nothing locked on but we are starting to get in the Grumbles missile range." They were still 100 miles out but on the deck.

The approach called for a final pop up, to let the missiles 'see' and lock the target in. This maneuver would also make them visible to any long-range missile defense assets the Russians might have placed.

On the emergency frequency they picked up a challenge from the Russian ACS. "Неопознанный самолет 130 км к югу от Востока, прекратите ваш подход пока не разрешено."

Hamilton ignored the challenge. "Arm them up Jake," he said. Jake had already picked up the weapons status on the master function display Window, selecting the control to ALL receiving good lights from both weapons. "All weapons check, both selected."

"Неопознанные самолеты оборачиваются немедленно!" The heavily accented voice was becoming more strident telling them to turn around immediately.

"80 to go," Jake said.

"Time to play," the pilot said, pulling back on the power and transitioning into a steep descent.

Jake cried out, "SA-10 one o'clock!" The rapid descent took them off the radarscope. "Lost lock." The immediate threat passed. "Fifty," He said

"Popping up." Hamilton responded.

"We are being swept by multiple bands of radar. Both missiles have telemetry."

"Launch when ready," Lance said.

Jake reached touched the weapons array changing the launch switch from OFF to MANUAL and pressed the pickle button. The computer took over. It took a few moments for the smart bomb kits to communicate and validate their systems and positioning while the F-111 hung in space with what seemed like every missile in the southern hemisphere looking at them. Both bombs punched off the pylons at the same time. The sudden loss of 30,000 pounds of dead weight caused the F-111S to surge forwards. Once sure he was clear of the dropping cargo, Hamilton rolled the bomber on its back and headed back to routing through terra firma.

Jake depressed the jammer switch lights on the display panel and the forward XMIT light came on immediately. The SA-12 and several others were locked on to them solidly.

"We have multiple missiles launches, multiple tracks."

"Gimme chaff." Hamilton rolled the plane again taking her out at the best escape angle to the missiles before turning back into them and presenting the thinnest profile possible. Skimming low over the ice he moved the stick up and down to create a 100-foot oscillation and sideways rolling motion. There wasn't much else he could do.

The missile plumes were visible ahead. The airplane would die in seconds.

"Any good?" He asked Jake.

"No good, too many solid missile locks. We won't make it."

"Bombs?"

"Look good"

"Excellent. Let's go then. Eject, eject," he said, and pulled the ejection handle. The rocket motors in the escape capsule ignited and propelled it upwards, the heavy gee forces pressing both Hamilton and Jake hard into their seats. They were less than 700 feet away when the first big missile ploughed head on into the Wrangler, obliterating it amongst a volley of other missiles that homed into the same space.

Brian was making decisions quickly. There was no time to ponder, the outer northwestern unit would be first, its Grumbles and other missiles the primary threat. He could see massive tongues of flame and smoke appear as missiles left their launchers; they were onto the Wrangler. He hoped the F-111 was close enough to drop the bombs. But the problem was, it was not just the aircraft, but also the Fuel Air Bombs that could be taken out by the deadly accurate Russian missiles. He had to do something about that quickly and then designate the target.

Up until now, the little fanjet Microcraft had done a great job. But what was required next was something a little bigger. The switchblade was aptly named. Imprisoned in a small tube, it was fired in the same way as a shoulder-launched missile. He had two of these. They must have had a fire sale at the UAV factories, he thought. But he wasn't complaining.

Like the other units he powered the capsules up and selected the individual units on his laptop control and programmed their flight co-ordinates. He then picked up both, walked out of the hide and fired each into the air. A small charge ejected them from the capsule. Once ejected the wings, like switch blades, flicked out and

the unit's small pulsejet took over. While batteries could have sustained these units in flight, the pulsejets provided extra power to the units small but highly focused microwave emitters.

CHAPTER EIGHTEEN



Combat UAV's featured significantly in strike packages against well defended targets.

HQJOC BUNGENDORE.

December 8 11:30hrs. CJOPS briefing 2nd strike package on its way.

The Commander of the Australian Forces took a deep breath before turning to his audience, there had been little opportunity to sleep in the last few days, and now each minute seemed more urgent than the previous. He unconsciously played with the folded edges of the printout, flattening the pages out before speaking.

"In just the last few hours, the Longreach has succeeded in drawing Admiral Wen Jinsong's Carrier strike taskforce away from the eastern flank, also sucking away the Chinese AWACS and surveillance. This created a breach in their defense which allowed Squadron Leader

Hamilton's F-111S and companion C130 to break through to the ice shelf." He paused, picking up the last sheet of his notes and looking at the time. "Right now, the F-111 should be refueled and prepared for the next two stages of the operation."

Communications were not possible with Hamilton's Vostok strike team that far south, so the JOC was aware they were hoping for the best. He looked at his audience. There was no clapping, but he hadn't expected that, there was however comfort in some of the faces knowing at least they might still be in the game. He continued from his notes.

"The Longreach and UAV engagement demonstrated greater Chinese capability than previously realized. This includes HPM weapons, laser and other technologies operationally deployed on many of their ships and being effectively used to defeat our Harpoons and UAVs. Early warning via AWACS and over the horizon radar are also a real problem.

"What does that mean in English?" someone asked.

"It means with the satellite blackout that affects both of us, the Chinese can still see us coming, night or day." The General folded his briefing notes.

"That sounds like we are screwed?" the same voice asked.

Morel stood back from the lectern. "If at this stage we were trying to defeat them, yes. But that isn't the mission; inflicting damage was not the objective. We targeted the lead task force because of its proximity to our penetration route to kill that damn well fire. We not only succeeded in keeping them busy, we also got them to turn around. Now we actually have a shot at doing what we set out to."

"What does this mean for the second strike package?" This time it was the deputy Prime Minister.

The JOC looked at his watch. "The second strike is on its way." He looked at the Chief of Air Force who nodded in confirmation. "And

somehow we have to try and fool them again." It would be a lot harder this time. None of it would matter a damn of course, if Hamilton's team failed in delivering the FAB's on time and on target.

**CIA Headquarters, Langley.
Caspian Sea monster recon photos.**

David Stringer looked closely at the recon image. "How did we get this?"

"Mariner from the RANS Longreach. But it's several hours old. We had them launch a couple with a full sensor load. They were unable to transmit any data until they came back from below the satellite blackout. You know what it is?" The Intelligence Officer said looking at the satellite image.

"You heard of the Caspian Sea monster?" Stringer asked in reply.

"Vaguely."

"Well this is her big brother."

"Bigger?" That was kind of difficult to believe.

"Unfortunately yes. Much larger than the Airbus A380; we are talking 550 plus tonnes flying in Wing In Ground effect (WIG), the same as the Manta landing craft. They both exploit the effect of air compressing beneath a wings surface close to the ground, the same affect that causes many aircraft to 'float' above the runway while trying to land. The only difference here is size. This thing is big enough not to worry about the southern rollers. She flies 50 feet above the waves at over 400 knots. The Chinese version is stealthy in design and includes active radar cancellation, making her pretty much invisible unless you are standing next to her."

"Where do you think she's headed?"

"Towards the Australian fleet -- let them know. I will talk to Vince." He walked out of the control center in the Situation

Room to Vince Kippers office. "We have to find her before she kills any of our ships."

The Chinese Southern Ocean Task Force.

Meeting of the Chinese and Australian Fleets. Shipwrecks fired.

The penetration of Vostok Station by Brian and Lance was at best a fleeting moment. It was of little consequence to the Chinese Armada; two brothers were not going to change the course of a war already started. Made up of three separate task forces supported by Zhong Shan and the HAN AFB, the Chinese task force was formidable. Not just in size but in capabilities.

The Russian and Chinese efforts to develop weapons to specifically combat US Carrier task forces, had delivered systems that were more powerful, with longer range and smarts than most western equivalents. The purchase of technologies by the Chinese from the west, mainly France and Germany, had saved them years in development. The French systems, many derived from US technology were especially useful. Of course the French didn't mention the fact they were on-selling the technology to the Chinese.

At the same time as Chinese defense research and development multiplied its efforts, the U.S. effort faltered. The fiscal drag of the great recession and supporting so many traditional ground troops in foreign operational deployments had redirected defense funds from research, development and new weapons. As a result, U.S. investment in new technologies slowed. This provided the Chinese and Russians an unparalleled opportunity to catch up to the U.S. in the acquisition of new weapons technologies. Neither wasted time in exploiting the U.S. weakness.

None of this was on the Chinese Fleet Commanders mind, with his powerful fleet punching through huge foaming southern rollers, he was instead feeling frustrated. Sitting in the ships bridge, he looked

over the bow, waves hurled by gale force conditions smashed themselves against the steel to be whipped and stolen by the wind in frenzied streams of spray. The ferocity of the weather seemed to mirror the Admirals frustration that the Australians would not engage. The moment was he realized historic. Beneath and around him was an armada of naval force rarely ever seen. No one had ever generated this much naval firepower in a singular fleet deployment. It was of the same significance as Midway. Compared to Second World War naval forces, the Chinese Task Force carried multiple times the firepower of the entire U.S. Navy in those days.

Nearly all the Bing Qing operational objectives had been met, but the Australian's still bothered him. They had backed down at the 60th after making a big noise about stopping him there. He had then ordered the sinking of one of their destroyers and the shoot down of an Orion. The Australians in turn had attacked with UAVs sinking three of his ships. In the scale of events this was a small effort. He had hoped for a decisive engagement. Instead, the Australians refused a decisive meeting of forces but still nipped and tugged at his ankles before running away again. The occasional bite hurt, but not much, what did hurt was not being able to bite back hard. The mainland territories were strictly off bounds, which meant he had to play this cat and mouse game, but soon they would make a mistake.

As the hours dragged, so did Wen Jinsong's patience. With no satellite coverage available in the Southern Ocean, his fleet fumbled through the dark following waving compass headings. He knew the Australians and Americans were able to track him. He was after all sailing in waters they believed to be their own. He had rightly assumed they would possess some SOSUS equivalent and would be monitoring his movements. This didn't bother him greatly because of the huge numerical advantage he possessed. It also took the guessing

out of what EMCON (emissions control) state he should apply to the fleet.

There were three EMCON states, A, B and C. A meant no emissions, B were limited (no unique emissions), and C unrestricted. The Chinese fleet with the exception of the sub force was active and unrestricted.

In each task force Wen had established layers of defense designed to give maximum protection to the fleet's high value units (HVUs), the carriers and cruisers. Furthest out in each fleet were the picket ships, Combat Air Patrol (CAP) craft and Early Warning Aircraft (AEW). These units operated 200 nautical miles from the main body, extending early warning out another two hundred from there. The units of Wens outer screen operated between 12 and 25 nautical miles from the carrier or cruisers and the inner screen within 10 miles of the HVUs.

Wen knew a deadly strike could be launched at his task force from more than 600 nautical miles away. This was a huge area to scout. A missile launched on a passive fix from over-the-horizon was deadly. With the fleet active on all fronts, it provided his force early detection of threats, considerably reducing the enemy's advantage of surprise.

The Admiral had ordered the three task forces to travel in echelon, an effective anti-submarine formation. The ships headed in the same direction were staggered. In each task force, the carrier and cruisers were in the middle of the pack with the destroyers and frigates at the ends. Parameter escorts ringed the groups. When the formation zigged, all the ships made a simultaneous turn, changing the dynamics of the echelon (an echelon right will become an echelon left, etc.). This made solutions very hard to obtain for enemy submarines.

The Admiral also allowed his pickets and escorts to turn at their own pace and counter rotate. This threw a real unpredictable curve ball at any attacking submarine.

On the decks of the fleet carrier the Shi Lang, a Chinese J-11N, a Chinese redesigned version of the Sukhoi Su-27SK was in full after burner, the big twin Saturn-Lyulka AL-31F turbofans delivering over 55,000lbs of thrust between them. The pilot had released the brakes giving the big Sukhoi its head. Like the French and Russians, the capability to manufacture reliable steam catapult systems had eluded them. Instead, they used raw horsepower and a ski ramp at the end of the carrier's deck to overcome the inertia and gravity that wanted so badly to force heavy metal objects into the sea.

The Chinese Admiral watched the bright glow of the big fighters after burners light up the sky as it leaped from the deck, climbing rapidly to join the continual rotation of aircraft that extended the fleet's protective zone to hundreds of miles. Early detection and tracking of anything approaching his fleet relied almost entirely on the fleet's own sensors and their AEW aircraft. TU95s were on continual rotation out of Han AFB scouring the vast ocean for any sign of the enemy. Early detection was not just defensive; it also meant he could exploit his superior range in firepower, while maintaining a safe distance from the enemy.

He pondered the UAV attack. A reaction from the Australian's was to be expected. The question that bugged him was where the UAVs came from? The three Chinese ships lost were not critical, which begged another question, why they were targeted and not the carrier? Surely the carrier was the biggest threat and therefore the most fruitful target. He knew instinctively there was something out there he could not see. Submarines could not deliver the large and fast UAVs that had attacked him, destroyers did, and aircraft carriers

did. But he would have seen any destroyers or aircraft carriers out to at least 750 miles. Something had launched these inside the 400 mile envelope he thought. It was still out there. What else did they have that he could not see? That problem aside, there was also the question of them knowing his fleet's location.

Just then he heard the buzz of the CMD Video phone, it was General Chen Jianguo. He put him on screen.

"You wanted to speak to me Admiral." Chen Jianguo asked.

"Yes Sir. Vostok. We have information from Zhong Shan."

"Yes." Chen interrupted. "President Petrov has just informed us that Australians forces are attacking Vostok."

With what, Wen thought? Didn't the General say earlier the Australians had few F-111's left and their offensive capability depleted? "Are the Russians going to be able to hold on to it?" Wen asked.

"Kazakov assured me himself. But he also blamed us for letting the attacking force get through."

The Chinese Admiral let that remark pass. Unfortunately Wen thought, that part could be true. The UAVs were a deception that drew him away from the ingress route. But that still didn't explain what they were doing?

"I don't understand General what it is the Australians are trying to achieve with this token gesture."

"Neither do I," General Chen conceded. "None of this makes sense. If they were trying to take back Vostok surely they would have to get a larger force past you, not just two or three aircraft."

"Yes, my thinking exactly." At least they agreed on something.

"Did they land any ground forces, try to retake the station?"

"We still don't know yet. Kazakov informed us immediately the station came under attack. They are aware of only one jet, which has

been shot down. The bombs fell short exploding harmlessly in the well shaft.

Fell short? The Admiral asked himself. "What if they are aiming for the shaft?"

The Chinese general couldn't bring himself to believe in the U.S. and Australian propaganda, deception was an art in warfare, an art the Chinese were good at. "Why? Surely you don't believe in their blatant propaganda. No, it looks like a Special Forces operation gone wrong. The Russians are chasing them down as we speak. In the mean time they have asked us to redouble efforts to prevent any more forces penetrating past our defenses and into Antarctica. Keep me posted Wen."

"Yes Sir." The Admiral closed the connection and sat back in the Flag Chair, pondering the great map of Antarctica displayed on the main screen. Maybe they were telling the truth about the fire? He was far from sure though. Whether Chen was wrong or right, it was still logical to assume that there would be a follow on force. Given the huge distances, the shortest route to Vostok was through his fleet's line of defense. He decided he would pull in the western most task force and close the iron curtain. There would be no gaps this time.

After hanging up with the Chief of Staff he patched in his next call. "Get me the Operations Commander at Han Air force Base," he ordered his communications officer. "And schedule a Vidcon with the task force commanders in ten minutes." He planned to focus the forces maximum firepower on the anticipated corridor the Australians would attempt to penetrate through, if and when they and the Americans decided to try and retake the ice continent. At the same time he also needed to figure out what to do with the small bevy of Australian Frigates and Destroyers that were still yapping at his heels.

Twenty minutes later he was summarizing his strategy with his task force commanders. "We need to pull in the outer escorts and ensure that our COIL and HPM weapons overlap. It also appears the Australians are deploying a high velocity gun with a range of at least 200km. Clearly not all of their ships possess that. That's an assumption not fact," he added.

"Sir!"

Wen swung towards the excited voice.

"We have an updated fix on the Australian fleet. Bearing due north, range 800 kilometers, closing at approximately 30 knots."

Wen looked up at the situational screen, which now showed the position of the Australian Warships. They were closing at flank speed. The Chinese Admiral did not intend to let the Australians get close enough to present a threat. He quickly completed the delivery of his orders and dismissed the meeting. He then looked forward of the Island's bridge, six stories below at the rows of large hatches that housed the aircraft carriers deadly shipwreck missiles. Even at flank speed, the Australians were still some time from being able to bring their weapons into range. That limitation didn't apply to him; he was now in range.

Racing south, the small Australian fleet were led by three RAN destroyers Hobart, Brisbane and Sydney and the USS Zumwalt. The three Hobart Class Navantia F100 air warfare destroyers were built by Tenix systems in Adelaide Australia, they were fitted with upgraded weapons and pushed out as almost all electric warships. Under the orders of the JTF Commander, Admiral Nick Jansen, the Australian fleet was closing with the Chinese Task Force in a deliberate attempt to draw their fire.

The Australian Captain of the HMAS Brisbane was only too aware his ship was lit up like the proverbial firecracker next to the

stealthy DDG-1000 USS Zumwalt. He paced the control room. It would start soon; the Chinese would know they were coming.

Hundreds of miles south the Chinese Task Force Commander gave the order. The lids of the twelve Granit anti ship missile launchers flipped open. Smoke and flame began to belch from the containers almost blanketing the deck despite the wind. The bright exhaust flames made the smoke glow a bright orange as the SS-N-19 Shipwreck missiles rose on long tongues of fire, accelerating quickly, disappearing into the low overcast cloud. Speeding at over two and half times the speed of sound, the Shipwreck missiles took just minutes to close the gap to their targets. As they penetrated to less than one hundred miles the missiles went active, looked at the multiple targets, prioritized them, apportioned one to each missile and computed attack strategies for each individual missile. Weighing over one and a half ton each, with almost a half ton of warhead weight, each missile was capable of delivering a death stroke to its target.

The rush of missiles to the Australian and U.S warships were not the only threat. Directly below the flight of missiles, positioned in front of the rushing fleet of Australian warships was the Qinzhou, a Ming class type 035G diesel electric submarine which was barely making headway as it waited for the enemy warships to come within firing range. The outer doors of the boats six forward and two rear 533mm torpedo tubes were already open. The Captain stood at the plot watching as the intercept progressed.

'Control, sonar, 10,000 meters making 30 plus knots.'

Weapons reported back to the Qinzhou's Captain. "Six minutes."

Far behind the control room, the boats two Xiangtan alternators gently rotated the single shaft that ran through the hull to its propeller, turning very slowly to push the hull through the water at just over two knots.

Twenty-five nautical miles to the east of the Qinzhou, the USS Greeneville hovered below the thermal incline. She had bolted from her patrol area around île Amsterdam to try and provide additional coverage to the Australian warships. Her replacement was the latest Virginia class submarine with a full compliment of Special Forces. Clearly, Turner thought, there were some plans afoot to disrupt Han AFB. Good stuff.

The sonar operator held his hands to his earphones, listening hard and looking intently at the acoustic read out. Conn, Sonar, new sonar contact, designate sierra zero three one, contact is putting out a weak signal to noise ratio." There was a very faint rubbing sound, barely audible. "Single screw, classify as Ming Class, contact now designated Master-3 can classify as the Qinzhou."

In the control room USN Commander Scott Turner looked intently at the BSY-2 fire control console. He was still out of range. "Make our speed ten knots, depth 500, steer 095 west," Turner ordered. At ten knots the Greeneville was quiet. Turner knew with the Australian ships making a flank run towards his position from the North, the Ming was in a good place to shoot. He also had no doubt that out there were also several other hostile submarines that would attack if they heard him. To his south he could hear the active pulses of the dipping sonar from an Australian Seahawk anti submarine helicopter. Too weak to pick up the Ming or illuminate the Greeneville. Within a few minutes he would be in range of the Ming.

To Turner's southeast the Captain of the Chinese Kilo submarine, the Ting, also heard the dipping sonar. It was close. He immediately ordered his boat dive deep beneath the layers to remain hidden and position it to watch and wait, ready to attack.

The Greeneville heard the sudden move.

"Captain!" the sonar operator reported, "we have a new contact on the spherical array, intermittent, moving between the convergence zone. Seven bladed screw making turns for thirteen knots, designate contact as Master-4 classified as the Ting."

Turner knew this was one of their latest improved Kilo class subs. She had obviously dived fast to remain hidden from the helo. But his joy in detecting the deadly Kilo was short lived.

"Conn, sonar, we have lost contact with Master-4," the sonar supervisor said.

Turner ordered the boat slowed to five knots and steered directly towards the Tings last known position. He knew good diesel boats had an advantage over SSN's in stealth. Slowed or completely stopped, they could run on their batteries alone, no moving parts or working machinery to give them away, virtually impossible to detect. Whereas, a nuke boat was required to constantly pump coolant into the nuclear reactor, to keep it critical and avoid overheating. If the Captain of the Ting decided to stay still and silent, he would be extremely difficult to re-acquire. Turner guessed the Tings Captain had brought his boat to a full stop. The Chinese Captain could listen intently to detect any approaching submarines, free of the normal interference from the boats machinery and the hulls passage through the water. This made the Ting a smart and dangerous adversary.

How many others like him remained out there ready to pounce? Intel briefings had informed him the Chinese had sent a considerable number of their submarines south. But naval intelligence were not able to tell him where they were. In the last two days those that had been detected on the surface had dived.

Unwittingly Greeneville's slight change in course took the LA Class SSN right across the bows of another improved Chinese Kilo class boat, the Lin San Liu. Barely 2500 yards separated the two ships.

The Lin San Liu was quick to react. "Captain, sonar. We have a single screw LA class boat crossing our bow north to south! Identified as the USS Greeneville."

"Have they seen us?" he asked. The young Chinese commander was inexperienced but made up for that in ability.

"No Sir, I doubt it. I think they are following the noises we heard from the Ting."

"Excellent. Open all outer doors!" the Kilo Captain ordered. With its tubes already flooded, the Lin San Liu with her sister ships, now eagerly awaiting the arrival of the Australian fleet. The sudden appearance of the LA class boat was another bonus. To sink a new Hobart class destroyer and in the same stroke, one of the long feared Los Angeles class hunter killers, would bring him great honor and do wonders for his promotional opportunities and his family.

The Kilo's multi-purpose MVU-120EM computer allowed the boats fire control system to simultaneously track both his target ships and the Greeneville at the same time. The targets course, position and speed data from the Andoga navigation system fed straight to the combat data system.

"Target tubes one and two on the Greeneville, three and four on the Brisbane and five and six on the lead ANZAC frigate," the Captain ordered. He watched the evolving firing solution. He wanted the Australian surface ships a little closer on his nose but was mindful of the Greeneville's increasing separation. All the forward tubes of hull number 366 were loaded with Ta Po.

From the Shi Lang's control center, PLAN Admiral Wen Jinsong considered the large situational display feed from the ships Tavitak command and control system, which was in turn fed and updated from the entire fleets command and sensory systems. Unlike the restrained littorals and shallow water environments of the South China Sea, they

were operating in a world it seemed of a limitless and hostile ocean. As a result, the plot showed the position of his submarine assets to be spread over a wide area. The Admiral decided to maintain the fleets westerly heading to draw the Australian ships out, giving time for some of them to converge on the Australians course. The Captain of the Shi Lang interrupted his thoughts.

"Sir, we are ready to launch our air strike."

"Very well." Wen said looking down at the now congested flight deck, his mind wondering. I know where my submarines are. But where are theirs? The gale force winds had for the moment reduced to a barely acceptable level for flight operations. The deck still heaved beneath his feet and he did not envy the pilots trying to come back to land. He had ordered all the fleets anti submarine helicopters into the air spreading them in front, to the side, and to the rear of the fleet. He was taking no chances.

"Missiles on terminal guidance," one of the operators announced. The shipwrecks were about to strike the small Australian fleet.

RAAF 82 Wing over the Southern Ocean. F-111's strike Chinese Fleet, subs strike Aust fleet.

Group Captain Laurie Wilkie, Officer Commanding 82 Wing, pushed the nose of his big jet towards the water. This would rank as one of the toughest flights in his life. The TFR (Terrain Following Radar) was switched off and every other emitting electronic device. It was dark and the only visual was the ghostly infrared vision projected into his helmet display. Thank god for that. He couldn't have handled the old goggles for long.

The UAVs from the Longreach had given them a chance. Fore warned, fore armed. In addition to the Bing Qing, AESA phased array

radar and doppler systems, the Australians and Americans now also suspected the Chinese had deployed a laser countermeasure device, capable of picking up almost any laser emission. Even simple altitude measurements, which they had been using to replace the radio-based devices, could be detected. At this point of time, Wilkie knew his biggest assets were sitting behind and beneath him, bloody big engines and a super fast and tough airframe.

Utilizing the same tactics as Hamilton, the flight of F-111's was hard on the deck, flying between the big southern swells, pigs on the hunt, their pilots flying virtually blind, navigating by paper and compass. "TOT five minutes!"

"Rog. Lets go ARC," Wilkie said, turning on the Active Radar Cancellation.

A few hundred miles south, one of the KJ-2100 Mainstay AWACS operators noticed occasional blips to the north. "Here!...what is this?" he exclaimed. His fellow operator dialed the focus on the radar to the 'detect', but nothing happened.

"Birds," he said "It happens all the time. The systems are so damn sensitive they can pick up seagulls having lunch!"

Back in the F-111, the airframe literally thumped as it punched through the turbulent sea air at over 500 knots, just feet from the water. The ride was that hard the 82nd Groups Wing Commander had great trouble switching between modes on the main screen. His weps officer was working furiously. There were none of the normal inputs. With satellites down below the 60th, including NAVSATS, and unable to radiate a transmission of any sort, they weren't just blind, but deaf as well.

"ARC charged," the weps replied. The adapted Grumman ZSR-63 defensive aid came online. The attacking F-111's sported small antennas separated by the length of the aircraft. The antennas emitted electromagnetic waves half wavelengths out of phase with any

reflected radar signal, effectively reducing its intensity, making the aircraft virtually disappear from any radar screen. However, they were a long way from being fully effective. But at the height and speed the Pigs were flying, they were lost amongst the clutter. The Bing Qing, as good as it was, could also not make sense of such low fast objects.

Like the British in the Falklands, the Chinese systems were advanced and looking for sophisticated adversaries. They had for years developed their systems to take on and defeat U.S. carriers and air threats. They were not expecting this; low, mach plus, zero emission aggressors, with human hands on the wheel hiding amongst the waves.

On board the lead F-111, Wilkie armed the system; at least he thought he was still the lead. "We are hot," he said to the navigator. He had no idea how the others were doing. It was darker now; there were no visuals and no communication, no radar, no location devices. They were all on their own.

"Ready for pitch up!" he said looking to the TOT and estimated release point.

"Now!"

"Punch, punch now!" The airplane jumped.

"weapons gone," the weapons officer announced.

Wilkie pushed the plane back to the deck. With the F-111's wings almost skimming the waves, he stood the bomber on its wing tips, eight gees of force pressing the two men hard into their seats, reversing course. They both grunted to keep themselves from blacking out. The RAAF Wing Commander dropped the F-111 so low the big turbines ploughed water while he fire walled the throttles into the indents gritting his teeth. "Let's get the fuck out of here!"

Flying at mach one plus, the F-111 rapidly exited the area, the shockwave throwing a thrashed wall of water 100 feet high behind

them. The minutes ticked by, both of them watching the RHAW, fully expecting it to start screaming. Nothing happened. "Fuck me," the Nav eventually announced. "I bet we only ever get to do that once!"

"Damn right," the Wing Commander said, not believing their luck.

The radar operator on the northern most picket of the Chinese task force tapped the screen. There was something out there. But it was very weak and kept disappearing.

"New Contact, very weak, is bearing 010."

The second packet of F-111's popped up and released their missiles.

"MISSILES inbound, we have missiles inbound," the radar operator yelled. Almost immediately the close in defense system started to automatically engage what were two harpoons, attempting to throw up a wall of lead that the incoming missiles would have to fly through. Unlike its sister ships, the Jinan had not received the HPM upgrade. Only a handful had the close in laser defense system. The older CIWS, normal cannon, had little chance in stopping the two sea skimming, fast weaving AGM-158D JASSMs.

Both missiles struck hard on the water line. The ship immediately settled in the water. As the cold seawater began to flow over the forward deck, the F-111's thundered over the stricken vessel fanning out as they prepared to attack the other radar pickets. The lead nudged his stick to avoid hitting the sinking destroyer's communication masts that still protruded from the water, pigs on the hunt, the smell of blood in the air.

The Chinese fleet, like the U.S. and Australia, was linked together by a large wide area networked combat and control system. The system was well aware of the Jinan's defense status and its sudden disappearance from the network.

"Sir! The Zhou Task Force appears to be under attack. We have a dropped link to the Jinan," the communications operator announced.

"What? What did you say?" Admiral Wen Jinsong asked in surprise.

"We just lost contact with the Jinan!"

Wen Jinsong knew the Jinan was assigned to the task force immediately to his west. So much for the reduction of the Australian F-111 strike capability he thought angrily. "Captain, where the hell is that fighter CAP?" Admiral Wen growled, and why he thought, could neither the AWAC's or other sensors have seen them coming? Radar cancellation he told himself, combined with their ferocious low and fast attacks, obviously now without their TFR, otherwise they would have seen it. They must be peeling seaweed off these things they were so damn low. "If I am not mistaken we have some F-111's almost on top of us," Wen said.

The Captain visibly paled. After a problem with the forward elevator he had momentarily stopped flight operations until it had been fixed. And with the destruction of the F-111's earlier on he had assumed there was little threat, General Chen had said so himself.

"Get whatever you have into the air immediately!" he said to the Captain, turning back to look at the missile plot. "What's the status on our missiles?"

"Fifteen seconds," the missile director said.

The Chinese Fleet commander leaned over the central digital plotting table located in the center of the control room. His middle task force was under attack by an F-111 strike group. It looked like the prelude to a 'best push' by the Australians. The American carrier forces were still too far away to help. He knew the Australian destroyers and frigates charging towards him were using up most of their surface combat capability, as did the attacking group of F-111's, which were their only potent long range anti shipping

strike capability. There were a few items from their register still not accounted for. But he was sure they would show up. What was annoying him however was that despite his forces superior firepower, the Australians were taking the initiative. But that would change.

As the Chinese Admiral had begun to grapple with the F-111 strike, the inbound sea skimming SS-N-19 Shipwreck missiles fired by Wen's task force were picked up by the Australian fleet less than 60 miles out.

"Incoming!" the Brisbane's radar officer announced from within the ships control room.

The Captain of the Brisbane sat up abruptly in his chair almost throwing his coffee across the room. "What do we have?"

"Low, fast supersonic by the looks of it, twelve, from numerous directions. The system is fully locked and automatic," the air warfare officer said.

"Thank you," the Captain said, his face expressionless. Several miles in front and to the beam of the advancing Australian Warships, the commander of the kilo Class submarine hull number 366, the Lin San Liu, was poised and ready to strike. He had the Greenville and two Australian ships dead in his sights. He gauged the moment. He opened his mouth to issue the order but was suddenly cut off by a loud directional ping that reverberated through the hull of Kilo number 633. The blood chilled in his veins. In a fraction of time, a thousand thoughts raced through his mind. He knew he had made a fatal mistake.

"Torpedo in the water!" the Chinese sonar operator cried.

There was only one course of action. "Fire tubes one through six and reload!"

Turners mouth was dry. After passing and almost missing the unknown Kilo, the keen ears of his sonar operators had detected the sound of outer doors opening. The Kilo had him dead to rights, any

second he expected a shot he could not escape from. The seconds had ticked by in agony. Turner had concluded quickly the Chinese commander wanted both the Greeneville and the surface ships and believed the Greeneville had not detected the Kilo. He also knew with his boat sitting in the target frame, it was far better off not to provoke an immediate response, every yard gained was closer to living.

Just three minutes later and a few hundred yards and the tactical situation had changed.

"Cut the wire, shut the door and reload," Turner ordered just before the ADCAP Mod 7 had gone active. "All ahead flank steady course 185, cavitate, make your depth 600. The Greeneville accelerated; her towed array already reeled back in before the torpedo went active.

"Torpedoes in the water," Sonar announced. "Two bearing 190, active and homing!"

That was expected. The Greeneville's top speed exceeded forty knots. The two torpedoes chasing her were doing in excess of 200 knots. It was how much in excess of that number that had Turner wondering. They were fast, but short ranged.

"Conn, sonar, the Kilo has just picked up speed, turning directly towards us, making twenty knots."

The skipper of the Greeneville admired the guts of the Chinese commander. He was going to go down fighting. But could he get another shot off? As Greeneville sped up, her listening skills diminished. He wouldn't know until he slowed down again. The Kilo would take five minutes to fire another salvo. It was all a matter of maths.

At flank speed the Greeneville was making a lot of noise. She was letting anyone know in a very loud way, exactly where she was. Worse, she was almost completely blind herself. Greeneville

thundered through the water at nearly fifty knots. Turner made some rapid calculations in his head, there had been no time to pump them into the computers, and by the time they had typed them in it would have been too late. This is what he was paid for, to make decisions. But by running from the Shkval, he was headed straight for Master-3 and Master-4 with a bull's eye on his head. They were in front of him, could hear him, and he was racing blindly in their direction. Every second taking him closer to a point they could shoot at him and he wouldn't know.

"Helm, ten knots," he ordered suddenly. "Maintain heading, stream the long array."

The boat slowed quickly. "Captain, we still have two torpedoes closing rapidly, 1500 yards." The sonar operator said trying to keep the edge from his voice.

Turner was sure he had the math right. He was going to tell sonar to look for the other contacts but stopped himself. He walked to the sonar stations. They were of course on the ball and doing exactly that, trying to re-acquire and establish firing solutions on the other contacts.

"Captain, we have loud breaking up noises to our aft," the operator announced. "We have lost contact on both Chinese torpedoes; looks like they went dead in the water!"

Turner could see the relief on the operator's face despite him trying to hide the fact. He respected the professionalism to contain it, because he felt exactly the same way. He slapped his hand on the young sonar man's shoulder and smiled, heading back to his seat in the control room.

"Conn, sonar, we have Master-3, making cavitation noises and speeding up. There are also sounds of surface explosions and break up noises near the fleet."

Damn it, Turner thought. Was it one of those torpedoes he did not stop in time? He didn't know. He wouldn't have time to ponder either.

"Conn, sonar! Two torpedoes bearing 010. Chinese Mk46 copy-Mod 4, range 23,000 yards."

Turner looked at the plot and decided to ignore the torpedoes, both fired in an attempt to distract him.

"Give me the ranges to Master-3," he asked, already knowing the answer but keeping to the process.

"23,000 yards for the Ming." They were within range of the MADCAPS.

"Keep looking for Master-4, she is still out there and knows where we are." He immediately initiated firing point procedures on the Ming. "Torpedo room, fire control, make tubes two and three ready in all respects and open outer doors."

The order was acknowledged and then confirmed.

"Sonar, conn, stand by."

"Conn, sonar standing by."

"Match sonar bearings and shoot tube two."

Seconds after confirmation of the order "Tube two fired electronically." The boats combat system operator reported.

Turner turned to his XO. "Reload number two and swim the torpedo in tube three out quietly towards the last position we saw Master-4, the Ting." Turner wanted a few moments to re-evaluate while the XO took care of the last orders.

The Ming and the Ting. They rhymed. Stupid thing to think about now! The MK 46s were fired out of range. His calculated decision to run from the shkvals, had still kept him short of the firing range of the other Kilo and Ming, that and all the noise from the shkvals had helped. Assuming of course they had not moved far

and hoping like hell there were no other immediate surprises. He had to be ready for those other surprises; they were surely out there.

"Conn, sonar, number two has acquired Master-3," the combat system operator reported. The MADCAP had found the Ming with its own sonar and didn't need any more guidance from the Greeneville's fire control system.

"Cut the wires and shut the outer door, reload tube two," Turner ordered.

"Conn, sonar we have one explosion bearing 192." There wasn't time to get excited. They were still knee deep in alligators.

"Helm, conn, steer 270." Turner ordered a 90 degree right-hand turn to allow the sensitive towed array to get a good look to the rear without executing a full 180 which might foul the wires on the ADCAP, still looking for the missing Kilo the Ting.

It picked up another chaser immediately. The sonar chief called from his forward station. "Conn, Sonar, new sonar contact designate sierra one bearing one six zero. Contact is putting out a medium signal to noise ratio on a single pump jet propulser. Contact classified as submerged warship, classification Russian Akula II fast attack submarine."

"Conn, sonar, contact designated Master-6 the Shaminski, making turns for 48 knots directly in our baffles."

"Snap shot, match sonar bearings, shoot tubes one and four and reload."

The two torpedoes left the tubes, their Otto fuel engines coming to life and powering their powerful pump engines. The Alpha, an incredibly powerful and fast attack boat in the hands of an expert was lethal. Unfortunately its skipper did not know a good time to lay back and wait, and when to use its speed, because it was noisy as hell. He had hoped to race up behind the LA boat while it was sprinting and shoot it in the back, hiding in its baffles. The Alpha

was blind while it raced to catch the Greenville. The two MADCAPS acquired it immediately.

"Cut the wires and close the outer doors. Helm steer 190, speed four knots."

"Conn, sonar, we have two explosions in our baffles and breaking up noises," the sonar operator reported quickly. There was no glee in the voice. The thought of the frigid ocean plunging into the hull, and the death dive to the ocean floor 12,000 feet beneath their keel was a fate that could visit all of them.

While all of this was going on, ahead of the Greenville the MADCAP was executing a very stealthy and precise search procedure. The new MADCAP was instructed to use passive sonar to sniff her prey, silently closing on the last known location of Master-4, the Ting.

At the same time as the Greenville and Lin San Liu had exchanged shots, from the other side of the fleet another Chinese submarine that had waited in ambush fired its own torpedoes, adding to the freight train of rocket torpedoes headed towards the Australian warships.

The Australian warships immediately heard the explosive sounds of numerous shkval rocket engines rushing towards them.

"Control, sonar, torpedoes in the water, high speed high cavitations, probably Shkval!"

The Commander of the HMAS Brisbane quickly looked back at the warfare officer.

"CGs (Cavitation guns) have acquired with strong FC (Fire Control) telemetry," the warfare officer said, referring to that part of the AEGIS Fire Control system that was responsible for tracking and destroying the inbound sub surface threat. Fight fire with fire he was thinking.

The commander unconsciously held his breath and watched the progress of both missiles and torpedoes targeting his ship.

"Sonar, high speed torpedoes inbound 1000 meters, running shallow." His voice was excited.

"Control, missiles 7000 meters."

The Commander said nothing, calmly watching the screens. The torpedoes at over 200 knots arrived a few seconds before the missiles. The small cannons mounted in hull turrets beneath the ship started hammering. Even inside the control room it was hard to miss the reverberation. The RAMICS CIWS (Close In Weapons System) cannons were no ordinary CIWS. Mounted on Hobart, Canberra and some ANZAC Class ships, they were capable of firing super-cavitating 'Kinetic kill' bullets. This was the first time they had ever been used operationally.

"1000 meters."

"500 meters."

The Captain felt the RAMICS modified rapid gun firing below. The incoming torpedoes were making more noise in the water than a four-trailer road train towing metal pipes, the ship's sonar having no problem in acquisition and targeting. The rounds from the RAMICS CIWS were spread out in the water five hundred yards from the ship directly in the path of the incoming torpedoes. The guns specialized 30mm flat nosed projectiles barely slowing before slamming into the torpedoes 60 feet beneath the surface. None of the Chinese modified Shkval got past the 450-yard mark. The muffled explosions of some of the torpedoes ran through the deck, sonar confirming the kills. But there was no time to celebrate.

"Radar!"

"Still incoming."

"Thank you," he said. Actually he felt like saying a lot more. Like, was the system working, you sure? That type of thing. But if

he had to ask that, they were all fucked anyway. So he kept his mouth shut.

A familiar vague shudder in the hull and slowing of the ship alerted him first. Massive feeds of power from the ships almost all-electric system were delivered to three heavy and rapidly spinning kinetic compulsators that sat beneath the ships two gun turrets. The compulsators were basically large alternators designed to produce fast massive electrical pulses, converting stored rotational energy into electrical energy. Once up to speed a switch within the system sensed the desired polarity and amplitude and closed the circuit.

Twin barrelled railguns pivoted in their gimballed turrets on the aft and forward decks, their square barrels sniffing the air guided by the ships targeting radars. The guns were linear electromagnetic accelerators utilizing Lorenz Forces from a high magnitude electrical impulse to propel an armature down two parallel conducting rails.

An automated rapid-fire breach loading mechanism inserted the armature and a specially designed five-pound tungsten fin-stabilized round seated inside an aluminium sabot cradle that contacted the two parallel rails. Forced in by hyper velocity gases an optical sensor triggered the switch in the compulsators for just 10micro seconds releasing 20 million amps.

The current flowed up one rail, through the armature and down the other rail resulting in a magnetic field between the two rails and an intercepting field by the armature. The rails repelled each other and both repelled the armature to produce an evolving magnetic field that expanded in approximately 200 nanoseconds to reach several million atmospheres pressure. The aluminium sabot cradle that carried the tungsten projectile accelerated up the rails leaving the barrel at over 14 miles per second, twenty times faster than a bullet.

On leaving the barrel the sabot exterior parted leaving the aerodynamically stable tungsten projectile to steer towards its target. Within five seconds another had been fired, the gun hammering out twelve super high velocity rounds a minute, the kinetic energy of each round many more times powerful than the HE effect of a tomahawk warhead. With a range of 250 miles, the projectiles easily reached the incoming shipwreck missiles in less than a heart beat of leaving the barrel.

"Forward gun engaged." He could almost feel the ship slow a little.

"Rear gun engaged. Telemetry is good."

The ships Aegis combat system had to make but a small calculation in targeting of just seconds to steer the super high velocity five-pound tungsten darts on target. With a combined impact speed of nearly ten times the speed of sound the incoming missiles were stopped in their tracks, almost completely vaporized by the kinetic hit.

Back on the ship several very loud explosions could be heard, but nothing that shook the hull. The overhead tracking display showed an almost 100 percent kill rate, almost. Without those railguns the shipwrecks would have made mince meat of most of the Australian ships. The three Hobart Class ships were the only ones to possess them.

"All ahead flank!" he ordered. "One nine zero." Without these ships in front, the Australian Destroyer Commander realized the rest of the fleet was extremely vulnerable. "Get Hobart and Sydney to form on us ASAP XO!" This wasn't his job but they were in the heat of battle. He was at the front and could see what was happening best.

"Confirm?"

"Confirm!" the task force commander said.

"Still one missile inbound! Can't target it," the weapons officer said, stress creeping into his voice. "The Tennant is in the way!"

Shipwreck missiles were called that for a reason. They were really big, incredibly fast and virtually nothing could stop them. The Hobarts railguns were hammering smart iron into the air when suddenly the forward gun failed. The other close in support weapons kicked in hard throwing up a wall of lead, but it wasn't stopping the incoming missile. The Aegis system compensated by re-allocating the targets to other weapons in the fleet.

In the control center of the Hobart the Captain looked at the red warning light of the gun that failed and realized he was in deep shit. He knew the sea skimming ship killer was approaching from the forward port side, shielded from Hobart's other gun and the rest of the fleet by the ships hull. The Shipwreck missile ploughed into the forward section of the ship at over Mack two, completely blowing the bow off the destroyer. She sank in minutes. No one survived, not in that cold water.

The Captain of the HMAS Sydney felt the hull tremble from the shockwave of the blast. "Get our Sea Hawk on that immediately XO, make sure the others cover us to the front," the Isa's skipper ordered.

The two remaining Hobart Class destroyers and the USS Zumwalt surged ahead, their wakes frothing as they rushed towards the Chinese. Three small destroyers followed by Adelaide and ANZAC class frigates in the face of an overwhelmingly more powerful navy.

The Hobart's systems that failed were made up of two parts. First, active rounds, and secondly hull mounted emission systems. They failed because the software froze when configuring the radar system with the railguns, a unique set of numbers it wasn't

expecting. Not a big deal, two lines of code. But there was no time to fix the code and no one knew how big the problem was. Just the fact it didn't work and several hundred Australians had paid the price.

With the two Hobart Class destroyers and the USS Zumwalt barricading the front gates from the big missiles, the fleet continued to close on the Chinese Armada. Beneath the surface a completely new game was being played out, a mix of new and old rules.

CHAPTER NINETEEN



An Australian 737 Wedgetail AWAC.

USS Greenville.

The undersea battle against the Ting and others.

Greenville had started the battle with a full load out of weapons; twenty-six weapons including four in the torpedo tubes. That load out was becoming depleted very rapidly. Turner knew that the Shkval at close range was a killer. He had been lucky. If the Lin San Liu had fired earlier, the Greenville would be headed to the deep with the Alpha and the Ming.

His adversaries were very capable. Many of them enjoyed entirely digital and superior non-hull penetrating systems, much like the Virginia class. The quiet diesel boats could also now stay submerged for days at time, powered by Air Independent Propulsion

systems. There was little chance of an easy kill in this knife fight. The fact he could not find Master-4 was proof of that. But he knew the Chinese boat was either aware of him, or worse, hunting him.

Master-4 was a lot closer than Turner would have liked. The Captain of the Ting crept forward very quietly, closing the distance to the Greeneville. He would not make the mistake of using a rocket torpedo on the Greeneville. The Mk 46, which the Chinese had copied and modified, was slower than the Shkval, but had a much greater range. The tubes were flooded and the outer doors opened. The firing solution would be any moment.

Was it instinct? Turner didn't know. But the hairs on the back of his neck stood up and he felt a cold shiver run down his spine. What he did next would have, under any normal circumstance, been construed as a bad decision. "Sonar, conn. Give me one active ping in the direction of the Ting." The loud pulse propagating through the water, the response from sonar was quick.

"Captain, the Ting is on our bow making turns for seven knots, 14,000 yards!"

This was quickly followed by something even more distressing. "Torpedo in the water 10,000 yards to our heading, looks like another MK46!"

"Snap shot, match bearings and shoot tubes one." Turner waited for the confirmation of the shoot, before the next order.

"Helm, right full rudder, all ahead flank. Cavitate, make your depth 500." The Greeneville heeled into the heavy turn. "Cut the wires," he ordered, knowing the chance of the MADCAP acquiring the Ting was greatly reduced. "Release a noise maker." It was time to clear the datum and get some space to come back and re-acquire. There was no way the Kilo could keep up with the Greeneville, nor her copycat torpedoes.

A few minutes later sonar reported more torpedoes in the water. But they were over 60,000 yards away. "ADCAPs and RTP's," he said.

Probably the Jimmy Carter Turner thought. He was right, the Jimmy Carter had fired the U.S. version of the rocket torpedo sinking the Changzheng, a nuclear powered Han Class Attack boat. The other sounds were Australian launched ADCAPs from the HMAS Waller and Farncomb, each claiming another Chinese Hull number. This was quickly confirmed when he looked at the updated combat control systems situational display. Between the four U.S. and Australian boats combing the area, combined with the active searches by helo's and ship sonar, they had sunk six enemy subs with no losses. The immediate underwater realm in front of the Australian and U.S. ships looked clear. The HMAS Hobart was shown as destroyed by missiles. He knew the familiar sick feeling in the gut would come later, when he was not responsible for so many other lives and had time to think.

"Make your depth 200, one nine five zero and turns for five knots." He waited for the response then turned to the Watch Officer. "You have the conn." A little while later he returned to the control room. The XO was there even though it was not his watch. The communications officer appeared at the same time.

"Captain, we have an URGENT message over the LC." The communications officer was referring to the recently deployed Laser Based Underwater Communicator. This exploited an optical window in the blue-green part of the laser spectrum, which enabled transmission to penetrate the ocean at substantial distance. The tactical improvisation of the laser meant, airborne, satellite or ground based emissions in conjunction with a space-based mirror delivered data transfer rates well over 300 times greater than the ELF (Extremely Low Frequency) system. The device also continually updated Greenville's situational plot.

"Send it through," Turner said. It was quickly directed to his personal display situated on the Captain's chair. It was lengthy. After reading it he decided not just the officers, but the entire crew needed to know the contents. It was his choice.

A few minutes later the officers were once again crammed into the small wardroom of the USS Greentown. Commander Scott Turner had decided to address the full crew over the internal Vidcon. It was important to him that they understood what was transpiring in and outside of the boat. If they were prepared to put their lives on the line they damn well deserved to know what for.

"The Russians, Chinese and French governments have submitted a UN resolution requesting a security zone around Antarctica led by China and Russia. This was vetoed by the UK because as you know the U.S. is no longer a member of the permanent Security Council. Let me read this part to you.

'Russia, China, North Korea, Germany, France and several other countries within the UN security council, have sponsored a proposal to establish an iron fence around Antarctica in order to prevent any further territorial aggression by the US and Australia over a continent whose ownership is still in doubt.'

"That's the transcript. Other nations assisting this new coalition also include defense elements from Spain, Iran, Pakistan, Malaysia, Indonesia, Argentina and Italy." Turner switched the main overhead display to the situational map.

"Argentina, controls a huge area of the Antarctic Peninsula. We can presume they have negotiated with the Chinese and Russians to preserve their claim and get some of the spoils. The joint forces call themselves the 'Wei' coalition." Turner spelled it out. "It means rose or valuable in Chinese.

"The enemy blockade is spread across a huge area and is only achieved through the support of several countries. Jinsong's task has been to prevent any Australian or U.S. vessel or aircraft breaching the containment line.

"The Chinese and Russians have recruited the North Koreans, Germans, Italians and even some Iranian forces to both make their stand look internationally legitimate and, more importantly, to plug the holes in the iron curtain they have been trying to draw down over Antarctica.

"The AOP for the Chinese appears to cover Cape Adare to Casey Station. The force Commander we believe to be Admiral Wen Jinsong, an experienced and capable naval officer.

"Admiral Wen has split the combined force package into three parts. The first led by the Shi Lang, which we think is the Flagship, the second is led by the French designed, Foudre class landing platform. The third groups center piece is the Mistral class LHD Command and Control ship, the Chee (Qi) and a Russian Slava Class Cruiser refurbished and renamed the Ching yoo-awn. (Qing yuan).

"Each of these Task forces has to patrol over 1000 kilometers of the iron line they have established. They have the added resource of air assets from Prydz Bay and Han AFB to cover up to Davis Station and overlap near Casey. These include H-6AII, TU95's (Range 12,500km) and Backfires. The Chinese and Russians think this is a battle of oil and land and have completely ignored our warnings. We now know this is a battle for our existence that we cannot afford to lose. To lose means we are all dead. This is gloves off time. The only carrier near our AOP is the Clinton. As you know she is neither fully commissioned nor up to strength. She is waiting support from the Stennis and H.W.Bush carrier groups who are at flank speed to get here.

"The Clinton has been keeping the Russki's busy and their heads down, but with the other group's offensive capabilities coming into range, will have to go on the defensive. The Centurion, Connecticut and Jimmy Carter have been working with the Clinton battle group and we have been informed, making good measure against Russian Akula, Shang and advanced Kilo class submarines.

"Our job as part of the overall effort has been to clear the approaches for the Australian ships and the USS Zumwalt." He paused, letting the information sink in. "Now we have new orders. Now we are going after the big money." The officers looked at each other. It was more fun to hunt than play screen.

"I'm also told the Australian task force supply ship has a fresh load out for us as well." That was welcome news. No one liked going on the hunt with the possibility of running out of shot in the middle of a firefight, or food for that matter.

"So," The XO said, having waited ages to crack his joke. "It's all the Wei or bust?" He laughed at his own joke; the others groaned.

Admiral Wen Jinsong believed correctly that the U.S. and Australian submarines were among his most dangerous and immediate threats; they had already proven that. But Jinsong had the advantage of numbers, despite the losses. And now the small flotilla of Australian ships was about to breach his submarine screen.

"Where's the boundary layer?" he asked.

"Thermocline is 112 meters sir. We have VDS (active variable depth sonar) arrays above and below the layer," the ship's sonar operator reported. "There are no contacts at present."

"Thank you," he said. He studied the overhead plot, looking carefully at his own submarine deployments. He knew some were already missing. The Australian fleet had already passed the first submarine picket. Unfortunately, the subs that had survived could at best do

twenty knots submerged. They would have to catch up as the battle progressed.

He turned to his communication officer. "Send a message to the Sub Fleet Commander. I want to concentrate our attack subs here." He indicated on the display with a small laser pointer. "This is where the Australians must go through to get to us." He looked hard at the display again. They were playing a game. He knew it. The Sub Fleet Commander was a smart man. "Tell him to advise me what units he will allocate and those he wants to leave in protection of the fleet."

"Order the entire fleet to turn about!" he said. The Australians were trying to sucker him again. "Get me the Russian fleet commander online ASAP."

"Yes Sir"

"What else can we get in front of the fleet to flush out enemy subs?" he asked.

His operations commander looked up from his console. "We have several long range ASW Bears on the AOP right now."

Unlike the Australian Diesel submarines, the Yuan and Song class subs were equipped with AIP systems, Air Independent Propulsion. This meant they could remain dived for up to twenty days. The Shang Type 093's were nuclear, meaning the entire Chinese sub force could remain stealthy.

Wen had wisely allowed his hunter killer subs to act independently, the down side to this was a lack of co-ordination. Communication was critical. North east of the fleet Wen had situated a long-range ELINT/EW aircraft, a Shannxi Yun-8 (Y-8) turboprop, copied from the Soviet Antonov An-12, NATO codename Cub. The aircraft's mission was to enable submerged communications. VLF waves propagate almost a quarter of the globe, which meant the entire

Chinese sub force in the Southern Ocean would receive the messaging even when submerged.

The Cub's powerful 210KW transmitter provided VLF transmissions similar to the way the US TACAMO (Take Charge And Move Out) did. The Cub flew with a trailing wire antennae nearly 10km long with a drogue parachute at the end. During transmission the aircraft flew in a continuous tight circle, which resulted in over 70 percent of the wire hanging straight down and acting as a relatively efficient vertical antenna. This was supported by an Ilyushin IL-76MD (Candid) B-4037, 34th Air Division from Nanyuan AFB, Beijing an air refueling squadron now operating out of Han AFB at Martin de'Vivies.

CHARC Attack! Somewhere in the Southern Ocean.

While the main force was rushing into the jaws of the massive Chinese fleet, two large LHDs (**Landing Helicopter Dock**) closed from the North West. The lead ship was the 231-meter HMAS Adelaide followed by her sister ship HMAS Canberra.

At a range of 400 miles to the Chinese fleet, they slowed and dropped their stern ramps. Between them, seven Lockheed Martin, 60-foot CHARC attack boats were launched. These were Covert High-Speed Attack and Reconnaissance Craft, ideal for operating in the Southern Oceans large sea states.

Looking more like something out of Star Wars, these were an innovative cross between an attack helicopter and a stealth boat. At speed, the CHARC would rise high out of the water, standing on two submerged torpedo like hulls that performed faster beneath the surface than above. This gave the CHARC the ability to run down just about anything else in or on the water, in any weather. The two-man cockpit stood high on top of the two legs that unfolded beneath them. At the bottom of the legs were 60 foot long round hulls, each containing a powerful gas turbine that propelled the killer boat

through the water. The design combined the lethality of an attack helicopter with endurance and stealth. With a crew of two, the CHARC was capable of patrolling or loitering for days at a time. In a chin turret beneath the cockpit was housed the main weapon, a railgun, powered by the CHARC's all electric system. The small 60 foot long CHARC carried more firepower than most traditional destroyers.

Once in the water the CHARC's extended their hulls and powered up the engines. They swiftly rose out of the water and at over sixty knots, they sped south cutting easily through the big seas. As the CHARC's sped south, the first Chinese air strike package was drawing close to the Australian fleet.

The Shi Lang's J-11 and Su-33UB Flankers were still 200 miles out but quickly approaching the release point for their 3M-80EA missiles, air launched versions of the SS-N-22 "Sunburn" slung to the bellies of the big jets. The jets, both long range strike bomber versions of the SU-27 had a range of over 1500 nautical miles. The fact none were on the way to visit the two Australian LHDS was just plain luck.

The strike package of four jets was spread out in a loose four finger formation looking to deliver a comfortable but precise stand off attack. The lead jets RWR - Radar Warning System, flashed brightly on the pilots HUD. An Australian Wedgetail had picked them up, he thought. Too bad; I will deal with him when I am finished with this. There was nothing the Wedgetail could do anyway. The air was clear of aircraft and missiles, just the annoying Wedgetail radar. There was nothing out here the Chinese pilot thought which could reach them. Not at this range, which is why the trailing Sukhoi was so surprised when the first three jets, including the idly thinking lead, suddenly exploded. The tail end Charlie's quick reactions saved his life. Jamming the stick into one corner he kicked the rudder hard left and threw the fighter into some hard

jinking turns, punching off the big antiship missile, which was making the aircraft hard to handle.

The tungsten rounds fired from nearly two hundred miles away had taken less than 12 seconds to arrive on target. At such speed it was impossible for them to compensate their trajectories to catch the evading Flanker. The first three jets that were flying in a straight line were easy targets. The surviving Chinese Pilot had no idea what had hit them, but all the way back to the carrier he never steered a straight line.

The Chinese submarine commander of the Jianguo had listened intently to the sounds of the attack. He had heard the run out of the powerful Ta Po's from his sister ships and had waited expectantly for the crashing explosion of the underwater missiles as they impacted the enemy ships and detonated.

"What is that?" the sonar chief exclaimed.

It sounded like a hiss over the speakers, it was followed by mute explosions and crumpling sounds. These were not the sounds of Ta Po's pulverising their targets the Kilo Captain thought. None of the torpedoes had reached their targets. This meant just one thing.

"The Ta Po's have somehow been destroyed on the run in to the target," he stated simply, looking across from his position in sonar to his XO. The other man nodded. His thoughts reflected. Between them, listening intently to their sonar, they witnessed the crushing defeat of their fellow submariners.

He motioned his 2IC to the plot table in the middle of the control room. Leaning over he spoke quietly.

"It appears that they have some sort of CIWS that is destroying the torpedoes."

"Hull mounted cavitation guns," the XO said. Chinese intelligence had suggested such but they did not know they were operational.

The Captain looked up. "Yes, I think you are right, the tonals sounded to be just that. Recommendations?"

"Program the torpedoes to approach deep and in the terminal phase go shallow and attack from the stern." He reasoned that the Australians would avoid shooting off their own propellers and rudders.

The Captain of the Jianguo nodded. He had already come to the same conclusion. The other torpedoes had used shallow terminal homing to the target mostly attacking from the beam. "Swim out a CUUV with an ELF warning the other boats."

"Aye," the XO of the Jianguo said, passing on the orders.

While the Jianguo considered its next move, the Australian fleet commander was revisiting his own. Missiles were not going to be the deciding factor, he thought. Their own UAV strike on the Chinese fleet and the subsequent missile and air attack proved that both sides possessed ships that were capable of defeating most missile threats. This changed strategy dramatically.

To his south, Chinese Task Force One, with the fleet flagship, was steaming west deliberately keeping distance from the Australians to figure out what to do next. The Australian fleet was bow on to the chase, with the rail and cavitation equipped ships to the front. Despite the lessons in usage of missiles, the Admiral was willing to bet that like themselves, only a few Chinese ships were equipped with all the latest technologies. The tactic of swamping the target with so many missiles that some had to get through wasn't as simple as it looked any more. The Chinese had tried that from the air combined with surface to surface missiles and torpedoes, but the rail and cavitation guns had decided the outcome.

"Sonar."

"Aye"

"Do we have a complete disposition yet?"

"Coming in now." The underwater surveillance system, similar to SOSUS, was passive and stealthy. Communications were relayed by underwater cable to Naval operations and back to fleet. The Chinese fleets tonal signatures were fed into a database and each ship identified.

"Show us on the main screen."

The overhead map display came up with real time ship positions of the Chinese fleet by name and type. "Yowzer," someone in the control room said. "That's a lot of ships."

"That's TF1. Target the following," the Admiral said, indicating each ship, ignoring the carrier and a handful of others. "Relay that immediately to the strike package." The Chinese Commander was smart, the Admiral thought; he was deliberately biding his time to understand what was going on; he suspected something. And so he should, He was willing to bet the Chinese Admiral would have surrounded his high value assets with his best defense. The targets he selected were just outside of that and vulnerable to missile attack.

After its first engagement, the HMAS Longreach was racing northwest to keep out of trouble. As the Longreach cut through the southern swells, the knife edged bows seemed to effortlessly part the waters. She sped unaware, directly into a trap.

Hudson happened to be in the ACC when the call came in. One of the PLO's looked up from his DEMPC terminal. "We have picked up a fast submerged contact, bearing 290." Looking at the screen and holding his earpiece he suddenly looked surprised. "Torpedo! We have a torpedo in the water!"

Even as the PPO was talking, Hudson was already speaking into his communicator. "Flank speed NOW! Steer 290°."

"Flank speed it is, steering 290°," the Helm replied. Hudson could feel the big Cat accelerate and begin a hard turn. Like the Captain of the Greeneville, Hudson knew when to run.

"Range?" he asked

"Range 15000 meters, speed 200 knots."

Hudson thought about it. It had to be the Chinese Ta Po or Skvall; he had three minutes. "Mathers you there?" Seconds passed, another few hundred meters closer. 5000 meters per minute, almost 100 meters closer every second.

"Aye!"

"Mathers, open those bloody cavitation exhaust manifolds."

"Aye sir. Emergency power and cavitation manifolds opened."

Hudson almost expected some sort of resistance about the manifolds not being ready. But there was none. The engines surged and the deck began to tremble heavily.

"12,000 meters!"

Unlike the destroyers and frigates the Longreach had no defense against torpedoes other than her speed. Below the water line, large diverters near the end of the turbine exhausts redirected gases under pressure into chambers in the large bulbous bows. Once there they were further pressurised and injected through the flat nose. The result was instantaneous. The ship became almost slippery, the speed increased to over ninety knots. The vibration and trembling of the hull as it cut through the swells was violent.

Propelled by jets of water the sudden cavitation from the front of the bows and down the side of the hull in the heavy the sea conditions, combined with the speed were over stressing the hull.

"Captain?"

"Yes?" Everyone he noticed was hanging on to something bolted down, including himself.