

The hole in the ice (a Rapid Response Team 4 adventure)

Chapter 1

(Steady)Eddy Nakamura eyed the floating smoke generators , they formed a circle 500 meters in diameter , the team had been asked by the Knights to see if there was a way to land and take off from a circle 500 meters in diameter in a dead calm . The team had been at it for the past 2 weeks they had tried everything they could think of , a drogue chute had solved the landing problem but takeoff's were a different story . Without waves to brake the suction , the flying boat took too long to get “unstuck” , but Nakamura had a idea as he motored the plane around the circle watching the waves they were making , if there was a way to time things just right so they reinforced each other like on the famous Tacoma Narrows Bridge disaster , he thought he could get enough waves to break the suction , but how ? , the waves just looked chaotic , any way it was 9:30 Am and the morning calm was past he would have to continue tomorrow morning.

Chapter 2.

After breakfast Nakamura walked down to the school , he remembered eating lunch in the main hall way , the school had no room for a dedicated lunch room so the main hall way became the lunch room for forty five minutes every day. He found what he was looking for , the school had a small but well equipped recording studio and a music teacher , Benjamin Ladd , that was a real genius (it was rumored that a lot of the federations most secret sonar technology was developed in this studio). There was singing coming from the closed door , Nakamura waited in the hall not wanting to interrupt the recording session , the voice sounded very professional , the song was an old Italian love song from the 50's , Nakamura had always loved Italian language class , the language sounded so civilized to him. The music stopped and a tall thin man in a suit came out from the studio and walked down the hall , Nakamura knocked on the studio door and Dr. Ladd opened the door “ Nakamura what an unexpected pleasure” Nakamura replied “I was hoping you would have a few minutes to talk” , “of course how can I help you” said Dr Ladd. Nakamura explained the problem and his idea to Dr. Ladd , Dr. Ladd listened and then said “what you want is an interference pattern , you are not getting it because you only are using one noise sour... I mean wave source , you need two planes one going clockwise and the other going counterclockwise” , “ of course ! That just sounds right , I bet that will work , thank you Dr. , thank you very much” replied Nakamura.

Next morning Rapid Response Team 1. had joined the trials , with two planes circling in opposite directions , churning up the circle was easy , and takeoffs were just a matter of swinging the *frigatebirds* towards the center of the circle and pushing all four throttles to their limits.

Chapter 3.

Rapid Response Teams 1 and 4 were crowded into the Knights container . A knight named Silkens was saying “ our laser relay satellites each have a 20 inch telescope that can be pointed towards the earth or the heavens , we do not use them as spy satellites , I want to repeat that , we do NOT use them as spy satellites , the federation respects other nations privacy , when they are passing over other nations , the telescopes are pointed

towards the heavens and federation Astronomers use the telescopes for space observations , only if a nation specifically asks for satellite photos do we turn them earthward. This does not mean that a news agency that wants a sensational story or a nation wanting to justify a larger military budget would be above claiming they were spy satellites. For this reason we prefer to keep anything concerning our laser relay satellites out of the news and off everyone's radar , so please act accordingly” Silkens turned on a ceiling mounted projection monitor , the same federation made model that was in almost every home in the federation , some one turned off the lights “ what you are looking at is a satellite photo of a hole in the Antarctic ice and if you guessed that it is about 500 meters in diameter you are correct” said Silkens . “We think it is a Chinese nuclear submarine that disappeared over 40 years ago and is starting to disintegrate and the reactor control rods have started to slide out , which could happen if the sub is on the bottom , upside down” “ I don’t have to tell you what kind of potential ecological disaster this could become”.

Chapter 4.

Rapid Response Teams 1 and 4’s *frigatebirds* were doing formation flying past the federation’s secondary runway , where could be seen the enigmatic wallfacer’s watercolor class , the wallfacer was a great fan of watercolor and had single-handedly revived the art form to become the most popular art form in the Federation , the formation flying had been a special request of the wallfacer. This was the last pass in front of the student artists then they would assume a fuel conserving *distant echelon* formation that would reduce fuel consumption over 10% , during the long trip to the Antarctic .

Chapter 5.

long non emergency trips like this usually involved carrying mail , for a offshore federation , economic mail service was vital and everyone did their part in keeping the costs of federation mail service competitive , programmers wrote programs that improved the efficiency of the automated delivery “Zamboni's” , The scouts had a merit badge for mail sorting and often volunteered to sort mail and load it into the Zamboni’s , often a new prospective immigrant's first job was sorting mail and loading the Zamboni’s , this gave an opportunity to see how well they would integrate into the federation , a prospective immigrant than was careless with other peoples mail would quickly be weeded out , even soft labor prisoners did a fair amount of mail sorting.

This trip involved mail stops in San Jose , Medellin , Caracas , Georgetown , Paramaribo , Cayenne , Fortaleza , and Capetown. The Federation had a hanger in Capetown with a couple competent mechanics and it was decided to spend the night in a hotel and let the mechanics go over the planes during the night before leaving civilization behind and heading into Antarctic waters. Nakamura stood on the hotel balcony and looked out over the ocean and thought *the Arctic was a harsh environment no question , but the Antarctic seemed to take everything up a notch* , he was very glad that team 1 was with them.

Chapter 6.

The two *frigatebirds* circled the hole in the ice , it was decided that team 4 would attempt to land first as they had the most practice , as Team 1 was a late comer to the project . Nakamura circled the hole , there was no wind , the air was cold and still , Nakamura decided to approach from the direction that gave the most definition to the shadows , he was so intent on staring at the hole that he did not even check his instruments to determine what direction that was , he came in low , a mere 10 knots above stall speed with all flaps fully deployed , touched down and deployed the drogue chute. The *frigatebird* bumped the opposite side at a slow walking speed. Nakamura realized he had been holding his breath , and let it out. After a careful consultation between pilots team 1 also performed a successful landing. The trip from Capetown and the landing in the hole had left Nakamura and his copilot shaking from the effects of too much adrenaline , for too long . They both went into the back of the plane and laid down . The rest of the team got to work , first an anchor was put out but it did not touch bottom , a quick sonar sounding showed the depth to be 712 feet that did not make any sense , the water here was pretty shallow , Rutger Faraji the dutch/African road engineer wondered out loud if maybe the cold was affecting the sonar , but even as he said it he realized it really was not that cold . Atieno Sane the teams nuclear scientist put the matter to rest by saying “ the sonar compensates automatically for altitude , temperature , salinity , biologics , thermoclines , and currents , that is a little marvel of federation technology , if it says it’s 712 feet , it’s 712 feet” .

A federation manufactured inflatable boat was launched , it differed from nonfederation boats in that it was almost completely fireproof so no special attention was required as to where it was stored or repaired , externally it was a pleasing to the eye earth tone color and it was a double ended planing boat like some motor lifeboats making it exceptionally seaworthy it also had built in sonar transducers . Patty , Sane , and Nicolás entered the inflatable and motored out into the “hole”. Meanwhile team 1 had been busy planting retroreflectors around the edge of the hole. By bouncing a laser from the inflatable off the retroreflectors and combining that with data from the sonar a accurate map of the bottom could be created.

Chapter 7.

Griffin woke with a start , a couple seconds later Nakamura also woke and leaped up and exclaimed “smoke !” the *frigatebird* was full of smoke , Nakamura ran for the cockpit Griffin scrambled for the nose hatch to call for help. Nakamura reached the cockpit and scanned the instruments then looked through the windscreen Just as griffin popped out of the open nose hatch , Sane held up a barbecue sandwich to Griffin and patty said “ Team 1 really knows how to eat , they carry a portable barbecue and charcoal everywhere they go , we really need to look into getting one for our team”

After dinner Rutger had set up a projection screen and benches from the *frigatebird* on the ice , it still seemed warm and still , Griffin asked Sane “ are you getting any radiation readings ?” “yes elevated xenon-135 or 133 levels , nothing else so far but I’m continuing to monitor” “so the knights were right ?” said Griffin “sure looks that way” replied Sane “are we in danger , the food ?” “No long-term animal studies have been performed to evaluate carcinogenic potential, mutagenic potential or whether this drug affects fertility in males or females” quoted Sane “it is used in controlled amounts in hospitals , this is notably uncontrolled” “I don’t like it , we need a solution that takes days or hours , not weeks” finished Sane.

Chapter 8

While the rest of the teams were watching the sonar scans on the projection screen Sane talked with the first team's nuclear scientist a French Pakistani named Faizan Dozier. Faizan was saying "we shouldn't even be here" Sane replied "If we leave, the only place to go, is all the way back to Capetown, and if that reactor melts it will cause an unbelievable ecological disaster", Faizan replied "and if everyone in the team gets radiation poisoning? We just don't know what xenon does, no one fuckin bothered to find out! The world spends a million billion dollars on nuclear weapons and no one thought to find out what radioactive xenon does!" By now everyone was looking at the two nuclear scientists and all conversation had stopped. After almost a full minute Patty spoke up "I want this whole place monitored I want cameras covering 360 degrees, I want Radiation, water temperature, a complete meteorological suite, and find some way to monitor the xenon remotely and I want everything buffered and relayed back to Capetown every time one of our birds gets into range I don't want a bird to blink without us knowing about it, oh and one more thing I want the boat anchored over the wreck with the sonar pointed straight down and set up to take a 20 second sonar snapshot every hour" as everyone scrambled to start setting up the instruments and break camp Patty said "I want everyone that has nothing specific to do to grab two large duffel bags and a shovel and follow me, that includes you Sane, it will only be for a few minutes and bring your xenon detector"

Chapter 9.

Patty's party had gotten about one and a half kilometers from the hole when Sane announced "ok that's far enough, not only is there no detectable xenon, if I project the rate of xenon drop beyond the range of my instruments we passed zero a quarter kilometer back" then Patty said "ok help fill Sane's duffels with snow so she can get back to the camp and get back to work on setting up the instruments". When Sane's duffels were full Patty said to Sane "tell Rutger to find a way to use cabin heat to melt the snow into the onboard water tanks, we will all be taking decontamination showers on the trip back" then Patty almost slapped Sane in the butt to get her heading back "*you are enjoying yourself a little too much*" Patty thought to himself.

Chapter 10

The instruments were set up, Rutger and Griffin had made a couple Rube Goldberg contraptions to melt the snow and pump it up into the fresh water tanks in the wing and installed one in each *frigatebird*. Nakamura and the pilot of the other *frigatebird* Sidor Avilov a ex Russian air freight pilot, were already in their cockpits talking to each other on the short range laser com. The teams piled in to the *frigatebirds* and shoved off, Team 1's *frigatebird* headed for the center of the hole and picked up the team member that had been assigned to anchor the boat over the wreck, then both planes started circling the hole in opposite directions. Unlike the smoke pots back at Alcyone this circle was surrounded with a solid barrier of ice that reflected the waves. It took less than three circumnavigations of the hole before it was very churned up, Nakamura swung the *frigatebird* around and pushed the throttles forward, and in the cool dense Antarctic air the turbines put out a noticeable increase in power over what they did in warmer waters, and the plane accelerated across the water and broke free and climbed into the cold

sunny sky. Ten seconds later the second *frigatebird* took off and assumed a *distant echelon* formation.

Chapter 11.

The first several hours of the trip back to Capetown were occupied with melting snow and decontamination showers , after which Sane and Faizan gave anti-radiation medications to everyone . Nakamura sent a laser com message to the two mechanics in cape town instructing them to stock up on mops , buckets , detergent , carpet cleaner , and anything else they could think of , and be prepared to have both planes stop outside the hanger with the hanger doors closed for a thorough cleaning top to bottom inside and out by the mechanics and both crews , under the supervision of Sane and Faizan. The trip back was going to take 14 hours but it was a routine that everyone was familiar with , team members slept , studied for classes back home , answered mail , or just watched the ocean through the observation blisters.

Chapter 12.

The *frigatebirds* arrived in Capetown just after 5 AM and the crews set to work washing the planes inside and out , twice , The xenon had found its way under the floors , in the carpeting , even inside the wings , it was a heavy gas and when there was no wind it settled into low places. Every access hatch was opened , every electrical box was opened and everything was blown out with a couple leaf blowers loaned to them by the airport grounds crew that said they were heroes. Rutger commented to Griffin “they , the...airport grounds crew , referred to us as Heroes , do you know what that’s all about ?” Griffin replied “ I don’t know , but you better tuck in your shirt” . The crews worked right through lunch and finally finished around 4 PM , pizza , lasagna , and Chinese food was ordered and delivered to the Hanger. After the late lunch the hangers laser com chirped with a compressed video message addressed to “Crews only” , Patty thanked the mechanics gave them each a \$50 and told them they could have the rest of the day off.

Chapter 13.

The hanger was swept for listening devices , benches and a video projector were set up and everyone sat down to watch the video. The video began with the wallfacer speaking to the camera “ **I don’t know if you are aware yet but your teams progress is being followed by the entire world , this was my decision , I could see that the scale of this project combined with the time factor , meant that we needed help to avoid the disaster the planet is facing. The offers of help have been pouring in day and night , in fact I was up all last night in video conferences from groups and individuals around the world. To begin with , one of the worlds leading experts on the treatment of radiation poisoning , Dr. Mallory Locroix accepted my offer to teach at our school , you will collect him and his desk and artwork at Charles De Gaulle , his desk a family heirloom and is part of the agreement , I have seen it , it is truly magnificent , 400 Kilos of the finest African Wenge , I would take it as a personal favor if you handled it with the greatest care , the good doctor will be stationed in Capetown for the duration of the operation then he will come here to start teaching . You will also be picking up 10 members of *club de plongée sous-marine spécial Français* a french diving**

club that specializes in extraordinary diving and also their equipment , in addition the Chinese hospital ship *Daishan Dao* will anchor off Heard island about 1100 nautical miles south east of the wreck site , the captain sends his regrets that he cannot approach closer but the ship is not Ice rated . The *Daishan Dao* will take the remains of any Chinese sailors recovered by the *club de plongée sous-marine spécial Français* back to their families in China. Additionally the *Daishan Dao* will be carrying Vice-Director Zhao Renkai one of the original designers of the submarine , he will be assisting the *club de plongée sous-marine spécial Français* Divers. I will now give the camera to officer Silkens of the Knights” Silkens replaced the wallfacer in front of the camera and said “I first want to say that you guys have been doing a good job and we are making certain that you receive the the best medical help there is concerning the xenon exposure. I am saying Good job , not great job because you kind of walked right into that one , I want you to be more cautious in the future. And speaking of the future our best estimate is that you have less than a week before things come to a head , the submarine appears to have been traveling at a high rate of speed when it hit the side of the underwater volcano , it pichpoled end over end and landed upside down on the rim of the crater , I would not have believed it could have happened that way , without seeing the sonar scans you took. After the wallfacer went public with the whole project a federation citizen , I think you know him , came forward with an idea , I think I will let him tell you , himself.” Silkens was replaced with Dr. Ladd in front of the camera who said “ First I want to apologize to you all , my name is not Benjamin Ladd , Benjamin Ladd was a dear friend of mine , a music teacher who died of cancer , before he died we exchanged identities , my name is Hieronymus Hill I was a consulting engineer , that specialized in designing complex building demolitions , After 9-11 I was scared and sick with guilt and over time it only got worse , I swear I never even considered that my employers were the ruthless monsters that they turned out to be. It was Dr Ladd that convinced me not to kill my self and instead assume his identity , and when the federation came in to existence , it seemed like I could leave my previous life behind , I took Dr. Ladd up on his offer , assumed his identity , and immigrated to the federation. I come to you now because I believe I can design a sequence of explosive packages that will first topple the submarine into the volcanoes mouth and then collapse the volcano on top of it , burying it hundreds of feet under the seabed.” Dr, Ladd was replaced with Silkens who said “ We are sending team 3’s *frigatebird* loaded with light weight scuba and hazmat suits and , a complete Cold weather campsite and 8 sets of experimental skies for the *frigatebirds* that we have just made. While it is on It’s way to Capetown I want both of your *frigatebirds to fly to Charles De Gaulle* and collect Dr. Locroix and the *club de plongée sous-marine spécial Français* divers and their equipment , and the Dr.’s desk , you better take a couple of the strongest team members with you. Those of you that are not flying to France I want you to find and rent a house for Dr. Locroix , I consider him to be a very valuable federation asset and I want him well taken care of , he is 66 , I do not want to hear that he was mugged on the way to the grocery store ! Dr. Ladd is overseeing the assembly of the explosive packages , they will total over 13,000 pounds of high explosives it will take three

frigatebird flights to move them , so team 3's *frigatebird* will be returning right away , also don't forget to collect Vice-Director Zhao Renkai and a package of body bags from the *Daishan Dao* when it gets within range. Everything we have told you and much more is in a text document attached to this video file. Lastly we would prefer to keep Dr. Ladd's true identity out of the media if possible."

After the video ended Griffin said "play it again" and the teams watched the video two more times. Then it was decided everyone would go to the same hotel they had used the last time , since without the mechanics , no one knew their way around Capetown , they would shower , change , read through the document package and meet at patty's room for a evening planning meeting.

Chapter 14

The meeting was crowded with some people standing on the porch , Patty asked Nakamura and Avilov if they had any reservations about the 60+ hour round trip flight to Paris , Avilov replied "We examined the planes very thoroughly while we were decontaminating them , I do not see any problems , this is what the *frigatebirds* were designed to do" Nakamura added " I agree with Avilov , in fact because Rutger will be coming along for muscle and he can tell us what was discussed at this meeting , I would like the pilots and copilots to skip the meeting and go to sleep now. I want to be in the air by 5 AM". Sane said "I can videotape the entire meeting and send you a copy by Laser Com" Patty asked "does anyone have any objections ?" every one shook their head. After the two pilots and copilots had left the people on the porch were able to move into the room , Sane had got out her video camera , and Patty said " anyone got any ideas how to protect the good doctor ?" Sane answered from behind the camera " we need to rent a car and anyone with nothing else important to do at the moment will get guard duty, I'll make a schedule and break it down into 8 hour shifts" Patty replied "sounds good". Then Nicoló said "he is going to need a laser com in his house , and he is going to need to know how to use it" then Team 1's computer and electronics expert Xavier Combs said "I can handle that , I speak pretty good French also" , "perfect" replied Patty. Then Patty had a thought "Sane why don't you go with one of the mechanics and look for the house tomorrow you can take your video camera along and send videos directly to the Doctor as you look at them" Sane answered "good Idea". The forth teams normally reserved second doctor , Myung-Hee spoke up "I have been thinking if we can make do with just one *frigatebird* we could send two back then the bombs could arrive on one flight of three planes saving three days" Patty thought about it "the plane with the base camp will arrive day after tomorrow if it just refueled and we fitted a set of skies to it it could dump the base camp directly on the ice with say two people to start setting it up , then return here , the planes will be back from France by then or only a couple hours out , we take off the skies , refuel , maybe a good meal , then both teams one and three's *frigatebirds* , would fly back together and team four's *frigatebird* could start shuttling men and equipment out to the ice" Everyone thought about it and nodded , then patty said " ok then everybody sleeps in tomorrow except Sane and when she finds a house to rent in a safe neighborhood that the doctor likes , we'll all go over there with the new cleaning supplies from the hanger and get the house ready for the doctors arrival , and Sane can make the security guard schedule while we are doing that." Then Patty asked "anyone have anything to add" Aleksei Kamenkovich the teams smokejumper Said "sooner or later we will have to deal with reporters , we have been told a few things not to say , but I

would like some clear guidelines on how to deal with reporters” , Patty replied “your right , and with the time pressure , we have no time to be giving press-conferences. Ok if you are confronted with a reporter refer them to who ever is guarding the doctor at the moment they will do double duty as our spokes person , you all know what not to talk about , our laser com system and Dr. Ladd . They will undoubtedly ask how we found the wreck in the first place , just say the Knights were studying the Ice for some reason and found it that’s all we know about that. If they ask about who Dr Ladd is just say he is our sonar expert , everything else just answer truthfully to the best of your ability , clear ?” Aleksei answered “yes that is clear , thank you”. With that the meeting broke up.

Chapter 15

Nicoló woke at 11AM with knocking on the door of his hotel room , It was Sane she was waking every one up , “wake up and come down to the hotel lobby” called Sane through the closed door “ok” replied Nicoló. 8 minutes later both teams were assembled in the hotel lobby , Sane had rented a large electric cargo van and everyone piled in , one of the mechanics was at the wheel . Sane said “ I have rented a three story building in Bo-Kaap , that is a kind of historical district , all the buildings are pastel colors , ours is yellow, It has a large studio on the top floor with an ocean view for the good doctor” Aleksei commented to Patty and Nicoló “guess who is going to be carrying that desk up to the third floor”, but he said it with a smile. Myung-Hee who had been perfecting her Yoda impersonation said “carry it up , *and* , down you will ” in a low Yoda voice. Several team members chuckled , then it grew till everyone was laughing.

Chapter 16

The *frigatebirds* flew in *distant echelon* formation over the African continent , the cockpit siren sounded and a sexy female voice announced “ have detected incoming AA rounds , 85% probability Soviet KS-19 , I’m spoofing the proximity fuses” just then the planes were thrown about as 100mm rounds starting exploding about a 1000 meters below them. Avilov said “ I know that voice I have seen her with her clothes off” as he put the plane into a erratic 7° dive and advanced the throttles to maximum. Both planes escaped undamaged. Nakamura spoke into the short range laser com “that was not mistaken identity , the sky is clear , and the *frigatebirds* don’t look like anything else in the air. You call Silkens and tell him what happened , I’m going to plot a new flight plan and **NOT** file it”.

The two *frigatebirds* crossed the rest of the African continent at 50 feet and full throttle just popping up to cross power lines and dropping down again , finally the Mediterranean coast passed beneath them and the two *frigatebirds* started climbing , a Russian air defense radar stationed in Syria interrogated their IFF and seemed to decide they were not a threat. Nakamura talked to Palermo Air Traffic Control and filed a new flight plan. The rest of the flight to Charles De Gaulle was uneventful and very picturesque.

The doctor , the divers , and the Desk and diving equipment and a small crate of paintings were all quickly loaded , the fuel tanks filled and the planes took off again. About 5 ½ hours later as they approached the Mediterranean coast of Italy the laser com chirped , Nakamura flipped off the auto pilot , a message appeared on the cockpit E-paper clipboard , **US air force will provide escort for remainder of operation , call sign for Africa/Antarctica Theater of Operations “Foe hammer”** Nakamura asked Griffin if he knew what that meant , Griffin was fiddling with the rear vision camera and

brought up a picture of an A-10 with no less than 8 external drop tanks , it's main Gun sparkled and tracer rounds flew over the *frigatebirds*. The radio crackled "Uh , sorry about that I was cleaning the button , call sign , Foe Hammer" Nakamura answered " Gandalf calling foe hammer , don't worry about it , we will form echelon behind you , Gandalf out" , "Roger that Gandalf" replied Foe hammer.

Chapter 17

The building was in good shape , the teams moped all the floors , washed the many and large windows and left them open for ventilation. The building was unfurnished except for a chest of drawers in every bed room , but the kitchen was fully equipped and there were plenty of very comfortable federation design cots in storage at the hanger , the only thing really missing was good lighting for reading as the rooms only had a single bare bulb in the ceiling . After Sane finished with the guard schedule and posted it on the kitchen wall , she left with one of the mechanics for grocery shopping and went to a store that called it self a "lighting and living store" that seemed to just sell lighting (it was not clear what the living part was all about) , she bought a articulated table lamp and bulb to sit on every chest of drawers in the building. Nicoló and Myung-Hee started cooking a mix of Italian and Korean dishes while Patty and Aleksei washed and dried all the dishes and flatware and peeled and chopped the vegetables. Martin Ray an Ex Colombian Armored car guard , Ezekiel Montefalco a Filipino Doctor , and Courbet Garcon a French Doctor all from team one went out with one of the mechanics to get tables and chairs , but returned empty handed except for a large crate of grapefruits for breakfast . Everyone ate dinner sitting on the floor of the large third floor studio and the conversation lasted late into the night.

Chapter 18

Next morning everyone piled into the van and went to the airport , Xavier had down loaded plans for the new skies and put them up on the projection screen so everyone could familiarize themselves with how they were installed , It was clear that they would prevent the landing gear from retracting but that could not be helped. The third teams *frigatebird* landed , all the skies were unloaded but 2 sets that were left on board to serve as spares on the ice , a set of skies were installed , the fuel tanks filled , Patty and Martin got on board , and the plane took off for Antarctica. When the plane arrived at the hole in the ice , it was noticeably bigger , all the retroreflectors were gone and some of the other instruments looked a lot closer to the edge , but the sun was setting fast and there was no time for sightseeing , the plane landed near where patty's party had dug the snow , it was unloaded in record time , and took off just as the last glow faded to black. Patty and martin flipped on their headlamps , technically they were always on as they used a tritium light source with a special enhanced output federation manufactured phosphor , but they did have a "blackout" shutter . Patty found the duffel marked Arctic *survival shelter* , The bag was about ½ a meter in diameter and 1 ½ meters long and colored Falu red , it was surprisingly light , Patty asked Martin where he thought they should set it up , to which he answered "considering how close we are to a nuclear reactor that is about to melt down I think we should have the door facing the opposite direction , because that is the direction I plan to run" Patty shrugged "sounds reasonable". They layed out the shelter , screwed the 15 included ice screws into the ice to secure it down and pulled the cord on the Argon bottle to inflate it , it was shaped like a

5 sided pyramid with the top cut at a slant , the slant was covered in solar cells..... patty and Martin started unscrewing the 15 ice screws and reoriented the shelter so the solar cells faced north. Martin found the case with the radioisotope Heat/light/power generator and put it in the corner of the shelter like a wood stove , The federation had no nuclear reactors but had long term contracts for radioisotopes from several reactors around the world and Federation children grew up using radioisotope heat/light/power generators and thought nothing of using a small radioisotope generator to keep their wetsuits comfortable in winter. Patty saw a bag labeled *airlock outhouse* and decided since there was no wind he would risk inflating it without securing it down , it turned out to be rectangular and was designed to zip on the the main shelter and provide a airlock that led to the main shelter and to a restroom with a shower on one side and a storage area on the other. after zipping it to the Main shelter Martin and Patty screwed it down too , then Martin said “all these ice screws make me think we should put all the other duffels inside , sooner or later this calm will end”

Chapter 19

Chris Iversen , that was Foe Hammers real name , appeared to be quite used to setting the auto pilot and sleeping in the cockpit , and it wasn't very long before the crews of the *frigatebirds* started to feel like they were watching over him as much as the other way around , occasionally looking down from above into the cockpit of the A-10 to see that everything was ok. When they were a half hour out from Cape town they clicked the radio mic to wake Chris who waved and smiled. *Frigatebird 3* had arrived a full 5 hours earlier do to the extra time spent by the flight through Africa going around any potential trouble spots , the crew took full advantage of the 5 hours by sleeping on cots in the hangers sound proofed office. *Frigatebirds 1* and *4* landed , while Foe hammer provided “Top cover” *frigatebird 1* was immediately unloaded and refueled , then *1* and *3* took off and formed echelon behind Foe Hammer and headed for Fortaleza , somewhere in the middle of the Atlantic Foe Hammer handed the escort over to Goblin Cleaver the A-10 that was providing escort for the Central/South American theater of operations , and turned back for Cape town.

Chapter 20

It was decided to divide the divers into two groups of 5 , one group would recover the bodies of the Chinese sailors if possible , and the second group would place the explosives. The group charged with recovering the bodies and half the diving gear took off in *frigatebird 4* to look for the ***Daishan Dao*** , one hour out the wonderful weather they had been having started to deteriorate. Luckily Heard island had a sheltered lagoon without which the transfer would have been much more difficult . Nakamura radioed ahead and found out that the ***Daishan Dao*** was already anchored in the lagoon , the transfer by whale boat of Vice-Director Zhao Renkai and a package of 100 body bags from the ***Daishan Dao*** to the *frigatebird* went without incident , the *frigatebird* then immediately took off for Antarctica . While the weather was rapidly building to something Griffin called a “a cross between a typhoon and a blizzard” the *frigatebird* was hit with a down draft that caused it to loose 1500 feet in a matter of seconds and as it was slowly regaining the lost altitude it was hit with a side wind that rolled the plane 90° , then a sudden tail wind accelerated the plane forward and started to cause it to cartwheel , Nakamura fought the tendency with the rudder and it seemed to be holding , but then the

force of the wind increased even further and the plane started to cartwheel again , Griffin advanced the throttles on the wing that was pointing down and at first it seemed to help but then the plane started to go over again and Nakamura retarded the throttles on the upper wings engines , then a second powerful down draft hit the plane but due to the planes orientation it had little to act upon. Griffin's eyes went wide and Nakamura looked at what he was looking at , the airspeed indicator was reading 270 knots ! They were being shoved along 20 knots beyond the maximum speed of the plane and two of the engines were throttled back ! Another down draft hit them but again due to their orientation they only lost a hundred meters . It almost seemed like the storm knew that the plane wanted to rise above the storm and it was not going to let it , every time they gained a hundred meters a down draft would shove them down a hundred meters and all the while they were flying sideways somehow. Nakamura thought about what was happening , the tall fuselage must be acting like a wing , but even at their extreme speed they were slowly losing ground , the down drafts were overcoming the marginal lift provided by the sideways fuselage , and if they leveled out the down drafts would have more to work against and they would be losing 1500 feet with every down draft instead of 100 meters , they were stable but slowly losing altitude.... Nakamura had a germ of an idea , he started pushing the yoke forward slowly turning the plane till finally their course was directly into the wind , now their "wing fuselage" was flying into a headwind and started to slowly gain altitude , 200 meters would be gained , then 100 lost , then 250 gained , and 75 lost , the storm was weakening , Nakamura looked at the altimeter it was reading 39,000 feet ! The storm was less but they were by no means out of it , Nakamura leveled out the plane and advanced the throttles the plane climbed through 40,000 feet , 45,000 feet and at 47,000 feet they finally were above the storm , Nakamura turned the plane once again for Antarctica , flipped on the auto pilot , took his hands off the yoke , and closed his eyes.

Chapter 21

Myung-Hee drove the van out to the airport and waited for Chris's A-10 to return , Chris parked the plane leaned back and closed his eyes , some noise kept on and on finally he opened his eyes enough to see that there was a short Korean woman knocking on the cockpit bubble , he raised the bubble and Myung-Hee said in her best Yoda voice "Away put your weapon. I mean you no harm , I am wondering , why are you here?" , Chris answered "I am looking for some one" , " Looking , found someone I would say , hmm he he" , and in her own voice , "I'm Myung-Hee I have come to invite you to stay at our building we have plenty of extra rooms".

Chapter 22

Frigatebird 4 was still at 47,000 feet making lazy circles over the campsite where wind speeds were averaging 60 knots with gusts to 190 knots and the wind direction seemed to change moment to moment. The arctic survival shelter was composed of double wall hyperbolic paraboloids with a fabric honeycomb shear web the cells filled with fireproofed goose down , it was designed in a wild tunnel to have zero net lift , no matter what direction the wind came from. However even though it was a marvel of federation technology , it had one drawback the light stiff materials it was made from behaved like drum skins in the storm and the noise inside made headphones mandatory and the constant noise was physically exhausting , while at the same time preventing sleep. At

about 5:20 AM the radio in the *frigatebird* crackled it was Patty “we have had a steady 50 knot wind from the south east with no gusts for a full two minutes , I think this is the best you are going to get” Nakamura called back “everyone buckle up” , waited for 15 seconds and threw the plane into an inverted power dive straight down “*if your going to die , you might as well do it with style*” thought Nakamura. The radar altimeter read down the altitude 45,000 , 40,000 , 35,000 , 25,000 , 10,000 , Nakamura pulling back on the yoke as hard as he could , finally leveling out at sea level as the skies hit the ice , Nakamura throttled back and put the props into a slight reverse pitch , Griffin was intent on the radar “I got them , the base camp is 100° off our current direction about 4 kilometers distant” Nakamura was afraid to stop encase they got stuck , adjusted the pitch to positive and turned the plane 100° , the landing lights reached out about 7 or 8 meters in the blizzard but Griffin had a solid lock on the campsite with the radar and eventually it appeared in the landing lights . “everyone out I’m taking off in one minute” called Nakamura , The 5 french divers and Vice-Director Zhao Renkai scrambled to get themselves and their equipment out of the plane and away from the deadly propellers , Nakamura put the props in full reverse pitch and advanced the throttles and the plane reversed back the way it came , after about 150 meters he fed positive pitch into the right side engines and spun the plane around facing the way it had come , adjusted the left props to positive pitch and pushed the throttles to maximum . The *Frigatebird* empty and with only partially full fuel tanks accelerated with authority and took off , Nakamura put it into a steep climb and kept the throttles at maximum till the *frigatebird* finally broke through the storm and leveled off at 47’000 feet. , adjusted the heading for Cape Town , and flipped on the auto pilot. Griffin said “that was some flying boss”.

Chapter 23

The divers , Vice-Director Zhao Renkai , and a few thousand pounds of advanced diving equipment that looked straight out of science fiction , piled into the survival shelter , it appeared that Vice-Director Zhao Renkai spoke fluent French , something neither Patty nor Martin did . The divers had discovered that the floor in the *airlock outhouse* storage area had a removable panel in the center , they quickly removed it , and a other diver produced an electric chainsaw , it appeared they were going to dive on the submarine right here , right now ! Patty held up his hands and said “STOP” every one stopped , but patty did not speak any French..... Martin handed Patty a giant sized “*Self heating Lasagna in a box , just pull the string !*” A federation staple , Patty held up the box and smiled. As soon as the Lasagna was finished , the chainsaw started.

Chapter 24

Patty and Martin lay in their bunks and watched the six helmet cam feeds on the projection screen (it turned out Vice-Director Zhao Renkai was a accomplished diver as well as being a nuclear submarine designer) the helmet cams had some how detected that Patty and Martin both spoke English and automatically overlaid subtitles in English , which was just as well , as the wind had picked up and was even louder than before. Patty looked at all the French high tech and commented to Martin “ do you ever feel like everyone ealse is smarter , better looking , and gets all the girls ?” Martin answered “you could always become a chef , the way you pulled that string”. The divers were coming up to the wreck now , it was badly mangled , as they moved down the length of the sub there were huge dents , buckeled plates , and innumerable scraches and

gouges , they passed what was left of the conning tower it looked like it had been twisted and ripped off , the divers came to the inside of the mouth of the volcano and directed their underwater tows over the lip of the volcano and what they saw looked like a vision from a nuclear hell , the submarine had been ripped open , the reactor containment vessel was completely exposed , surrounded by a medusas head of torn pipes and electrical cables , and it was HOT ! It was furiously boiling , a huge column of steam bubbles went straight up and dissapeared in the blackness above. The divers steered a wide berth around the reactor and continued to follow the hull of the submarine till it just ended , it looked like the last 90 feet of the submarine had been smashed by a hundred huge hammers into a pile of scrap metal being held together with pipes and cables. Renki said "the turbine must have ruptured , this is not crash damage , a quarter of the crew may not **be** recoverable" It turned to be even worse than that , everything from the reactor back , was not accessable without cutting through the side of the hull , the divers swam back to the front of the sub that was hanging over the seemingly bottomless pit of the mouth of the volcano. After cutting away some mangled tubing from the conning tower it was possible to enter the controll room , one of the divers swam inside and a second and a third followed , then a arm came back out and a other diver put a rolled up body bag into the out streached hand . "Oh shit thay're going to be coming back here with bodies in a few minutes , what are we going to do with them , we can't store them in here , and we put them outside they will freeze to the ice , we'll have to remove them with chisels !" patty exclaimed . Martine said " uh we put up the second shelter and use it as a mortuary , if we can figure out a way to keep it at 4° it will preserve the meat like in a supermarket sorry" , "no that's ok , that's a good idea , but how do we erect the shelter in this wind?" replied Patty but even as he said it he could hear that the wind had died down and was maybe 20 knots at most. Patty and Martin found the bag that held the second shelter , dragged it outside , and patty said "let's put it over there I just don't want to go to bed next to sixty dead bodies" , Martin replied "I'm with you on one" they carried the bag about 20 meters away and started screwing the shelter down to the ice , After it was inflated Martin said "ok how do we Control the temperature ?" Patty replied "Ill show you" Patty went and got a radioisotope heat/light/power generator and stuck a screwdriver through a hole in the side and screwed down a screw till it pointed between 0 and 5 degrees. Martin said "I didn't know you could do that" , "neither did I till a couple years ago" replied Patty. A hour later the first ten body bags came back , the diver said " I will stay shallow from now on and just shuttle body bags , that way I do not need to decompress every time" Patty nodded his head and said "understood". Patty and martin carried the bodies out to the mortuary and after the tenth one was carried out Martin said "look"and pointed up , the storm was gone and the sky was clear, Patty and Martin just stood and stared at the sunrise , till a noise back at the shelter indicated the next load of body bags had arrived.

Chapter 25

Dr. Mallories desk and paintings had been carried up to the third floor studio , Chris had insisted on helping to "give back" as he put it . Chris and Myung-Hee had become inseparable with Chris nervously waiting outside when it came Myung-Hee's turn to be examined by Dr. Mallory , with the exception of teams 1 and 4's pilots and copilots and patty and Martin everyone that had been on the ice had received a clean bill of health by the good doctor. Team 4's *frigatebird* arrived about 10:40pm and it was decided that

there was no need for them to return immediately as the flight with the explosives was still at least a day and a half out , Nakamura and Griffin went to the building , found unoccupied rooms and went to sleep , and In another room Chris and Myung-Hee were sleeping in Adjacent cots.

Chapter 26

Next morning Sane , Aleksei , and Nicoló went out grocery shopping and fixed a huge late breakfast for everyone , and just as they were contemplating where to eat breakfast Courbet Garcon the French Doctor produced a set of lock picks and in less than a minute had opened the locked door to the roof , which had a low wall all the way around it that made a sort of continuous bench seat , and combined with a spectacular view of the ocean made a perfect place to have breakfast.

After breakfast Dr. Mallory examined Nakamura and Griffin and gave them a clean bill of health. In the afternoon Ezekiel Montefalco , Courbet Garcon , and Xavier Combs returned from a factory auction where they had bought several folding factory lunch room tables and bench seats . They also brought steaks and potatoes for dinner. After they returned Chris asked if he could borrow the van to go to the beach with Myung-Hee and everyone decided to go to the beach together. Next morning everyone slept late except Chris and Myung-Hee who were up at 6 am with Chris in the air and heading out over the Atlantic for the hand off from Goblin Cleaver by 8 am.

Chapter 27

By noon everyone was at the hanger and had reviewed the procedure for attaching the skies to the three incoming *frigatebirds*. The *frigatebirds* arrived at 3:10 pm and had skies attached and were refueled and on there way to Antarctica by 4:00 pm with *frigatebird* 4 joining them carrying the second dive team and their equipment. The weather was clear and cold but no one doubted it could change at any time , the planes arrived at 6:20 am the next morning and were immediately unloaded and all ten of the divers started shuttling and placing the charges in the locations specified by Dr. Ladd. Meanwhile the aircrews , and Patty and Martin , quickly loaded and secured the 51 recovered bodies along with Vice-Director Zhao Renkai and the unused body bags into *frigatebirds* 2 and 3 which then took off for the ***Daishan Dao***. The “mortuary” was scrubbed , disinfected , deodorized , dried and put away. Every piece of unused equipment and supplies was loaded into the *frigatebirds* and finally the the survival shelter was deflated and loaded into the planes and all that was left was a hole in the ice and a rapidly diminishing pile of explosives , and then even they were gone , then 50 more tense minutes while the last divers finished decompression. The explosives were placed , the planes loaded , and remote monitoring equipment in place. Patty looked around one last time , climbed into the *frigatebird* and closed the hatch behind him. Nakamura spooled up the turbines and took off , being careful to stay “on the deck” to avoid any risk to the divers of decompression sickness. one minute later and three kilometers away Dr. Ladd pushed the button , the submarine toppled into the volcano and the volcano imploded above it and buried it forever, Dr. Ladd felt the weight of guilt that he had carried for so many years lifted.

The laser com chirped , Nakamura flipped off the auto pilot , and a message of thanks from the Chinese navy scrolled across the clipboard , then another message of congratulations from the wallfacer , a message of congratulation from the French

president , and a invitation from Chris and Myung-Hee to their wedding in Cape town tomorrow !

If you liked this story about Rapid Response Team 4 please let me know , I will be happy to wright more. Robert lackey